Proceedings of the 2012 Australian Collaborative Education Network National Conference

SPONSORS

DEAKIN
UNIVERSITY AUSTRALIA
Worldly

VICTORIA UNIVERSITY
MELBOURNE AUSTRALIA

Australian Government
Office for Learning and Teaching

GEELONG
OTWAY
TOURISM INCORPORATED

club
exec

These proceedings have been published by the Australian Collaborative Education Network (ACEN) Incorporated.

Postal Address: PO Box 938
Sprinvale South VIC Australia 3172

Statement of review

All papers reproduced in these proceedings have been independently and blind peer reviewed, by at least two qualified reviewers, with consideration for HERDC reporting requirements.

All papers reproduced in these proceedings were presented at the ACEN National Conference held at Deakin Univeristy, Geelong, Victoria between 29 October – 2 November, 2012.

Disclaimer

The opinions, advices and information contained in this publication do not necessarily reflect the views or policies of the ACEN Executive or its members.

Whilst all due care was taken in the compilation of these proceedings, the ACEN Executive does not warrant that the information is free from errors or omission, or accept any liability in relation to the quality, accuracy and currency of the information.

Copyright

Copyright © 2012 Australian Collaborative Education Network and Authors.

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, non-exclusive licence to use this document for personal use and in courses of instruction; provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Perth 2010. Any other use is prohibited without the express permission of the author(s).

Apart from any fair dealing for the purposes of research or private study, criticism or review, as permitted under the Copyright, Designs and Patent Act, 2005, this publication may only be reproduced, stored or transmitted, in any form or by any means, with the prior permission in writing of the publishers, or in the case of reprographic reproduction in accordance with the terms and licenses issued by the copyright Licensing Agency. Enquiries concerning reproduction outside those terms should be sent to the Australian Collaborative Education Network at the above address.

Format of citing papers

Author surname, initial(s). (2012) Title of paper. In Campbell, M. (Ed.) *Collaborative Education: Investing in the future – Proceedings of the 2012 ACEN National Conference,* (pp. xx-xx). Perth, 29 October – 2 November, 2012.

ISBN 978-0-9805706-2-5

List of reviewers

Fouad Kamel Abdalla
Lynne Adamson
Deborah Ankor
Michaela Baker
Craig Cameron
Matthew Campbell
Natalie Charlton
Joanne Connaughton
Debra Coulson
Steve crumo
Ryan Daniel
Tracey Dickinson
Maureen Drysdale
Susan Edgar
Sue Elston
Angela Fenton
Sonia Ferns
Edward Flagg
Jenny Fleming
Amy Forbes
Jill Franz
Barry Fraser
Natalie Gamble
Stephen Guinea
Marina Harvey
Jay Hays
Ashley Holmes
Dale Holt
Katharine Hoskyn
Prue Howard
Pauletta Irwin
Sue Jones
Leif Karlsson
Andrew Kilgour
Derek Kosbab
Patricia Lucas
Jacqueline Mackaway
Andy Martin
Dineli Mather
Margaret McBeath
Norah McRae
Gaon Mitchell
Valentine Mukuria
Srivalli Nagarajan
Deborah Peach
Greg Reddan
Anna Rowe
Elizabeth Ruinard
Leoni Russell
Susan Ryan
Angela Samuels
Mark Schier
Rowena Scott
Sheila Scutter
Mandy Shircore
Judith Smith
Helen Stephenson
Frederick Stokes-thompson
Vanessa Sturre
Karen Sutherland
Teresa Swirski
mark symmons
Freny Tayebjee
Kylie Twyford
Lisa Westcott
Theresa Winchester-Seeto
Carolyn Woodley
Jacob Workman
Karsten Zegwaard

Editorial

It is with pleasure that I present the full papers of the Australian Collaborative Education Network (ACEN) National Conference.

Each paper represents a substantial contribution to the scholarship and research around work integrated learning, with the proceedings presenting a collection of world leading research in this area. The aim of this National Conference focuses on the future of work integrated learning and the challenges that lay ahead for practitioners, partners, academics and researchers in this field. Emerging across the papers is a growing focus on the aspects of service learning, ethics in work integrated learning and innovation. These themes are complimented by more traditional foci such as employability, graduate outcomes and quality curriculum in work integrated learning. These emerging trends are evident of the philosophical challenge that lays ahead for work integrated learning as it becomes more embedded in universities. Namely, researchers and practitioners are being challenged to consider how practice-based authentic experiences for students in workplaces, with a significant aim around employment, can also compliment and extend 'traditional' notions of the liberal education of universities. Beyond this theoretical problem, it is of no surprise that the future challenge and innovations are often driven by the links and possibilities of technology in work integrated learning. This is being realised in the authentic expeirence of work integrated learning being simulated through the virtual world, and also in support technologies that enable large-scale work integrated learning placements.

A persistent challenge of work integrated learning that continues to be evident in these papers is the design and development of quality curriculum. There continues to be a grappling with the concept of reflection and how it is evident in a work integrated learning experience, and also models of reflection that can be used in the assessment of these. Assessment of work integrated learning experiences persists as a problem yet to be fully resolved. There continues to present a pressure by univeristies, industry and regualtors to deliver a user-friendly assessment tool that provides for the desired academic rigor. The reconcilitation of these sometimes competing ideas presents as an ongoing and future challenge for work integrated learning.

Overall, these proceedings continue to support the argument that work integrated learning has formed its own body of knowledge within a broader conversation of higher education. Presented in this program are over 50 papers, with in excess of 120 papers presented at the conference. These proceedings represent 44% of all presentations made at the conference.

I would like to acknowledge the contributions made by **Kim Atkinson (Deakin), Jodi Morgan (Deakin)** and **Lainie Groundwater (Griffith)** who provided invaluable assistance in managing the review process, checking amendments, and completing final drafts and editing of papers. I also acknowledge the leadership of **Professor Dineli Mather (Deakin)** who as the Conference Chair ably laid the foundations for a valuable and worthwhile scholarly conference.

Personally I hope that these proceedings provide the foundation and inspiration for interesting new research endeavours as we continue to invest in the future of work integrated learning.

Matthew Campbell
ACEN 2012 National Conference Program Chair
Proceedings Editor
Email: m.campbell@griffith.edu.au

Table of contents

Choosing ethical partners: one institution's efforts to engage in ethical partnerships **9**
Michaela Baker

Ethical practice in learning through participation: Showcasing and evaluating the PACE Ethical Practice Module **14**
Michaela Baker, Alison Beale, Laura Hammersley, Kate Lloyd, Anne-Louise Semple, Karolyn White

Developing an ethical professional through work-integrated learning **20**
Matthew Campbell, Karsten E. Zegwaard

Developing Reflection: a practice framework **26**
Susanna Chamberlain

Promoting learning and teaching about research through collaborative work integrated learning: implications for students, agencies and practitioners **32**
Dominic Chilvers, Jane Maidment, Yvonne Crichton-Hill

Preparing for WIL: Online Career Development for IT Students **37**
Jo Coldwell-Neilson, Annemieke Craig

An International Perspective of Cooperative and Work-Integrated Education: A Synthesis of Themes from the Second Edition of the International Handbook for Cooperative and Work-Integrated Education **42**
Richard K. Coll, Karsten E. Zegwaard

What is the relevance of reflective practice in undergraduate e-portfolios to professional work practices? **47**
Joanne Connaughton, Susan Edgar

Rounding the edge(s) of a (torrid) region: Designing Arts capstone curriculum at JCU **51**
Allison Craven, Amy Forbes

Transitioning undergraduate students from Law, Business, and Creative Arts towards Work Integrated Learning Capstone Experiences **56**
Professor Ryan Daniel, Mandy Shircore

Designing, developing and delivering work integrated learning to large student cohorts **61**
Kerry Dickson, Friederika Kaider

Involving stakeholders in Action Research to develop e-portfolio Assessment for Social Work Field Education. **68**
Tracey Dickinson, Jo Mensinga

Using a Strengths Approach in Collaborative Education **71**
Angela Fenton

Graduate employability: Teaching staff, employer and graduate perceptions **77**
Sonia Ferns

Partnerships and relationships in cooperative education: Are stakeholder perspectives aligned? **88**
Jenny Fleming

Developing authentic professional knowledge through transformative community engagement in an interdisciplinary service learning project **94**
Jill Franz Ingrid Larkin, Dean Brough, Erin O'Connor, Natalie Wright, Oksana Zelenko

Campus-based work-integrated learning: Opportunities for Health Education **98**
Natalie Gamble, Stephen Guinea, Paula Williams

Community based service-learning: Partnerships of reciprocal exchange? **103**
Laura Hammersley

Moving beyond the diary: innovation in design and delivery of reflection **109**
Marina Harvey, Michaela Baker, Agnes Bosanquet, Debra Coulson, Anne-Louise Semple, Vanessa Warren, Kathy Henschke

Learning Integrated Work: inter-organisational collaborators reflect on provision of authentic virtual multimedia project experience **120**
Ashley M Holmes, Ruth Kinslow, Michael Pope

Horses for courses? A comparison of four undergraduate WIL streams in tourism **125**
Karen Hughes, Aliisa Mylonas, Pierre Benckendorff

Virtual WIL: A Collaborative approach to Work Integrated Learning using a virtual world **131**
Pauletta Irwin, Allan Ellis, Iain Graham

Community-based-learning in disaster zones: Ethics and economics **135**
Jessica Johnston

Festival volunteer work-integrated learning placements: student experiences and outcomes **140**
Derek Kosbab

Incorporating career development learning in a business work integrated learning framework **146**
Raymond Leong

An assessment rubric on reflection in a career development learning component of a business course **153**
Raymond Leong

Critical reflection. What do we really mean? **163**
Patricia Lucas

How do I measure up? Supporting student self-assessment in skills and graduate attributes **168**
Jacqueline Mackaway, Theresa Winchester-Seeto, Anna Rowe

Enhancing Cultural Intelligence Through International Work Integrated Learning **172**
Norah McRae

Reflections on twenty years of practicum, partnership & practice **179**
Andrew J. Martin

Increasingly embedding workplace and applied learning opportunities within the curriculum: A resource based approach **185**
Andrew J. Martin, Malcolm Rees

Leveraging work integrated learning through on-campus employment – A university-wide approach **190**
Gaon Mitchell, Judie Kay

Serendipity: incidental learning associated with student-centred supervision **197**
Jan Moore, Berni Murphy

The ACEN Student Scholarship: a profile of financial hardship and Work Integrated Learning **201**
Keri Moore, Sonia Ferns, Deborah Peach

A longitudinal evaluation of the Career Change Program at Victoria University 2005-2011 **213**
Rodney Moore, Jayne Pitard

Work integrated learning for the development of professional skills of Information Technology graduates **218**
Srivalli Nagarajan

Developing an Objective Structured Clinical Examination to Assess Clinical Competence **223**
Fiona Naumann, Keri Moore

High-risk, high-stake relationships: building effective industry-university partnerships for Work Integrated Learning (WIL) **230**
Deborah Peach, Ingrid Larkin, Elizabeth Ruinard

To grade or not to grade: Student perceptions of the effects of grading a course in work-integrated learning **237**
Gregory Reddan

That's not really WIL! – building a typology of WIL and related activities **246**
Anna Rowe, Theresa Winchester-Seeto, Jacqueline Mackaway

The Building Consultancy – a case study of collaborative multi-disciplinary approaches to work integrated learning **253**
Leoni Russell, Lyn Hannah

The need for alternate approaches to Cooperative Education **257**
Angela Samuels

Bringing it all Together: An overview of the delivery of key work-integrated learning (WIL) initiatives at Flinders University **262**
Heather Smigiel, Ceri Macleod, Jody Hannah

Enacting Service Learning across HE disciplines: An exploration of pedagogical principles **266**
Judith Smith, Natasha Shaw

PrePlace: an online preparatory resource for students undertaking Work-Integrated Learning (WIL) in the workplace. **272**
Helen Stephenson, Jody Hannah

Researching the potential of the 3D virtual learning environment to complement work integrated learning in higher education **276**
Frederick Stokes-Thompson

Development of processes and assessment to facilitate a broad multidisciplinary Work Integrated Learning package **282**
Karen Sutherland, Mark Symmons

Using a Work Integrated Learning (WIL) model for preparing Skilled Migrants for Australian Employment **285**
Freny Tayebjee, Srivalli Nagarajan

What do children say about school social workers? **290**
Doris Testa

What Makes Staff (and Universities) Ready, WIL-ing and Able? **296**
Kathryn von Treuer, Sophie Keele, Vanessa Sturre

The Process of Designing and Analysing a Qualitative Study into Multiple Work Integrated Learning Experiences **302**
Lisa Ward, Tina McAdie, Alison Bravington, Nigel King

Work Integrated Learning for Tertiary Hospitality Education **307**
Karina Michelle Wardle

Accessible and Everyday OHS: enhancing employability and increasing awareness **314**
Carolyn Woodley, Sue Marshall, Melanie Perkins

A review of the Asia-Pacific Journal of Cooperative Education **320**
Karsten E. Zegwaard

Choosing ethical partners: one institution's efforts to engage in ethical partnerships

Michaela Baker
Macquarie University

The WIL literature discusses the importance of engaging with partners in an ethical way (Orrell, 2004; Bringle & Hatcher, 2009; Smith et al, 2009). However, how higher education institutions *choose* ethical partners is an area that is neglected. It might be argued that much institutional concern is about finding enough partners to meet student demand. However, it is also necessary to ensure that partners align with the mission and vision of learning through participation, as well as those of the higher education institution. This is necessary to make sure the partners we choose to work with do not prompt ethical queries or issues which could be damaging to both student and institution. This paper examines the partnerships literature and how other organisations make choices about ethical products or organisations. These case studies demonstrate that the choice of an ethical partner has at least two dimensions: what constitutes an ethical partner and how to determine whether or not a potential partner is ethical. The development and implementation of policies and procedures to facilitate decisions is required. In this paper I present a case study of how we are developing a framework to guide the formation of 'ethically aligned' relationships with partners.

Keywords: Ethics, ethical partners, policy development and implementation

Background

In 2008, Macquarie University introduced, as part of curriculum renewal, the Participation and Community Engagement (PACE) initiative. This initiative embeds units in the Macquarie University curriculum that involve community-engaged learning that is mutually beneficial to the student, the University and the organisation in which student participation activities take place. Intrinsic to the PACE initiative is the development of mutually beneficial relationships by Macquarie University with a range of partners. Partners must conform to the University's ethical standards and the activities undertaken must align with the PACE initiative's overall aim of promoting the well-being of people and the planet. Thus we must make sure the partners we choose do not prompt ethical queries.

This paper has 4 aims:

1. To examine the existing literature about partnerships in the context of ethics
2. To examine how other organisations make choices (or advocate making choices) about ethical organisations
3. To suggest how we might align our screening processes with Macquarie's Ethics Statement
4. To outline what we are doing at Macquarie to safeguard ethical alignment with partners.

The literature on partnerships

The literature about learning through participation (LTP)[1] discusses ethics in various forms (Peterson et al., 2007; Crabtree et al., 2008; Tryon et al., 2008) and the importance of engaging with partners or community stakeholders in an ethical way (Orrell, 2004; Bringle & Hatcher, 2009; Smith et al, 2009). However, how institutions might go about *choosing* ethical partners is an area that is relatively neglected. Indeed, it might be argued that much, if not most, institutional concern is about how to find enough partners and placements to cater to student demand. However, it is also necessary to ensure that partners align with the mission and vision of LTP, as well as those of the institution. This is necessary to make sure the partners we choose do not prompt ethical queries or issues which could be damaging to both student and institution. The question of alignment with the ethical principles of the higher education institution is difficult, and requires clarification of both what those values are, and what would constitute alignment with them. In addition, it requires the development of procedures and policies to guide those who choose partners in their decision-making.

[1] The term LTP covers all models of participation, including, but not exclusive to, WIL, work-based learning, cooperative education, service-learning, etc (Winchester-Seeto & Mackaway, 2011).

The majority of the literature about ethical partnerships in LTP focuses on ethical interactions between institutions and their partner organisations (for example, Weston et. al., 2009; Flicker et. al., 2007). The initial choice of ethical partners has not yet been covered in great depth, though some authors do point to the need for a closer analysis. This is motivated by the new opportunities and challenges that arise, particularly given the 'increased emphasis on community partnerships' (Silka & Renault-Caragianes, 2006, p. 171) in higher education. However, the literature on research collaborations as a form of community engagement does contain some information from which inferences can be drawn regarding the choice of ethical partners and the initial ethical issues surrounding partnerships.

In discussing the ethics of research partnerships between universities and communities, Silka and Renault-Caragianes (2006) state that issues regarding the ethics of decision-making in research partnerships 'arise at every stage' (p. 171) of the research process. They argue that an ongoing collaborative process throughout the research project is essential for a truly ethical partnership, and that partners must commit to reaching mutual decisions about every stage of the research process, from design and implementation to the distribution of results. They also point to the fact that one-sided collaboration often leads to a 'paucity of benefits' (p. 173) being derived from the research. It can be inferred from this that for an ethical partnership, partners must be equally committed to a truly collaborative process before a partnership is agreed upon. (See also Brugge & Hynes, 2005; Brugge & Kole, 2005).

Brugge and Kole (2005) state that there was a general sentiment amongst participants in community-engaged research that ethical partners must demonstrate respect and a commitment to building a relationship within the community. Honesty, equity and clear communication were also important to the participants' perception of a partner as being.

It is also clear that partner organisations must be aligned in their ethical principles, as demonstrated by Agyeman and Bryan's (2005) case study of a partnership between the Mystic River Watershed Association and Tufts University, which had the goal of working within surrounding communities to promote understanding of issues of environmental justice pertinent to the Mystic River watershed. This required mutual agreement upon ethical principles of environmental justice, and could not have been possible had either party been found to adhere to ethical principles contrary to its goal of addressing environmental justice. It can be inferred that when aiming to set up a mutually beneficial partnership, there was an imperative to seek out potential partners who adhere to similar ethical principles.

Other organisations' approaches

To better understand how to develop 'ethically aligned' relationships with partners, information was sought from a range of organisations on how they address this issue, along with evidence from organisations who promote 'ethical' choices/products. Data was gathered, from these organisations: The St James Ethic Centre and the 'Responsible Business Practice' project; The Australian Institute for Corporate Responsibility; the Ethical Consumer Guide; Hunter Hall Investment Management Limited; and, Australian Ethical Investment and Superannuation as well as The National Statement on Ethical Conduct in Human Research.

Common themes

Three common themes emerged:

1. *Ethics policies/Values statements/Principles* – The organisations reviewed provide statements about their commitment to ethically responsible behaviour/partnerships and the provision of ethical services/products via documents such as an ethics policy, a values statement or a set of principles. These documents outline at a high level the key ethics principles and values that underpin and guide the structures, procedures, decision making, etc. within the organisation.
2. *Transparency* – Organisations provide examples of what they consider to be 'ethical' as well as 'non-ethical' products/activities/partners, countries. Some organisations, such as Hunter Hall Investment Management Limited, also concede that the perception of whether activities/products are ethical can be subject to revision as circumstances change and state in their Ethical Investment Policy they 'will seek to avoid jumping to hasty conclusions about the ethicality of an activity yet will be flexible so as to adapt to change' (p.2).
3. *Acknowledgement of complexity* – There is a general sense that these organisations recognise the issue of ethics as complex and there is no single answer to every ethical question.

Case study: Hunter Hall Investment Management Limited

Hunter Hall Investment Management Limited (hereafter Hunter Hall) is Australia's largest dedicated ethical investment manager. They aim to create wealth for investors over time through careful and responsible investment in undervalued companies.

According to the company's Ethical Investment Policy (the Policy) the organisation avoids investing in businesses that are involved in activities that do harm to people, animals or the environment. They utilise their two page, easy to read, Policy document to communicate this value along with the high level processes they follow to support their ethical approach to investment.

The Policy reflects a cautious approach to word choice, e.g. 'Hunter Hall is committed to the *concept* of…'; '*seeks* to avoid…'; 'in its *opinion*'; '*aims* to provide'; and, includes caveats such as 'investors should be aware…'; and, 'Hunter Hall will seek to avoid jumping to hasty conclusions about the ethicality of an activity…'. The careful wording of their Policy may be indicative of three things: the complexity and 'grey' that can surround the issue of ethics; acknowledgement that a Policy document functions as a guide and not a 'rule book'; and, that risk or risk management is an inherent aspect of ethics.

Beyond the high level statement about avoiding investment in businesses that do harm to people, animals or the environment, the Policy provides insight into the approach used by this company to guide investment decision making. Hunter Hall applies both a negative and positive screening 'criteria' to their process. The negative screening criteria (Ethical Investment Policy, p.1) does not name specific companies to avoid, rather it identifies types of companies, namely those that derive operating revenue from direct and material involvement in activities that do harm to people, animals or the environment, e.g. the manufacture or sale of weapons, tobacco manufacture, animal testing for cosmetics and unremediated destruction of the environment.

Hunter Hall accept there are times when the screening process is not straightforward and decisions may be 'borderline' or 'unclear' (Ethical Investment Policy, p.1). In these instances company Directors 'retain the right to exercise their collective judgement and will take the merits of the investment into account' (Ethical Investment Policy, p.1). A similar approach could be applied to potentially 'ethically contentious' PACE partnerships, whereby the PACE Advisory Committee, or another group, review proposed 'borderline' partnerships and make final decisions.

Macquarie University's Ethics Statement

Through the examination of the case studies above, it becomes clearer that the choice of an ethical partner (organisation, product) has at least two main dimensions:

1. *What* constitutes (in a given context, for a given organisation) an ethical partner and
2. *How* to go about determining whether or not a potential partner counts as an ethical partner given the answer to 1.

In answering the first of these questions, preliminary discussions in the PACE Ethics Subcommittee concluded that the most sensible approach would be to align what constitutes an ethical partner with Macquarie University's Ethics Statement. The Statement is framed in terms of the idea of acting with integrity, which is defined in the document as being 'consciously informed by a framework of core values and principles that are given consistent, practical effect'. Among the values outlined in the Statement are:

- Respecting the intrinsic dignity of all persons
- Neither initiating nor colluding in harmful acts.

In addition to these values, the PACE Criteria state that Participation units should align with the overall aim of the PACE initiative to 'promote the well-being of people and the planet'.

These values provide a good starting point for defining an ethical partner. We might begin by negatively defining an ethical partner as one which does not violate any of these principles. In addition to this, the University has a policy of not engaging in any activities or partnerships involving the tobacco industry, so any organisations that are part of that industry may be immediately eliminated as potential partners.

That said, these values are fairly broad (as maybe befits an overarching statement) and may not necessarily offer sufficient guidance as to exactly what may constitute a violation of the principles outlined. There is a clear role for professional judgement in individual cases. However, in order for that judgement to be exercised, adequate resourcing, support and assurances are required. This is particularly important given the potential for negative

publicity for the University should a partnership be entered into with an organisation that turns out not to be a properly ethical partner.

Procedural issues

If ethical alignment with partners is taken seriously, there are a number of implications for institutions offering WIL. Screening a potential partner to see whether or not they conform to the requirements for being an ethical partner is one of a large number of steps that staff must go through before a partnership agreement can be signed. These steps include contacting prospective partners, getting legal approval via the signing of partnership agreements, delineating student projects, generation of activity agreements, and securing Work Health and Safety approval for the activity. Given the large number of processes involved in securing an agreement with a partner, streamlining each of these as much as possible is desirable.

There are a number of concerns about the process of screening a prospective partner to see whether they qualify as ethical. The first of these is how to get the information required. Whilst it may be (relatively) straightforward to gather information about companies that have a high profile and large online presence, the same cannot be said of e.g. small community organisations. Given the number of students and potential partner organisations, as well as the quick turnaround times required to ensure that students can begin their placements on time, the problem of finding information is further compounded. Adding to this concern is also the question of how much we can legitimately be expected to know about any given organisation. Whilst breaches of ethics may be reported in the media and thus publicly available, it is quite frequently the case that they are not, or that past breaches only come to light at a much later stage.

The second concern is how certain pieces of available information should be evaluated. For example, a convenor was approached by organisation that had, in the past, had issues relating to poor practices in co-ordinating foster care. These issues were reported in the media, and so the information about them was available. However, the organisation in question had put in place measures to address the issues and the situation had subsequently been improved. In this case, the unit convenor was happy for the placement to proceed.

A third concern is regarding at what level the alignment with the University's ethical principles should be evaluated. For example, would an organisational psychology placement at a mining company conflict with PACE's stated aims of 'improving the well-being of people and planet'? This raises issues about the relation between the partner and their industry or values and the placement activity (which may itself align with the University's values).

Additionally, even if a partner has been found to align with the University's ethical principles, students may themselves feel that a partner or activity does not align with their own values. A process for resolving this is also needed.

Where to from here?

A policy and procedure to guide staff in their decision-making about partnerships, and to provide a transparent justification for these decisions to the University and to organisations, is currently being drafted. These documents will, like other Macquarie policies and procedures, be publicly available on the University's website. To support decision-making, a staff consultative group is to be convened. This group will be the first port of call for staff who have questions about whether or not an organisation would constitute an ethical partner. A ready reference guide (based upon a guide that has been developed about research ethics in PACE) will be developed to provide staff with easy access to information relevant to their decisions. This could potentially serve as a starting point for other institutions to develop their own processes around ethical partnerships. We are also implementing ways of flagging the ethical status of organisations in our internal partnership management database, to facilitate more streamlined processing, as well as investigating the possibility of including a clause about ethics in the partnership agreement.

Acknowledgements

I would like to acknowledge Jacqueline Mackaway's important contribution to the early stages of this project, as well as my research assistant, Alison Beale, for her excellent work on the ongoing project.

References

Agyeman, J., Bryan, D. (2005). Environmental Justice across the Mystic: Bridging Agendas in a Watershed. D. Brugge and H.P. Hynes (eds.) *Community Research in Environmental Health*. Vermont, USA: Ashgate Publishing Ltd.

Bringle, R.G., & Hatcher, J. A (2009). Innovative Practices in Service - Learning and Curricular Engagement. *New Direction for Higher Education.* No.. 147, Fall 2009, p. 37-46.

Brugge, D., Hynes, H. P. Science with the People. D. Brugge and H.P. Hynes (eds.) *Community Research in Environmental Health*. Vermont, USA: Ashgate Publishing Ltd.

Brugge, D., Kole, A. 'A Case Study of Community-Based Participatory Action Research Ethics: The Healthy Public Housing Initiative. D. Brugge and H.P. Hynes (eds.) *Community Research in Environmental Health*. Vermont, USA: Ashgate Publishing Ltd.

Crabtree, R. D. (2008). Theoretical foundations for international service-learning. *Michigan Journal of Community Service Learning.* Fall 2008, 18-36.

Flicker, S., Travers, R., Guta, A., McDonald, S., Meagher, A. (2007. Ethical Dilemmas in Community-Based Participatory Research: Recommendations for Institutional Review Boards. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, *84*, pp. 478-493.

Frisque, D. A., Lin, H., & Kolb, J. A. (2004). Preparing professionals to face ethical challenges in today's workplace: Review of the literature, implications for PI, and a proposed research agenda. *Performance Improvement Quarterly*, 17(2), 28-45.

Hunter Hall Investment Management Limited (2012). Ethical Investment Policy. Available at http://www.hunterhall.com.au/about.html#ethical_policy

Macquarie University (2007). Macquarie University Ethics Statement. Available at: http://www.mq.edu.au/ethics/ethic-statement-final.html)

Orrell, J. (2004). Work-integrated Learning Programmes: Management and Educational Quality, p.76-80. In Carmichael, Rob (Ed.), *Proceedings of the Australian University Quality Forum: Quality in a time of change. Adelaide, Australia July 7-9, 2004.* Australian Universities Quality Agency.

Silka, L., Renault-Caragianes, P. (2006). Community-University Research Partnerships: Devising a Model for Ethical Engagement. *Journal of Higher Education Outreach and Engagement*, *11*, pp. 171-183.

Smith, M., Brooks, S., Lichtenberg, A., McIlveen, P., Torjul, P., & Tyler, J. (2009). Career Development Learning: maximising the contribution of work-integrated learning to the student experience. [Australian Learning and Teaching Council] Final Project Report June 2009.

Tryon, E., Stoecker, R.M. Martin, A., Seblonka, K., Hilgendorf, A., & Nellis, M. (2008). The challenge of short-term service-learning, *Michigan Journal of Community Service Learning* Spring 2008, p.16-26.

Weston, R., Brooks, R., Gladman, J., Senior, K. and Denley, L. (2009). Ethical research in partnership with an Indigenous community. *Australasian Psychiatry*, *17: Supplement 1*, pp. S51-53.

Winchester-Seeto, T. & Mackaway, J. (2011). Ethics and ethical practice in Learning through Participation (LTP). Discussion paper, Macquarie University.

Copyright © 2012 Michaela Baker

The author assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author.

Ethical practice in learning through participation: Showcasing and evaluating the PACE Ethical Practice Module

Michaela Baker, Alison Beale, Laura Hammersley, Kate Lloyd, Anne-Louise Semple, Karolyn White
Macquarie University

In 2008, Macquarie University introduced the Participation and Community Engagement (PACE) initiative, which embeds units in the undergraduate curriculum that involve learning through participation, including service learning and work-integrated learning (WIL), that is mutually beneficial to the student, the University and the partner organisation. Ethical practice is thus an integral part of this initiative. However, the issue of ethical practice in these approaches to learning has not been comprehensively addressed (Peterson et al, 2007) with research ethics in undergraduate curricula also warranting further examination and integration (Crabtree, 2008; Tryon et al., 2008). To support both students and staff at Macquarie University, we have collaboratively developed and begun to trial an innovative, holistic module to teach ethical practice in Participation units. It includes ethical theory, applied ethics, research ethics and ethical practice in PACE. The significance of this module lies in its flexibility, accessibility, and applicability to a multi-disciplinary and institution-wide audience. In this paper we evaluate the effectiveness of our module and present preliminary findings, which comment on the flexibility and usefulness of the module in supporting and preparing students for participation activities. We also reflect on how this module can be developed further and suggest avenues for future research.

Keywords: Ethical practice, teaching ethics, participation and community engagement, curriculum development and evaluation

Background of the PACE Initiative

Macquarie University's unique Participation and Community Engagement initiative, introduced as part of curriculum renewal, aims to prepare students for a globalising world that presents new social and environmental challenges, and to ensure that, over time, all Macquarie undergraduate students complete a 'Participation' unit as part of degree credit.

Participation units require engagement that is mutually beneficial to the student, the University and the partner organisation. Participation activities thus include, but are not limited to, service learning and WIL. Students are placed in organisations which must conform to the University's ethical standards, including integrity, respect, equality, responsibility, and justice,[2] and activities must align with PACE's aim of promoting the wellbeing of people and the planet. Participation units may include research-based participation activities, and students are expected to engage with the wider community in an ethical manner. Ethical practice is thus an integral part of this initiative, and students need to be prepared accordingly.

This paper discusses the motivation for, significance and development of the PACE Ethical Practice Module, which aims to help students understand the importance of ethical practice, both personally and professionally, and in participation activities. It then examines pilot evaluation data collected from a sample of Participation units using the Module during 2012. Finally, we discuss future development and research.

Motivation and significance

Participatory learning and its ethical ramifications are attracting increasing interest. Frisque *et al*. (2004, p. 29) argue that "global ethics training is necessary in a global economy if professionals and future professionals are expected to appreciate a broad range of ethical behaviours". Providing opportunities for students to participate in diverse contexts means students must conduct themselves in a responsible and ethically informed manner that respects the rights of individuals, communities and the environment (Vujakovic & Bullard, 2001).

Evidence from service learning and WIL indicates that ethical understanding is integral to the learning process (Boud, 2001; Campbell, 2011; Peterson et al, 2007). If students are to be ethical in practice, they need "to be equipped with the capacity to navigate and negotiate the ethical complexities of the workplace" (Campbell &

[2] http://www.mq.edu.au/ethics/ethic-statement.html

Zegwaard, 2011a, p. 3). This involves developing "skills within students that facilitate sensitivity to their context (such as issues of power, hierarchy, culture and position)" (Campbell & Zegwaard, 2011b, p. 209), enabling them to critically think about potential risks of their work and interactions with others, immediate and over time (Colby & Sullivan, 2008).

Teaching ethical practice in participatory learning "is complex and has not been comprehensively addressed in the literature to date" (Peterson *et al,* 2007, p. 1. See also Frisque, Lin & Kolb, 2004). Literature indicates disagreement about approaches to teaching ethics for participatory learning (Rigby, 2009; Sims & Felton, 2006). Research ethics training for undergraduates also warrants further examination and curricular integration (Crabtree, 2008; Tryon *et al*., 2008). Logistical difficulties, such as time and curriculum space constraints and potential lack of student interest mean that, if room for teaching on ethics is made, it is only enough to cover one or two aspects (Griffith University Work-Integrated Learning Community of Practice, 2007; Van Slyke, 2007).

In order to make Participation experiences valuable for students, Macquarie University and partner organisations, we needed to develop a multi-disciplinary approach to teaching ethics, sensitive to logistical realities.

Development of the module

In developing the module, we considered: diverse applications of ethics (Williams & Chadwick, 2012; Grunwald, 2001; Moor, 2001; Robin and Reidenbach, 1987; Newton, 2003; MacIntyre, 2006; Hazard & Dondi, 2004), the need for the module to be multi-disciplinary in nature and relevant to unit convenors and students across the institution; the imperative for flexibility of delivery; and conformity to ethical codes of practice and governing bodies (Macquarie's Human Research Ethics Committee, the NHMRC).[3] The completion of the Module is a requirement of the PACE Ethics Protocol (an ethics approval governing student research in particular Participation units). Existing policies and procedures, such as Work Health and Safety and partnership agreements, complement it.

Given its multi-disciplinary nature, the Module can be embedded into units across the institution. It was trialled in Faculty Participation Units[4], as they are open to students of any degree programme and being new units undergoing curriculum development, and in a Sociology Research unit.

The Module builds on existing examples of online ethics courses at Macquarie University in order to provide an improved understanding of how to teach ethical practice for PACE. The Module consists of four components: ethical theory, applied ethics, research ethics and ethical practice in PACE. (See Table 1.)

This approach is novel for several reasons: first, these four components are usually taught separately at an undergraduate level, with students rarely exposed to all of them in a single unit.[5] Ethical theory and applied ethics are typically presented as courses in Philosophy and some vocational health care courses,[6] whilst research ethics training is not often presented as part of an undergraduate curriculum. Developing the Module at an institutional level means that ethics training is not confined to one particular program. Students who have completed the Module in one discipline are not required to repeat its core elements, though individual units may require the completion of additional discipline-specific elements. The fourth component of the module (Ethical practice in PACE) focuses specifically on ethics as it relates learning through participation[7].

The Module consists of a bank of resources that can be accessed through iLearn (online learning management system). Resources include tailor-made video lectures discussing ethics and its relation to PACE, journal articles and websites. The selection of resources was informed by the University's ethical standards, as well as the

[3] For example, one responsibility of researchers (and research trainees) is to 'promote adoption of this Code and avoid departures from the responsible conduct of research [and] conform to the policies adopted by their institutions and bodies funding the research' (*Australian Code for the Responsible Conduct of Research* (2007), Part A, section 1.6).
[4] These units non-discipline-specific units, developed to provide an academic framework for a range of participation activities, ran for the first time in 2012
[5] Some elements are combined in postgraduate courses on bioethics or professional ethics. For example, the The Centre for Applied Philosophy and Public Ethics' (University of Melbourne) Postgraduate Certificate and Diploma in professional ethics, and MA in Professional and Applied Ethics.
[6] For example, in some nursing and medical courses.
[7] This includes WIL and service learning.

Participation Criteria.[8] There is a core of required resources, to which convenors may add additional discipline-specific resources.

The Module can be delivered entirely online, entirely face-to-face, or in blended mode (both online and face-to-face), which facilitates flexibility and accessibility and helps address logistical issues. For example, some students study externally or via distance mode and staff may have limited time in which to deliver the content.

Students work through the module sequentially:

Table 1: Content and Structure of the PACE Ethical Practice Module

	1. Ethics and Ethical Theory	**2. Applied Ethics**	**3. Research Ethics**	**4. Ethics and PACE**
Video Content	Introduction to ethical theory; consequentialism and utilitarianism (Bentham, Mill); deontological ethics (Kant); virtue ethics (Aristotle).	Why be ethical; how ethics guides behaviour; examples of business, media, legal ethics; importance of reflection.	Importance of ethical research practice; examples of unethical research; The Code and National Statement; ethics as more than legislation	Ethical interaction with partner organisation; importance of reflection on own assumptions
Activities	Trolley Problem online exercise	'Should You Kill the Fat Man?' online exercise	CDC website on Tuskegee experiments	
Readings	'The Trolley Problem' (Thomson, 1985); 'Moral Saints' (Wolf, 1982)	'Applied Ethics: Naturalism, Normativity and Public Policy' (O'Neill, 2009)	NHMRC's *Australian Code for the Responsible Conduct of Research* & *National Statement on Ethical Conduct in Human Research*	'Reciprocity: An ethic for community-based participatory action research' (Maiter et. al., 2008); 'Ethical Challenges for the "Outside" researcher in Community-based Participatory Research' (Minkler, 2004).
Other resources include	Centre for Applied Philosophy and Public Ethics website; *Stanford Encyclopedia of Philosophy* articles	Markkula Centre for Applied Ethics website; newspaper articles (Wikileaks, social media, Murdoch scandal)	UN *Declaration of Helsinki*; Australian Research Council website; NHMRC's *Code of Practice for the Care and Use of Animals for Scientific Purposes*	YouTube videos on collaborative community-based research; case study of ethical dilemmas in WIL and participatory learning from the disability community

At the completion of the module, students are required to undertake an online quiz consisting of short answer questions to test their comprehension of the material and to relate it to their individual participation activities. Via iLearn's completion tracking function, the quiz is not released to students until they have worked their way through each part of the Module. The quiz is a graded component of the unit and once students have successfully completed it, they are awarded a certificate of completion.[9] The degree to which the Module achieves its goal of fostering ethical practice will be determined through ongoing monitoring and evaluation, for which a pilot study has been completed.

[8] These include that partners must reflect the ethical standards of the University and that units develop Graduate Capabilities, including ethical responsibility.
[9] This certificate can be used to ensure that students who have completed the module in one unit are not required to repeat it in another.

Evaluation of the module

The aim of pilot research was to evaluate the effectiveness of the Module through feedback from unit convenors and students, in order to refine the Module. After completing the Module, students were invited to complete an anonymous online survey with qualitative and quantitative questions, including whether the Module had helped to prepare them for their participation activities. Convenors were invited to take part in a semi-structured interview about their experiences of the Module's effectiveness and possible improvements.

The pilot data collected include survey responses from students, semi-structured interviews with unit convenors, and analysis of students' online discussions.[10].

Results

Initial survey data reveal that, overall, students found the Module to be "engaging" and the activities in particular to be "fun and simple to complete". Interviews with unit convenors also highlighted the Module's interactive nature in addition to its flexibility: "I like the module in the sense that it is a mixture of resources that a convenor can pick and choose from and deliver face-to-face or online".

Unit convenors commented that students found it helpful to have continuous access to course material (especially videos) which they could complete in their own time – important given the logistics of a student juggling unit learning with participation activities which are often located off-campus.[11] Video lectures and online discussions were highlighted by convenors as effective ways for students to share learning. Convenors remarked on the benefits of online discussions, observing that students were able to discuss and engage with potentially new ethical issues (many of which were new to them) in a way allowed time for them to reflect before initiating discussion: "I was so excited that on their own they stimulated discussion amongst each other…and I thought well you know you've got something if students are spontaneously responding to online resources".

All student participants agreed that the module was effective in developing their understanding of ethics in practice, while most agreed that the module was effective in preparing them for their participation activity. Online student discussions provided evidence of the ways in which the module had been helpful during participation activities. For example one student wrote:

Even though I knew and hoped that the activities and lectures we used…would be useful I did not expect it to be as useful as I have found it in practice. I found the ethics component…particularly useful as there has been several times when I have stopped in my tracks during a project and stood back and thought is this approach ethically or culturally sound? Even though they mostly were I still found it useful to detach myself and think of the tasks through a variety of different viewpoints.

Survey responses also indicate that the module challenged students to think differently. For example, one participant commented: "I have never participated in any study involving ethics or been introduced to ethics so I did find it hard to address the question[s]". However, this participant also believed that the Module was responsible for "opening [their] eyes to ethical practice".

As students began to understand the relevance ethics training had to their participation activities, convenors observed students beginning to view situations through an ethical lens. One convenor reflected: "I did have one student who was almost finished her activity…she made a couple of comments about how having gone through the ethics module her approach to certain things was different as a result of thinking more ethically and philosophically about things".

This is further indicative of the overall importance of developing an ethics module for undergraduate programs that involve service learning and WIL.

[10] More data from the pilot is due to be collected in December, but could not be incorporated due to timing.
[11] Some students are employed and some students undertake activities overseas with sporadic Internet access. Hence, flexibility to complete the Module in one's own time is crucial.

Future development and research

Evidence from the pilot evaluation suggests that learning about ethical practice prior to their participation activity can empower students to make appropriate decisions, resulting in a better experience for students and partner organisations. Further development of the module is necessary, and based on pilot data, soon to be implemented changes include tools to stimulate additional online and face-to-face discussion, a video and accompanying resources about ethics and Indigenous-related participation activities, as well as a separate 'stream' of resources for those students who are undertaking research[12].

In order to assess students' ethical behaviour and gain a greater understanding of the value and implications of the module, however, future research should also include students' interaction with others involved in PACE, for example, interviews with partner organisations, workplace supervisors, team leaders and host communities. These will begin in early 2013, when all inaugural participation activities are complete, and all partners have experience on which to draw.

In seeking student feedback post-participation activity and to further promote student reflection as part of their participation in the research, it would be valuable for students to provide an example of how they applied what they learnt in practice. Similarly, having pre- and post-participation activity surveys in order to better discern stages of learning will help demonstrate the impact of the module on student learning. Finally, collecting additional data on the unit of study, discipline background of students, year of degree study, gender, and other demographics would provide further indicators for consideration.

While we have identified a range of areas for further development and research of the module it is clear that the significance of the module presented lies in its flexibility, accessibility, and applicability to a multi-disciplinary and institution-wide audience. This initial evaluative research on the module makes a contribution to the developing research on ethics and learning through participation.

References

Boud, D. (2001) Creating a work-based curriculum, in Boud, D. & Solomon, N. (eds.) *Work-based learning: a new higher education?* Open University Press, Buckingham, UK, pp.44-58.

Campbell, M. (2011) Education for the ethical professional through work integrated learning, Conference presentation at the ACEN NSW/ACT Forum, University of Canberra, Canberra, Australia, 14 May.

Campbell, M., & Zegwaard, K.E. (2011a). Ethical considerations and values development in work-integrated learning programs. Conference proceedings of the New Zealand Association for Cooperative Education, Napier, New Zealand, 18-19 April, 2011.

Campbell, M., & Zegwaard, K.E. (2011b). Values, ethics, and empowering the self through cooperative education. *Asia-Pacific Journal of Cooperative Education*, 12 (3), pp.205-216.

Colby, A. & Sullivan, W.M. (2008). Ethics teaching in undergraduate engineering education. *Journal of Engineering Education*, July, pp. 327-338.

Crabtree, R. D. (2008). Theoretical foundations for international service-learning. *Michigan Journal of Community Service Learning.* Fall 2008, 18-36.

Frisque, D. A., Lin, H., & Kolb, J. A. (2004). Preparing professionals to face ethical challenges in today's workplace: Review of the literature, implications for PI, and a proposed research agenda. *Performance Improvement Quarterly*, 17(2), 28-45.

Griffith University Work-integrated Learning Community of Practice (2007) Work integrated learning: academic workload and recognition. *A public report by the work-integrated learning community of practice*, pp.1-27.

Grunwald, A. (2001). The application of ethics to engineering and the engineer's moral responsibility: Perspectives for a research agenda. *Science and Engineering Ethics*, 7(3), pp. 415-428.

Guillemin, M., Gillam, L. (2004). Ethics, reflexivity, and "ethically important moments" in research, *Qualitative Inquiry*, 10, pp. 261-280.

Hazard, G. Jr., & Dondi, A. (2004). *Legal ethics: a comparative study*. Palo Alto: Stanford University Press.

MacIntyre, A.C. (2006). *Ethics and politics: selected essays volume 2*. Cambridge: Cambridge University Press.

Macquarie University (2012). *PACE Website*,

[12] This includes review of the PACE Ethics Protocol and resources on 'research ethics in practice' to ensure students make the connection between ethical research methods and conducting themselves in the field (See also Guillermin and Gillam, 2004).

http://mq.edu.au/business_and_community/participation_and_community_engagement/ Accessed on: 11/05/2012 Macquarie University (2008). *Review of Academic Programs, White Paper*, http://staff.mq.edu.au/teaching/governance/reports_and_reviews/review_of_academic_programs/ Accessed on: 11/05/2012 Moor, J.H. (2001). The future of computer ethics: You ain't seen nothin' yet! *Ethics and Information Technology*, 3, pp.89-91.

Newton, L.H. (2003) *Ethics and sustainability: sustainable development and the moral life*. Upper Saddle River, NJ: Prentice Hall.

Australian Federal Government National Health and Medical Research Council (NHMRC) (2007) *National Statement on Ethical Conduct in Human Research*. First published 1999, revised 2007.

O'Neill, Onora (2009). Applied Ethics: Naturalism, Normativity and Public Policy. *Journal of Applied Philosophy*, 26 (3), pp. 219-230.

Peterson, J.F., de la Harpe, B., Milton, J., & Lim, M. (2007). Ethics and ethical practice: Issues and challenges for WIL. Refereed proceedings of the *World in Partnerships for World Graduates Conference,* Sofitel Melbourne, 28-30, November, 2007.

Rigby, B. (2009). Review of generic skills: Critical thinking, team work, ethical practice and sustainability (August, 2009). Retrieved 28 January, 2012 from www.graduateskills.edu.au

Robin, D.P., & Reidenbach, R.E. (1987). Social responsibility, ethics, and marketing strategy: Closing the gap between concept and application. *Journal of Marketing*, 51 (1), pp. 44-58.

Sims, R.R., & Felton, E.L. (2006). Designing and delivering business ethics teaching and learning. *Journal of Business Ethics,* 63, 297-312.

Thomson, Judith Jarvis (1985). The Trolley Problem. *The Yale Law Journal*, 94 (6), pp. 1395-1415.

Tryon, E., Stoecker, R., Martin, A., Seblonka, K., Hilgendorf, A., & Nellis, M. (2008). The challenge of short-term service-learning. *Michigan Journal of Community Service Learning,* Spring 2008, pp.16-26.

Van Slyke, J.M. (2007) *Preferred modes of teaching in higher education law enforcement*, Proquest Information and Learning Company, MI, U.S.A.

Vujakovic, P., & Bullard, J. (2001): The Ethics Minefield: Issues of responsibility in learning and research. *Journal of Geography in Higher Education*, 25 (2), pp.275-283

Williams, G. & Chadwick, R. (2012). Responsibilities for healthcare. *Cambridge Quarterly of Healthcare Ethics*, 21, pp.155-165.

Wolf, Susan (1982). Moral Saints. *The Journal of Philosophy*, 79 (8), pp. 419-439

Copyright © 2012 Michaela Baker, Alison Beale, Laura Hammersley, Kate Lloyd, Anne-Louise Semple, Karolyn White

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Developing an ethical professional through work-integrated learning

Matthew Campbell[13]
Griffith Institute for Higher Education, Griffith University
Karsten E. Zegwaard
Cooperative Education Unit, University of Waikato

Background

Students emerging into professional fields need to understand and navigate the increasingly important ethical aspects of being a professional, transforming the workplace and themselves (Campbell & Zegwaard, 2011a). A primary goal of a work-integrated learning program, and likewise professional ethics education, is the evolution within the student of a sense of self and the development of an identity within their chosen profession and/or workplace. Students need to develop as critical moral agents (actively making choices whilst critically evaluating their moral implications) whilst developing their understandings of professionalism and professional obligations.

Ethical practice emerges through a negotiated position between the individual and collective. The ideal professional has, therefore, an obligation to affect positive change and actively respond to ethical ideals and misconduct; that is, the professional, at any stage of their career, must be actively engaged in the construction and negotiation of acceptable ethical practice. An argument is made in this paper for approaches to work-integrated learning to provide support for the development of critical mind and moral courage of the emerging professional and engaged student.

Aims

This paper aims to provide a justification for a research study, which will closely examine the transformation in student perceptions and responses to ethical issues before, during, and after work-integrated learning placements.

Approach

The paper presents a proposed methodology of the research study evolving from a consideration of the current literature. The paper employs a literature analysis as a tool for framing an argument for the development of critical moral agency within students with a suggested pedagogical and research approach to better understanding this development.

Discussion

Emerging from the literature are is the argument for the centrality of concepts such as practical wisdom within an applied professional ethics education for students as part of a comprehensive understanding of work-integrated learning. The paper suggests that pedagogical approaches that are grounded in notions of 'situationalism' provide the most useful educative tools for the mature development of a critical moral agent.

Implications

It is intended that this research will provide a foundation for professional ethics education which moves beyond the traditional approaches, to an authentic and engaged curriculum which equips students with the capacities for critical decision making required to navigate the world of work.

Keywords: Professional ethics, agency, values education

Critical moral agency

In understanding the nature of professionalism there is an almost inevitable reference made to notions of values, ethics, morality, and decision making as key attributes of the professional. For example, in his attempt to define professionalism with respect to lawyers in the United States, Rizzardi (2005, p.42) draws the conclusion that, 'the core essence of professionalism can be expressed as follows: character, competence, commitment and courtesy'. Therefore any educative process, which focuses upon the development of a professional, must

[13] Griffith Institute for Higher Education, Gold Coast Campus P: +61 7 555 27055 E: m.campbell@griffith.edu.au

consider the key elements of values and ethics. However, this is a different conclusion to laying claim that students need to be indoctrinated into a particular set of values, instead they need to be empowered to examine and critique their world through a values lens that contributes to their own personal moral development. Students should graduate with the capacity to enact values-driven decision-making. There is, it is argued here, a role for work-integrated learning programs to contribute to this development of critical moral agency.

Critical moral agency derives from three positions of understanding of human learning and existence. Firstly it contests that the individual learner in a practice setting has agency in developing and shaping their learning (Billett, 2008). That is the learner is not merely beholden to the demands of the social world of the workplace, but that they are able to be agentic in deciding the value of particular endeavours. An individual enters a workplace with existing ontogenies, histories, and dispositions that shape their intersections with the social workplace; that is the individual is not *tabula rasa* but instead already formed in a number of ways (Billett, 2006; Campbell, 2009). This challenges the common notion of the socialisation of the individual as a subject of the dominant social norms, and asserts that the learner is an active participant in the formation of their practice. As evidenced in the work of Campbell (2009) as the individual transitions into the workplace, although being aware of dominant social norms and practices, they form practices that are unique and individual. As Campbell (2009, p.21) argues:

Although there exists a significant power□differential between the novice and expert within the community, and access to learning within a social setting can be directed significantly by proclaiming adherence to the values of the community, the trajectory undertaken by an individual is not pre□determined and unchallenged.

The second aspect is the construct of criticality, understood here as the ability to critique the social structures and norms situated in an environment that produces particular subjectivities and behaviours. This concept finds its origins in the work of Foucault and his positioning of ethics as the defence of the free self. As argued by Infinito (2003), deriving from Foucault (1988), there is a desirability to equip students with the capacities to be imaginative about how they understand themselves in the world, and be able to critically assess the social structures that subjugate them to a norm of practices. In Infinito's (2003, p.70) words:

If … we constantly practise care of the self, if we are intimately involved in making judgments, in thinking critically and imaginatively about who it is we wish to be and the actions we perform, if we are practiced at reflection and in dialogue with others, then we will be able to bring about a self who is free.

Within this quote there is evident several elements of practice that facilitate the freedom of self and criticality needed to be transformative agents of change. Firstly, Infintio makes mention of the concept of 'care of self'. This phrase carries with it two meanings; namely, assurance of individual wellbeing and maintaining the freedoms of individuality. These ideas are not mutually exclusive in so much that being aware of ones desires, values and motivations assists in the maintenance of environments that are supportive and enabling of these ideas, thereby creating environs which support personal growth, development and wellbeing. Secondly, Infinito highlights the important role of reflection and dialogue as enablers of imagination and criticality. Reflection has often been regarded as a key component of any successful work-integrated learning curriculum (Winchester-Seeto, Mackaway, Coulson, & Harvey, 2010). However, Infinitio challenges also for the inclusion of dialogue as an instrumental practice in realising the freedom of self. Often discussions of work-integrated learning have strong tendencies towards reflective practices, but consideration of the position and role of dialogue (student-academic, student-mentor, academic-industry) as being a core component to the development of a critical graduate is often neglected in designs of work-integrated learning curriculum. Therefore, it is argued here that there is importance to the development of criticality amongst students when they engage in work-integrated learning experiences, and this is achieved through dialogical practices that enhance the imagination of the self.

The third element of the critical moral agent, which this paper argues as a goal of importance for work-integrated learning, is the notion of the moral being. Accepting that students enter situations of learning with pre-existing ontogenies and dispositions it must also be accepted that students have pre-existing values, morals and ethics. As a student transitions to the workplace or profession there is an expectation that these personal morals will be translated and understood through a lens of professional and workplace ethics. However, the student should not merely conform to expected norms, but must critically engage with the workplace norms. As contested by Campbell & Zegwaard (2011b), there is a power imbalance evident in work-integrated learning experiences with the student often being subject to the dominant norms of the workplace. On the other hand, a student empowered through explicit ethics education can draw power from the knowledge of values frameworks and the ability to use these as a lens to critique practice. Furthermore, where a student is more aware of their value position they are less likely to conform to practices that they perceive to be wrong. There is a role for

higher education institutions, who engage students in work-integrated learning programs, to ensure that students have a developed sense of their personal values framework and have considered this with respect to professional expectations, thereby equipping them to be critical agents in the formation of their professional practice. This relationship is depicted in Figure 1 (adapted from Campbell & Zegwaard, (2011a, p. 365). A student engages with the values and practices of the workplace through an interpretive lens shaped by their histories, dispositions and personal values developed over their lifetime. The role of ethics education, therefore, becomes the ability to have students reflect upon each of these elements and develop critical moral agency so as to avoid mere conformity, but instead promote active decision making and, if necessary, transformative practices (Crain, 1985; Lovat & Toomey, 2007). Ethics education, in this sense, is not just a theme that maps across existing programs but is explicit teaching of values and critical moral agency to enable the students to identify, and constructively engage with, ethical issues in the workplace (Bowden & Smythe, 2008; Reiss, 2010). Furthermore, a work-integrated learning experience should encapsulate this entire system of moral development, reflection and dialogue.

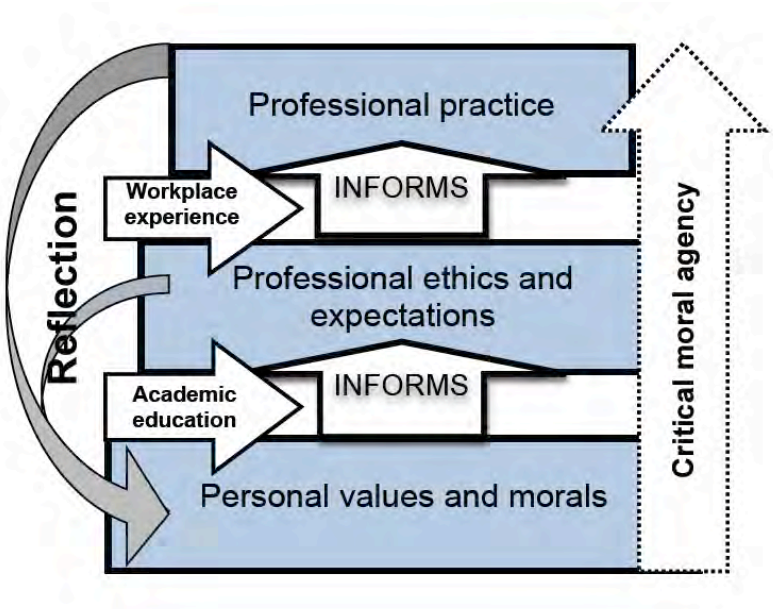


Figure 1 - The relationship between personal values and professional practice. (Adapted from Campbell & Zegwaard, 2011)

What is being argued here is that students engaging with work-integrated learning should evolve what is sometimes referred to as practical wisdom, drawing on the work of Aristole (*Nicomachean Ethics* VI.5). Practical wisdom, as a focus of ethics education related to work-integrated learning, requires not only the knowledge of what is right and wrong, but a capacity to act on this knowledge. As defined by Aristotle, practical wisdom is 'a true and reasoned state of capacity to act with regard to the things that are good or bad for [humanity].' Its realisation requires the student to have a moral knowledge and awareness of good and bad, right and wrong. But extends this to also requiring the student to have expectations of a particular situation, ability to deliberate well and make judgments, and most importantly the capacity to act on that deliberation (Trede, 2012). That is ethics education, as described above, is not merely the education of students into the expectations of the workplace, but the development of capacities to evolve their own moral sense and understanding of self and the agency to act upon this.

Educating for moral agency

An important consideration in the argument for the value of critical moral agency through work-integrated learning is the role of education in the process. It is contested that where a practice (or behaviour) is able to be acquired by an individual then there must equally exist a process through which this is learnt, and consequently taught. This learning / teaching process does not always exist within the current paradigms of education, nor within existing frameworks of practice evident in higher education. The 'learning' of critical moral agency falls within the category of those types of learnings that may not be possible within existing practices. It is often argued (Bowden & Smythe, 2008; Campbell & Zegwaard, 2011b) that it is an almost impossible task to teach moral behaviour. Therefore ethics education has traditionally tended towards models which develop critical

capacities and decision-making, avoiding, to greater and lesser extents, values education. Professional ethics education should be a cornerstone in the facilitation of the exploration by students of the existing moral and value frameworks, allowing them to actively reconstruct these through reflection on (and in) the experiences of the practice setting. Furthermore, there is a role for professional ethics education to facilitate a critical engagement within cultural norms and workplace value systems facilitating the ethical transformation of the workplace, and therefore there must be an acknowledgement of the importance for engagement in discourses of power and hierarchy with respect to moral courage. Proposed here, based on the arguments of Bagnall (1998) is an approach to ethics education that he labels as 'situationalism'. Situationalism involves:

the deconstructive problematisation of modernist ethical rules, principles and codes of moral conduct. It involves the freeing of the moral impulse from the strictures of modernist moral precepts; and it involves the development of moral judgement and action to the point of a highly sophisticated expertise, informed intuitively by the wisdom of individual experience (Bagnall, 1998, p.322).

As Bagnall (1998) acknowledges, a situational ethical reasoning is best summed up as 'respect for experience', where experience is seen as the intersubjective realities that give form and value to the particular practice setting. Therefore, within approaches to ethics education, particularly with respect to its relationship to work-integrated learning programs, there is a need to develop skills within students that facilitate sensitivity to their context (such as issues of power, hierarchy, culture and position) allowing them to act in an empathetically informed manner, and with the ability to draw upon personal moralities and evolve values frameworks. It is beyond the scope of this paper to articulate exact pedagogical practices, with the intent of the proposed research to clarify and explore new approaches to the teaching of ethics, akin to Bagnall's situationalism, which extend and extrapolate upon student experiences in the workplace beyond current dominant practices with focus on the assessment and education of codes and decision-making models.

The moral experiences of students in work-integrated learning

This paper proposes the need for research into the development of critical moral agency by students through the experience of work-integrated learning. Students, whilst on work placement, situate in a rich learning environment (Billett, 2011; Eames & Cates, 2011). Whilst situated in this relevant community of practice, they will inevitably encounter, observe, and perhaps be challenged by situations that are ethical in nature affording a valuable learning experience (Campbell & Zegwaard, 2011a). Students will experience in the workplace a range of practices that extend from a variety of values frameworks, which may, or may not, compliment the personal values of the student or the espoused values of the workplace (Ayling, 2006). These experiences will further shape the students professional self, modifying the interpretive lens by which they discern the activity around them. The extent of the preparation of students to critically engage with the practice setting should have an impact upon the level of influence the shaping will have.

Literature keeps reminding us that tertiary education is expected to create work-ready graduates (DEST, 2007). Such work-readiness includes readiness to engage in workplace norms and ethical readiness to navigate around ethical issues in the workplace, and modify ones own views whilst improving the ethical practice around them. It is important to recognise that students on placement are still, despite holding personal values, in formative stages of developing their professional values and ethics, holding narrow conceptual understandings of professionalism (Grace & Trede, 2011). Unknown is to what extent students are prepared to engage in such challenges and if a preparatory curriculum, incorporating a critical reflective process, based on the ideas explored previously in this paper, would enable a greater awareness of ones own values, and would better prepare students for they workplace. However, given the rich learning environment that work-integrated learning affords, a valuable relationship between WIL and professional ethics exists, and this needs to be developed further to allow students of these programmes to be true professionals upon graduation.

It is proposed to undertake a study of students across two university settings which will examine the development of values, ethics and critical moral agency through engagement in work-integrated learning experiences. This proposed study will contribute to a broader development of curriculum approaches that better support students in the development of their ethical capacities and professional identities as part of a work-integrated learning program. For this study the overall aim is to investigate student's pre- and post-placement understandings and experiences of professional ethics, values and decision-making as part of a work-integrated-learning program, through both qualitative interviews and a larger quantitative survey based on Chaar, Brien and Krass' (2009) psychometric measure of moral reasoning. The aims of the study can be described through three sub-aims identified as:

To determine student's current (pre-placement) perceptions of professional ethics and personal values.
Investigate student experiences within the workplace that present with particular ethical concerns and issues.
Review changes in student perceptions of professional ethics and workplace values following completion of an embedded workplace experience.

Conclusion

As professionals, graduates are required to be autonomous in their decision making. To exercise this responsibility the graduate needs the capacities to critically interrogate the workplace and its espoused and tacit values frameworks. Furthermore the graduate must be agentic in shaping their moral frameworks and professional ethics, but to be able to do so requires educative support from the university. There is considerable need to understand what student awareness is of workplace values, what expected behaviours are of new graduates and norms of the workplace, and how we as educators best prepare students for this. Imparting students with a good understanding of identifying ethical issues and values important to engaging with such ethical issues is significant not only for the student potential success as a professional, but also for the success of that workplace.

References

Aristotle. (1994). *Nichomachean Ethics* (W. D. Ross, Trans.). Online:http://classics.mit.edu/Aristotle/nicomachaen.html.

Ayling, D. (2006). Fostering moral courage: What do business students learn about professional ethics in cooperative education placements. In R. K. Coll (Ed.), *Annual New Zealand Association for Cooperative Education Conference* (pp. 116-120). Queenstown: New Zealand Association for Cooperative Education.

Bagnall, R. G. (1998). Moral education in a postmodern world: continuing professional education. *Journal of Moral Education, 27*(3), 313-331.

Billett, S. (2006). Relationship interdependence between social and individual agency in work and working life. *Mind, Culture and Activity, 13*(1), 53-69.

Billett, S. (2008). *Realising the educational worth of integrating work experiences in higher education*. Paper presented at the WACE/ACEN Asia Pacific Conference - Work Integrated Learning (WIL): Transforming Futures, Manly, Australia.

Billett, S. (2011). Curriculum and pedagogic bases for effectively integrating practice-based experiences (pp. 48). Strawberry Hills, NSW, Australia: Australian Learning and Teaching Council.

Bowden, M., & Smythe, V. (2008). Theories on teaching and training in ethics. *Electronic Journal of Business Ethics and Organizational Studies, 13*(2), 19-26.

Campbell, M. (2009). Learning in early-career police: Coming into the workplace. *Asia-Pacific Journal of Cooperative Education, 10*(1), 19-28.

Campbell, M., & Zegwaard, K. E. (2011a). Ethical considerations and workplace values in cooperative and work-integrated education. In R. K. Coll & K. E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 363-369). Lowell, MA: World Association for Cooperative Education.

Campbell, M., & Zegwaard, K. E. (2011b). Values, ethics and empowering the self through cooperative education. *Asia-Pacific Journal of Cooperative Education, 12*(3), 205-216.

Chaar, B., Brien, J., & Krass, I. (2009). Professional Ethics in Pharmacy Practice - Developing a psychometric measure of moral reasoning. *Pharmacy World and Science, 31*, 439-449.

Crain, W. C. (1985). *Theories of development: Concepts and applications*. Englewood, N.J.: Prentice-Hall.

DEST. (2007). Graduate employability skills (pp. 76). Melbourne, Australia: Business, Industry and Higher Education Collaboration Council.

Eames, C., & Cates, C. (2011). Theories of learning in cooperative and work-integrated education. In R. K. Coll & K. E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 41-52). Lowell, MA: World Association for Cooperative Education.

Foucault, M. (1988). *The care of self: The history of sexuality* (Vol. 3). New York, NY: Vintage Books.

Grace, S., & Trede, F. (2011). Developing professionalism in physiotherapy and dietetics students in professional entry courses. *Studies in Higher Education, 35*, 1-14. doi: 10.1080/03075079.2011.603410

Infinito, J. (2003). Jane Elliot meet Foucault: The formation of ethical identities in the classroom. *Journal of Moral Education, 32*(1), 67-76.

Lovat, T. J., & Toomey, R. (2007). *Values education and quality teaching: The double helix effect*. Sydney, Australia: David Barlow Publishing.

Reiss, M. (2010). Ethical thinking. In A. Jones, A. McKim & M. Reiss (Eds.), *Ethics in the science and technology classroom: A new approach to teaching and learning* (pp. 7-15). Rotterdam, The Netherlands: Sense Publishers.

Rizzardi, K. W. (2005). Defining Professionalism: I Know it When I See it? . *Florida Bar Journal 38, 79*(7), 38-43.

Trede, F. (2012). Role of work-integrated learning in developing professionalism and professional identity. *Asia-Pacific Journal of Cooperative Education, 13*(3), 159-167.

Winchester-Seeto, T., Mackaway, J., Coulson, D., & Harvey, M. (2010). 'But how do we assess it?' An analysis of assessment strategies for learning through participation (LTP). *Asia-Pacific Journal of Cooperative Education, 11*(3), 67-91.

Copyright © 2012 Matthew Campbell & Karsten Zegwaard

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Developing Reflection: a practice framework

Susanna Chamberlain
Griffith University

Over the past few years there has been a great deal of discussion of the use of reflective journals and commentaries as an assessment tool within the context of Work Integrated Learning. One of the issues which has dominated the discussion is how to assess reflection, and what precisely could be assessed. This discussion has prompted me to share the experience that we have had over the past three years in utilising a curriculum approach to developing the practice of reflection, by teaching a framework of understanding the process which then forms the foundation of the assessment rubric.

Methodology

This paper is written as a retrospective review of practice which draws from Brookfield's 1995 model for evaluating and enhancing teaching through a reflection on practice which is engaged with the scholarly literature. To that end, I explore the literature on assessing reflection, and touch upon the uses of reflective practice journals in work-integrated or cooperative learning and briefly discuss the means by which critical reflection can be taught.
The practice which has been established over the past three years is then presented and further discussion indicates the parallels of the 6As mnemonic with the revised Bloom's Taxonomy. I also discuss the ways in which the practice has been refined over this period and the intentions for changes in the coming year.

Literature review

There are three distinct areas which intersect in the understanding of this practice framework: assessment of reflection, work integrated or cooperative learning and curriculum development.
A recent review of assessment practices in WIL undertaken by Winchester-Seeto et al (2010) from Macquarie University identified the assessment of reflective practice journals as one of the key assignments prescribed across the sector. They indicated that there were both strengths and problems with the use of journals, and in discussion (pers comm. 2010) reported that one of the significant difficulties was a lack of clear guidelines for "reflection" with many differing expectations emanating from the markers. The work of Moon (2004, 2006) and Bradbury et al (2010) focuses on the uses of reflection as practice, and offers quite generalised ideas on the assessment of what is seen to be a valuable learning practice.
One of the possible approaches lies in the use of critical thinking models which develop the student's ability to examine with clarity and decision the experiences and sources which stimulate them (Field and Leicester2000, Leicester 2009). Here the student is taught a framework of reasoning which enables a clear understanding to be developed and articulated. This requires a development of a curriculum which allows the space for teaching such an approach.
The approach taken to developing a curriculum which supports work integrated or cooperative learning demands a foundation in sound pedagogical principles (Biggs 1996, Biggs 2003, Biggs and Tang 2007; Fry, Ketteridge and Marshall 2003; Ramsden 2003). In particular, there is an appreciation that learning has to be both integrated and reinforced in order to be assimilated into the continuing experience of learning beyond the academy. The core stream courses which I discuss below have been designed around a Problem-Based Learning approach, (Barrell 2007; Beard & Wilson 2002; Dewey 1997; Kolb 1984), with each course set up to pose questions (such as "why should I care?" or "how can I be an active member of a community?").
The task presented was creating a platform for work-integrated learning in an unusual context, although the university is committed to introducing cooperative education across all of its programs (Bates 2008, Griffith University 2006, Orrell 2004, Patrick et al 2008, Smith and Simbag 2008). The Bachelor of Arts is the oldest degree form and traditionally allows the greatest freedom of choice for the entering student. It is precisely this fluidity which created the greatest challenges in terms of developing a curriculum which was both responsive to a range of distinct fields of study and was in itself interdisciplinary (Brewer 1999, Hall and Weaver 2001, Petrie 1992, Woods 2007). The emphasis has been on developing and sustaining transferable skills (Betts and Kercher 1999, Fallows and Steven 2000) across the curriculum. One of these skills is an approach to reflective practice which can be utilised beyond the academy, but is also easily available to assessment.

Practice framework

Context

In 2008, Griffith University introduced a new format in the Bachelor of Arts which incorporated a core stream in Social Enterprise. The suite of courses consists of six courses, one in each semester. To date over 1400 students have undertaken at least the first year subjects, and 2010 has seen the first cohort to graduate, having completed the entire core stream. The core courses explore topics like human rights, social justice, social policy, the environment, community and international development. Over two years the students are offered the opportunity to explore the third sector of community and voluntary organisations, not-for-profits and social businesses. In the third year, students undertake a professional placement with an organisation which has social goals, and complete the final year by creating and managing a showcase event.

The curriculum for the core stream incorporates a range of skills, ranging from the fundamentals of academic practice to more specific areas of research, grant-writing, project /event planning and management. The courses provided are an introductory Academic Writing (formerly called Effective Writing) and Introduction to Social Enterprise in the first year; Thinking Ethically and Culture, Community and Enterprise in the second; and the final year comprises the Social Enterprise Placement and the capstone Social Enterprise Project.

The practice of reflective writing is introduced briefly as part of the varied writing exercises in the first semester course in first year, but becomes an essential element of the second semester course Introduction to Social Enterprise. It is in this course that the framework below is both taught and then used as the foundation of the rubric for assessment. In the second year courses, the practice of reflection is taken up in Thinking Ethically where students are required to develop a Personal Ethical Statement (which is considered formative) and an accompanying exegesis (which is considered summative and consequently is assessed).

In the third Year, when students are undertaking their professional placements, they are required to provide a Reflective Practice Journal as a major assessment item. Here the framework which was utilised in first year is revisited.

T he Framework: the six As

Acknowledgement	*Research, stimulus, sources*
Analysis	*Meaning, comparison, examination of elements*
Assessment	*Evaluating the ideas or experiences*
Application	*Seeing the possibilities in alternative contexts*
Action	*What needs to be done*
Articulation	*Presentation, writing, referencing*

In Introduction to Social Enterprise (semester two, First Year) the students are introduced to the 6As as a framework for thinking through the practice of reflective writing. In the workbooks provided in the course there is a series of questions which enables the student to explore each of the "As" (elements) in some detail. While this framework could be used as template, my preference has been that it is more beneficial as a way to understand the process of reflection than as a simplified model.
Like the Revised Blooms Taxonomy (Bloom 1956, Biggs 1996), the Six As framework acknowledges the complexity of learning processes. The difference lies in the approach. The Revised Bloom's taxonomy ranks from lowest to highest each of the competencies: knowledge, comprehension, application, analysis, synthesis evaluation and creativity. With the Six As, these elements are seen as parallel and often inextricable processes when applied to reflective practice.

The questions

Much of the teaching of this framework is formulated using a range of quite direct questions which enable direct engagement with each of the core ideas. The use of questions as the pivot on which each course is continuous

throughout the core stream: each course is built around at least one key question which is the nexus of engagement by student and teacher. I have included these here to demonstrate the pedagogical technique being used. This is by no means a complete or comprehensive list, but it does serve to show how the practice of reflection can be orderly and develop both self-awareness and reflexivity.

- What are the sources/ what was the experience?
- What prompted the observations?
- What was noticed or observed?
- Where did the material (or observations) come from?
- What research has been done?

Analysis

- What did the experience mean?
- What did you understand?
- What was the argument or the elements of the stimulus?
- What did the source (or experience) contribute to your understanding?
- How did you know what this meant?
- When did you realise or comprehend what was important about this experience?
- How do these ideas compare with others you have come across?
- How are they different?

Assessment

- Why was this material or experience important?
- How can you evaluate the experience/material?
- What particular or specific techniques of evaluation do you use?
- How do you know what is important in this instance?
- How can you tell what is useful or important about this experience?
- What kinds of values does this experience enable you to know you have?

Application

- How could you use these ideas (or values) in another context?
- What does this experience offer as an indication of what to do?
- What have you learnt that is useful?
- How could you use the understanding you have gained to trigger your own creative processes?

Action

- What do you need to do now?
- What further learning would be useful?
- What would be the ways in which you could use the learning you have gained from the experience?
- How would you know if a specific action is necessary and inevitable?

Articulation

- How has the reflection been expressed?
- Have the academic conventions been followed (referencing, spelling, grammar, format)?
- Has the language been carefully chosen?
- Is the text clear, concise and complete?

The framework is discussed in class, incorporated into the workbook for the initial course and is explored several times over the three years. This repetition allows for growing sophistication with each iteration, and for deeper discussions as to the possible questions that could be used to develop the particular skills.

Assessment

The assessment of Reflective Practice Journals is based precisely upon the SixAs format. Rubrics are drawn up and published, in the workbooks, on line and with the course profiles. The typical rubric reproduces the table above, with the inclusion of a range of possible results from Unsatisfactory to Excellent. As a significant element in the use of this model is the development of a life-long learning or work-integrated skill-set (Conway, Cohen and Stanhope, 1992; Fallows and Steven 2000), we use rubrics which match the expectations set by the taught framework. In this way the learning is reinforced and students recognise their own competency.

There are several advantages to using this particular framework, and possibly some disadvantages too. It allows for a clarity about precisely what is to be assessed but allows for the student to develop and utilise his/her own voice. There is a general encouragement of creativity in the exploration of the experience and sources or triggers, but not an invitation into the confessional mode which may disclose material which is not really appropriate to an academic or a work-oriented task. Marking expectations are apposite the year level of the student, but the practice can develop over time, and sophistication of conceptualisation is allowed for.

When exploring the disadvantages, the obvious one is that students use the framework quite literally and present the Reflective Practice Journal in discrete sections, each superficially addressing the "A" required. While this tends to occur more in the first year, over time the underpinning practices of reflection become ingrained and the overt use of the "A"s becomes subsumed in a more contemplative and deeper recursivity. This is evidenced in the third year showcase, in which students reflect on the entirety of the degree.

Discussion

There are a range of issues that deserve some discussion.

The structure of the Social Enterprise core stream or signature experience provides a platform for the work-integrated learning process. There are six courses so the student is engaged with the ideas that underpin the sector into which they are going on professional placement. This is not uncommon in a vocational course such as Pharmacy or Physiotherapy or Nursing, but highly unusual in a generalist degree which aspires to train scholars in the Humanities. Historians, analysts of literature or film, sociologists and philosophers all face the task of finding work at the completion of an undergraduate degree, but few universities prepare them for the workplace. This is precisely the task we have taken on. Integrating students into the Third Sector, or even raising the issues faced by the not-for-profit arena, forms a foundation for possible careers.

The issue of developing a reflective orientation which is both lucid and incorporated into ongoing practice is a significant element of the underpinning philosophy of the Social Enterprise stream. There is a strong element of performing the meaning in the ways in which the course structures (based on a model of pivotal questions) are reinforced by the use of questions to invite personal reflection. The central pedagogical thrust is towards an ingrained and articulate curiosity, both about the world and about the student's relationship with that world.
The parallel process is invoked in the development of rubrics which match the taught framework. The use of Six As has been deliberate, as mnemonics are often a useful means of integrating a key to practice. It is also a deliberate choice not to locate the elements within a particular hierarchy, allowing for some individual learning styles or variations in thought process. Using criteria sheets which are specifically designed to allow for an assessment of the level of engagement with each of the aspects of the reflection process has enabled both the students and the teachers to engage with the practices of reflection without recourse to prior understandings.

Often this is the most difficult aspect of assessing reflective practice: what precisely do we understand reflection to be? One of the comments that I have heard repeatedly in fora where this issue has been raised is that teachers are looking for "honesty" from the student. What does this honesty consist of? For those in human services, for example, the "honesty" seems to be a transparent relationship with affect- what was the emotional response of the student to a particular experience or issue. There seems to be a different perspective on " honesty" when the reflection needs to be undertaken in either a medico/scientific discipline or in any of the pragmatic/engineering fields. Here the issue of " honesty" seems to mean a factual statement of event and interaction, without that emotional engagement of the human services.

In the Humanities, we have students whose fields of study can be either quite abstract (history, philosophy, literature) or applied (screen and film, cultural and sociological sciences). The "honesty" demanded in these fields is that of being able to apply academic and intellectual rigour to a problem, usually from an objective and relatively detached point of view. Developing a framework which enables the pursuit of that rigour while allowing for a personal subjective element of engagement has required being able to think across the range of expectations.

The Six As approach works well in the Humanities. It enables the application of rigour, trains the students in a method which can be applied across a range of experiences, and presents an assessable framework which can be drawn upon across the entire degree path. What I am curious about is how well it applies to other disciplines. At least one experiment has been tried where the framework was shared with engineers, and I look forward to hearing how it fares in other disciplinary contexts.

References

Abeysekera, I. (2006). *Issues relating to designing a work-integrated learning program in an undergraduate accounting program and its implications for curriculum.* Asia-Pacific Journal 7(1), 7 -15.

Barrell, John, 2007, *Problem-based learning: an inquiry approach*, Corwin Press, New York.

Bates, Merrelyn, 2008, "Work integrated curricula in university programs", in **Higher Education and Development**, Vol 27, No 4, December 2008, 305-317

Beard, Colin and John P Wilson, 2002, *The power of experiential learning: a handbook for trainers and educators,* Kogan Page, London

Betts, George T and Jolene K Kercher, 1999, *Autonomous learner model: optimizing ability*, Hawker Brownlow Education, Cheltenham, Vic

Biggs, J., 2003, *Teaching for quality learning at university* (2nd Ed) **SRHE** and Open University Press, Buckingham.

Biggs, John, 1996, *Enhancing Teaching through constructive alignment*, in **Higher Education**, Vol 32, No.3 (Oct 1996), pp 347-364

Biggs, J and Catherine Tang (2007) *Teaching for Quality Learning at University,* McGraw Hill and the Society for Research into Higher Education,Berkshire, UK.

B. S. Bloom (Ed.),1956, *Taxonomy of Educational Objectives: The Classification of Educational Goals*; pp. 201–207, Susan Fauer Company, Inc.

Boud, D. and Costley, C. (2007). *From project supervision to advising: new concepts of the practice*. Innovations in Education and Teaching International. 4(2).119-130.

Helen Bradbury ... [et al.](eds) , 2010, Beyond reflective practice : new approaches to professional lifelong learning, London ; New York : Routledge

Brewer, Garry D, 1999, "The challenges of Interdisciplinarity" in **Policy Sources**, Vol 32, No 4 , pp 327-337, Springer

Brookfield, Stephen. *Becoming a Critically Reflective Teacher*. San-Francisco: Jossey-Bass. 1995.

Conway, M., Cohen, G., & Stanhope, N. (1992). Very long-term memory for knowledge acquired at school and university. Applied Cognitive Psychology, 6, 467-482.

Dewey, J, 1997 (reprint) *Experience and Education*, Pocket Books, New York

Fallows, Stephen J., and Christine Steven, 2000*, Integrating key skills in higher education: employability, transferable skills and learning for life*, Routledge, London

Fry, Heather, Steve Ketteridge and Stephanie Marshall, 2003, Understanding student learning in *A handbook for teaching and learning in Higher education*, Kogan Page, London

John Field and Mal Leicester(eds), 2000, Lifelong learning : education across the lifespan London ; New York : Routledge/Falmer

Griffith University. (2006).Definition of Work-Integrated Learning. Griffith University Policy Library, 2006/0003793.

Hall, Pippa and Lynad Weaver, 2001, "Interdisciplinary education and teamwork: a long and winding road" in **Medical Education**, 35:867-875

Kolb, David A, 1984, *Experiential learning: experience as the source of learning and development,* Prentice Hall, New Jersey

Mal Leicester, c2009, Teaching critical thinking skills, New York : Continuum

Lombardi, M. (2007). *Authentic learning for the 21st century: an overview.* Educause Learning Initiative.

Jennifer A. Moon,2004, A handbook of reflective and experiential learning: theory and practice, New York : RoutledgeFalmer

Jennifer A. Moon, 2006, Learning journals : a handbook for reflective practice and professional development, London ; New York : Routledge

Orrell, Janice, 2004, "Work-Integrated Learning programmes: management and educational quality" in **Proceedings of the Australian University Quality Forum**, AUQA occasional publication.

Petrie, Hugh G, 1992, "Interdisciplinary Education: are we faced with insurmountable opportunities?" in **Review of Research in Higher Education**, Vol 18, pp 299-333

Ramsden, P, 2003, *Learning to teach in higher education*, Routledge Falmer, London

Patrick, C-j., Peach, D., Pocknee, C., Webb, F., Fletcher, M., Pretto, G. (2008, December). The WIL [Work Integrated Learning] report: A national scoping study [Australian Learning and Teaching Council (ALTC) Final report]. Brisbane: Queensland University of Technology. Available online at:www.altc.edu.au and www.acen.edu.au

Prosser, M and Trigwell, K, 1999, *Understanding learning and Teaching, the experience of higher education*, SRHE and Open University Press, Buckingham

Smith, C.D. (2008). Design-focused evaluation. Assessment & Evaluation in Higher Education, 33 (6), 631–645.

Smith, C., & Simbag, V. (2008).A structural framework for work-integrated learning curricula. Manuscript submitted for publication. Unpublished Manuscript submitted for publication. Griffith University.

Winchester-Seeto, T, et al (2010) An Integration and Synthesis of assessment for Learning through participation, with a focus on assessment of reflection, Conference presentation, ACEN Conference, Curtin University, Perth

Woods, Charlotte, 2007, "Researching and developing interdisciplinary teaching: towards a conceptual framework for classroom communication" in **Higher Education**, 54:853-866

Copyright © 2012 Susanna Chamberlain

The author assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author.

Promoting learning and teaching about research through collaborative work integrated learning: implications for students, agencies and practitioners

Dominic Chilvers
Department of Nursing and Human Services, Christchurch Polytechnic Institute of Technology, New Zealand,
Jane Maidment
Department of Nursing and Human Services, Christchurch Polytechnic Institute of Technology, New Zealand.
Yvonne Crichton-Hill
School of Social and Political Science, University of Canterbury, New Zealand.

Research has a long history in the social work curriculum and yet it is often an area of significant challenge for educators due to negative student perceptions about the relevance of research for practice. Work integrated learning has been an underutilised approach for teaching research in social work despite the use of practicum being well established and valued by students in other parts of the curriculum. This paper presents a practicum model where a group of social work students completed three month research focused placements in a variety of social service industry settings. Findings from this New Zealand pilot project identified a range of benefits for students, academic staff, social work practitioners, and industry partners if quality research practicum opportunities are developed. Factors which strengthen research learning in the field are discussed so that educators or organisations who may be interested in developing research focused work integrated learning can plan for success.

Keywords: Challenges and innovation in WIL, stakeholder partnerships, collaborations with industry.

Introduction

Within the social work profession there is an increasing recognition that interventions based on evidence from research improve the quality of practice (Orme & Powell, 2008). There is a long tradition of including research skills within the curriculum for social work education (Dunlap, 1993), although the respective merits of preparing practitioners to be either consumers or producers of research has been hotly debated (Walsh, 1998). Teaching research has also presented significant challenges for academic staff due to negative student perceptions about the relevance of research for practice (Cameron & Este, 2008). Approaches to learning and teaching research for social work have traditionally neglected work integrated learning (WIL) in favour of a classroom based approach (Lorenz, 2003). This more abstract way of teaching inquiry has arguably contributed to practitioner lack of confidence in conducting research in the field (Beddoe, 2011; Joubert, 2006; MacIntyre & Paul, 2012). Despite these challenges, the current focus on evidence based practice to justify professional action (Matthews and Crawford, 2011) makes it necessary for educators to find innovative methods to facilitate research learning in order to effectively prepare graduates for the current demanding practice environment. Cameron and Este (2008) have argued that educators should increase the practical application of research to help overcome student's inherent aversion to the subject. In particular, they suggest the use of WIL; asking practitioners to present their research interests with the aim of recruiting students to undertake research roles as part of a practicum.

The contribution of WIL in the education of social workers can be traced back to the beginnings of the profession in the settlement house movement of the mid-nineteenth century (Knee, 2002). WIL, or field education as it is known in social work, has long been recognised as a critical component of practitioner education with students reporting it to be the most significant single element of their professional induction (Fortune & Abramson, 1993). Hewson, Walsh and Bradshaw (2010) have described a WIL approach to teaching research to social work students in Canada and their research found that confidence with research increased amongst participants. Elsewhere (Maidment, Chilvers, Crichton-Hill & Meadows-Taurua, 2011) we have described the development of a similar approach in New Zealand. This article explains the model that was developed as part of the New Zealand pilot project for facilitating practice research using WIL, together with examining strategies for strengthening research learning in the field.

Project Background

The *'Learning to conduct collaborative social work research in the field'* project was a collaborative venture undertaken in 2011 that involved the Christchurch Polytechnic Institute of Technology and the University of Canterbury. The project was supported through funding from the Ako Aotearoa National Centre for Tertiary Teaching Excellence. Academic staff from both education institutions were interested in facilitating improved engagement with research activities by students and local qualified social workers, and had a strong commitment to fostering collaborative research activity with agencies. The project aimed to:

- Facilitate opportunities for students to learn research skills in real social service industry settings.
- Improve learning and teaching about research both in class and in work contexts and develop resources to support these activities.
- Develop confidence in undertaking and teaching research amongst field educators (social work practitioners who mentor students on practicum).
- Build the local capacity for social work practice research.
- Develop opportunities for research focused collaboration and support across academic and practice sectors.

Nine social services agencies were involved in the project and each identified a research project that a student could participate in during a twelve week full time practicum. The field educators were chosen because they had all expressed an interest in research and in working with students on practicum. The topics of the agency projects were extremely varied and were at different stages of development. Students were therefore involved in various phases of the research process. Some students wrote literature reviews or research proposals, whilst others were engaged in data gathering or analysis. A number of placements included a mixture of research and client casework whilst others were entirely focused on research tasks. The nine students recruited to the project had demonstrated an aptitude for research but had not specifically requested a research practicum. They were encouraged to consider the option of undertaking a research placement but were given the choice of whether to accept the opportunity. All social work students complete two practicums and therefore those who chose to participate in this project also completed a more traditional casework placement.

Theoretical ideas about situated learning and developing Communities of Practice (Wenger, McDermott and Snyder, 2002) explicitly informed this project. Students participated in a series of tutorial sessions with the aim of sharing experiences related to undertaking research. Academic staff, field educators and students were engaged in building a research community of practice that would support the learning of all involved and also develop the capacity for practice research. Individual projects were established on a developmental basis whereby initial students would be involved in a discreet part of the research and future students might continue further phases. This developmental process ensured an on-going engagement between the stakeholders which included a post placement seminar to profile the agencies and their projects and encourage other agencies to consider future participation in the project.

Semi structured interviews were undertaken with all students and field educators at the end of the practicum. These interviews were transcribed and subjected to first and second level coding for the purposes of developing a cogent thematic analysis. Video interviews were also conducted with most of the participants as part of the development of a teaching a learning resource. During the course of the project a set of research facilitation cards were also developed for use as a teaching resource. These facilitation cards have yet to be piloted in the field or classroom learning environments.

The data collected during the project indicates that students were more interested and confident with research at the end of their practicum (Maidment, Chilvers & Crichton-Hill, 2012). The individual research projects contributed to the development of social work practice and resulted in an increased capacity for conducting practice research. The project also saw the early development of a research community of practice that will hopefully lead to an on-going growth in confidence, interest, and engagement in research from local social workers. These findings suggest there are a number of benefits that accrue from research focused WIL opportunities. .

Facilitating a Successful Research Practicum

During the research interviews, students and field educators identified a range of factors they felt were critical for a successful research practicum. These factors are important considerations for host agencies, field

educators, students and academic staff as they need to be addressed on multiple levels, and should not be left as the responsibility of one stakeholder.

Matching the student and research topic

Whilst some students in this project wanted to be given the opportunity to choose the topic or focus of their research practicum, interviews revealed that where students had openness to projects that they did not choose, they became increasingly interested and immersed in the research as they engaged with the relevant literature. As one student said, *"...once you grasped the fundamental principles of what you were reading and looking at, it became really interesting"*.

Researchers are often careful to select research projects that relate to a particular area of interest or passion due to the extended time period over which enthusiasm and motivation will have to be maintained. However, in a twelve week practicum this requirement for endurance is less significant and students are at a stage in their career where exposure to a breadth of topics should be both engaging and interesting.

Preparing the research environment

Several students faced challenges related to the resources in the agency available to support their research. Some struggled to access desk space or a computer or could not access academic databases from within the agency. Other students commented that they felt isolated within the agency context and faced challenges due to a lack of interest or understanding about their research from other staff. For example, one student commented:

"It was kind of lonely, like you'd spend a lot of time in the office by yourself. Also I felt like I had to keep justifying to people – I think other staff members didn't think I was doing anything because I wasn't actually out there working with the patients and so they kept asking me if I had enough to do, and I'm like yep I really do."

It is essential that the host agency addresses the practical requirements of students undertaking research. For example, access to a computer with internet access is essential, but where this is problematic arranging time for the student to work at home or from the library can overcome resource limitations. As well as the physical environment, it is important to create a research friendly environment in the team. This preparation involves briefing the team in advance to explain the nature of the project, the reasons why it is important for the organisation, how the findings will be used, and the tasks the student will undertake. Once the student arrives it is important to provide regular updates about progress on the project and to engage the team in addressing challenges that may arise. Involving the team from the outset helps avoid questions about the legitimacy of the work the student undertakes and develops a supportive collegial working environment that prevents a sense of isolation for the student.

Clarifying the research question and tasks

Some students faced challenges with clarifying the focus and objectives of the research project and the tasks they would be expected to complete. In several agencies the focus and expectations changed a number of times, and whilst students managed these changes the process created significant anxiety. Several field educators were initially unrealistic about how much could be achieved by a student in twelve weeks, sometimes because of pressure from the agency to complete a whole research project in an unrealistic timeframe. Field educators have a particular role in ensuring that there is clarity about the research project from the outset of the practicum. Identifying a focused research question is important in any research project but is particularly significant when it is part of a student practicum. Support may need to be provided by academic staff to ensure that this clarity is achieved at an early stage and that the tasks the student will undertake are realistic and achievable.

Time Management

Time proved a significant challenge for both students and field educators involved in a research practicum. One field educator explained the solution he developed with the student to address the issue of time for supervision about the research.

"Time is always a critical factor so we kind of split – we developed a second supervision session during the week that was just research specific."

Ensuring that time is set aside to undertake research focused supervision and providing regular feedback about the tasks the student is undertaking is particularly important as students are likely to lack confidence with the research process. If the practicum has a mix of research and casework then field educators must help the student to structure their time and protect the time necessary to complete the research tasks.

Networking

Undertaking strategic networking is an important part of the research process that field educators need to address with students. Encouraging the student to connect with people and resources outside of the agency, and to link with other students engaged with research, helps students to understand the practical value of these activities and learn how networking can be both a legitimate and important component for strengthening research activity. One student reported how he contacted services throughout New Zealand to ask about the service evaluation tools that were being used. He anticipated that similar services would be using evaluation tools that his practicum agency could adopt, but in fact discovered none were being used. This piece of information changed the focus of his research but would not have occurred without the systematic networking the student undertook with allied agencies. Equally, field educators need to recognise the support they may need and request assistance from the academic institution with aspects of the research process where they lack confidence, knowledge or research resources. Whilst it is important for field educators to refresh their research knowledge and skills, it is also critical that they do not feel that they should have all the answers simply because they are supporting a student.

Developing a research community of practice

An unexpected challenge reported by students were the negative views about conducting research expressed by their peers. As one student explained:

"When I was looking for peer support I was getting a lot of negativity from fellow students about what I was actually doing…their perceptions were quite negative so it sort of rained on my parade a bit…"

This comment highlights the importance of academic staff facilitating the development of a research community that can provide the necessary support to students during WIL. In this project a series of tutorials were provided that involved a mixture of structured sessions with student tasks and unstructured sessions that used the challenges students were facing as a starting point for discussion and action planning. Students reported that these sessions helped them to recognise that other research students were facing similar obstacles and provided opportunity to identify potential strategies or solutions. Offering advice and support to field educators during the practicum, or making resources available such as databases, also helped to foster a sense of community. At the end of the practicums a research seminar was organised for students and field educators to present their research projects and celebrate their achievements. Whilst several students commented that they felt this was extra work, it did foster a sense of belonging to a community with shared interests.

Connecting research tasks to the assessment

Several students commented on the challenge of applying their research to the practicum assessment process. Each student was required to develop a set of learning objectives for their practicum but many found it difficult to integrate the research activities into the learning agreement. Some students reported that they saw the research activities as extra work, or disconnected from 'real' social work skills that would be required to demonstrate competence. Therefore, academic staff must ensure that the assessment process can be clearly applied to a research practicum. Even if the process does apply, it is important to provide clear guidance to the students and field educators about how research tasks should feature in the learning agreement. As one student put it:

"They (tutors) lined up the social work process and the research process and showed how they fitted with each other and that really helped my understanding."

Conclusion

There are two main limitations arising out of this inquiry. Firstly, the project involved only a small sample of students, field educators and social service agencies in one city in New Zealand. It is therefore not possible to generalise the findings. Secondly, the scope of the project did not allow for the impact of conducting research practicum projects to be quantified, despite the qualitative data suggesting a range of potentially significant implications. Despite these limitations this research has extended our understanding of the value of using work

integrated learning to develop confidence with conducting research amongst social work students. Interviews conducted with students and field educators identified a variety of factors that need to be considered to facilitate effective research practicums. These factors require the engagement of host agencies, field educators, students and academic staff in a collaborative process focused on developing research knowledge and skills. Further research is required to test the applicability of these factors to other settings and other disciplines concerned with practice research.

References

Beddoe, L. (2011). Investing in the future: Social workers talk about research. *British Journal of Social Work, 41*, 557-575.

Cameron, P., & Este, D. (2008). Engaging students in social work research education. *Social Work Education: The International Journal, 27(*4), 390-406.

Dunlap, K. (1993). A history of research in social work education: 1915-1991. *Journal of Social Work Education, 29*(3), 293-201.

Fortune, A. & Abramson, J (1993). Predictors of satisfaction with field practicum among social work students. *The Clinical Supervisor, 11*(1), 95-111.

Hewson, J., Walsh, C., & Bradshaw, C. (2010). Enhancing social work research education through research field placements. *Contemporary Issues in Education Research, 3,*(9),7-15.

Joubert, L. (2006). Academic-practice partnerships in practice research: A cultural shift for health social workers. *Social Work in Health Care, 43*(2/3), 151-162.

Lorenz, W. (2003). European experiences in teaching social work research. *Social Work Education, 22*(1), 7-18.

MacIntyre, G., & Paul, S. (2012). Teaching research in social work: Capacity and challenge. *British Journal of Social Work, 1-18, doi: 10.1093/bjsw/bcs010.*

Maidment, J., Chilvers, D., & Crichton-Hill, Y. (2012). *Learning to conduct collaborative social work research in the field.* Ako Aotearoa Nation Centre for Tertiary Teaching Excellence.

Maidment, J., Chilvers, D., Crichton-Hill, Y., & Meadows-Taurua, K., (2011). Promoting research literacy during the social work practicum. *Aotearoa New Zealand Social Work, XXIII*(4), 3-13.

Matthews, I., & Crawford, K. (2011). *Evidence based practice in social work.* Exeter, England: Learning Matters.

Orme, J., & Powell, J. (2008). Building research capacity in social work: Process and issues. *British Journal of Social Work,* 38(5), 988-1008.

Walsh, J. (1998). A model for integrating research, practice, and field instruction in the undergraduate curriculum. *Journal of Teaching in Social Work,* 17(1-2), 49-63.

Wenger, E., McDermott, R., & Snyder, W. (2002). *Cultivating communities of practice.* Boston, MA: Harvard Business School Press.

Copyright © 2012 Dominic Chilvers, Jane Maidment & Yvonne Crichton-Hill

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Preparing for WIL: Online Career Development for IT Students

Jo Coldwell-Neilson
School of Information Technology, Deakin University, Geelong
Annemieke Craig
School of Information Systems, Deakin University, Geelong

This paper reports on an online unit that enhances IT students' generic skills. Frequently IT students, even those with a strong technical background and a high academic record, can be unsuccessful at obtaining work placements as they stumble at the interview stage due to a lack of social or professional skills. A simulation was created that enables students to enhance their employability and to prepare for transition to work integrated learning (WIL) through realistic interview preparation. The simulation utilizes a synchronous communication tool to conduct behavioural group interviews with expert careers advisors. The impact of this new initiative is explored and feedback received from faculty, careers advisors and students during three trimesters is discussed. The findings suggest that incorporating WIL through the simulation has been a success by at least raising students' awareness of the importance and significance of being well prepared for job interviews.

Keywords: Career development, generic skills, graduate attributes

Introduction

Traditionally a university provides students with curricula centred on the core body of knowledge of a discipline. More recently the expectation has been to ensure students are not only proficient in their chosen field but that they are also work-ready thus requiring generic employability skills (Litchfield, Frawley & Nettleton 2010). IT students will readily add to their portfolio of technical skills such as new programming languages or development methodologies, but there is much hesitancy and dissatisfaction when required to extend their communication skills, team work competencies or other generic skills. This paper focuses on an intervention developed to assist IT students improve their communications skills associated with interview preparation and participation.

Literature Review

Research studies suggest that the skills required of IT graduates by employers differ from the skills they actually possess (Sixsmith & Litchfield 2010). From their research Patrick et al (2008, p.vii) found that "… a large proportion of applicants for positions are considered unsuitable" and noted that many graduates had skill deficiencies in areas including business communication, problem solving, independent and critical thinking, and understanding of business practice.

Co-operative education programs, such as WIL, place students in relevant work experience for periods of up to one year to improve their generic skill development as well as their understanding of business practice. For a variety of reasons, not all students are able to undertake such placements. Consequently the provision of opportunities to develop their generic skills through the curriculum is needed. It *is* possible to simulate the work environment to enable students to experience aspects of the workplace within an educational framework (Sixsmith & Litchfield 2010). While the provision of professional and graduate attributes through the curriculum is not a replacement for those obtained through WIL, it should be seen as a necessary and valuable addition (Litchfield et al 2010). Curriculum content needs to cover these skills, make them more visible, and ensure that they are systematically taught.

Equally students need to be prepared for the transition from university to the workplace and to successfully navigate the recruitment process to secure employment. Students need to select appropriate job vacancies and demonstrate that they meet the selection criteria. Therefore students also need the skills to be able to self-manage lifelong career development (Bridgstock 2009).

Shirley and Davies (2007) have used digital technologies in a virtual placement project to help final year undergraduate students enhance their self-awareness and generic skills. They suggest that such tools provide authentic WIL experiences for students preparing for the 'real world'.

The Study

Background

IT Practice is a compulsory final-year unit in the Bachelor of Information Technology at Deakin University. It aims to provide students with opportunities to develop practical skills that can be applied in real-world situations. It is an online unit where communication and collaboration is facilitated through the university's online learning environment (DSO). A problem-based learning approach is used where project briefs and associated tasks are the major part of assessment, driving the learning. The unit consists of four modules which focus on different aspects of employment and the day-to-day operations of an IT department. The first module is *IT Employment* where students reflect on what it means to be an IT professional. Students apply to a graduate employment program in United Enterprises (UE) by preparing their personal application letter and resume. UE is a simulated organization, in which they will work for the trimester. Once they are shortlisted for the position, students prepare for the next stage of the application process, the group interview. The live online interview is conducted by careers advisors from the University. Additionally students develop a Personal Reflection and Action Plan to identify skills they need to address, and describe what specific short-term and long-term actions they need to implement, to improve or acquire these skills.

Resources and links for *IT Employment* are available through DSO including: links to the UE website and the graduate program; resources and templates for resumes from student support services; links to external websites such as the Australian Computer Society's careers website, and sites such as YouTube. Moderated discussion forums are also utilized in DSO to support the students' learning activities.

The group interview using online real-time technologies was a new initiative in Trimester 2, 2010. Previous IT Practice cohorts were given a list of interview questions and discussed possible answers online. The new initiative of online interviews using genuine careers advisors as facilitators is the focus of this paper.

Elluminate Live!® (ELive)

ELive is a communication tool that allows participants to interact and collaborate in real time. With ELive users can:

- conduct synchronous voice (and video) discussions;
- engage in conversation using text based chat tools;
- share resources; and
- manage interactions using visual cues and communication spaces.

The video functionality was not used in IT Practice since many students could have bandwidth constraints which limits its viability. All other forms of communication in ELive were used though.

The Group Interviews

Students were given a description for a help desk position in UE. The position description focused on professional and generic skills including team work, communication and negotiation skills. Students were instructed to pay attention to the STAR (Situation or Task; Actions; Results) behavioral interviewing technique as this would be used to explore their suitability for the position. A number of resources on interviewing techniques, including STAR, and examples of the type of questions they could expect were provided. Students were also informed that the interview would focus on the essential selection criteria, including: written and verbal communication skills; working individually and collaboratively in teams; critical thinking and problem solving skills; time management and organizational skills; and lifelong learning skills. The position description indicated that the applicant would need to have an IT degree at the time of appointment.

A number of interview sessions were scheduled in which students could enrol. Sessions were capped at nine students. The one-hour sessions were held over a number of days starting as early as 8am and finishing as late as 7pm, to provide flexibility for students. Three to five days were set aside each trimester to hold the interviews. These were conducted by Deakin's Careers Advisors. Faculty provided technical support, assisting both interviewers and students with any difficulties they encountered with the use of ELive.

The interviewers had a list of students enrolled in their session and could ascertain who was online through information in the ELive window. Each student was given the opportunity of answering two questions, the first was a practice question where prompts and feedback were provided on their answer; the second one was assessed. Marks were allocated for: timely arrival at the interview; adequate preparation using the technology; having a professional approach and engaging fully with the process; using the STAR technique; and finally the quality of the answer.

The questions were devised such that students could provide an adequate response even if they had no work experience. For example, "Tell me about a team situation you have experienced ..." and "Describe a time when you had to resolve a conflict ..." All questions could be answered from the perspective of previous work experience, social or sports club participation, or school and university activities.

At the conclusion of the interview session students were thanked for their participation and were told that they would hear the outcome of their interview by the end of the week, the timing coinciding with the conclusion of *IT Employment* and the commencement of the next module which required students to take on the role of a new employee at UE.

In trimester 2, 2011, the careers advisors were able to access the online resume students provided to UE, rather than a summary form which had been used with the previous interviews. This allowed the careers advisors to tailor the interview questions to students' specific skills. Whereas 2010 students had to provide the context of their response to a question ("When I worked at McDonalds ..."), in 2011 the interviewer could provide the context that students should reference in their response ("When you were working at McDonalds ...") or formulate the question in a way that captured the student's experience or area of specialization within their degree.

Results

Teaching staff and careers advisors participating in the initiative were interviewed and feedback from three cohorts of students was gathered providing a picture of student and staff perceptions of the initiative. It was found that benefits were perceived at a number of levels: students appreciated the opportunity to practice their interview technique and receive critical feedback; some students were amazed to discover that careers advice was available on campus; careers advisors were appreciative of the opportunity to have critical input into students' career development skills.

Feedback from Careers Advisors

The feedback from interviews conducted with the careers advisors was very positive. "The e-live session is close practice to what a telephone interview would be like" and "the tool provides students with experience of using an online audio visual communication tool – something they'll use more of in their future workplace".

The careers advisors were pleased with the overall management of the sessions, the attendance rate of the students and "the enthusiasm and engagement of the students who valued the feedback, some asking for another go!". "I think the students get a lot out of these sessions ... they get involved and have a good attempt at answering the questions. They respond positively to the feedback we give and are usually appreciative of the session".

According to one careers advisor, students are often hesitant about seeking careers advice but this initiative allowed them to interact with students in a very realistic way. It was also an opportunity to direct students who had difficulty with structuring or articulating responses in the interview to the career services and other workshops provided by the University's support services.

One observation was that there was quite a variance in the quality of the answers. It was clear who had prepared for the interview and who hadn't. What also became apparent was that students had the opportunity to learn from each other and from the feedback during the session. The responses for the second round of questions were more detailed and expansive. "Students who give well-structured quality responses provide a good example for students who find the exercise more challenging. It is noticeable that having good strong students in the group raises the level of the session".

Feedback from those conducting interviews in 2011 reinforced the positive feedback received previously. "The activity provides students with an excellent opportunity to experience the interview process and is just as

authentic as the traditional face-to-face scenario." They also suggested that ELive is less intimidating than face-to-face role play where presentation issues can be overwhelming and detract from the potential learning opportunities. It was also evident that submitting a formal application encouraged students to "reflect on and articulate the transferable skills they had acquired throughout their course". One interviewer highlighted the benefit for off campus students in particular "who often lack contact with the university and fellow students".

Feedback from Faculty

The technology utilized for the interviews was regarded as "available, easy to set up and run. Students are expected to use the technology later in the unit making it a worthwhile addition". Another faculty member indicated that "ELive was the ideal tool to facilitate a conversation between careers advisors and students in this context".

Although organizing and running the interviews was resource intensive, the value added to student learning was worthwhile. In follow-up tasks students had to reflect on the outcomes of the interview activities and develop an action plan to improve their skills and knowledge. Students produced more insightful submissions than in previous years suggesting that the interview process had provided valuable feedback into their personal skills limitations.

The number of students in a group was capped at nine to allow sufficient time to conduct the interviews in one hour. Most groups had eight or nine participants. The size of the group proved to have advantages and disadvantages. Smaller groups were able to discuss their performance with the interviewer after the assessment was completed but had a limited number of examples to discuss. The larger groups generally did not have time to review their performance but were able to listen to a wider range of responses and feedback during the interview.

Feedback from Students

Students were not surveyed formally but it is clear from anecdotal evidence that they found it to be relevant and worthwhile. Students appreciated the opportunity to interact with careers advisors and acknowledged that it had enhanced their learning. One student was particularly appreciative of this opportunity as he participated in his group interview session while waiting for a train that would take him to a real job interview!

Off-campus students are often isolated while studying and appreciated the opportunity to engage directly with careers advisors and to learn from other students.

A number of students commented on the wider career preparation opportunities. "I feel much more prepared to begin my career"; "it made me think about my future"; and "I gained a lot of experience from this that I can take and use my whole life!"

It is common in the recruitment process to conduct initial telephone screening or conference calls where the focus is on the applicant's overall manner and the content of their answers and not on body language and presentation. A careers advisor suggested:

This activity emphasises the importance of auditory tone cues to build rapport with the interviewer and the focus is on the content of the response. In the face to face situation presentation issues need to be addressed and some students are quite awkward role playing in front of their peers. ELive is comparatively less intimidating but still allows the group to listen and learn from each other's responses while minimising potential distractions.

Conclusion

One of the aims of a university is to develop in its graduates the knowledge and skills to allow them to transition seamlessly into the working environment (Litchfield et al 2010). Providing opportunities for students to develop these skills is difficult to do, particularly in online environments. IT Practice attempts to expose students to real world practices, including applying for employment on graduation. As part of this process students have participated in group behavioural interviews facilitated by careers experts through the use of a synchronous communication tool. While it would be advantageous to provide the experience of face-to-face interviews, simulating this real-world situation in an online context appears to have been successful. Essentially students have interacted with the real world in real time with real people.

References

Bridgstock, R. 2009. The graduate attributes we've overlooked: enhancing graduate employability through career management skills. *Higher Education Research & Development*, 28(1), 31 - 44.

Henschke, K. and Poppins, P. 2009. Industry-Based Learning. *Evolution of Information Technology in Educational Management*. Boston, Springer Boston, 292, 169 - 180.

Litchfield, A., Frawley, J. and Nettleton, S. 2010. Contextualising and integrating into the curriculum the learning and teaching of work-ready professional graduate attributes. *Higher Education Research & Development,* 29(5), 519 - 534.

Patrick, C.-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M. and Pretto, G. 2008. The WIL report: Work Integrated Learning. A national scoping study: QUT Publications. DOI=http://www.altc.edu.au/system/files/grants_project_wil_finalreport_jan09.pdf

Shirley, M. and Davies, I. 2007. The Virtual Placement Project: Utilising e-learning to Enhance Students' Transition from Education to Professional Practice. *International Journal of Learning,* 13(12), 147 - 152.

Sixsmith, A. and Litchfield, A. 2010. Improving the Learning of Graduate Attributes in the Curriculum: a Case-Study in IT Management. In *Proceedings of 12th Australasian Computing Education Conference*, (Brisbane, Australia, January 18-22, 2010). Australian Computer Society, CRPIT, 155-164.

Acknowledgements

The authors would like to thank Annegret Goold and Maria Sponza for their contribution to this work.

Copyright © 2012 Jo Coldwell-Neilson, Annemieke Craig

The author assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author.

An International Perspective of Cooperative and Work-Integrated Education: A Synthesis of Themes from the Second Edition of the International Handbook for Cooperative and Work-Integrated Education

Richard K. Coll[14]
Karsten E. Zegwaard
Cooperative Education Unit, University of Waikato, New Zealand

The publication of the second edition of International Handbook for Cooperative and Work-Integrated Education (Coll & Zegwaard, 2011b) provides us with a unique opportunity to consider the current situation of cooperative education (co-op)/work-integrated learning (WIL) and the main issues facing it at the present time. In this presentation we summarize the issues we think exist for co-op/WIL, based on the material presented in this handbook. We do not seek to be provocative nor do we necessarily agree with the views of the contributing authors either: what we present is our view of some of the issues in the new millennium. It is our intention that these ideas will stimulate thought and reflection about the nature and practice of co-op/WIL.

Keywords: compilation of literature, current issues in WIL and co-op, integration, terminologies, research.

Introduction

The first edition of the Handbook provided a chapter by Coll and Eames (2004) that sought to consider the 'state of the art' for co-op and WIL at the time of writing; this analysis being based on author contributions. Issues identified for co-op/WIL at the time were; identity; learning; the purpose and role; accreditation; research; generalizability of the practice and research; organization and support; and the publicity and marketing of co-op/WIL. Here we briefly summarize the analysis presented in the first edition and conclude with discussion of some emerging issues.

Prior status of cooperative education and work-integrated education

Grappling with the identity of co-op/WIL, Coll and Eames noted, consisted of attempts to define co-op and WIL, and these focused on the following issues:

The aims and objectives of the work placement program itself and how the work portion integrates within the program;

- The individual mainly responsible for finding the work placement;
- Whether or not students in these programs are paid a wage or salary for their work placement;
- Whether or not students in these programs should gain course credits towards their qualification for their work placement;
- What proportion of the program the placement comprises;
- Assessment of the placements; and
- The number and duration of individual (if multiple) placements.

Coll and Eames noted that the *diversity* was of concern, and expressed reservations about what might be labeled as co-op or WIL, especially if the amount of time, or level of interaction within the 'workplace', were very limited as appears to be the case for some programs (e.g., some report less than 30 hours across a whole program of study). They then argued that for co-op/WIL to retain or gain legitimacy it must comprise an *educational endeavor*, with student learning being a central focus. There also was a growing awareness of a need for sound educational theory underpinning work placement program design and curriculum. Of note was that current theories of learning allows for the diversity and contextualized nature of co-op/WIL programs, and were able to accommodate cognizance of the dual-sector nature. Coll and Eames also commented that *assessment* of learning and program evaluation still remains problematic, arguing that the purpose of work placement programs needs to go beyond mere production of work-ready graduates. Co-op and WIL is more than

[14] R.K. Coll & K.E. Zegwaard, Cooperative Education Unit, University of Waikato, +64 7 838 4100, +64 7 838 4892, r.coll@waikato.ac.nz, k.zegwaard@waikato.ac.nz.

a vocational-education program; we need graduates who are able to challenge the status quo, if 'industry' is to move ahead. Coll and Eames felt the research was probably in better shape than many thought at the time, depended on what you were comparing it with. They did note, however, a need for more research in learning and integration of learning. It seems that the diversity the practice is indicative of its value in terms of its *generalizability*, across disciplines, and that drawing upon diverse theories of learning could help us understand how co-op/WIL works in different contexts. The *organization and support* of co-op, Coll and Eames noted, is crucial, given its impact upon program development and implementation. A key component of successful learning is securing quality placements; this requires adequate support and investment. *Publicity and marketing* of co-op/WIL comprises internal and external marketing. They concluded by saying that we need to convince our colleagues in our educational institutions, our employers, and public authorities that co-op/WIL adds value to education programs and their outcomes.

Current status and future issues in cooperative and work-integrated education

Terminology and definitions of cooperative and work-integrated education

There has been a proliferation of terms used to describe, in board terms, what is essentially co-op or WIL (if, indeed, these two terms are to be taken as synonymous), and this proliferation appears to be growing. Some terms have a well-established history within some sectors, such as practicum, internships, cadetship, however, other terms appear to be newer, such as work-based learning, workplace learning, practice-based learning, industry engaged learning, career and technical education, collaborative education, industry-based learning, and work exchanges. Some of these terms have been created by institutions striving to be distinctive in their offerings, and represent an institutional term rather than reflect an established term in a particular subject sector. Recently, the World Association for Cooperative Education (WACE) begun using the term 'work-integrated *education*', rather than co-op or WIL, since the term 'education' is more holistic (viz., both learning & teaching), an argument that is convincing. The term 'work-integrated education' may present a useful umbrella term, overcoming the challenges presented by the diversification, and at times somewhat fluid use, of other terms. Groenewald, Drysdale, Chiupka and Johnston (2011) explore the definitions to co-op and WIL, and present a possible taxonomy of terms. This work is still ambitious ongoing work by Drysdale and Johnston. We would argue that the diversity and proliferation of terms has become so wide that it may perhaps be better to focus on defining features of co-op/WIL programs (or whatever term one chooses to use), allowing these programs to be known under a variety of guises and be identified by their defining features. These defining features may include; exposure to a professional and relevant workplace (community of practice), of a duration alongside practitioners (old timers) long enough for enculturation to occur (the ideal duration being a topic of much need of discussion), where the tasks undertaken are authentic, relevant, meaningful, and purposeful, where students are able to learn the workplace norms, culture, and understand/develop professional identity, and integrating that knowledge into their on-campus learning. Some staunch stalwarts of co-op may prefer narrow definitions of the terms; however, we would argue that it is important to remain inclusive. Narrow definitions have not been helpful and may have contributed to the proliferation of terms. It may also have restricted the realm within which co-op/WIL research is being undertaken, when much valuable and informative work is being carried out in the realms just beyond the narrow definitions of co-op.

Research in cooperative and work-integrated education

There often is much call for further research in co-op/WIL and certainly a tone that appears to resonates among the Handbook authors. However, co-op/WIL researchers and practitioners need to recognize that over the last 25 years a comprehensive body of literature advancing our understanding of co-op/WIL has been built up. A glance over the number of citations used in the first edition of the Handbook, amplified by the width and breadth of the expansion of the second edition, shows how comprehensive this body of literature has grown. There is no need to continue to be defensive about where co-op/WIL research is at. A further cursory look at several periodicals (e.g., *Asia-Pacific Journal of Cooperative Education*, *Journal of Cooperative Education and Internships*, *Journal of Vocational Education and Training*) indicates co-op and WIL research is alive and well indeed. The amount of literature cited in the chapters of the Handbook, much of which makes citations to research publications, is impressive. This is particularly true for the chapters discussing of the research about the benefits (Braunstein, Takei, Wang, & Loken, 2011; Crump & Johnsson, 2011; Dressler & Keeling, 2011), educational theory (Eames & Cates, 2011; Van Gyn & Grove-White, 2011), and the assessment of co-op/WIL (Cedercreutz & Cates, 2011; Hodges, 2011), whilst chapters on the practice of co-op/WIL also drew from a comprehensive literature selection (e.g., Baker, Caldicott, & Spowart, 2011; Cooper & Taylor, 2011; Zegwaard & Laslett, 2011). Of additional note is that two major reviews recently undertaken state that co-op/WIL now

stands on a solid body of literature with a sound theoretical base (Bartkus, 2007; Coll & Kalnins, 2008). We suggest that now it is important to have this knowledge compiled in a way that enables a better shared understanding, agreed upon by the whole co-op/WIL community. Hopefully the Handbook will go some way to fulfilling that need. A comprehensive shared understanding across the co-op/WIL community will help avoid recreating research and discussion around issues where there already is established understanding, and instead move research direction to new areas and to new levels. Four areas we see as being ripe for research are student learning, assessment of student learning, integration, and the nature of the relationships between the key stakeholders.

Integration with on-campus learning

A fundamental component of work-integrated education is the middle term, 'integration' (Coll et al., 2009). The term work-integrated learning/education automatically implies integration occurs for such programs. However, even though integration is identified as fundamental (Allen & Peach, 2007; Coll, et al., 2009; and others), there is uncertainty by practitioners about what is meant by the term, how we go about achieving this 'integration', let alone recognizing it when it has been achieved. Therefore, we believe integration, pedagogy, and curricular development is an area much in need of research and development. The chapter in the Handbook by Johnston (2011) provides a solid steer in this direction, as does the chapter by Coll and Zegwaard (2011a).

Of some concern is the unsupported notion that mere add-on work-experience program, tacked to the side of a degree or other program, constitutes co-op or WIL. However, for whatever reason, many of these programs exist. The erroneous assumption made by these programs is that learning will automatically occur by simply providing a workplace experience (therefore assumed to be adding value to student learning experience). However, this is unfounded and not supported by the literature. At best some random or accidental learning may occur; however, this is neither planned, structured, nor an expected outcome (Coll & Zegwaard, 2011a; Eames & Cates, 2011; Garrick, 1998). The quality of the learning experience is not secured, and perhaps even the emphasis that the placement is a learning experience may not be present.

The slow drift of co-op/WIL programs at well-established co-op/WIL universities, particularly in the US, becoming centralized and service-focused has had particularly detrimental effect (Sovilla & Varty, 2011). A non-academic location for co-op/WIL within an educational institution is simply not conducive to the formulation of academic programs with rigorous curricular, that will result in desirable educational outcomes (Coll & Zegwaard, 2011a; Freeland, 2007; Zegwaard & Coll, 2011). Centralization has resulted in a decrease in research active co-op academics and a shift towards staffing of general (and often part-time) contract staff. In a co-op/WIL program as conceptualize here, these practitioners are involved in education, not just the administration of a work-based learning program. As Coll and Eames (2000) and Eames and Cates (2011) argue, it is fundamental that practitioners see themselves (and be accepted by others) as 'educators', who must have familiarity with theories of learning and the learning process/education. We thus encourage researchers and curricular developers to focus on developing sound pedagogies that enable integration on the workplace experience into the on-campus learning and advocate for co-op/WIL programs to be central to the degree of study, supported primarily by educators not administrators.

Conclusion

The substantive scholarly literature cited in the Handbook show we have the evidence that cooperative and work-integrated education provides benefits for all parties, across a wide range of disciplines of enquiry, and results in a wide range of graduate attributes and competencies. We need to be encouraged that the endeavor we call co-op/WIL (or whatever term chosen to describe our work placement programs) is well-founded, effective, and provides positive and transformative life changing experiences for students that partake in our programs. The onus is on practitioners to market these substantive benefits to all key stakeholders; students, colleagues, and managers in their institutions, and external stakeholders such as officials and governments.

References

Allen, J.M., & Peach, D. (2007). Exploring connections between the in-field and on-campus components of a preservice teacher education program: A student perspective. *Asia-Pacific Journal of Cooperative Education, 8*(4), 23-36.

Baker, L., Caldicott, J., & Spowart, J. (2011). Cooperative and work-integrated education in hospitality and tourism. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives on theory, research and practice* (2nd ed., pp. 219-227). Lowell, MA: World Association for Cooperative Education.

Braunstein, L.A., Takei, H., Wang, F., & Loken, M.K. (2011). Benefits of cooperative and work-integrated education for employers. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 277-286). Lowell, MA: World Association for Cooperative Education.

Cedercreutz, K., & Cates, C. (2011). Program assessment in cooperative and work-integrated education. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (pp. 63-72). Lowell, MA: World Association for Cooperative Education.

Coll, R.K., & Eames, C. (2000). The role of the placement coordinator: An alternative model. *Asia-Pacific Journal of Cooperative Education, 1*(1), 9-14.

Coll, R.K., & Eames, C. (2004). Current issues in cooperative education. In R.K. Coll & C. Eames (Eds.), *International handbook for cooperative education: An international perspective of the theory, research and practice of work-integrated learning* (pp. 271-282). Boston, MA: World Association for Cooperative Education.

Coll, R.K., Eames, C., Paku, L., Lay, M., Ayling, D., Hodges, D., Ram, S., Bhat, R., Fleming, J., Ferkins, L., Wiersma, C., & Martin, A. (2009). An exploration of the pedagogies employed to integrate knowledge in work-integrated learning in New Zealand higher education institutions (pp. 95). Wellington, New Zealand: Teaching and Learning Research Initiative.

Coll, R.K., & Zegwaard, K.E. (2011a). The integration of knowledge in cooperative and work-integrated education programs. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 297-304). Lowell, MA: World Association for Cooperative Education.

Coll, R.K., & Zegwaard, K.E. (Eds.). (2011b). *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice*. Lowell, MA: World Association for Cooperative Education.

Cooper, B., & Taylor, N. (2011). Cooperative and work-integrated education in teacher education. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 207-217). Lowell, MA: World Association for Cooperative Education.

Crump, S., & Johnsson, M.C. (2011). Benefits of cooperative and work-integrated education for educational institutions. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research, and practice* (2nd ed., pp. 287-294). Lowell, MA: World Association for Cooperative Education.

Dressler, S., & Keeling, A.E. (2011). Benefits of cooperative and work-integrated education for students. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 261-275). Lowell, MA: World Association for Cooperative Education.

Eames, C., & Cates, C. (2011). Theories of learning in cooperative and work-integrated education. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 41-52). Lowell, MA: World Association for Cooperative Education.

Freeland, R.M. (2007, June). *Keynote address: Reflections on Co-op at Northeastern: Crisis, change, and the pursuit of quality.* In the proceedings of the 15th World Conference on Cooperative Education, Singapore.

Garrick, J. (1998). Informal learning in corporate workplaces. *Human Resource Development Quarterly, 9*(2), 129-144.

Groenewald, T., Drysdale, M., Chiupka, C., & Johnston, N. (2011). Towards a definition and models of practice for cooperative and work-integrated education. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 17-24). Lowell, MA: World Association for Cooperative Education.

Hodges, D. (2011). The assessment of learning in cooperative and work-integrated education. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International*

perspectives of theory, research and practice (2nd ed., pp. 53-62). Lowell, MA: World Association for Cooperative Education.

Johnston, N. (2011). Curriculum and curricular orientations in cooperative and work-integrated education. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 305-311). Lowell, MA: World Association for Cooperative Education.

Sovilla, E.S., & Varty, J.W. (2011). Cooperative and work-integrated education in the US, past and present: Some lessons learnt. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 3-15). Lowell, MA: Work Association for Cooperative Education.

Van Gyn, G., & Grove-White, E. (2011). Theories of learning in education. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 31-39). Lowell, MA: World Association for Cooperative Education.

Zegwaard, K.E., & Coll, R.K. (2011). Exploring some current issues for cooperative education. *Journal of Cooperative Education and Internships, 45*(2), 8-15.

Zegwaard, K.E., & Laslett, R.L. (2011). Cooperative and work-integrated education in science. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 101-110). Lowell, MA: World Association for Cooperative Education.

Copyright © 2012 R.K. Coll & K.E. Zegwaard

The authors assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the authors.

What is the relevance of reflective practice in undergraduate e-portfolios to professional work practices?

Joanne Connaughton, Susan Edgar
The University of Notre Dame

Abstract

Reflective practice is a graduate attribute that is typically difficult to assess and measure. Universities are increasingly turning to digital technology as a medium to support reflective skills. This is particularly relevant to undergraduate courses that incorporate professional field placements where students are off campus, including health professional courses. The aim of this study was to determine the relevance of reflective practice in undergraduate e-portfolios to current work practices of new graduate physiotherapists. Graduates (n=6) took part in a focus group which guided the development of a questionnaire sent to all 2010 physiotherapy graduates, addressing the use of e-portfolios and their impact on transition into the workforce. 42% (n=25) of graduates completed the questionnaire. The use of a structured framework for reflections, within the online medium, assisted to promote reflective practice. Graduates felt that they were more automatic in their reflections and resultant work practices, as a result of utilising assessed undergraduate e-portfolios. The future challenge for educators is to balance context, assessment and delivery of reflective practice tasks. E-portfolios are one medium that may assist with the development of reflective practice skills beyond graduation.

Keywords: e-portfolios, reflective practice, graduates

Introduction

With the introduction of digital technology into the higher education sector, the use of e-portfolios has expanded. For courses incorporating professional placements, including medicine, nursing, allied health, health sciences and education; e-portfolios provide a useful medium to both document and assess work practices. Reflection on work practices is not a new concept though there is debate in the literature on the value of student reflections and whether they are promoting 'critical reflection' in the correct learning context (Boud & Walker, 1998; Ryan, 2011). Initial findings from the Australian e-portfolio project noted that e-portfolios could aid students to become 'reflective learners' (Hallam & Creagh, 2010). The review also noted that the use of e-portfolios in the tertiary sector has added value in graduate recruitment. However, little is known of the link between student reflections utilising e-portfolios and how this translates to graduate attributes, specifically the ability to be a reflective practitioner. The aim of this study was to determine graduate physiotherapists thoughts and experiences on using the e-portfolio medium for reflection on undergraduate professional placements, and its relevance to current work practices.

Background

Physiotherapy students from The University of Notre Dame Australia complete online reflections while on clinical placement, following a structured framework (Connaughton and Edgar, 2011). Students are set up with a private blog account that is linked into the university's learning management system. Students commence their reflective entries in first year while completing Pre-Clinical Experience (PCE) hours and continue throughout second, third and fourth years as they attend six, five week full-time clinical placements. Their final e-portfolio contains personal reflections from all their clinical experiences, as well as links to professional development presentations and other projects they may have completed whilst on placement. Students have access to view fellow students' e-portfolios in their year group, through the learning management system. Reflective entries in the e-portfolios are assessed by the clinical education team and account for twenty percent of students' final clinical placement grades for each placement.

The clinical education team noted that the depth of students' reflections appeared to improve over the course of the physiotherapy program, following the introduction of assessed e-portfolios (Connaughton & Edgar, 2011). Students were not only evaluating their actions but were also considering strategies for future practice. A study was designed to determine if reflective skills developed as an undergraduate utilising e-portfolios, assisted graduates with their transition into the workforce and future practice.

Methods

Former students from the 2010 graduating cohort of the physiotherapy undergraduate program at The University of Notre Dame Australia were invited to attend a focus group on reflective practice, seven months after their graduation. Six graduates registered to attend and the group met onsite at the university. The focus group addressed the use of e-portfolios for reflective practice and their relevance and impact on transition into the workforce. The session was semi-structured and facilitated by one member of academic staff, least known to the graduates. The focus group was recorded, transcribed and coded into relevant concepts and further into categories, as per Braun and Clarke's stages of analysis (2006).

Following the focus group analysis, a questionnaire was developed based on categories extracted from the transcribed data as well as surveys previously utilised for the health professional student population (Roche & Coote, 2008; Tsang & Walsh, 2010). The questionnaire consisted of 31 questions, each with a five point Likert rating, as well as five open-ended questions where graduates could expand on their thoughts related to reflective practice. The questionnaire was divided into four main sections with graduates rating statements on the use of the online medium, the STARES (Situation, Task, Action, Result, Evaluation, Strategies) format of reflective entries, reflective practice in general and the option of peer review. The questionnaire was reviewed by colleagues prior to emailing to all physiotherapy graduates from 2010. Participants completed the questionnaire anonymously via an online survey engine. Data were analysed utilising descriptive statistics as well as collation of open-ended answers.

Approval was gained for this study from the Human Research Ethics Committee of The University of Notre Dame Australia (011013F).

Results

42% (n=25) of the graduated cohort completed the questionnaire. Results for the section pertaining to reflective practice are presented in Table 1.

Table 1: Graduate ratings on statements in relation to reflective practice

Statement	***Strongly Disagree*** ***%*** ***(N)***	***Disagree*** ***%*** ***(N)***	***Neutral*** ***%*** ***(N)***	***Agree*** ***%*** ***(N)***	***Strongly Agree*** ***%*** ***(N)***
I resented being forced to do reflections on clinical practice	*12* *(3)*	*40* *(10)*	*28* *(7)*	*8* *(2)*	*12* *(3)*
The purpose of completing reflections was unclear as a student	*16* *(4)*	*56* *(14)*	*8* *(2)*	*20* *(5)*	*0* *(0)*
Finding something to reflect on was easy	*4* *(1)*	*36* *(9)*	*36* *(9)*	*20* *(5)*	*4* *(1)*
I referred to my STARES entries after graduation	*32* *(8)*	*28* *(7)*	*4* *(1)*	*20* *(5)*	*16* *(4)*
Being forced to reflect helped prevent me from repeating mistakes	*8* *(2)*	*24* *(6)*	*24* *(6)*	*40* *(10)*	*4* *(1)*
The purpose of completing reflection has become clear now I am working	*8* *(2)*	*16* *(4)*	*12* *(3)*	*44* *(11)*	*20* *(5)*
Being forced to reflect as a student assisted me with the transition from undergraduate to graduate	*12* *(3)*	*20* *(5)*	*20* *(5)*	*36* *(9)*	*12* *(3)*
Since graduation I reflect on my actions whilst I'm working	*0* *(0)*	*4* *(1)*	*4* *(1)*	*48* *(12)*	*44* *(11)*
Since graduation I reflect on my actions outside work hours	*0* *(0)*	*12* *(3)*	*16* *(4)*	*40* *(10)*	*32* *(8)*

The majority of participants indicated that the purpose of completing reflections was clear to them and they did not resent being forced to complete online reflective entries as an undergraduate. However, many reported difficulty identifying a situation to reflect on. 36% of respondents reported that they had referred to their STARES entries since graduation. The majority of graduates agreed that they now reflect on their actions both whilst they are working as well as outside work hours.

Graduates were asked five open-ended questions in the online survey, including "What does reflective practice mean to you?" The responses to this question were varied although there appeared to be a common thread of thinking back on actions and improving outcomes. One graduate responded that reflective practice was "...critically assessing your performance to ensure you are giving the patient the best possible care... and know what to do the same or change when a similar situation arises again." Another respondent commented that it was a "...daily reflection on clinical reasoning, theory and treatment decisions...critical to being a quality practitioner". One graduate summarised the concept by stating that "Reflective practice plays a fundamental role in professional and personal progression, enabling you to analyse what you have done, where you have made mistakes and what you can improve on. Without reflection you have no clear understanding of areas to better yourself and therefore continue the same behaviours."
Graduates responded positively to writing reflections online with 60% reporting that blogs were an easy medium to use with a further 16% feeling neutral about this statement. Continued access to online reflections after graduation was also noted as a positive both in the questionnaire and open-ended answers with two students expanding that it was "helpful for government interviews" and "extremely useful when applying for jobs".

Discussion

Although there is debate about the use of structured reflections to promote critical reflections in undergraduates, graduates responded positively to the use of assessed online reflective writing. An important principle of adult learning is to ensure that the assessed learning activity is relevant to the student (Biggs & Tang, 2007). Almost three quarters of participants responded that the purpose of completing reflective practice tasks within the e-portfolio medium was clear to them as undergraduates. Education from the clinical education team about the relevance of critical reflection in the development of lifelong reflective practice skills could further contribute to the students engaging positively with the task.

The introduction of the STARES framework to online entries brought about marked changes in the quality of student reflections (Connaughton & Edgar, 2011). Students were including strategies for improved future practice. Now as graduates, they reported that they reflected on their actions both at work and outside work hours. Although, it is difficult to directly link undergraduate activities with work practices, the use of the STARES model appeared to ingrain the process of considering strategies for future practice. This research would further suggest that without a well-developed structure to promote critical reflection, an e-portfolio alone may not assist the transition from undergraduate to professional practice.

The graduates provided many and varied definitions on 'reflective practice'. One common theme throughout, however, was the acknowledgement that there was a need for a change or improvement in behaviour. Through the use of the STARES framework as well as timely feedback and assessment of reflections, undergraduates were guided to consider future strategies for change. It would appear that graduates have continued to consider this an important aspect of the reflective process.

Undergraduates on clinical placement often encounter challenging situations which they may not encounter again until they have made the transition to professional practice. The opportunity to critically reflect on a difficult situation and develop future strategies with the guidance of supervisors and placement resources can only assist with the transition from undergraduate to professional practitioner. Some graduates reported accessing their e-portfolios after graduation to review these situations. Others utilised examples from their reflective writings for both written selection criteria and job interviews. Future access to e-portfolios to reflect and promote professional achievements appears to be a priority when designing mediums to incorporate at undergraduate level (Andre, 2010).

The authors acknowledge the limitations of this study which include the low response rate to the online questionnaire. The design of the study required the online survey to be conducted a significant period of time following graduation. Further, graduates were required to remember experiences from the year prior. Future studies will incorporate a prospective design with students being surveyed as they progress through clinical placements to graduation and future employment.

Conclusion

The e-portfolio is an ideal medium to use a structured framework to foster reflective practice skills in the transition from undergraduate to graduate. Nine months after graduating, 92% of participants reported that they now reflected on their actions during the working day. They reported an awareness of the need to consider

change in their behaviour when reflecting. The ongoing challenge for educators is to design relevant, structured, assessed reflective tasks that assist with promoting change beyond graduation. E-portfolios that are accessible beyond graduation can assist with this process.

References

Andre, K. (2010). E-Portfolios for the aspiring professional. *Collegian*, 17, 119-124.

Biggs, J., & Tang, C. (2007). *Teaching for Quality Learning at University* (Vol. 3). Maidenhead: Open University Press.

Boud, D., & Walker, D. (1998). Promoting reflection in professional courses: the challenge of context. [Article; Proceedings Paper]. *Studies in Higher Education, 23*(2), 191-206.

Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology, 3*, 77-101.

Connaughton, J., & Edgar, S. (2011). Framework for Reflective Practice. *Focus on Health Professional Education: A Multi-Disciplinary Journal, 12*(3), 89-93.

Hallam, G., & Creagh, T. (2010). ePortfolio use by university students in Australia: a review of the Australian ePortfolio Project. *Higher Education Research and Development, 29*(2), 179-193.

Roche, A., & Coote, S. (2008). Focus Group Study of Student Physiotherapists' Perceptions of Reflection. *Medical Education, 42*, 1064-1070.

Ryan, M. (2011). Improving Reflective Writing in Higher Education: a Social Semiotic Perspective. *Teaching in Higher Education, 16*(1), 99-111.

Tsang, A. K. L., & Walsh, L. J. (2010). Oral Health Students' Perceptions of Clinical Reflective Learning - Relevance to their Development as Evolving Professionals. *European Journal of Dental Education, 14*, 99-105.

Copyright © 2012 Joanne Connaughton, Susan Edgar

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Rounding the edge(s) of a (torrid) region: Designing Arts capstone curriculum at JCU

Allison Craven
James Cook University
Amy Forbes
James Cook University

This paper concerns the development of an interdisciplinary capstone subject for Bachelor of Arts students at James Cook University that showcases the faculty-based approach WIL strategy outlined by Patrick et al. (2008) where WIL is incorporated into core curriculum through "sequential teaching and assessment approaches from first to final year". In 2010, two first year core subjects were introduced into the BA to address transition, retention, and skill-building. The design of the capstone subject follows this initiative and also targets a unique set of conditions: enhancement of the stagnant outlook for graduate transition and employability; embrace of JCU Singapore student cohort; and address to the university's strategic intent in re-branding its historical tropical profile and its expanding perspectives in the Asia-Pacific region. BA3000 Arts Edge, the resulting subject, represents not only an expansive exercise in applied and self-directed learning for students but also a unique enterprise in transdisciplinary staff interaction as well as engaging alumni, community and industry. The project has posed some formidable challenges and also exposed potential WIL and capstone interfaces. We discuss these emerging outcomes and this reconfigured space of learning and teaching in describing the development of the key activity, "The Edge".

Keywords: Capstone, WIL, Liberal Arts, Interdisciplinary, Graduate Attributes, Transition

Introduction

The impetus for the establishment of a core curriculum in the Bachelor of Arts at James Cook University originally stemmed from a university-wide curriculum refresh that commenced at the initiative of the Vice Chancellor in 2008. This also coincided with the then recent restructuring of four separate schools – Humanities, Psychology, Social Science, and Social Work and Community Welfare - into departments of the current School of Arts and Social Sciences, a process that was accompanied by a dramatic shedding of courses and subjects in each department. The subsequent decision to introduce core curriculum in the Bachelor of Arts was therefore conceived and developed in a larger process of institutional change and shake-up. At the same time, the changes reflected the need to constructively align curricula with employer needs and articulate the value of the BA in the incremental development of much sought-after graduate attributes, a key objective of work integrated learning (WIL) activities.

Two first-year core subjects in the BA were developed with the aims of supporting students' transition into university and also instilling cohesion in a formerly disparate set of Arts majors. BA1001 Time, Truth and the Human Condition and BA1002 Networks, Narratives and the Making of Place were first taught in 2010, employing a thematic framework – the conceptualization of time and space from various disciplinary perspectives – to derive the more practical pedagogies of first-year transition. Elsewhere, our colleagues (Kuttainen, et al., 2010) have discussed the design of these subjects and the student profile addressed, in the aims of "establishing cohort identity" and "inspiring students and showing them pathways through the BA" as well as providing grounding in academic literacies (writing, research) and "identifying and supporting students at risk". The arrival of the capstone, BA3000 Arts Edge, in 2012 will thus cap not only the studies of that first group of students of the redesigned BA, but also the rollout of the core curriculum. With its strong commitment to WIL, the faculty has adopted this coordinated and sequential approach in recognition of the role capstones play in facilitating programme integration and student transition to professional practice as part of a faculty-based WIL strategy (Patrick et al. 2008). The establishment in 2011 of an Arts Advisory group drawn from industry, government and regional community is a further stage in establishing external WIL affiliation. The establishment of a constructive partnership with stakeholders is important so that all parties share a common understanding and appreciation of the mutual benefits accruing from engaging in WIL activities (McDermott, 2008).

Not coincidentally, these local developments coalesced in a period of national and international transition in Arts pedagogy (see Gannaway and Trent, 2008), in which the traditions of Liberal Arts learning are increasingly adapted to vocational outlooks. However, Arts is not alone in developing core curriculum at JCU as first-year

cores and third-year capstones have sprouted in the neighbouring School of Creative Arts' programs, and in a companion degree to the BA, the Bachelor of Social Science.

The Contexts of the Tropics

The identity of JCU as Australia's university for the tropics also now forms a strand in the approach to Arts curriculum. JCU was originally established with an express agenda to serve the tropical regions of northern Australia, the tropics being climatically a "torrid" zone by another term. In recent years, this brief has been revisited and reinvigorated to rethink JCU's relationships to tropical regions of the world, and to the non-Australian geographic regions that abut Australia's north, namely South East Asia and the Pacific region. While the character of tropical research seems self-evident in marine science and botanical scholarship, all JCU faculties are now challenged to engage with the tropical agenda. This process has resulted in some of the more prosaic fields of Humanities and Social Science identifying and highlighting the unique tropical aspects of their subject and course content and in profiling educational goals for students. Thus Political Science more readily identifies its specific expertise in the Asia Pacific region; History profiles its particular approaches to Indigenous and environmental histories; the Journal of Tropical Psychology emanates from that department, and so on.

The emerging reformulation of final year studies as a transition zone is itself a torridly contested one. It primes what Pamela Heath (2011) characterizes as the "tension" between the "values of the market-place and values of "education as a practice of citizenship" (p. 99). This has been manifest in our design discussions of BA3000 in a debate about whether the capstone should facilitate employability and postgraduate pathways, especially as Arts students do not have a singular profile and some mature-age Arts students will be approaching the career workforce for the second or third time, unlike younger students in first-year transition. This issue has been put a number of times by one member of staff with reference to a star graduate of past years who was a retired airline pilot. "Why," our colleague has repeatedly provoked, "would he do a capstone"?

In fact, the majority of JCU's Arts students are in an under-25 age group, although there is some variance among the three campuses of Townsville, Cairns and Singapore where BA3000 Arts Edge will be offered. Townsville and Singapore have more in common demographically – age and gender – than Townsville and Cairns as Cairns students are statistically the oldest of all three campuses. Students are predominantly female on all campuses – around 80%. In spite of JCU's reputation for the highest enrolment of Indigenous students of any university in Australia, these students represent around 2% overall, and in Arts, this trends up to around 4%. There is no such category in Singapore. The students of Arts Edge in 2012 will not deviate greatly from this profile. But the Singapore cohort who are potentially the greatest in number in future are almost exclusively Psychology students owing to the foundation role of Psychology in the recently established campus. As the participation of Singapore students in industry-interfaced activities is constrained by national regulations, this has also influenced the options for the Australian groups. Designing the capstone to allow Singapore students to engage in on-campus WIL projects is one strategy to go around country-imposed barriers to obtaining an internship placement.

Data on employment outcomes for alumni has only recently begun to be gathered and is sketchy to say the least. Part of the value of Arts Edge will be in establishing a record of students' aspirations and employment outcomes as they pass through this subject. Some significant differences are to be expected as historically, students of JCU, including in Arts, are drawn from the North Queensland region, and are reluctant to leave to seek work even at the expense of quality employment. Family and regional values tend to prevail, except in a minority of instances, in which students have arrived from outside of the immediate region and depart for employment following graduation or some head off to pursue pathways that are simply not available locally.

Discussion

Initial discussions on BA3000 commenced in 2010, with a working group comprised of a large contingent of interested academic staff from all departments, along with Honours and graduate students, and librarians. The interests were diverse, ranging from a sense of "ownership" of students in discipline majors to more motivated senses of interdisciplinary break-out in Arts pedagogy. In summary, however, the interests of this group ranged from those in favour of vocationally-oriented activities, to those who saw a capstone as a potential catchment for Honours and postgraduate students, to those with specific interests such as Indigenous education. Some staff members viewed the capstone as something of a loss to students, forced to surrender their academic liberty to an imposed programmatic view of Arts. Some envisaged the capstone as a space for purposeful reflection on

undergraduate studies and a formal rite of passage outwards; looking back and looking forward. Others saw tremendous potential to harness and cap discipline learning, and to dress this with some vocational skills that students would otherwise struggle to acquire informally, and, with WIL components, contact with potential employers.

A number of templates and precedents were viewed from the growing literature on capstones but none seemed to cap a BA. Fyffe et al. (2011, p. 5) alliteratively name the magnet (discipline-specific capstone), the 'mandate' (meets external criteria such as for accreditation), and the 'mountaintop' (supposedly "truly interdisciplinary, crossing majors and bringing diverse groups…together"); and Kift (2011) has coined the "mirror" (reflecting on learning and outcomes "against program goals"). Fyffe et al. emphasise the variety of capstones and capstone experiences. Indeed, none of the models seemed to ideally fit our aims. Moreover, a number of models seem formulated from variants of discipline capstones and few were based in multi-campus scenarios.

From the earliest meetings, however, consensus began to emerge around a view that the capstone should be an exercise in transition and collaboration, challenging students to apply their acquired disciplinary knowledges in an externally-focused, scenario-based collaborative project such as a conference on a theme generated by the student group. This proposed format quickly emerged in preference to options for internships and placements, which presented as inadequate to the objective to cap a course of study. While the need for career skills such as CV design and interviews were seen as important, an overly vocational approach was deemed unworthy of degree credit, and already available to students in some form in university services. In the discussions, greater consensus emerged around ideas for activities than an abiding rationale for the subject, and few of the ideas put forward developed epistemological carriage.
In overcoming concerns as to how students would respond to a capstone, some consensus began to congeal around a central question that was attributed in discussion to an imaginary Indigenous student: "how will my BA work for me?" This question helped forge an initial sense in the working group as to where the interests of capstone makers and transitioning students might intersect. But the question of students' diverse major interests and the unpredictable weighting of discipline groupings in a BA capstone class proved a consistent wall, and the theoretical landscape of capstone design is as yet rudimentary for overcoming this issue. "'[A] crowning course [unit] or experience coming at the end of a sequence of courses [units] with a specific objective of integrating a body of relatively fragmented knowledge into a unified whole'" (Durel cited in McNamara, Kift et al., 2010) – a capstone thus defined represents a particular challenge in a BA.

Eventually, however, we perceived the need to focus on what prospective capstone students would hold in common that would enable them to work together as a group. First, most students will have completed the first-year core subjects, BA1001 and BA1002, and thus have a sense of pathway through the BA. Second, all capstone students face the experience of transitioning out of their undergraduate studies. Third, all of our students will be in some way subject to the situational semiotics of becoming alumni in the Tropics. By also recognizing the need to address some skills-based learning, the final shape of the subject has emerged, and the notion of transition has emerged in the framework and fundament of BA3000 Arts Edge.

The Edge

The subject name, Arts Edge, suggests both the precipitous character of transition as well as the launch of the soon-to-be-minted graduates. The format of the subject comprises a series of seminars supporting the theme of transition and provoking contemplation of the soon-to-be qualified self, a process supported in the first assessment, "My BA". The collaborative project, The Edge, is at the centre of the subject but with a series of introductory lectures that draw in staff representatives from various disciplines. The proposed seminar topics include: Transitioning out; the psychology of change and leaving (Psychology); Networked writing: professional writing and the workplace (Humanities/Writing); Amazing Alumni: Invited BA alumni in an interactive panel with students; The Politics of the Workplace: industrial issues and contexts (Political Science/History); Cultural Diversity in the workplace (Indigenous Studies) ; Team and Group work (Social Work). Students will also caucus in a weekly forum regarding the main project, The Edge, and by week 3 will pitch proposals for their contribution to a panel of lecturers and Course Advisory Group members.

The first item of assessment, My BA, will involve an individual creative reflection on undergraduate studies to date and how the participant is positioned to contribute to The Edge. Following the seminars, three weeks are allowed for independent preparation of The Edge, all arrangements for which will fall to students, with the scope to seek the support of chosen mentors. A panel of lecturers and Course Advisory group members will

assess the presentation of The Edge, based on agreed criteria. In the following week, students will meet with the coordinator again to debrief and discuss the final assessment, The Last Word, which will require a detailed reflection on the event and an oral component in the form of an exit interview.

Conclusion

The settled format for Arts Edge meets a number of aims of the design group, and retains scope for students to take the running while facing the profound challenges of personal transition and collaborative enterprise.

WIL is highlighted throughout in activities that serve to assist in improving students' ability to both transfer theory to practice and develop professional skills/understanding. Student experience is structured so that learning goals are set and achieved (Martin, 2006) and work-like tasks are integrated into the subject. The involvement of alumni and the Arts Course Advisory Group in the subject design are considered indicators of success of faculty-based WIL as identified by University of Canberra's Teaching and Learning Center for its own faculty-based WIL projects ("Criteria for evaluating Faculty-based WIL," 2010). By the date of this conference, BA3000 Arts Edge will have run for the first time and the students' reactions and responses across all campuses will be in hand, and we shall review those findings. It is also expected that as best practice, the provision of WIL in an on-campus subject rather than the usual internships will unburden the university of the problem of too few placements. For international students, this may also address the expressed disappointment of students unable to fully participate in off-campus placements due to specific country and legal restrictions. The torrid zone of transition pedagogy is still to be navigated in Arts Edge; and the purpose and value of a BA capstone is as yet unconfirmed, and it will doubtless play quite differently in Townsville, Cairns and Singapore, however uniformly the subject content is posed. The Edge is potentially a transformative space for students and for Arts staff at JCU, a challenge that may lastingly re-define the character of Arts in the Tropics.

References

Criteria for evaluating Faculty-based WIL Incubator Projects 2010. (2012). Retrieved July 21, 2012, from http://www.canberra.edu.au/tlc/wil-project/criteria-for-evaluating-faculty-based-wil-incubator-projects-2010

Fyffe, J., Bailey, J. et al. (2011). *Capstone Courses in Undergraduate Degrees: A Review of the Literature.* Report prepared for Capstone Courses in Undergraduate Business Degrees: Better Course Design, Better Learning Activities, Better Assessment and the Australian Learning and Teaching Council Ltd., an initiative of the Australian Government Department of Education, Employment and Workplace Relations.

Gannaway, D., &Trent, F. (2008). *Nature and Roles of Arts Degrees in Contemporary Society: A national scoping project of Arts programs across Australia*. DASSH, ALTC. Canberra: Australian Learning and Teaching Council Ltd., an initiative of the Australian Government Department of Education, Employment and Workplace Relations.

Heath, Pamela. (2011). Education as citizenship: Appropriating a new social space. In P. Kandlbinder & T. Peseta (Eds), *Higher Education Research and Development Anthology* (pp. 99-113). Milperra: HERDSA.

Kift, S. (2011). *Capstone Experiences, transition and assessment*. Paper presented at the Curriculum Refresh Seminar Series Capstone Workshop, Townsville, Queensland.

Kuttainen, V., Lundberg, A., Wight, L. & Chang, N. (2010). Honest reflections : big ideas and real life experiences of a new first year BA. In *Enhancing Learning Experiences in Higher Education International Conference Proceedings*, Hong Kong. Retrieved 20 May 2012 from http://www.jcu.edu.au/curriculumrefresh/public/groups/everyone/documents/operational_plan/jcu_079213.pdf

Mcdermott, K. (2008). Addressing the weak link: enhancing support for the sponsors of student placements in cooperative education. *Asia-Pacific Journal of Cooperative Education*, 2008, 9(1), 91-111.

McNamara, J., Kift, S., et al. (2010). Work Integrated Learning as a component of the capstone experience in undergraduate law. In *Australian Collaborative Education Network National Conference Proceedings*. Perth. Retrieved 25 May 2012 from http://www.acen.edu.au/resources/

Martin, E. (1996) *The Effectiveness of Different Models of Work-based University Education,* Canberra: DEETYA Evaluations and Investigations Program, 96/19.

Patrick, C.-j., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL [Work Integrated Learning] report: A national scoping study (ALTC) Final report*, Queensland University of Technology.

Shephard, Kerry. (2010) Higher education's role in ''education for sustainability''. *Australian Universities Review* 52.1, 13-21.

Copyright © 2012 Allison Craven and Amy Forbes

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Transitioning undergraduate students from Law, Business, and Creative Arts towards Work Integrated Learning Capstone Experiences

Professor Ryan Daniel
School of Creative Arts, James Cook University
Mandy Shircore
School of Law, James Cook University

The Faculty of Law, Business and Creative Arts at JCU offers undergraduate degrees at each of its campuses in Cairns, Townsville, Brisbane and Singapore. To date, each campus / degree has offered a diverse range of work-integrated learning (WIL) components and practices, causing issues for both students and academics in terms of sequential integration and consistency of practice. The challenge has been to design a wholly integrated WIL program that can be implemented across all locations, taking into account contextual issues relevant to each campus and degree. The new faculty WIL program includes a scaffolded approach within each degree, at both foundational and developmental levels to maximise preparedness for common advanced WIL capstone experiences. At the capstone level all students choose from one of three final year units, each requiring them to identify meaningful and sustainable outcomes and solutions to the challenges inherent to an increasingly complex and globalized society. This paper will discuss the development, challenges, implementation and feedback strategies involved in designing a WIL framework to cater to a diverse student body.

Keywords: WIL, Sequential, Capstone, Multidisciplinary, Collaboration

Introduction

The emergence of an increasingly diverse range of work-integrated learning (WIL) activities in undergraduate degree courses, confirms that the integration of theory with the practice of work provides rich and contextualized learning experiences for students, as well as responding to student and employer demand for more 'work-ready' graduates (Patrick, Peach, Pocknee, Webb, Fletcher & Pretto 2008). Yet for WIL to provide the greatest opportunity for student learning it has also been acknowledged that there must be systematic and purposely designed curriculum that recognizes the importance of incremental development and where capstone subjects are involved, the relevance of WIL to these culminating experiences (Freudenberg, Brimble & Cameron 2010, McNamara, Kift, Field, Butler, Brown & Gamble 2010).

The synergy between capstone experiences and WIL can be seen in the broad and mutual objectives of providing transition (through development of graduate attributes and employability skills) and closure (through professional and cultural discipline awareness)(Patrick *et al* 2008). However it has been argued that the two are not necessarily interchangeable and that "WIL alone will rarely assure all of the desirable elements of a capstone experience"(McNamara *et al* 2010). Stand alone WIL subjects having limited integration with the degree as a whole, and with the final year in particular, are therefore unlikely to fulfil the objectives of a true capstone experience. Prior to a recent curriculum refresh of degrees in business, law and creative arts at JCU, there was limited purposeful coordination of WIL activities to ensure student preparedness for final year transition experiences. The challenge in this recent redesign has been to ensure that a comprehensive WIL program incorporates both horizontal and vertical alignment, beginning in first year and culminating in a final year that carefully situates best practice capstone design principles.

Contextual issues of relevance

The design of one WIL program, transferable across three diverse degree programs and containing a number of different disciplines (in the case of business and creative arts), was complicated by the fact that the University has several campuses, at metropolitan (Singapore and Brisbane) and regional (Cairns and Townsville) locations. In addition, the Brisbane and Singapore campuses cater primarily to international students which, when offering internships, gives rise to distinctive considerations (language and cultural) and visa restrictions (Singapore). In our regional centres, one key challenge is the fact that there are limited and less diverse industry partner opportunities than can be found in metropolitan locations.

However, as our research and consultations progressed it became apparent that the challenges could be construed as opportunities and used to create a distinctive experience for both students and staff which value adds to our University's broad strategic intent as a University for the tropics. The design, as outlined below, ensures that through sequentially developed WIL activities, engaging with local and regional industry partners will facilitate an appreciation of place and identity, and assist students to become resilient, accountable citizens adaptive to regional problems, often with global roots. This in turn will promote cross-disciplinary research opportunities for academic staff concomitant with our faculty focus on sustainability in curriculum design and research themes of *Industries and Economies in the Tropics* and *Peoples and Societies in the Tropics*.

Program design – existing practice

The project team engaged in an analysis of existing WIL activities across the three schools in the Faculty and which revealed there was already a considerable amount of activity in this area. Existing activities included work placements or internships, project-based work with and for industry or community, simulations, scenarios and field trips. It was also the case however that these activities were largely driven by individual staff, rather than being systematic or sequentially developmental across a degree program. That is, while there was certainly WIL activity, connections could not be made between or across these various activities in any formal or meaningful way. In addition, there were significant variations in relation to the use of capstone subjects across the degrees, ranging from no application in some cases to those where a capstone was firmly embedded in the final semester and with significant evidence-based success (Fleischmann & Hutchison 2010).

Embedding a sequential and integrated framework

In order to respond to this scenario and develop a Faculty-wide approach that could be coordinated and sustainable, the project team set out to develop a framework that could be applied across all degrees. The principles of constructivist learning theory (e.g. Fosnot 2005) would underpin the overarching framework for the WIL program, given that one of the key goals was to enable students to progressively build their knowledge of work-related processes and realities in a sequentially developmental manner. The WIL activities and learning experiences would therefore increase in complexity over the three years and also the extent to which students would be responsible for their own learning. That is, the capstone subjects would be student-centred and based on project work where staff would act as guides and facilitators and where industry and/or community would be active participants in the learning process. In relation to the capstones, students would be able to choose from three: an independent project linked to the workplace, a formal internship in industry, or a multi-disciplinary collaborative project that responds to a demonstrated industry or community need. Table 1 below provides an overview of the program planned for full implementation across the undergraduate degrees.

Table 1: Sequential and integrated WIL framework for application across diverse Faculty and School degree programs

Level	Core principles	Example activities / projects	Learning Objectives
Foundation (year 1)	Learning is largely through observation and simulation Reflection is where students demonstrate engagement with WIL concepts Some use of in-house project activities or scenarios Introductory group work	Visits to industry sites or locations (e.g. galleries, law courts, commercial settings, laboratories) Guest lectures from practitioners about industry realities and/or developments Students critically assess and/or re-design an internal document and/or system (e.g. posters, workflow procedures, data systems)	• Observe and appraise problem solving in real world discipline specific areas • Apply classroom knowledge to real world hypothetical scenarios and/or 'real' industry problem within controlled environment • Explain the purpose and complexity of group work and demonstrate how teamwork can be implemented to produce a simple group outcome • Describe what is meant by 'professional identity' and ethical behavior • Describe what is meant by reflective practice and apply through simple reflective exercises
Developmental (year 2 or years 2 and 3 for a 4-year program)	Students are active participants in WIL activities Students work with an external client but via an internally managed project and structured environment Students are able to demonstrate and test industry or professional skills and attributes	Groups of students create a product for an external client (e.g. website, HR induction manual, market analysis and report) External clients play a role in the assessment of student work (e.g. Mooting, concept development) Students are placed in live workplace scenarios e.g. events management, industry/workplace observations	Demonstrate and evaluate the effectiveness of group work in producing a project outcome Apply developing problem solving and analytical skills to 'real' industry problem within controlled environment Compare and contrast how different perspectives can be used to evaluate project outcomes Communicate effectively with diverse audiences Explain and demonstrate how reflective practice can improve learning outcomes
Capstone (final year and semester)	Students are able to adopt a leadership role within their chosen capstone The capstone requires students to engage directly with industry or the profession Students are required to demonstrate how their learning culminates in their chosen capstone and project	Students who design an independent project do so in consultation with employers and for a demonstrated workplace or industry need Multi-disciplinary teams of students respond to an industry brief or problem and present this in a relevant public setting Students undertake negotiated internships involving the completion of specific tasks and activities	Apply classroom knowledge and skills gained throughout the degree to solve complex real world industry issues and produce a large scale project outcome Convey information clearly and fluently, in high quality written form appropriate for professional audience Demonstrate essential knowledge necessary for a career in chosen profession Demonstrate the ability to work collaboratively, in particular in a cross-discipline team and where required to effectively manage and lead a team Demonstrate skills relevant to chosen industry within a professional setting Demonstrate an awareness of ethical and social responsibility in professional practice Identify, evaluate and action learning opportunities and self-improvements

Implementation and resourcing

In order to create a sustainable framework for the ongoing viability and delivery of the WIL program, a number of key strategies and steps were identified as critical, including:

- The appointment of a Faculty project officer, who in partnership with the Director of Business Development and Operations, would further build and foster relationships with current employers and industry groups;
- The appointment of a Director of WIL in each of the three Schools within the Faculty, in order to establish a leadership team who would play a key role in ensuring that sequential integration and alignment occurs across degree programs;
- The development of appropriate mechanisms and forums for consultation between the Faculty and industry/community as well as appropriate collateral to promote the WIL framework both internally and externally;
- The establishment of clear procedures and systems for the archiving of student work as a means of providing exemplars for future student cohorts as well as for the industry or community sector seeking ideas for creative solutions and/or innovations; and
- An effective system of evaluation of the framework in order to create an ongoing feedback loop that involves the various key stakeholders, including students, industry/employers and educators.

Conclusion and directions

This paper essentially reflects the broad theoretical framework and plan for the implementation of WIL within diverse degrees. As part of the work undertaken by the project team, it demonstrates what is potentially a common situation in the tertiary sector. That is, while WIL activity and learning is not new or distinctive, the constructive alignment and sequential development of WIL activities across degrees is arguably less common and also more difficult to achieve in practice.

There are both obvious and necessary avenues for further research, one of the most significant involving a formal review and evaluation of the program once it has been fully implemented and tested. That is, evidence must be obtained from multiple perspectives in order to determine in detail how this WIL framework does in fact lead to more beneficial outcomes for students.

References

Fleischmann, K., and Hutchison, C. (2010). Creative exchange: implementing a model in tertiary education that embeds multidisciplinary collaboration in the creative arts and beyond. In *Proceedings of the 8th International Conference on Arts and Humanities*, (CD version). Honolulu, Hawaii: http://www.hichumanities.org/AH2010.pdf

Fosnot, C. (Ed.). (2005). *Constructivism: theory, perspectives, and practice* (2nd ed.). New York: Teachers College Press.

Freudenberg, B., Brimble, M. & Cameron, C. (2010). Where there is a WIL there is a way. *Higher Education Research & Development*, *29*(5), 575-588.

Patrick, C-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M. & Pretto, G. (2008). *The WIL [Work Integrated Learning] report: A national scoping study.* Australian Learning and Teaching Council ALTC Final report. [Electronic version]. Brisbane: Queensland University of Technology. Retrieved September 3, 2009, from www.altc.edu.au

McNamara, J., Kift, S., Field, R., Butler, D., Brown, C., & Gamble, N. (2010). Work integrated learning as a component of the capstone experience in undergraduate law. In *Proceedings of the Australian Collaborative Education Network National Conference* (pp. 323-330), Perth, Australia: Australian Collaborative Education Network.

Copyright © 2012 Professor Ryan Daniel, Mandy Shircore

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN

website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Designing, developing and delivering work integrated learning to large student cohorts

Dr Kerry Dickson
School of Biomedical and Health Sciences, Victoria University
Ms Friederika Kaider
Faculty of Health Engineering and Science, Victoria University

Embedding work integrated learning (WIL) activities into the curriculum can be particularly challenging in units of study with large student cohorts (enrolments >100 students). The aim of this study was to determine the major operational and pedagogical challenges involved in designing, developing and delivering WIL to large student cohorts and to determine the strategies used, or recommended, by academics to address these challenges. This qualitative study used purposive sampling to explore the practice of academics who co-ordinated units of study with WIL. Sixteen, in-depth, semi-structured, face-to-face interviews were conducted. All interviewees valued WIL. Preliminary analysis showed that they faced numerous challenges in embedding it into their units, the most important being high workload and limited funding. The number and complexity of challenges increased as student numbers rose and as the student cohorts became more heterogeneous - particularly in terms of their abilities, learning strategies, preparedness for higher education, levels of engagement and chosen career path. Interviewees forwarded a range of strategies to overcome these challenges, including employing WIL-dedicated staff, increasing academic workload allocations, keeping WIL projects and assessment percentages small, replacing WIL with simulations, assessing students in teams, and automating marking. The findings may inform university management and academics about improved approaches to implementing WIL to large student cohorts.

Keywords: WIL; experiential learning, large student numbers, high enrolments, student diversity.

Introduction

In response to employer demands (Business Council of Australia, 2011), universities have increasingly employed experiential learning approaches to prepare students for their careers. One approach, Work Integrated Learning (WIL) involves activities such as placements, industry and community projects and simulated learning environments. Studies have illustrated the benefits and challenges of WIL (Patrick, et al., 2009). However, as Orrell (2011) notes, few have focused on the needs of marginalised students or difficulties associated with large student cohorts. Victoria University (VU), through its Learning in the Workplace and Community Policy (2008), allocates 25% of its curriculum to WIL. Implementing such an ambitious policy in the current Higher Education (HE) sector has been challenging, particularly as VU has a high rate of economically-disadvantaged students.

The aim of this study was to determine the major operational and pedagogical challenges involved in designing, developing and delivering WIL to large student cohorts (enrolments >100 students) and to determine the strategies used, or recommended, by academics to address these challenges.

Methods

This qualitative study (VU Human Ethics Committee # 10/237) used purposive sampling. Sixteen, in-depth, semi-structured, face-to-face interviews were conducted with academics who co-ordinated WIL units in either Nursing, Paramedicine, Biomedical Science, Engineering, Education, Sports Management, Psychology, Communication, Law, Business, Management or Accounting. Interview questions included unit of study and course demographics; description of WIL; type of industry or community involvement; type of assessment; challenges encountered in the designing, developing and delivering of WIL; strategies adopted to overcome the challenges; and recommendations for academics and university management. Interviews, which lasted 30-90 minutes, were transcribed and analysed into themes. Data were analysed using Excel.

Results

The 16 interviewees co-ordinated 37 units with an enrolment of 271 ± 498 (mean ± SD, range 21-2,831) and WIL worth 68 ± 38% (range 0-100). Individual units contributed to a single course or up to 10 different courses, were taught in one or both semesters, and were run on one campus in Australia or up to 9 campuses in 3

different countries. Of the interviewees, 13 co-ordinated WIL units with at least 80 students, indicating that they were well informed about the challenges of, and approaches to, embedding WIL into units with large student cohorts. All interviewees valued WIL, as it enhanced classroom-based theoretical learning by applying it to work-based scenarios; fostered learning that was active, student-centred, experiential and problem-solving; and provided opportunities for the development of generic employment skills.

Large student cohorts: challenges of WIL

Preliminary analysis showed that interviewees considered the major operational and pedagogical challenges encountered in designing, developing and delivering WIL in units with large student cohorts were, in descending priority (Figure 1): 1. high academic workload and limited funding, 2. difficulty establishing and maintaining industry links, 3. low student capability, 4. problems with developing high quality WIL, 5. difficulties related to assessments, and 6. additional unit co-ordination responsibilities, such as occupational health and safety (OH&S). All interviewees commented that the number and complexity of challenges increased as student numbers rose and as student cohorts became more heterogeneous. Students in large cohorts often differed markedly in their abilities, learning strategies, preparedness for higher education, levels of engagement and chosen career path. Many of the challenges reported are highlighted by the following comments:

It was all a challenge! …Time and money … are the two biggest ones.

What's demanding is that you have to form a relationship with industry … to design projects which are appropriate WIL activities and to get those industry people to agree.

Where students go is just luck of the draw … a bunch of not so academically-prepared students in one place and thus you've got to spend a lot of time there.

Just because you send someone out into the workplace or community it doesn't mean that they're actually learning.

Assessment and Progress Policy states that, if the assignment is worth more than 25%, it has to be double marked … 200 assignments!

The biggest challenge … massive student numbers ... it's just not workable.

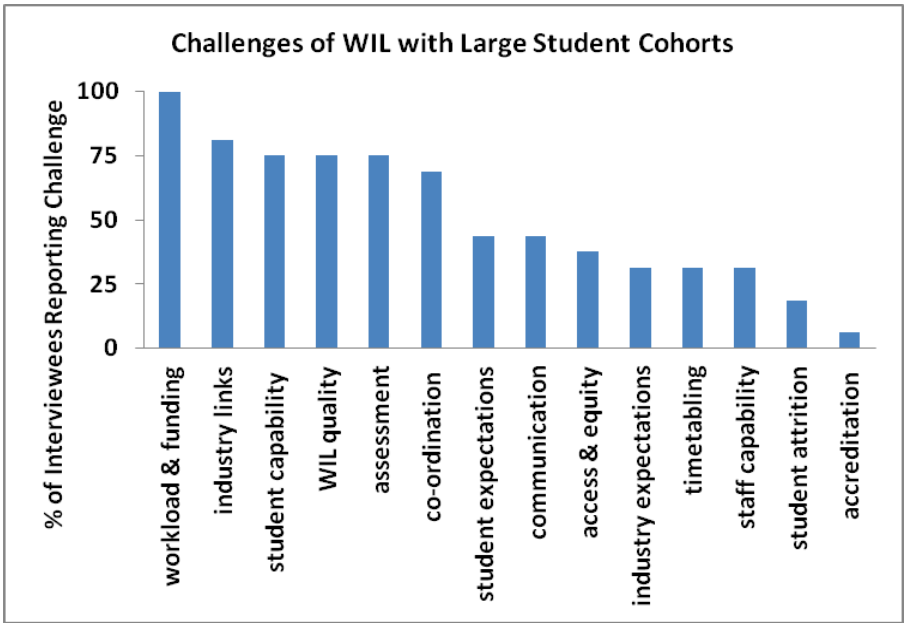


Figure 1: % of interviewees reporting challenges encountered in designing, developing and delivering WIL in units with large student cohorts.

Large student cohorts: strategies for WIL

Strategies recommended (Table 1) to address the 6 major challenges ranged from institution-based support to on-the-ground pragmatic initiatives. With regard to workload and funding, all interviewees commented that the university should either employ more WIL-dedicated staff or increase WIL workload allocations to academics. Interviewees suggested that the strategy of employing WIL-dedicated staff to source work placements be incorporated for all courses, not just those tied to accreditation (e.g. Education, Nursing). Interviewees also stated that embedding WIL in units with large student cohorts should be rewarded and resourced (e.g. promotion, funding for simulation laboratories). Most interviewees commented that the VU requirement of 25% high quality WIL was unsustainable, given the unmet need for resources, and should be reduced (Table 1). Many of the comments about workload and funding are highlighted by:

Give people time, recognition and workload points for curriculum development and networking.

It has to be formalised, supported and operationalised at School level. There have to be discretionary budgets, and you can't centralise those.

Table 1: Strategies to overcome the extra challenges of WIL presented by large student cohorts.

WIL Strategies for Large Student Cohorts	
1. Workload and funding Employ WIL-dedicated and administrative staff. Increase academic workload allocations. Recognise, reward and resource academics. Reduce VU WIL policy requirement from 25%.	**4. WIL quality** Embed into course at each year level. Align with learning outcomes. Involve industries in the design phase. Ensure that it is not just work experience.
2. Industry links Register of companies. Source one large partner (e.g. industry association). Use alumni to establish industry links. Keep projects small. Replace projects with simulations. Entice industry representatives to campus. Provide videos for absent students. Prefer community organisations over companies. Ensure industry's involvement is for altruistic reasons. Link projects to established work placement schemes. Share industry projects with other academics. Link projects to students' part-time employment.	**5. Assessment** Keep assessment percentages small. Assess students in teams, the larger the better. Ensure each team member has a specific job. Use oral presentations. Use peer evaluation schemes. Uncouple assessment from industry project outcome. Ensure assessment is clear, structured and do-able. Ensure marking is transparent, consistent and timely. Automate marking (e.g. multiple choice questions). Provide detailed instructions to markers and require adherence to timelines. Make several alternative assessment plans.
3. Student capability Design projects appropriate for students' skill base. Engage learning support services. Be aware of cultural differences. Accommodate to socio-economic limitations.	**6. Unit co-ordination** Make integration between theory and practice very clear. Ensure legal obligations are documented. Be flexible (e.g. timetabling).

Many interviewees saw their role as teaching HE, not in networking and negotiating industry links, and suggested that there be registers of companies willing to be involved in WIL (Table 1). Others, very protective of their existing links, suggested that the university should reduce the pressure to share. Many interviewees commented on the need to maintain and nurture industry links without overburdening the companies, thus ensuring the sustainability of the WIL. When dealing with large student cohorts, some interviewees suggested working only with selected large companies; others preferred many companies, particularly those sourced via alumni, as shown by the following comments:

The big 1,000 student units … proactively manage some big, key players in industry … industry associations, engage them … small businesses just do not have the capacity … to deal with students.

Keep working the field, maintain your contacts, stay close to industry, make it worth their while.

Interviewees indicated that additional resources were vital for sourcing and maintaining links with industry and community partners. If resources were inadequate, some interviewees responded by limiting the industry involvement via simulated environments, case studies, guest lecturers, and pre-recorded interviews. Others

reduced the number of organisations with which students could engage, required students to find their own industry partner, or engaged WIL-dedicated staff to source companies (Figure 2).

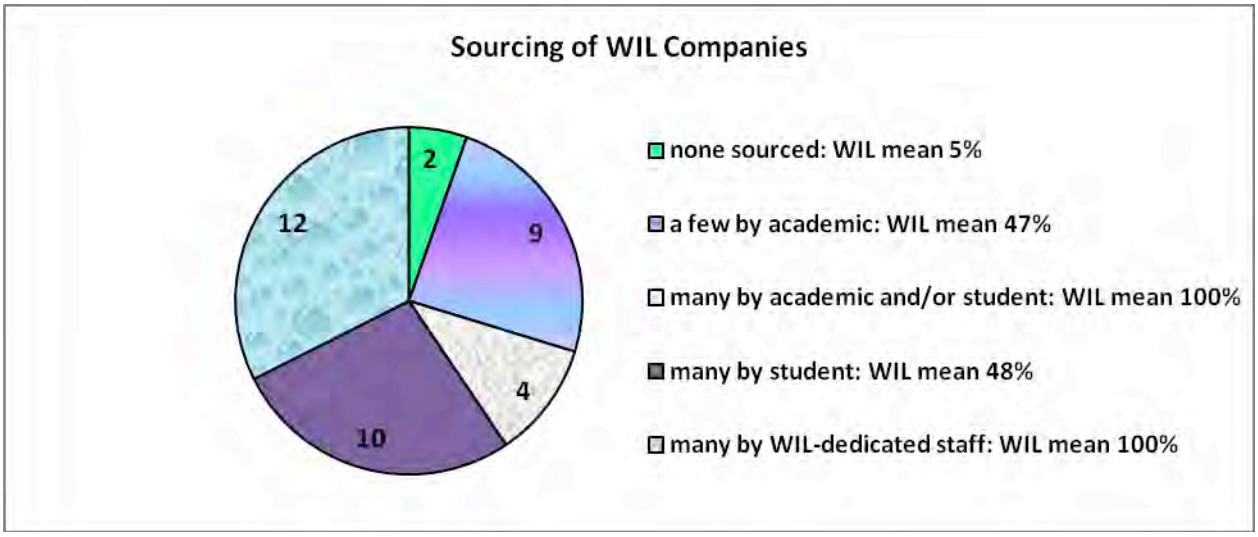


Figure 2: Responsibility for sourcing companies for 37 units and mean % WIL in those units.

When large cohorts had many students with low capability - particularly as related to English-as-a-second language (ESL), international origin, pathway entry (e.g. Technical & Further Education), low socio-economic background and low university entrance score (e.g. ATAR) - interviewees recommended that considerably more WIL resources were required. Interviewees reported that low student engagement in WIL was linked to low capability, as evidenced by students unwilling to engage because WIL was often team-based, required extra effort or was not seen as relevant. Where low student capability was a significant issue, interviewees adopted strategies such as directing students to ESL and learning support and replacing industry projects with simulations (Table 1). Interviewees commented that these strategies illustrate how time pressures frequently and adversely influence the pedagogy of WIL.

The quality of the WIL learning experience was considered by many interviewees to be diminished by limited time and funding. Interviewees recognised the importance of mapping WIL at a course level and scaffolding the learning from year to year, thus avoiding repetition (e.g. interviewing an industry representative in numerous units or at each year level). Most recommended that the university's policies emphasise the quality of WIL, rather than the prescribed quantity of 25%, ensuring that it be worthwhile, embedded, reflective, experiential, and that it integrates theory and practice (Table 1), as highlighted by comments such as:

Embed WIL into a course, rather than making it an add-on.

There's no benefit to the workplace experience if they're not reflecting on it.

Students must understand how their theory has application.

Strategies for reducing difficulties related to WIL assessments included ensuring that they were appropriate to the learning activity, allocated fairly across team members, not subject to plagiarism, comparable across markers, and returned with timely and constructive feedback. Many interviewees commented that, because resources were inadequate, they had adopted less than optimal strategies to cope with the marking workload in large student cohorts (Table 1). In units where co-ordinators did not have assistance from WIL-dedicated staff, the percentage of WIL declined as number of students increased (Figure 3).

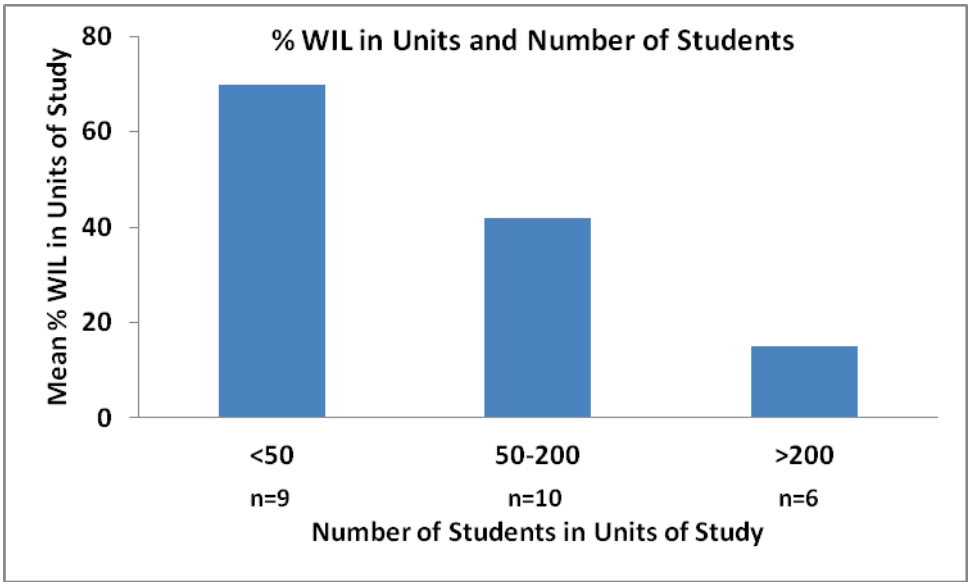


Figure 3: Mean % WIL in units of study (excluding those with WIL-dedicated staff) and number of students.

Many interviewees adopted strategies to cope with the added demands of unit co-ordination, when WIL was embedded in units with large student cohorts (Table 1). These included giving detailed instructions to sessional staff and students, organising registers for legal requirements (e.g. OH&S), and being extremely well-organised, yet flexible.

Discussion

This paper aims to understand the impact on academics of combining large student cohorts and WIL. Interviewees' comments fell into broad areas: venting frustration, showcasing good practice, adopting coping strategies, and making recommendations. Our findings substantiate earlier work which showed that academics are required to adopt numerous strategies to overcome the challenges of large student cohorts (Mulryan-Kyne, 2010; Burnett and Krause, 2009; Heppner, 2007; Chalmers, 2003; Habeshaw, et al., 1992) and of WIL (Levin et al., 2010; Woodley and Johnston, 2010). For decades, teaching large classes has been challenging but, when it is coupled with providing experiential work-based learning, the challenges are manifold.

All interviewees commented that the number and complexity of challenges increased either with a rise in student numbers or an increase in student diversity. These results suggest that academic challenges were cumulative when WIL was combined with large student cohorts or with high student heterogeneity. However, high levels of frustration were expressed when WIL was combined with both large and heterogeneous student cohorts, suggesting that the challenges were then synergistic, rather than cumulative.

The degree of dedication to teaching and learning was outstanding in the group of academics interviewed. They exhibited a sound understanding of good practice and applied it where possible. However, our results showed that, for the majority of academics, workloads became overwhelming and disheartening when WIL was embedded in units with large and heterogeneous student cohorts. Academics found that considerably more time was needed to source and maintain industry partners, deal with disengaged and undisciplined students, negotiate and timetable quality projects, design and mark assessments, and co-ordinate and amend units of study. Consequently, interviewees, especially those with extensive experience in dealing with large student cohorts, were pragmatic in the strategies that they used to overcome these challenges. These pragmatic approaches were usually recognised as being less than optimal.
All interviewees believed that VU had not made adequate provision for the higher workload demands, either by appointing sufficient WIL-dedicated support staff or increasing workload allocations to academics. Furthermore, inadequate provision of resources raised issues of fairness, equity of workload and sustainability of quality WIL. When the VU WIL policy (2008) was introduced, an independent costing exercise identified the need for additional funding and there was the suggestion that extra resources would be made available (Kay et al., 2010). However, when resources were less than anticipated (VU, Strategic Plan 2011), academics felt extremely pressured and unsupported in their endeavour to implement the very ambitious WIL policy of 25% of

curriculum. Consequently, despite their best intentions, efforts and professional integrity, academics have not always been able to facilitate optimal engagement with industry and community for their students. The changing funding environment, combined with a comprehensive internal review of learning and teaching policies and practices, may redefine WIL at VU.

Our findings of a synergistic relationship among WIL, large cohorts and student heterogeneity may impact on institutional policy and governance. Currently, the Australian government aims to lift participation rates in undergraduate courses, particularly of students from low socio-economic backgrounds. This, combined with the government's desire to engage industries and the community, may be unrealistic given the inadequate resourcing and, in turn, may affect the future skill base and productivity of Australia (Business Council of Australia, 2011).

Conclusion

The findings of this qualitative study confirm that academics value WIL as a tool to enhance students' learning and career prospects. However, offering WIL to large student cohorts, particularly when they have multiple diversity factors, presents numerous challenges to academics. Most of these challenges stem from the need to resource the extra time and effort required to effectively design, develop and deliver WIL. Academics used a range of strategies to overcome these challenges. However, due to inadequate funding, these were often pragmatic, less than optimal solutions. Our findings may influence the implementation of VU's very ambitious WIL policy and strengthen the broader community's request for more funding to the HE sector in Australia.

References

Burnett, L., & Krause, K-L. (2009). Teaching Large Classes: Challenges and Strategies. http://www.griffith.edu.au/__data/assets/pdf_file/0007/118924/GPG-tlc.pdf

Business Council of Australia, (2011). Lifting the Quality of Teaching and Learning in Higher Education. http://www.bca.com.au/Content/99520.aspx

Habeshaw, S., Gibbs, G. & Habeshaw, T. (1992) *53 Problems with large classes: Making the best of a bad job,* Technical and Educational Services, Ltd. Bristol, UK.

Heppner, F. (2007) *Teaching the Large College Class,* Ed: John Wiley and Sons, San Francisco.

Kay, J., Russell, L. & Standfield, R. (2010). Realising the Vision: Implementing Learning in the Workplace and Community at Victoria University. *World Conference on Cooperative and Work-Integrated Education.* http://www.waceinc.org/hongkong/linkdocs/papers/Australia/Refereed%20Paper%2021.pdf

Levin,E., Pocknee, E. & Pretto, G. (2010). The Challenges of Establishing an Internship Program: Policy, Expectations and Workloads. *World Conference on Cooperative and Work-Integrated Education.* http://www.waceinc.org/hongkong/linkdocs/papers/Australia/Refereed%20Paper%209.pdf

Mulryan-Kyne C. (2010). Teaching Large Classes at College and University: Challenges and Opportunities. *Teaching in Higher Education,* 15, 175-185.

Orrell, J. (2011). Good Practice Report: Work-integrated Learning, Australian Learning and Teaching Council. http://www.olt.gov.au/resource-work-integrated-learning-2011

Patrick, C., Peach, D., & Pocknee, C. (2009). The WIL (Work Integrated Learning) Report: A National Scoping Study, Australian Learning and Teaching Council. http://www.olt.gov.au/resources?text=work%20integrated%20learning

Chalmers, D. (2003). Teaching Large Classes Project 2001, Australian Universities Teaching Committee. www.olt.gov.au/system/files/.../teaching-large-classes-report.pdf

Victoria University (2008), Learning in the Workplace and Community Policy. http://wcf.vu.edu.au/GovernancePolicy/

Victoria University (2011), Excellent, Engaged and Accessible: VU's Strategic Plan to Be a Great University of the 21st Century. http://www.vu.edu.au/media/media-releases/

Woodley, C. & Johnston, S. (2010). Engaging Industry in Assessment. *World Conference on Cooperative and Work-Integrated Education.* http://www.waceinc.org/hongkong/linkdocs/papers/Australia/Refereed%20Paper%2019%20%28revised%29.pdf

Copyright © 2012 Dr Kerry Dickson, Ms Friederika Kaider

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Involving stakeholders in Action Research to develop e-portfolio Assessment for Social Work Field Education.

Tracey Dickinson
Dept of Social Work, James Cook University
Jo Mensinga
Dept of Social Work, James Cook University

Abstract

Social Work students participate for a total of 140 days over two Field Placements in a variety of practice settings across Australia and Internationally to meet the Australian Association of Social Work practice standards. Students are supported and evaluated by the Dept of Social Work staff, professional Social Work Field Educators from the community and Human Service Agencies. Feedback from all stakeholders indicated that the current evaluation tool was restrictive and difficult to use.
This paper documents the community development process utilised to engage with stakeholders in the Action research project to develop an ePortfolio assessment tool that enhances student learning whilst on field placement. The conclusion links the project design process to lifelong learning strategies of collecting information, reflecting and interacting with the process and products of the project with student engagement with the e-portfolio.

Keywords: Social Work, e-portfolio, Action Research, Community participation, Assessment, Field Education

In Australia, Social Work students participate for a total of 140 days over two field placements in a variety of practice settings across Australian and internationally to meet the Australian Association of Social Work Education Standards (Australian Association of Social Workers, 2010a). This paper presents evidence to support a collaborative and participatory project facilitated by the authors to inform the design, implementation and evaluation of e-portfolio assessment for Social Work Field Education. The environmental context of the project with a brief summary of the benefits of e-portfolio assessment in developing student lifelong learning skills is provided to explain the origin of the project idea. The overarching project design of involving key stakeholders is outlined and supported by community development literature, action research methodology and meshed with current research informing e-portfolio implementation into University Institutions.

The decision to create an e-portfolio assessment tool for the James Cook University (JCU) Social Work Field Education programme was developed in response to feedback from students, field educators and staff regarding the current process being cumbersome and ineffective. The paper-based assessment tool was considered inadequate to support and document the evaluation of the students' learning due to the size of the document, convoluted language and its reliance on text. The design of the assessment tool directed the students in a linear process by documenting their learning goals, method for learning, evaluation of learning and feedback from the Field Educator. The Field Education stakeholders noted that a more flexible assessment tool that provided an environment in which to collate, reflect and interact with the students learning whilst on placement would be more useful. The e-portfolio provided an opportunity for the assessment tool to include both formative and summative evaluation (Taylor, Thomas & Sage, 1999) of the students learning.

Portfolios have been utilised within a range of professional education settings including Social Work (Heron, 2011) and are well established for collecting evidence of competence in Tertiary education (Taylor, Thomas & Sage, 1999). Benefits of portfolios to enhance student learning by linking theory to practice and as a tool for self-reflection are well documented (Fitch, Peet, Glover Reed & Tolman, 2008) though physical portfolios are "cumbersome to store, transport, present or display" (Swigonski, Ward, Mama, Rodgers & Belicose, 2006, p814). By contrast e-portfolios provide a more manageable digital platform for students to engage with artefacts in diverse ways, transforming portfolios from just an outcome to a process as well (Fitch et al, 2008, p38). That is, students' learning was seen to be enhanced by collating and reflecting on artefacts to create an e-portfolio final product to demonstrate the achievement of learning objectives (Cambridge, 2010, p88). E-portfolios also provide an opportunity for Social Work students to learn by reflecting on artefacts to "build a theory or narrative to understand 'self' in context" (Cambridge, 2010, p49) which is congruent with the Australian Association of Social Work (AASW) Standards (2010a) and informed by the JCU Learning, Teaching and Assessment Policy (2011). E-portfolios provide a format of assessment that provides a rich picture of the process and outcome of student learning.

The process of including stakeholders in the development, design and implementation of the e-portfolio into the JCU Field Education programme was congruent with community work principles of involving people throughout the project (Beilharz, 2002). The principle of participatory collaboration encourages sustained, effective engagement by all stakeholders including students, field educators and staff. The decision to involve stakeholders in the design, trial and evaluation of the e-portfolio was to generate "energy, interest and a sense of excitement" (Henderson & Thomas, 2002, p31). Research suggests that once engaged in the creation of e-portfolios students continue to work on their portfolios in a sustained manner (Bhattacharya & Hartnett, 2007). Social Workers within the JCU Social Work Field Education programme and JCU Social Work Advisory Committee had also expressed interest in developing their engagement with the Tertiary environment to inform their own practice and the Social Work degree for the benefit of student learning for practice. Inclusion of Social Workers and students was to inform the project with local knowledge, resources, skills, culture and processes (Ife, 2002). This participatory strategy was implemented to address the ineffectiveness of a 'top down' approach by the University (Swigonski et al, 2006) in implementing e-portfolios into the Tertiary system and develop a culture that values e-portfolio (Swigonski et al, 2006) as an effective lifelong learning tool.

The process to create an e-portfolio for JCU Social Work assessment was supported by the professional "belief in collaboration as the cornerstone of effective practice" (Australian Association of Social Workers, 2010b, p9). Throughout the Action Research cycle of planning, implementing and reflecting on the project (Dick, 1993), stakeholders were invited to inform, trial and evaluate the e-portfolio as an assessment tool for Social Work field education. The involvement of stakeholders in the project directed the e-portfolio format allowing the technology to "support the practices of the e-portfolio genre…rather than dictate the form" (Cambridge, 2010, p188). Strategies used to involve stakeholders were developed utilising existing forums of engagement between the University and the community including workshops, email and meetings. The strategies used to involve stakeholders also provided an opportunity to initiate the change in culture needed to successfully implement e-portfolios (Swigonski et al, 2006) by developing a common language, understanding of stakeholder capacity to engage, understanding of each other's goals for the project, and become a process of education (Sheil, 2003). This process utilised and developed the whole of community approach to student learning within Social Work.

A dual evaluation process for the project was designed utilising both Social Work and Action Research emphasis on reflective practice to inform and enhance future practice. The project is being evaluated utilising two frameworks developed with equal emphasis on the effectiveness of stakeholders participation in the project and the engagement of stakeholders with the e-portfolio to enhance student learning in Field Education. Stakeholders participation is evaluated by level of participation, activities created for participation, community representation and community attitude (York & Itzhaky, 1991) within the project. Lorenzo and Ittelson's (2005) model frames the evaluation of student engagement with collecting, reflecting and interacting with the e-portfolio as a lifelong learning tool. Both frameworks incorporate the involvement of stakeholders to ensure a holistic evaluation of the project, re-iterating the benefit of involving people throughout the project (Beilharz, 2002). In line, with the Action Research methodology, the evaluation process directs the next stage of the project of re-design and further trialling of e-portfolio as assessment (Dick, 1993). The future stages continue to engage stakeholders to build a supported learning environment for students, Field Educators and staff.

Evaluation to date has focussed on the participation of stakeholders in the design and development of the e-portfolio. Utilising York and Itzhaky's (1991) evaluation framework for stakeholder participation, the project design has facilitated key stakeholders active engagement in a diverse range of activities to inform the e-portfolio design. Staff members, Field educators, students and the wider university community have participated in the development stages of this project. Engagement activities have included focus groups, education workshops, surveys distributed by email and student workshops. Initial feedback from stakeholders has been positive about both the approach and proposed content of the portfolio.

The researchers' recognised that further engagement with stakeholders around the design of the e-portfolio would be useful. A decision was made to trial a paper-based interface prior to design the final e-portfolio. Students, Field Educators and JCU Staff trialling this format have provided preliminary feedback that the design utilises a practice based language effectively which facilitates the development of student learning goals, methods for practice and concrete assessment that demonstrates the AASW(2010) Standards achieved whilst on placement. This process likens itself to the lifelong learning strategies outlined by Lorenzo and Ittelson's (2005) evaluation framework. This extra stage of engagement with stakeholders on the design has provided more insight into the needs of stakeholders and will inform the final design of the web based interface.

The conceptual design of this project as outlined in this paper emphasises the process of developing the e-portfolio was as important as the outcome of the e-portfolio project. Evidence was provided to support the project design which was initiated by listening to feedback from key stakeholders and sourcing technology that would support the goals of the JCU Field education programme. The community development and action research methodology principle of including stakeholders at every stage of the project was beneficial to building a culture that values and engages with e-portfolios for lifelong learning. The project continues to develop through the planning, acting and reflecting cycle of Action Research (Dick, 1993) with each stage informed by the previous phases and stakeholders input. The project has modelled the envisaged goal for student engagement with e-portfolios by collecting data, reflecting on the data and interacting with the data developing lifelong learning skills along the way for stakeholders.

References

Australian Association of Social Workers (2010a). *Australian Social Work Education and Accreditation Standards*. Canberra, Australian: Association of Social Workers.

Australian Association of Workers (2010b). *Code of ethics*. Canberra, Australian: Association of Social Workers.

Beilharz, L. (2002). *Building community: the shared action experience.* Bendigo, Vic: Solutions Press.

Bhattacharya, M. & Hartnett, M. (2007). E-portfolio assessment in higher education. *Frontiers In Education Conference - Global Engineering: Knowledge Without Borders, Opportunities Without Passports, 2007. FIE '07. 37th Annual. (*T1G-19-T1G24). Milwaukee, Wisconsin:IEEE. doi: 10.1109/FIE.2007.4418182

Cambridge, D. (2010). *Eportfolios for lifelong learning and assessment.* San Francisco, CA: Jossey Bass Ltd.

Dick, B. (1993). *You want to do an action research thesis.* Retrieved from http://www.aral.com.au/resources/arthesis.html

Fitch, D., Peet, M., Glover Reed, B. & Tolman R. (2008). The use of ePortfolios in evaluating the Curriculum and Student Learning. *Journal of Social Work Education* ***44***(3), 37.

Henderson, P. & Thomas, D. N. (2002). *Skills in neighbourhood work*. London, Routledge.

Heron, G. (2011). Examining Principles of Formative and Summative Feedback. *British Journal of Social Work* ***41***(2), 276-295.

Ife, J. W. (2002). *Community development: community-based alternatives in an age of globalisation*. Frenchs Forest, N.S.W: Pearson Education.

James Cook University. (2011). "*Learning, Teaching and Assessment Policy*." Retrieved 6/12/11, from www.jcu.edu.au/policy/allitoz/JCU_076643.html.

Lorenzo, G. & Ittleson, J. (2005). Demonstrating and Assessing student learning with e-portfolios. In D.Oblinger (Ed.) *Educause Learning Initiative: advancing learning through IT innovation.* Retrieved 7/2/2012 from http://www.educause.edu/library/resources/demonstrating-and-assessing-student-learning-e-portfolios

Sheil, H. (2000*). Growing and learning in rural communities: a training manual in rural community development enabling rural people to determin their own futures.* Churchill, Vic: Centre for Rural Communities, Monash University.

Swigonski, M., Ward, K., Mama, R., Rodger, J. & Belicose, R. (2006). An Agenda for the Future: Student Portfolios in Social Work Education. *Social Work Education* ***25***(8), 812-823.

Taylor, I., Thomas, J.& Sage, H. (1999). Portfolios for learning and assessment: laying the foundations for continuing professional development. *Social Work Education* ***18***(2), 147-160.

York, A. S. & Itzhaky, H. (1991). How can we measure the effects of client participation on the effectiveness of Social-Work intervention. *British Journal of Social Work* ***21***(6), 647-662.

Copyright © 2012 Tracey Dickinson, Jo Mensinga

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Using a Strengths Approach in Collaborative Education

Angela Fenton
School of Education, Charles Sturt University

This paper explores a collaborative strengths-based approach to investing in pre-service early childhood teacher education in the area of child protection. The paper discusses findings from research that suggest using a collaborative process, involving work-integrated learning, enhanced the ability of the pre-service teachers in the study to protect young children. The paper draws on the doctoral research of the author, which evaluated a Strengths Approach as a cross-sector tool for implementing change in early-childhood education and in doing so researched a potential investment in improving pre-service preparation.

Keywords: Collaborative Education, Early Childhood Education, Strengths Approach, Teacher Education

Introduction

Child protection is one of the most challenging areas of preparation and practice for early-years educators and teacher-educators. New models of child-protection preparation are emerging, drawing on strengths-based approaches, and utilising work-integrated learning. Drawing on the doctoral research of the author, this paper discusses the potential of such a model to assist both early-years educators and teacher-educators in finding that, as well as challenging, this can be an extremely rewarding and successful area of their practice.

Literature Review

Child abuse considerably affects children's ability to develop and thrive in communities, with significant short and long-term adverse effects reported (Australian Institute of Health & Welfare, 2011; International Society for Prevention of Child Abuse and Neglect, 2010; Pinheiro, 2006). Literature also confirms that early childhood educators are ideally placed to implement protection strategies to assist children at risk of, or experiencing, child abuse (Briggs & Hawkins, 1997; MacIntyre & Carr, 2000). Yet, research also indicates that teachers report feeling under-prepared and lacking confidence for their child protection roles (Baginsky, 2003; Horton and Cruise, 2001; Laskey, 2005; Singh, 2005). Researchers in the last three decades have repeatedly called for enhanced child-protection preparation for teachers to assist them in this challenging task (Levin, 1983; McCallum, 2003; McCallum & Baginsky, 2001; Watts, 1997). Goldenberg and Gallimore (1991) questioned the value of "isolated" child-protection workshops and concluded that they do not sustain "meaningful changes" (p. 69). They argued that instead, "teachers need to be engaged in rigorous examination of practice, set within a range of possible situations which allows for close examination of the subject and reinforcement over time" (p. 72).

Teacher preparation programmes currently offer minimal child protection training in Australia, typically an adjunct workshop for a few hours in a four-year teaching degree, according to Arnold & Maoi-Taddeo (2007). They argue that strategies to improve teacher preparation include extending and integrating child protection with other aspects of pre-service preparation, particularly professional experience. Ewing, Lowrie & Higgs, 2010 argue the need for "learning in the real world and … role models, on learning" but claim this is "often incidental and unintentional rather than deliberate" (pp. 23-24) in education. Calway and Murphy (2011) further suggest that a work-integrated learning paradigm, which "incorporates knowledge and skills acquisition with 'real-world' experience" (p. 2), is not only needed, but should be embedded within higher education as situated learning (Lave & Wenger, 1991). Griffith University (2006) claims that intentional activities "that integrate theoretical learning with its application in the workplace" are required. Cooper, Orrell and Bowden (2010) state that a "synergy and integration between classroom, workplace and community-based learning" (p. 5) is crucial.

Strengths approaches in social services emerged from practitioners working with complex issues (Glicken, 2004, McCashen, 2005; Saleebey, 2009). There are indications that the approach may have potential for improving social circumstances across traditional discipline boundaries (Hodges & Clifton, 2004). McCashen (2005) explains that the Strengths Approach is collaborative and solutions-based, "a philosophy for working with people to bring about change" (p. v). The approach explores issues with all stakeholders to determine what would be a satisfactory outcome. Stakeholders then identify strengths and resources to assist with developing strategies and planning for solutions to issues.

Context and Method

The research participants were a purposive sample group of 19 pre-service teachers. They were all enrolled, full-time, in a Bachelor of Education (Early Childhood) degree and completing their third year, of a four-year degree programme, at a single university campus in Queensland, Australia. The research participants were the total group enrolled in a core 13-week, face-to-face, early-childhood subject. The group consisted of 18 female students and one male student. Five of the group were identified as mature-aged students (over 21 years of age). The subject was prior to a compulsory five-week professional placement in local early-childhood services and schools (with children aged 3-8 years). All participants attended different services on their placement. The author had the dual role of teacher educator and researcher.

A strengths-based module of teaching and learning about child protection was integrated into the subject (discussed below). The research aimed to explore the potential of the strengths-based approach to enhance child-protection preparation. Participant responses were gathered in three phases: during module implementation, following professional experience in schools, and 12 months following the module completion. The primary qualitative data collection methods were informal interviews, focus groups and electronic submissions to web based discussion boards or email.

In each phase, participants responded to researcher prompts regarding the research themes of child abuse, protection, the strengths-approach, and teacher preparation. For example, a prompt regarding child abuse in Phase 2 was, "We studied categories of child abuse and neglect in the module; I wondered what your thoughts were on these now, after practicum?" Some participants responded in a semi-structured focus group (from a choice of two groups of 6-8 participants, facilitated by the researcher and lasting approximately 40 minutes). Some gave individual, face-to-face interviews with the researcher (30 minutes – 1 hour), or posted responses of 2-3 paragraphs onto the subject website or, in Phase 2 and 3, responded by email to the researcher. In Phase 1, all participants responded. In Phase 2, fifteen participants responded and in Phase 3, fourteen responded. Some participants gave responses by all methods and many responded multiple times.

Data were analysed using both thematic analysis and contextual analysis. Transcripts from all data collection methods were coded for the research themes, and analysed by the author, with reference to child-protection and strengths literature. The data from each phase was also analysed alongside literature that was relevant to the data-gathering context. The Phase 1 contextual analysis drew on teacher-education literature; Phase 2 used work-integrated learning literature; and Phase 3, referred to literature regarding novice teachers.

The Strengths-based Child Protection Module

The module was a semester-long unit that explicitly identified and linked strengths-based, child-protection content to other topics in the subject (Appendix A shows the module plan). The aim of integrating child protection with other topics and practicum was to link child protection with the core preparation needed to become a teacher. The integrated module introduced content across thirteen weeks. Early childhood literature and practising early-childhood teachers (many of whom were practicum supervisors), helped to design the real-life scenarios used in the module.

The learner activity in the module was varied, practical and interactive. Participants observed and practiced role-modelling interactions with children, parents and child protection authorities, and watched audio-visual presentations from teachers and child-protection workers, relevant for their future work with children. The teacher educator gave week-by-week mentoring to the students. For example, students were shown a child-neglect case video which the teacher-educator debriefed, discussing strategies that could assist the child, family and educator. The module included an introduction to strengths approaches and practice. The participants firstly identified their own strengths and skills, and then researched together the available resources and support agencies to assist with child protection.

Participants practiced using strengths resources such as child-protection storybooks, songs and picture cards to help children learn child-safety strategies and protective behaviours. In consultation with their placement supervisory teachers, the participants planned child-protection learning experiences for their upcoming placement. Workshop sessions covered child-protection theory, child-abuse statistics, categories of maltreatment, and obligatory reporting requirements. Child-protection history was delivered alongside the

philanthropic beginnings of early-childhood services and in parallel to other contemporary issues with specific responsibilities for early-childhood educators, such as working with children with autism.

Findings and Discussion

In Phase 1 of the research, the participant's responses expressed a lack of confidence and a sense of being overwhelmed to deal with child abuse and protection issues that may occur in their teaching professions. Participant (18) reflected on statistics of child abuse presented in the module "initially all I could think about were the stats - 53 million children killed! … how can we possibly combat that!!" Although responses across the cohort, typically expressed anxiety and elevated emotions regarding child abuse, by the end of the module they were also, typically, accompanied by comments acknowledging their roles and responsibilities to protect children. Participant (18), for instance, states later, "if as teachers we can help *one* of these children or stop the abuse occurring we can change the stats, we can help!" Participant (18) explained how her reactions towards child abuse changed after studying the Strengths Approach: "instead of feeling completely overpowered and upset I was inspired." Participant (7), expressed she was "rather scared" that she would "be one of the people who pretended it [abuse] wasn't there," then reflected that, "being able to recognise this trait I will be able to work on it so as not to ignore problems instead identify and report case of concern". The emphasis in the module, on exploring the emotions and strengths that educators bring to child protection work, appears to have assisted the participants to engage with, rather than retreat from, child protection issues.

In Phase 2, after professional experience, participants were able to confidently and clearly, identify examples of possible physical, verbal, emotional and sexual abuse and neglect. Over 20 responses to the theme of abuse arose from the five-week placement. Responses included

- "I've been on prac and children have worn the same clothes four/five days in a row" (Participant, 16);
- "While I was on one prac the teacher told me that a child in the class had recently stated to her mother that she had been sexually abused by a family member" (Participant, 9);
- "He will just cry [child on prac] 'Oh, now I'm going to get another flogging'" (Participant, 8);
- "The student had so many lice they were falling onto her uniform" (Participant, 5); and
- "A little girl came up to me, and just looked me in the eyes and said, 'I don't have any food today because my Mum doesn't have enough money to buy me any'". (Participant, 14).

Whilst completing observations as part of their placement, the participants reported that they sometimes noticed the indicators of maltreatment they had studied in the module. Many participant reflections also emerged from in-depth conversations, and mentoring, that students received from their placement supervisory teachers.

There was a boy from the other class … oh he's got bruises on him, everywhere, bruises and I actually said to two of the teachers, "Is that normal?" I worked out with a little bit of infeed [information] from another teacher that he's got some sort of learning problem or something and that he isolates himself and that is a problem with him, the bruising, you know, he's just got to bump himself [bruises easily]. (Participant,15)

Supervising teachers were often able to explain behaviours or symptoms of abuse and strategies that they used relating to children's well-being. Participants confidently discussed and asked questions of their supervisory teachers, and observed the challenges of giving assistance to children in need.

I did have one child in my class who I suspected may be neglected. The student had so many lice they were falling onto her uniform and when the mother was rung to come and pick her up, she refused. The teacher aide took her and washed her hair. My SBTE [school based teacher educator] was aware of the mother acting this way on numerous accounts. She rang the mother that afternoon. (Participant, 5)

The participant responses often paralleled the module scenarios. However, on placement, the participants could also observe their supervising teachers using protective strategies. They also experienced referral processes, and learnt of privacy issues with sensitive protection information.

The teacher told me that a child in the class had recently stated to her mother that she had been sexually abused by a family member … she didn't want to talk about it and I didn't feel that it was my place to pry because I was just there observing at the time. (Participant, 9)

The participants reported that their supervising teachers were aware of possible maltreatment cases and were implementing protective strategies such as practical assistance, observing, monitoring, recording possible abuse,

and communicating with parents. A few supervising teachers offered information about formal child-abuse notifications. In these cases, both participants and supervising teachers appeared to have recognised the need to balance the sharing of this information with the confidentiality required by education policies (Queensland Government, DET, 2011). Due to the sensitivity of abuse cases and the practical demands of teaching, extended discussion about specific incidents may be inappropriate during placement. However, an opportunity for students to debrief with a teacher educator about their child-safety observations after practicum, may be beneficial. Participant (2) commented that debriefing, offered as part of the research project, was advantageous:

It [discussion with teacher educator] gave me an opportunity to think what I would do, you know because you never really think about it. And then I think discussing it afterwards [prac] with everyone, getting everyone's different ideas … Learning how to deal with it, how to know whether a child [may have been abused] … gave me confidence in dealing with that area.

In Phase 3, participants reflected on the overall preparation they had received for their child-protection roles. Participants responded that the strengths-based module had been "a total mind shift" (Participants, 2, 9), a "light bulb moment" (Participant, 15), and had given them an increase in confidence (Participants, 7, 8, 13). Participants' responses and strategies relating to child abuse and protection were enhanced by practice-learning. Participant (14), when asked what influenced her growth child-protection confidence, replied

I think more so through practice, [rather] than sitting at uni learning it through text book, you might read on paper and might say "That's really good", but it just doesn't work for you in practice. It's not until you are on prac that you do see these things and it is eye-opening.

Conclusion

The research findings confirmed the significant practical and moral demands of child protection for teachers. The research found that the combination of the Strengths Approach module, supported by a linked professional experience placement, was useful to increase the participants' confidence to protect children. Overall, the participants' reactions appear to support claims that the strengths approach has potential beyond the social service sector. Post-professional experience data revealed participants were confident when discussing and planning for the complex ethical issues of child protection.

I think that the strengths based approach offers a way of thinking about how we react to certain situations and how these situations make us feel…The thing that I like the most about what I have learnt so far is the idea of changing the frame. Through changing the frame, it gives us a whole different way of thinking about who we are and what is possible for us. (Participant, 19)

References

Arnold, L., & Maio-Taddeo, C. (2007). *Professionals protecting children: Child protection and teacher education in Australia* [Monograph]. Adelaide, SA: Australian Centre for Child Protection.

Australian Institute of Health and Welfare. (2011). *Child protection Australia 2009-10* (Child Welfare Series No. 51 Cat. No. CWS 39). Retrieved from http://www.aihw.gov.au

Baginsky, M. (2003). Newly qualified teachers and child protection: A survey of their views, training and experiences. *Child Abuse Review, 12*(2), 119-127. doi:10.1002/car.783

Briggs, F., & Hawkins, R. (1997). *Child protection: A guide for teachers and child care professionals*. Crows Nest, NSW: Allen & Unwin.

Calway, B. A., & Murphy, G. A. (2011). A Work-Integrated Learning Philosophy and the Educational Imperatives. In P. Keleher, A. Patil, & R. Harreveld (Eds.), *Work-Integrated Learning in Engineering, Built Environment and Technology: Diversity of Practice in Practice* (pp. 1-24). doi:10.4018/978-1-60960-547-6.ch001

Cooper, Lesley; Orrell, Janice; Bowden, Margaret (2010). Work Integrated Learning : A Guide to Effective Practice. New York: Routledge.

Ewing, R., Lowrie, T., & Higgs, J. (Eds.). (2010). *Teaching and communicating.* Melbourne, Australia: Oxford University Press.

Glicken, M. D. (2004). *Using the strengths perspective.* Boston, United States: Pearson.

Goldenberg, C., & Gallimore, R. (1991). Changing teaching takes more than a one-shot workshop. *Educational Leadership, 49*(3), 69-72. Retrieved from http://www.ascd.org/publications/educational-leadership.aspx

Griffith University. (2006). *Introduction to Work Integrated Learning (WIL).* Retrieved from http://www62.gu.edu.au/policylibrary.nsf/mainsearch/a0d60f04626b7f144a2571800063dd56?opendocument

Hodges, T., & Clifton, D. O. (2004). Strengths-based development in practice. In P. Linley & S. Joseph (Eds.), *International handbook of positive psychology in practice: From research to application* (pp. 256-269). Hoboken, New York: Wiley.

Horton, C. B., & Cruise, T. K. (2001). *Child abuse and neglect: The school's response.* New York, United States: Guildford .

International Society for Prevention of Child Abuse and Neglect. (2010). *World perspectives on child abuse* (9th ed.). Carol Stream, IL: Author.

Laskey, L. (2005). Making a difference in child protection: Towards an effective education for teachers. In M. Cooper (Ed.), *Teacher education: Local and global; Australian Teacher Education Association 33rd annual conference, Surfers Paradise, conference proceedings* (pp. 265-273). Retrieved from http://atea.edu.au/index.php?option=com_jdownloads&Itemi d=132&task=viewcategory&catid=58

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation.* United Kingdom: Cambridge University Press.

Levin, P. G. (1983). Teacher perceptions, attitudes and reporting of child abuse and neglect. *Child Welfare, 62*(1), 14-20.

MacIntyre, D., & Carr, A. (2000). Prevention of child sexual abuse: Implications of programme evaluation research. *Child Abuse Review, 9*(3), 183-199. doi:10.1002/1099-0852(200005/06) 9:3<183::AID-CAR595>3.0.CO;2-I

McCallum, F. (2003). Using mentored learning to support pre-service teachers in child protection. In P. L. Jeffrey (Ed.), *Educational research, risks and dilemmas: New Zealand Association for Research in Education/Australian Association for Research 2003, Auckland, conference proceedings* (No. mcc03224, pp. 1-13). Retrieved from http://www.aare.edu.au/03pap/mcc03224.pdf

McCallum, F. & Baginsky, M. (2001). *A comparison of pre-service training to identify and report suspected child abuse and neglect in Australia and the United Kingdom*. Paper presented at the annual meeting of the American Educational Research Association. Retrieved from http://www.eric.ed.gov/

McCashen, W. (2005). *The Strengths Approach.* Bendigo, VIC, Australia: St. Luke's Innovative Resources.

Pinheiro, P. S. (2006). *Violence against children: United Nations Secretary General's Study.* Retrieved from the United Nations Children's fund website http://www.unicef.org/violence study/reports.html

Saleebey, D. (Ed.). (2009). *The strengths perspective in social work practice* (5th ed.). Boston, United States: Pearson.

Singh, P. (2005). Risk management vs risk retreat. In P. L. Jeffrey (Ed.), AARE 2004 conference papers [Conference of the Australian Association for Research in Education, 28 November-2 December 2004] (pp. 1-17). AARE.

Watts, V. (1997). *Responding to child abuse: A handbook for teachers.* Rockhampton, Australia: Central Queensland University Press.

Copyright © 2012 Angela Fenton

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Appendix A

Strengths Child-Protection Module Guide

Week Beginning	Subject Content	Linking Strengths Approach (SA) child protection (CP) module content & research project
July 30th Wk 1	Introductory Lecture, Assessment, readings & outlines	Outline research project component and adaptations/implications to subject. Logistics for participants and non-participants. Time-line of research & reasons, aims of research. Link to professional experience placement. Intro to SA (principles & column approach)
August 6th Wk 2	LECTURE - Historical development of Education. Conditions for children. Time line – Greek philosophers, Indigenous child rearing practices. Importance of understanding foundations of ECE	Overlap with existence of child abuse, child labour, and methods of punishment historically. Cultural and historical differences on what constitutes as child abuse. How these provide foundations for social service approaches and how child protection is viewed. Private/family matter, little government involvement in social services? Idea of philanthropy. Knowing individual strengths/philosophy (personally/professionally). Personal feelings about abuse – help for professionals
August 13th Wk 3	LECTURE - Care and Education dichotomy and theorists who shaped ECE education– Froebel and Pestalozzi. The introduction of the Kindergarten and ECE programs (impact of war)	Role of teacher/carer and involvement with social issues, unavoidable in historical context. Abuse of children in war. Theorists & early philanthropists' links to SA principles E.g. Sydney development of Kindy/Nursery and Pestalozzi's 'Love, Acceptance, Trust'. Practical approach to teaching - not termed SA, however, intrinsically linked to social justice and role/responsibilities of a teacher.
August 20th Wk 4	LECTURE – Equality and education – role of education, Horace Mann, Rousseau, Owen, McMillan's, Locke	The affect of a philosophy to influence practice. Acknowledgement of power, care and education tensions. Ideas of performatism and reformation. The ability of education to empower (SA links) and philosophies of enlightenment (dignity and respect SA links).
August 27th Wk 5	LECTURE – historical development of Australian services – saving children from the streets, impact of child labour and war efforts, Policy and elections	Deficits approach outlined – medical and pathology approach – 1st wave in social work, rescue approach – historical links. Expert power and needs targeted. Children as commodities, influence of social consequence. Political and economic factors, changing role of women – what does empowering mean in SA? Child protection agencies and policy. Guest speakers.
September 3rd Wk 6	LECTURE – services C&K, influences from other fields Freud, Skinner. Approaches to ECE Montessori, Steiner, Indigenous educ, teacher and parent relationship is distinct.	2nd wave social work– problem solving, behaviourist approaches. Links to feminism. Child abuse links to wider issues, poverty, domestic violence, role of women and children, ECE emphasis on 'women's work'. Early teacher training history – child protection is part of early teacher training. How to report, refer and processes of protective services. Categories and levels of abuse. Ways to protect.
September 10th Wk 7	LECTURE – contemporary issues. Ethical dilemmas in ECE. Reframing problems. Media influence on ECE and current areas of interest	3rd wave social work. Outline St. Lukes approach. Outline the history of positive psychology and particularly influences of Clifton. Arose out of practice, social service approach. Use cards, scaling sheets diagrams and book to show difference in deficits and SA. SA Practical approach to change – practice CP scenarios – video, guest speakers. Debrief and mentoring for responses and strategies to CP issues.
September 17th Wk 8	Child Abuse & Protection Incidences, types and stats. Referrals, policy and regulations	Effects of CA & AP on children, families and teachers. Research findings re teacher fears and confidence in CP. Stats of CP. Current programs and strategies. Use SA cards to discuss feelings/resources available to assist teachers - role model for own & chn's use. Use storybooks and picture cards to discuss child-safety feelings and protective strategies
September 24th Recess	LECTURE RECESS Look for articles, topics of relevance and interest to ECE teachers for study	LECTURE RECESS - reconnect with grp Examine focus of such reports deficit or SA? Reframing exercise: Rewrite the news - What are the strengths here? Prepare scenarios – drama/role modelling interactions with children, families and child protection agencies
October 1st Wk 9	Lecture Ethical issues – behaviour guidance, short term and long term strategies	Building relationships. Raising resilience and self esteem for children (teachers?). Activities and ideas to start substantiative conversations. Revisit stages of implementing a SA . Ways of framing interactions 'power with' rather than 'power over' – understanding child abuse & protection.
October 8th	ASSESSMENT In-Class assessment	Not related to CP or the research project
October 15th Wk 11	Contemporary themes - Impact of technology, obesity, autism (dependant on media articles)	Scenario based exploration of ethical issues – how does CP link with other issues – responsibility to all chn with special needs. Opportunity to explore SA approaches and resources for topics. Research resources and organisation that can help. Obligations reporting, relevant gov and non-gov support agencies. help-lines, resources for neglect e.g., food, clothes, housing, transport.
October 22nd Wk 12	LECTURE Code of Ethics, Professional Standards – policy into practice. Opportunities for career enhancement, wages and conditions	Personal philosophies and community capacity building – areas of teaching strength, professional development and organisations to assist. Scenario and mentoring opportunities – What are our strengths, human strengths, resource/time strengths – opportunities and challenges. Prepare learning experience for placement
Oct 29th Wk 13	Logistics of subject assessment and feedback.	Opportunities for self-reflection and critical analysis of subject content and themes. Ensuring the links between research phases. Prepare to observe and ask questions on placement.

Graduate employability: Teaching staff, employer and graduate perceptions

Sonia Ferns[1]
Curtin Teaching and Learning, Curtin University

Employability of graduates is deemed an outcome universities should strive for as government, industry and students demand increased accountability measures. Most higher education institutions are exploring mechanisms for enhancing the student experience through the inclusion of authentic learning experiences and 'real world' assessment strategies in the curriculum. While 'getting a job' is a straight forward concept, the notion of employability and what it means to be employable is open to debate. Capabilities deemed to be highly desirable in determining the capacity of a graduate to be collaborative, productive and innovative in the workplace vary according to the perceptions of particular stakeholders. This comparative study gathered feedback on the importance of employability capabilities from a range of stakeholders including graduates, employers and teaching staff. Data was collected from the same group of stakeholders about the proficiency of graduates in relation to each of the employability capabilities as a result of graduating from a degree program. Teaching staff, graduates and employers of graduates from two large undergraduate programs at Curtin University in Western Australia were surveyed. Both qualitative and quantitative data from the surveys was analysed. The data collected paints an interesting picture of different perceptions of employability. The most highly regarded employability capabilities in each of the disciplines are highlighted and those that are perceived to be lacking in curriculum design identified. Data from the three key stakeholders was triangulated to ascertain diversity in perceptions. Comparison of feedback across disciplines recognises both the diversity and similarity across professions and the varied perceptions of different stakeholders.

Keywords: Employability, Stakeholder feedback, Graduate capabilities, authentic assessment.

Background

The Australian higher education system is undergoing radical reform with a significant investment in funds and infrastructure to ensure a more inclusive and quality driven sector (Commonwealth of Australia, 2009). The essence of the reform is based on the aspiration to create a highly skilled, innovative and sustainable Australian workforce which is globally competitive and drives economic growth and development. The reforms are based on the premise of a stronger Australia; fairness for all Australians; and the capacity to meet the needs of a rapidly changing global economy and future demands (Robertson & Scott, 2010). An integral component of the reform agenda is the increased focus on quality and transparency. 'Institutions will be required to demonstrate that their graduates have the capabilities that are required for successful engagement in today's complex world' (Commonwealth of Australia. P 31). Employability of graduates is deemed an outcome universities should strive for as government, industry and students demand increased accountability measures (Knight & Yorke, 2004).

The mandate for transparency and accountability for higher education institutions with an emphasis on user choice in an internationally competitive market, challenges many of the traditional approaches in universities (Layer, 2006). With the availability of comparative data in the public arena satisfaction levels of all stakeholders are integral to the reputation and sustainability of institutions (Department of Industry, Innovation, Science, Research and Tertiary Education, 2011). It is of increasing importance that higher education institutions explicitly embed employability in the curriculum and provide evidence of the skill acquisition for all stakeholders (Ewan, 2009).

Stakeholders want to see a return on investment; the government agenda aims for a sustainable and skilled Australian workforce; employers desire a pool of competitive applicants from which to recruit; and graduates strive to be highly employable through the acquisition of employability capabilities as a consequence of their educational experience (Australian Learning and Teaching Council, 2011; Mason, 2010). Student feedback strongly supports the provision of a relevant and authentic curriculum with opportunities to integrate theory and practice in settings which reflect the workplace (Robertson & Scott, 2010). Pivotal to an engaging educative student experience is quality teaching.

In order to provide the educational and life experiences essential for providing an inclusive and holistic course experience, engagement with the community is of paramount importance. Universities need to be responsive to market demands thereby ensuring currency and relevance of course content. Establishing and maintaining partnerships with industry is a key ingredient for institutions to provide authentic learning experiences which

enhance graduate employability (Hodges, 2011). To ensure graduate mobility, skills acquired need to be transferable across different contexts. According to van Rooijen (2011) universities should be 'a hybrid with society' (p.6) to ensure the theoretical components of a university education blend with authentic practice based settings culminating in work ready graduates. Mutually beneficial relationships between industry bodies and higher education institutions are fundamental to an inclusive student experience with desirable outcomes for both parties.

Employer expectations are heightened with a demand for work ready graduates who have intellectual capacity and are also equipped with work place expertise. While industry representatives appear satisfied with the technical or discipline-specific skills of graduates, there is a perception that employability skills are under-developed (Precision Consultancy, 2007). According to Ward (2007) higher education systems worldwide are being called upon to educate more students, provide more support for them, address workforce needs, solve social, scientific and technical problems and do it all better, and more efficiently, and in physical facilities and surroundings appropriate to the task. Graduate employers are considered important stakeholders in higher education and a valuable source of information pertaining to the capacity of graduates in the workplace from a quality assurance perspective (Coates, 2010). According to Coates, the employer's voice is of significant relevance with the profile of higher education increasing as a mechanism for addressing the needs of an increasingly global, knowledge economy.

Methodology

This comparative study gathered feedback on the importance of employability capabilities from a range of stakeholders including graduates, employers and teaching staff. Data was collected from the same group of stakeholders about the proficiency of graduates in relation to each of the employability capabilities as a result of graduating from a degree program. Teaching staff, graduates and employers of graduates from two large undergraduate programs at Curtin University in Western Australia were surveyed. Both qualitative and quantitative data from the surveys was analysed. The data collected paints an interesting picture of different perceptions of employability. The most highly regarded employability capabilities in each of the disciplines are highlighted and those that are perceived to be lacking in curriculum design identified. Data from the three key stakeholders were triangulated to ascertain diversity in perceptions. Comparison of feedback across disciplines recognises both the diversity and similarity across professions and the varied perceptions of different stakeholders.

The *Graduate Employability Indicator Surveys (GEI)* were developed as a result of an Australian Learning and Teaching Council (ALTC) Competitive Grant, *Building course team capacity to enhance graduate employability* led by Beverley Oliver (2011). The GEIs are a suite of three online surveys which gather the perceptions of graduates (of up to five years), employers and course teaching teams about fourteen graduates capabilities (see Table 1 below). The survey provides valuable information about the effectiveness of a course in nurturing employability capabilities from the perspectives of each of the stakeholders (Oliver et al., 2011). This instrument gathers both qualitative and quantitative data about employability capabilities. The survey is administered to relevant stakeholders in viable courses at Curtin University through the Comprehensive Course Review (CCR) process. Surveys are administered to graduates via Alumni and the Head of School sends the survey link to teaching staff. While the Head of School emails the survey link to employer contacts and peak bodies, respondents are invited to forward the survey to other employers. A gap analysis of the quantitative data collected through administration of the GEI survey is visually represented signifying the gap between aspirations and reality of graduate employability capabilities. Data from graduates, employers and teaching staff is triangulated to determine variations in stakeholder perceptions. Ethics approval was granted.

The GEI surveys comprise fourteen capabilities (see table 1) which are based on attributes, skills and personal qualities evident in pre-existing surveys (Oliver, 2010). Following a scan of universities' Graduate Attributes, Oliver posits that these capabilities address the spectrum of attributes used by universities.

Table 1: Graduate capabilities

Abbreviated title	Full text in survey
1. Knowledge	Work related knowledge and skills
2. Writing	Writing clearly and effectively
3. Speaking	Speaking clearly and effectively
4. Thinking	Thinking critically and analytically
5. Quantitative	Analysing quantitative problems
6. Using ICT	Using computing and information technology
7. Teamwork	Working effectively with others
8. Independent Learning	Learning effectively on your own
9. Intercultural Understanding	Understanding people of other racial and ethnic backgrounds
10. Problem-solving	Solving complex, real-world problems
11. Values & Ethics	Developing a personal code of values and ethics
12. Community Engagement	Contributing to the welfare of your community
13. Industry awareness	Developing general industry awareness
14. Social contexts	Understanding different social contexts

Two qualitative items ask respondents to comment the best aspects of the degree for developing employability skills and how could the degree be changed to improve skills for employment.

The Graduate Employability Indicators provide evidence to answer the following questions in relation to graduates of a degree program:

1. How important are the capabilities for early professional success?
2. To what extent do graduates generally demonstrate the capabilities (according to employers and teaching staff), or do courses contribute to their development (according to graduates)?
3. To what extent are graduates work-ready?
4. How confident are teaching staff in teaching and assessing the capabilities?
5. Which are the capabilities that are most important yet demonstrated or developed to a lesser extent?

The data presented is based on stakeholder feedback about two large undergraduate degrees at Curtin University. Both degrees incorporate a series of scaffolded work placements and undergo rigorous professional accreditation. Program A is a health sciences discipline while program B is a professional humanities degree.

Results

The number of respondents in each stakeholder group is outlined in Table 2 below. It is not possible to calculate response rates as the number of live email addresses is unknown and the total number of recipients of the survey cannot be ascertained as respondents are invited to forward the email to others.

Table 2: Number of stakeholder respondents

	Program A	Program B
Graduates	11	14
Employers	47	20
Teaching staff	20	10

Graduates

Figure 2and 2 below show a **comparison** of graduate perceptions about the extent the degree experience contributed to capability development with the perceived importance of the capabilities.

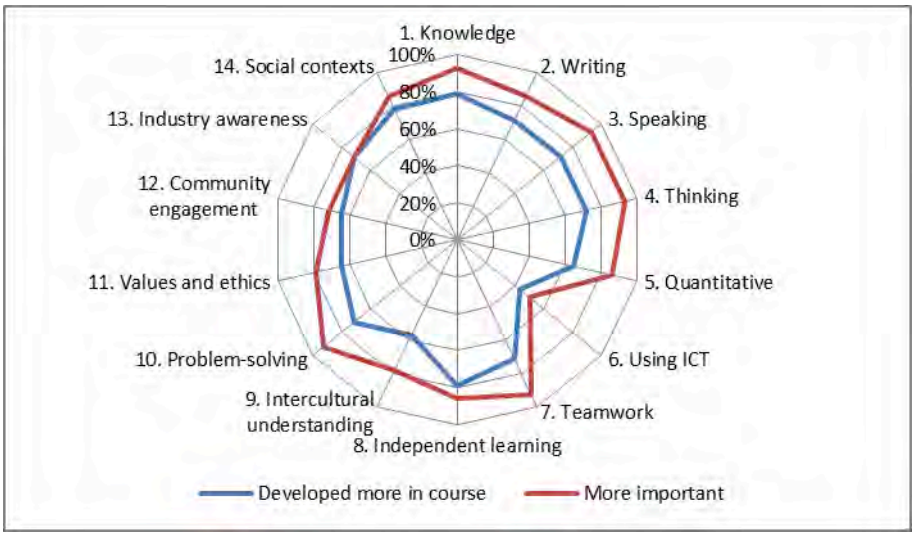


Figure 2: Comparison of graduate perceptions of the extent the degree experience contributed to capability development and the importance of capability (Program A)

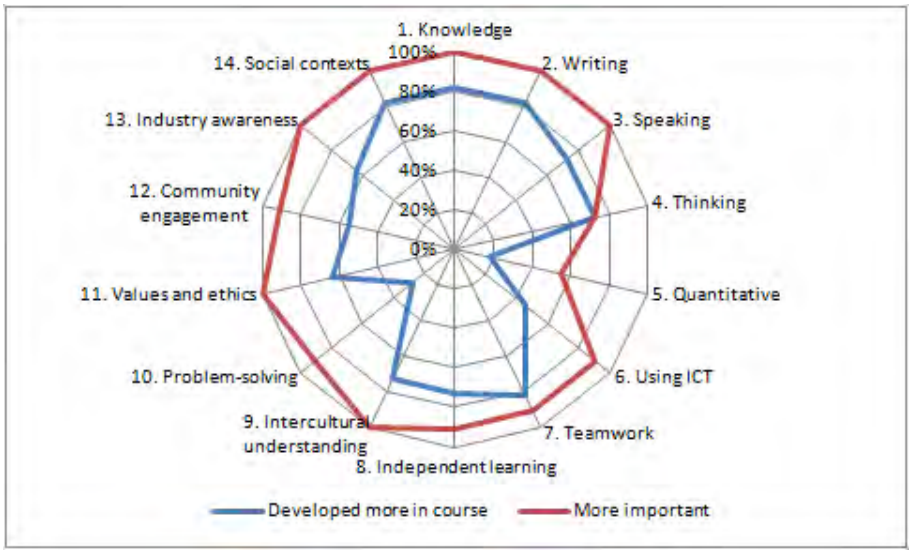


Figure 2: Comparison of graduate perceptions of the extent the degree experience contributed to capability development and the importance of capabilities (Program B)

Figures 1 and 2 signify a gap between the importance of capabilities as perceived by graduates and the level to which the degree supports the development of the capabilities. The disciplines differ in the views of important capabilities, but all graduates agreed that knowledge, writing, speaking, problem solving and teamwork are important. Significant gaps in the degree experience are evident in program B in relation to problem solving, value and ethics, community engagement, using ICT and industry awareness. There appears to be greater synergy between importance and capabilities addressed in program A data.

Employers

Figure 3 and 4 demonstrate a **comparison** of employers' perceptions of the importance of the capabilities and the extent to which graduates demonstrate achievement of those capabilities.

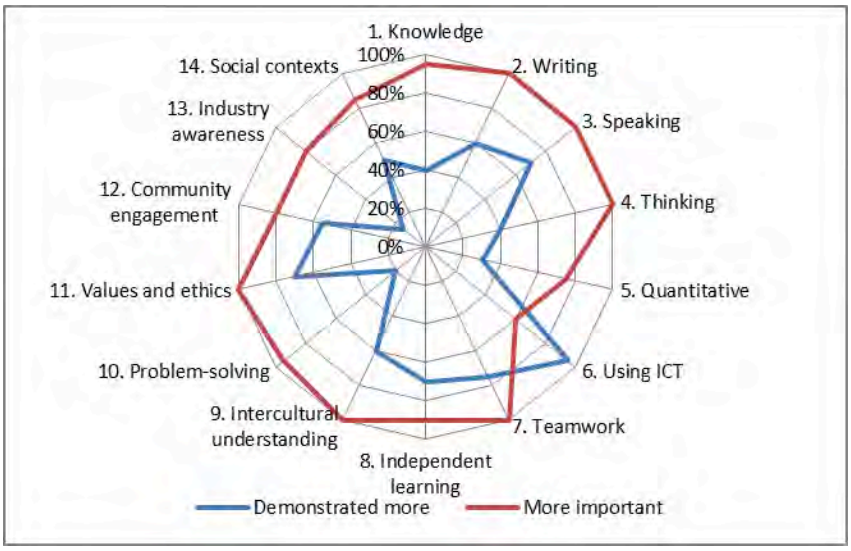


Figure 3: Comparison of employer perceptions of the extent graduates demonstrate each capability and the importance of capabilities (Program A)

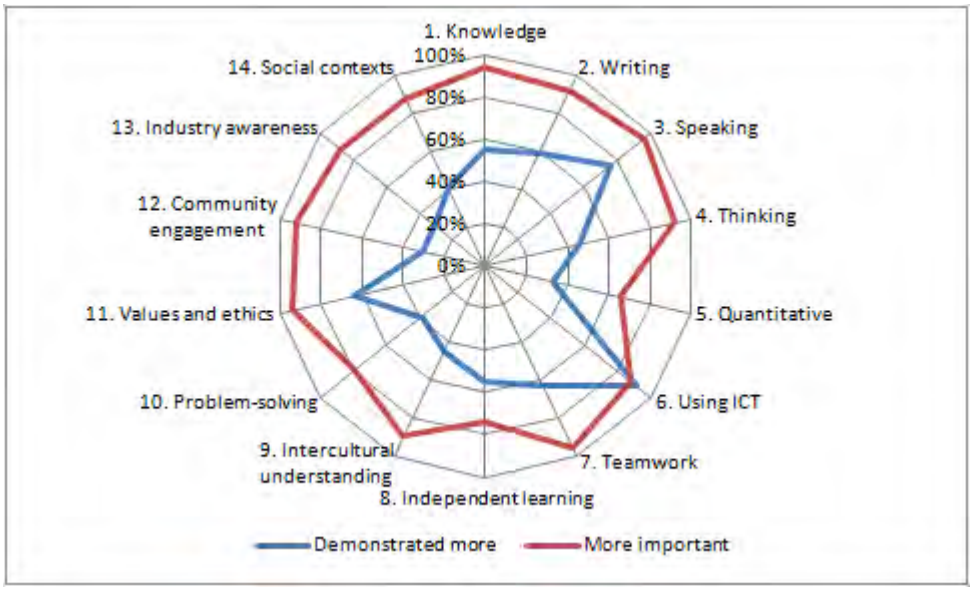


Figure 4: Comparison of employer perceptions of the extent graduates demonstrate each capability and the importance of capabilities (Program B)

Figures 3 and 4 show disparity in the capabilities employers consider important and those demonstrated by graduates. While there are minor differences between the two sets of employers, there appears to be general consensus about what is important and where the gaps are in graduate skills. It is interesting to note that using ICT is the only skill employers perceive as being adequately evident in graduates.

Teaching team

Figure present a comparison of the teaching teams' perceptions of the extent new graduates demonstrate each capability with the importance of capabilities.

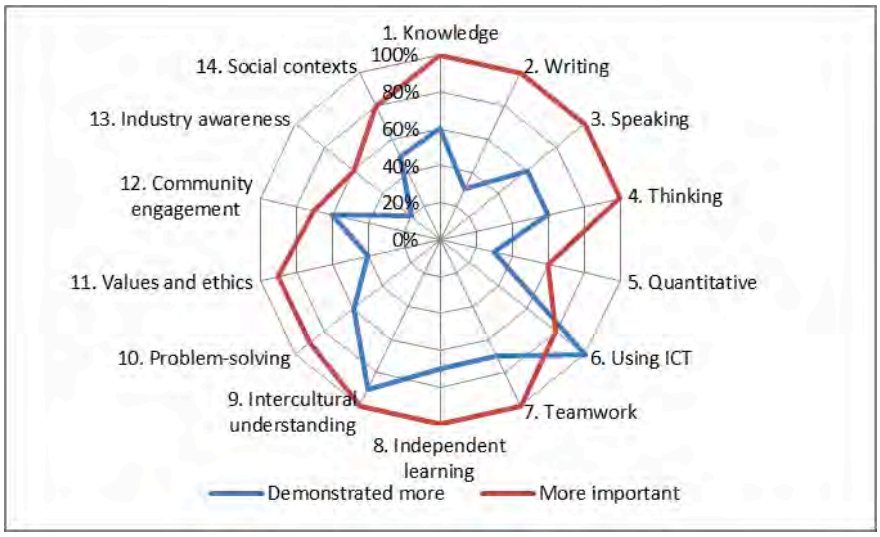


Figure 5: Comparison of teaching team perceptions of the extent graduates demonstrate each capability with importance of capabilities (Program A)

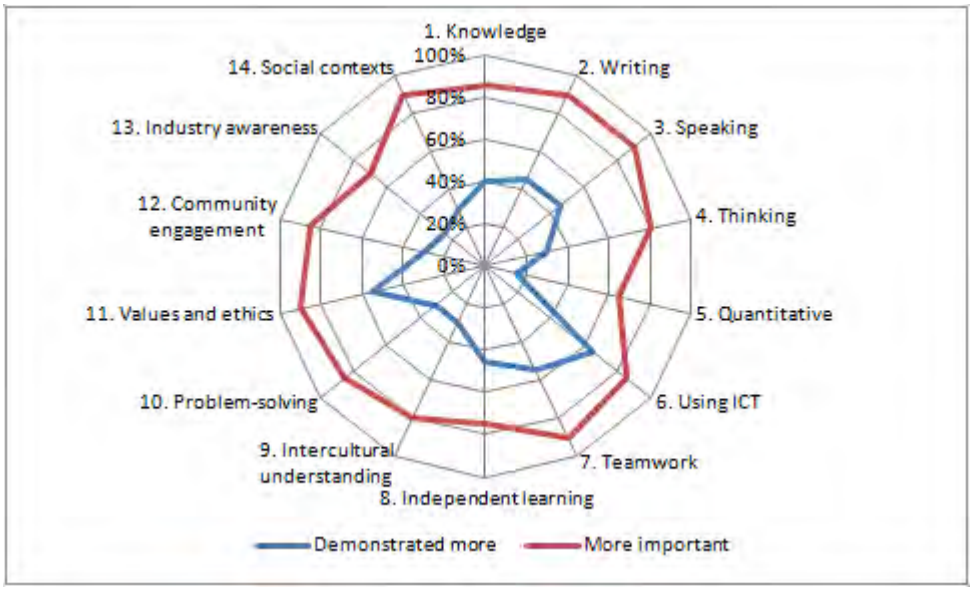


Figure 3: Comparison of teaching team perceptions of the extent graduates demonstrate each capability with importance of capabilities (Program B)

Figures 5 and 6 indicate a level of agreement between the teaching teams of both programs on what capabilities are important for graduate success. Both teaching teams perceive significant gaps in what graduates demonstrate and the important capabilities with industry awareness indicated as a skill rarely demonstrated.

Figure present a comparison of the teaching team's perceptions of their confidence in teaching and assessing each capability (percentage agreement with "quite confident" and "very confident").

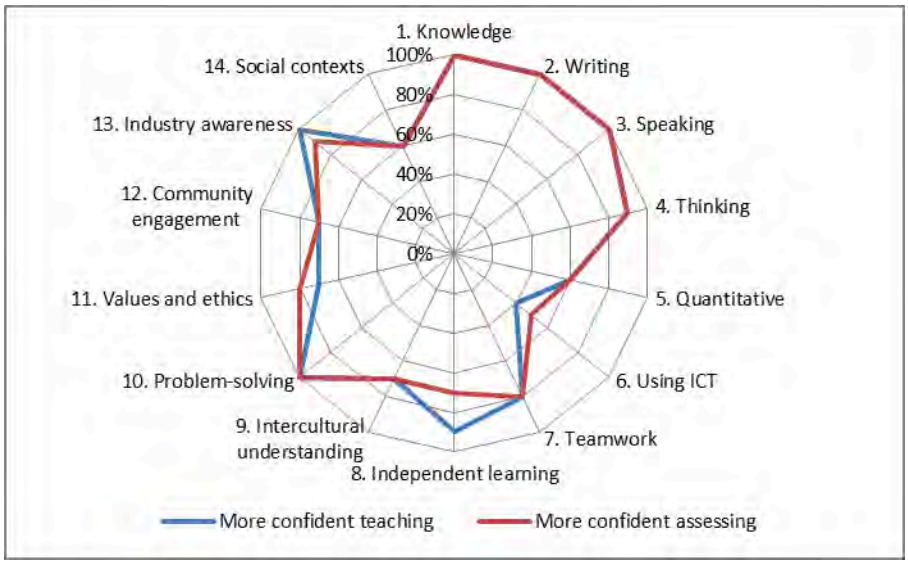


Figure 7: Comparison of teaching team confidence in teaching and assessing each capability (Program A)

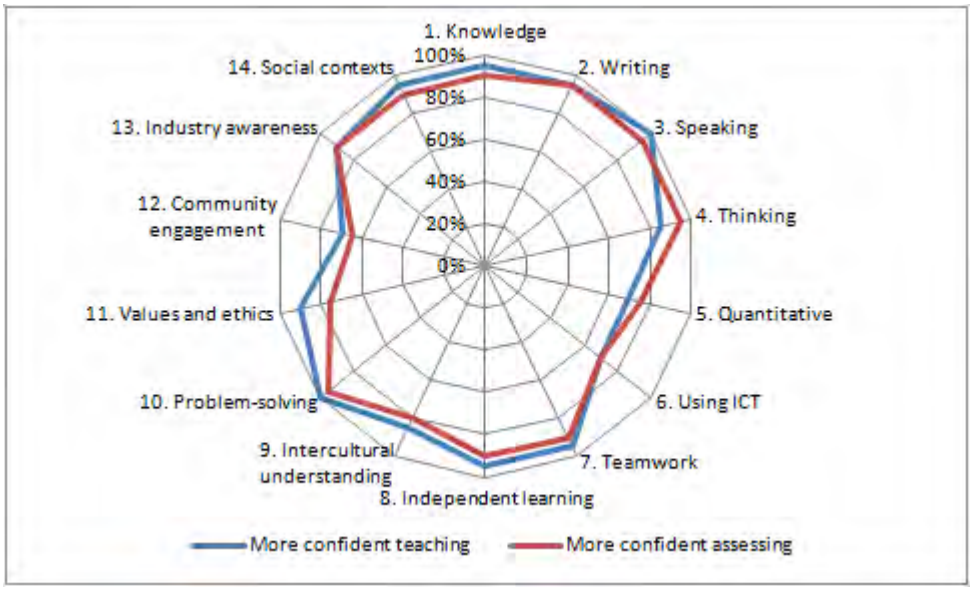


Figure 8: Comparison of teaching team confidence in teaching and assessing each capability (Program B)

Figures 7 and 8 suggest staff from both disciplines feel confident to teach and assess most capabilities with some trepidation associated with values and ethics and community engagement. Interestingly, there appears to be challenges for staff in teaching and assessing using ICT.

Triangulation of stakeholder perceptions

Figure 9 and 10 present a triangulation of the three stakeholder groups' perceptions of the importance of the capabilities.

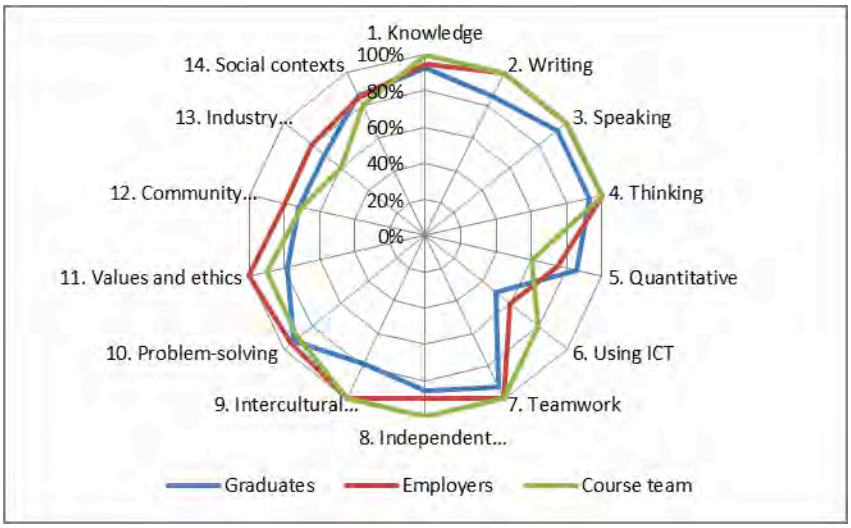


Figure 9: A comparison of graduate, employer and teaching team perceptions of capabilities perceived as more important to early professional success (Program A)

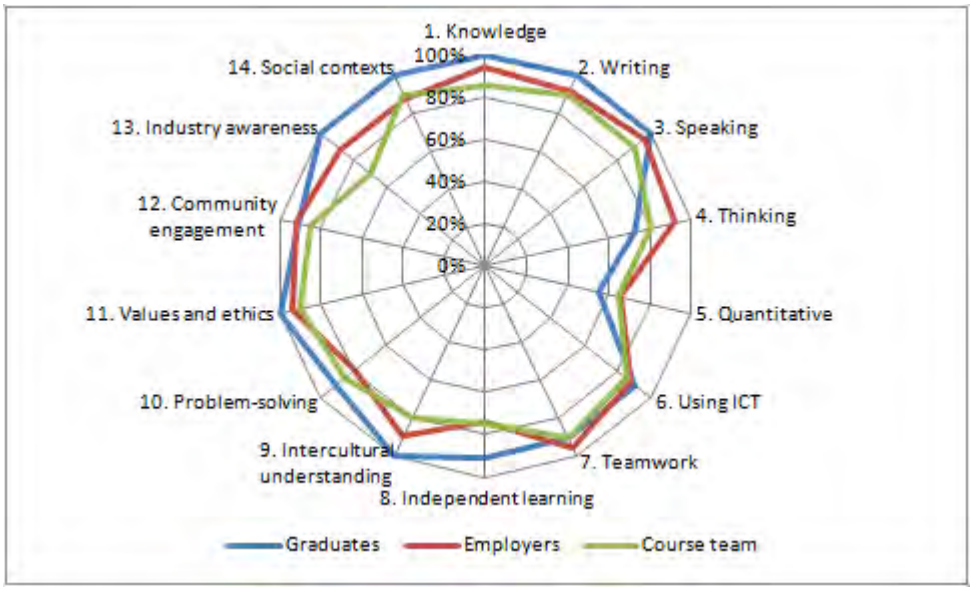


Figure 10: A comparison of graduate, employer and teaching team perceptions of capabilities perceived as more important to early professional success (Program B)

Figures 9 and 10 are indicative of a high level of agreement between all stakeholders across both degrees about what capabilities are perceived to be important to early professional success.

Figure show a triangulation of the perspectives of the stakeholder groups about the extent that new graduates demonstrate the capabilities (employers and program teaching team) or the extent graduates perceive they are developed in their course.

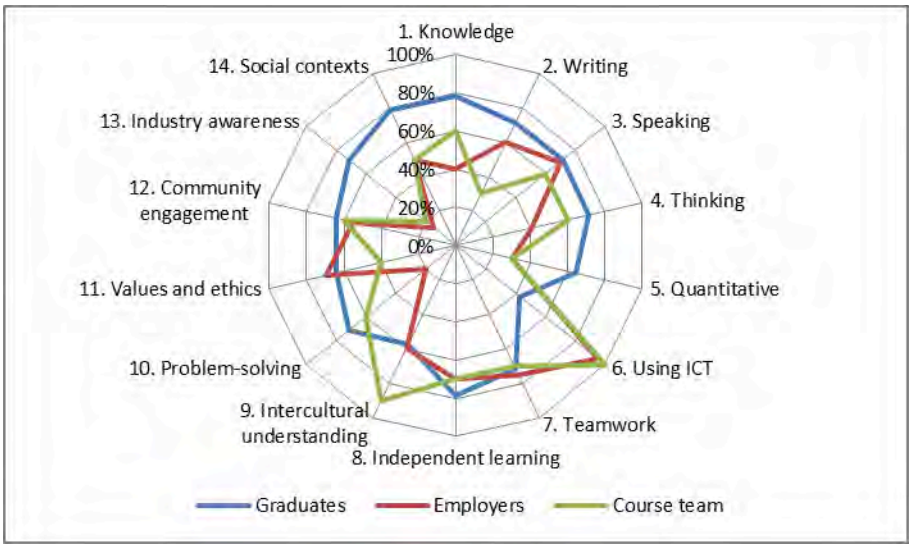


Figure 11: A comparison of graduate, employer and teaching team perceptions of capabilities perceived as more demonstrated or developed (Program A)

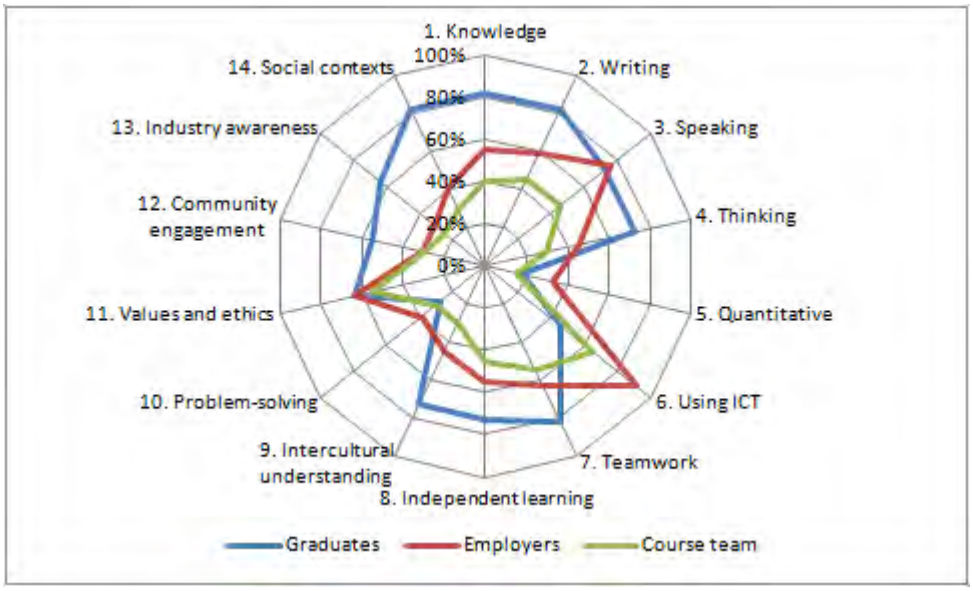


Figure 12: A comparison of graduate, employer and teaching team perceptions of capabilities perceived as more demonstrated or developed (Program B)

The triangulated data in figures 11 and 12 highlight the variations in stakeholder perceptions about the capabilities graduates demonstrate. Figure 11 indicates some agreement on the development of independent learning, teamwork and community engagement but significant variation in perceptions of industry awareness, problem solving and knowledge. In figure 12, the greatest variation occurs in social contexts, knowledge, speaking and writing.

Discussion

Employment and employability are complex phenomena and are more than the acquisition of generic skills (Yorke, 2006). Generic capabilities are interdependent and realistically exist as a cluster of skills rather than isolated achievements. However, the data highlights that perceptions of the important employability capabilities are consistent for all stakeholders. While there was variation among stakeholders in relation to the specific skills lacking, a gap between the importance of skills and the level to which graduates demonstrated proficiency consistently appeared. The differences in perceptions between the two programs may be due to the demands of

the discipline, not necessarily that one program of study addresses generic attributes better than another. There are several key points which are generated through analysis of the data. Firstly, there appears to be a general consensus that while using ICT is important, graduates tend to demonstrate expertise in this area, possibly as a result of ICT underpinning all components of a degree program. Secondly, while it was agreed that knowledge is an important attribute, employers did not cite it as the most essential skill, other skills such as problem solving, teamwork and communication were considered more critical elements of employability.

Possibly the most intriguing data is evident in the responses from the teaching team. It appears staff are equally confident in teaching and assessing the employability capabilities, yet feedback from all stakeholders, including staff, suggests there is a significant gap in the acquisition of these skills among graduates. This finding poses the questions around curriculum design, teaching strategies and assessment processes if staff are confident but graduates are still not demonstrating proficiency in these skills. Quantifying employability capabilities; applying metrics to determine student outcomes; and collating appropriate evidence is complex (Chalmers, 2007). Traditional assessment methods typically used in universities are not adequately designed for capturing students' ability to apply generic skills in a practice-based setting. The inclusion of authentic learning experiences which provide opportunities for students to practice work-based skills are resource intensive and require specific expertise and professional development. According to Layer (2006) strategies around teaching and learning and student support need to change in order to have an impact on the acquisition of employability capabilities. Layer believes the increasing diversity in student cohorts will exacerbate the challenge of designing and delivering a relevant curriculum which provides equitable experiences for all. Refocusing education providers to addressing industry outcomes will require a major cultural shift for institutions and initiate significant professional change and adaptation for many staff (Skills Australia, 2010). The findings in this investigation support the notion that while staff acknowledge the importance of generic capabilities, their ability to articulate these in curriculum and design fair, equitable and relevant assessment to determine student outcomes is an area warranting further investigation. The findings suggest that professional development programs for teaching staff need to explicitly address this shortfall and up skill staff in this area. The evident gaps in the curriculum also has implications for resourcing teaching areas to incorporate authentic experiences and engage with industry thereby establishing partnerships to enrich the student experience.

Conclusion

According to Oliver (2011) there has been abundant investigation into the assurance of graduate outcomes in relation to graduate capabilities but there is a lack of research into how these attributes are developed and assessed. This research demonstrates the divergent perspectives of graduates, employers and teaching staff on the importance of employability capabilities and the degree to which they are demonstrated by graduates. Challenges associated with embedding graduate capabilities into curriculum and ensuring authentic assessment practices will increase as the widening participation agenda takes effect with increasing class sizes and associated staff workload (Hodges, 2011). Despite the move towards massification of the higher education system, graduate employability has taken 'centre stage' requiring universities to explore and implement effective ways of embedding and assessing employability skills (Pegg, Waldock, Hendy-Isaac, & Lawton, 2012). The data produced through administering the GEI is of immense worth when reviewing programs of study and undertaking curriculum renewal. The visual evidence provides the impetus for staff to question the focus of delivery and encourages consultation with industry bodies. The inclusion of staff perceptions provides enhanced credibility and facilitates staff engagement. The visual stimuli instigate rigorous discussion about course content and learning experiences to maximise employability outcomes for students. The findings suggest opportunities for further research into the links between discipline trends, assessment profiles, student satisfaction and the development of generic capabilities. Furthermore, the importance and value of partnerships between industry and institutions is highlighted by the variations in perceptions. Investigation into models of partnerships; resourcing partnerships; and ensuring optimal student experience through effective partnerships would be of immense value to the sector (Nixon, Smith, Stafford, & Camm, 2006).

References

Austalian Learning and Teaching Council. (2011). Assuring graduate attributes.
Chalmers, D. (2007).A review of Australian and international quality systems and indicators of learning and teaching. Australian Learning and Teaching Council.
Coates, H. (2010). New Directions in Quality Management. In C. Nair, L. Webster & P. Mertova (Eds.), *Leadership and management of quality in higher education*. (pp. 169-182) .Oxford: Chandos Publishing.
Commonwealth of Australia. (2009). Transforming Australia's higher education system. Canberra.
Department of Industry, Inovation, Science, Research and Tertiary Education. (2011). Development of performance measurement instruments in higher education. Discussion paper. http://www.deewr.gov.au?HigherEducation/Publications/Pages/Home.aspx
Ewan, C. (2009). Learning and teaching in Australian universities: A thematic analysis of cycle 1 AUQA audits: ALTC and AUQA.
Hodges, D. (2011). The assessment of student learning in cooperative and work-integrated education. *International Handbook for Cooperative & Work-integrated Education. 2nd Edition.* World Association for Cooperative Education Inc., 53-62.
Knight, P., & Yorke, M. (2004). *Learning, Curriculum and Employability in Higher Education*. London: Routledge Farmer.
Layer, G. (2006). Widening participation and employability. *Learning and Employability Series*: Learning and Support Network.
Mason, C. (2010). Falling between the gaps: Appraising the past and future of widening participation at Liverpool John Moores University. *CETL Journal Innovations in Practice, 2*(2), 17-24.
Nixon, I., Smith, K., Stafford, R., & Camm, S. (2006). Work-based learning: Illuminating the higher education landscape. Final Report.
Oliver, B. (2010). Teaching Fellowship: Partnerships for graduate employability. Final report: Australian Learning and Teaching Council.
Oliver, B., Whelan, B., Hunt, L., Hammer, S., Jones, S., Pearce, A., & Henderson, F. (2011). Introducing the graduate employability indicators. Australian Learning and Teaching Council.
Pegg, A., Waldock, J., Hendy-Isaac, S., & Lawton, R. (2012). Pedagogy for employability. Higher Education Academy: York, England. Retrieved from http://www.heacademy.ac.uk/resources/detail/employability/pedagogy_for_employability_update_2012
Precision Consultancy. (2007). Graduate Employability Skills. Prepared for the Business, Industry and Higher Education Collaboration Council. Retrieved from http://www.precisionconsultancy.com.au/
Robertson, C., & Scott, M. (2010). Personal inquiry project: Students' perceptions of world of work initiatives; does anybody know that they're out there? *CETL Journal Innovations in Practice. 2*(2).
Skills Australia. (2010). Australian workforce futures: A national workforce development strategy.
van Rooijen, M. (2011). Transforming 21st century engagement: From work-integrated learning (WIL) to learning-integrated work (LIW). *Journal of Cooperative Education and Internships. 45*(01), 5-10.
Ward, D. (2007). Academic values, institutional management and public policies. *Higher Education Management and Policy. 19*(2). 1-12.
Yorke, M. (2006). Employability in higher education: what it is- what it is not. *Learning & Employability*. York, UK.

Copyright © 2012 Sonia Ferns

The author assigns to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author.

Partnerships and relationships in cooperative education: Are stakeholder perspectives aligned?

Jenny Fleming
Auckland University of Technology (and PhD student Deakin University)

Cooperative education can be expressed in terms of a partnership between students, university and industry. A stakeholder-integrated approach involves formalised sustainable relationships between stakeholders and a shared understanding of the meaning and purpose of cooperative education. This study examined, through a qualitative case study methodology, the stakeholder views of cooperative education partnerships in a tertiary sport education context. Students, industry and university academic supervisors had some degree of alignment in their understanding of the purpose of cooperative education. However, there was a range of interpretations of what cooperative education actually meant. The fundamental conception of integrating theory and practice that differentiates cooperative education from just 'work experience' was not clearly articulated. The perceptions of most stakeholders confirmed that cooperative education was considered a partnership. However, not all participants referred to a tripartite relationship. The students, industry and academics views supported multiple contingencies such as reciprocity, efficiency, legitimacy and synergy as important in the formation of cooperative education partnerships. Developing better strategies for communicating the meaning of cooperative education, along with a clearer understanding of partnership formation, should contribute to improving the management of the sport cooperative education experience for students, the university and the industry.

Keywords: partnerships, stakeholder relationships, cooperative education, sport.

Introduction

Cooperative education is a model under the umbrella term of work-integrated learning, where the aim is for students to integrate theory and practice and develop capabilities to enhance employability. Cooperative education can be expressed in terms of a partnership between students, university and industry. Multiple stakeholder relationships are therefore inherent in the tripartite structure. It has been argued that successful cooperative education programmes require a stakeholder-integrated approach (Cooper, Orell, & Bowden, 2010; Harvey, Moon, Geall, & Bower, 1997). This involves formalised sustainable relationships between stakeholders and a common understanding of the meaning, expectations, outcomes, associated responsibilities and level of commitment required by all involved.

When stakeholders actively and consciously participate, cooperate and collaborate, this can be called a *partnership*. The definition and characteristics of a partnership vary with the context in which the organisations are situated. 'Partnership' is often used interchangeably with other words that represent external linkages between organisations. In the sport industry *interorganisational relationships* (IORs) is the terminology frequently used to describe collaborative interactions similar to that evident in cooperative education. Babiak (2007) described an IOR as a "voluntary, close, long term, planned strategic action between two or more organisations with the objective of serving mutually beneficial purposes" (p.339). Various types of IORs exist on a continuum from a one–off exchange relationship, through to strategic alliances and in a business environment can lead to mergers and acquisitions. The determinants underlying the formation of an IOR (reciprocity, legitimacy and efficiency) align well with the concepts of a stakeholder-integrated approach to cooperative education.

It has been suggested that there are significant challenges to cooperative education partnerships through a lack of a shared understanding of the meaning and purpose along with different stakeholder expectations and motivations for participating in cooperative education (Beggs, Ross, & Knapp, 2006; Martin & Leberman, 2005; Patrick et al., 2008). The purpose of this study was to understand the perceptions of the cooperative education stakeholders (students, industry supervisors and academic supervisors) in the context of the Bachelor of Sport and Recreation (BSR) at Auckland University of Technology (AUT), New Zealand in order to address the following research questions:

1.What are the views of the stakeholders on the purpose and meaning of cooperative education?
2. What are their perceptions of cooperative education partnerships and the nature of stakeholder relationships?
3. To what degree are the views of the three stakeholder groups aligned?

The outcomes of this study will enable areas of diversity and inconsistency to be addressed and will contribute to improving the management of sport cooperative education partnerships.

Methods

A qualitative case study methodology was used to provide a rich description of the experiences of the three stakeholder groups (Baxter & Jack, 2008; Merriam, 1998). The intrinsic case was the cooperative education programme within the BSR at AUT. Embedded cases were the students, the academic supervisors and the industry supervisors within their own contexts.

The data collection occurred in two phases. The first phase consisted of the administration of a qualitative questionnaire (using open ended or sentence completion questions). Questionnaire responses were gained from 91 BSR students, who had completed their cooperative education experience in 2011, (response rate 79%) and 18 AUT academic supervisors, (response rate 68%). Twenty-eight industry supervisors responded to the questionnaire (response rate 44%). Industry supervisors were drawn from the sport or physical education departments in schools and a range of sport or recreation organisations in both the non-profit and commercial sectors. As the questionnaire was administered as part of a larger study, the questions relevant to this paper were focused on the stakeholders' understanding of the purpose and meaning of cooperative education. In addition, the industry supervisors were asked why they had chosen to host a BSR cooperative education student.

Phase two involved semi-structured interviews with a sample of participants from phase one, in order to gain more in-depth responses. Participants (six students, five academic supervisors and five industry supervisors) were selected from volunteers using convenience sampling based on their availability for interviews. The interviews focused on the following themes relevant to this paper: the purpose and meaning of cooperative education; the concept of cooperative education partnerships; and the nature of the stakeholder relationships.

Questionnaires and interview transcriptions were analysed using content and thematic analysis (Miles & Huberman, 1994). Data was coded and categorized by themes, using NVivo software.

Findings and discussion

The purpose and meaning of cooperative education

A stakeholder-integrated approach to cooperative education requires a shared understanding of purpose and meaning (Cooper et al., 2010). The questionnaire analysis identified multiple themes in the responses to the question *the purpose of cooperative education is…?* The main themes, with associated frequency counts, are summarised in table 1.

Table 1: The purpose of cooperative education

THEME	FREQUENCY COUNTS		
	Students (91)	Industry supervisors (28)	Academic supervisors (18)
Gain experience	41	13	4
Theory and practice	35	8	10
Career clarification	30	8	4
Enhance employability	14	7	6
Develop skills	13	3	4

Although to 'gain experience' was the most common theme, it was often only part of the response given. Many responses included comments that focused on understanding the nature of careers in the sport industry, enhancing employability or developing generic skills. The interview responses affirmed the questionnaire findings. The responses failed to express any consistent views within and across the three groups that the purpose of cooperative education was to apply knowledge learnt at university in industry or more specifically to integrate theory and practice. When examining the full responses, rather than the individual themes, the stakeholders overall had similar views that the purpose of cooperative education is to prepare graduates to be 'work-ready', which involves developing the knowledge, skills and attributes that employers are seeking.

The questionnaire responses indicated a range of interpretations as to the meaning of cooperative education. Some described cooperative education as a tripartite relationship between student, university and the industry. Others made reference to an industry-student partnership or industry-university partnership. The interviews confirmed that most students and industry supervisors and all academic supervisors considered that cooperative education was a partnership. Some academics and students also responded that cooperative education meant the application or integration of theory and practice. Any reference to 'theory and practice' in the meaning of cooperative education was rare in the industry views. This is of concern as the concept of integrating the learning that happens in the university and the workplace is what differentiates cooperative education from 'work experience'.

Partnerships and relationships

Oliver (1990) proposed a conceptual framework for the contingencies that determine the formation of IORs in the sport industry. Oliver referred to contingencies as "the causes that prompt or motivate organisations to establish IORs" (p. 242). Drawing upon Oliver's framework, the interview findings illustrated that the formation of a partnership within the context of sport cooperative education aligned well with the contingencies of reciprocity, legitimacy and efficiency.

Reciprocity is based on a perspective that partnerships are formed for the purpose of pursuing mutually beneficial goals or interests. Motives of reciprocity require mutual support, cooperation and collaboration rather than being based on domination, power and control (Babiak, 2007; Oliver, 1990). This contingency is consistent with the basis of a stakeholder-integrated approach to cooperative education and was evident in these academic and industry supervisor views:

It's a partnership where everyone works together for a common goal, although we all gain different things from it (Academic I1).

So it isn't just one person's goal, its achieving goals for all three people and then working collectively to achieve those goals, supporting each other and working along the way (Industry I4).

Reciprocity motives are evident when partners perceive that the benefits of forming an IOR far outweigh the disadvantages and costs (Oliver, 1990). In a cooperative education partnership each partner can offer the other mutual benefits through contributing their skills and resources. However, the outcomes they receive may be very different in return:

There are mutual benefits for the student and our organisation. The students get to apply what they are learning in a practical environment as well as understand the work ethic required, and we benefit from having additional resources. It's "real" learning (Industry Q22).

Legitimacy is concerned with improving an organisation's image and reputation and can be enhanced by affiliations or relationships with well-known organisations (Babiak, 2007). Individuals also tended to have a preference for forming partnerships with organisations that have a good reputation. The following comment from an industry supervisor in a secondary school highlighted how the image of the university and the BSR degree is enhanced through having a cooperative education relationship with a school:

I want to take on co-op students for benefiting the school as well as the students and maintaining that relationship with AUT… The outcomes are to obviously have the student working within the sports department in a positive way and giving positive feedback to our students…we've actually got quite a few students who are going straight from here in year 13 into BSR the following year as soon as they have graduated, so I think it is a selling point from that respect [and] maintains that relationship (Industry I2).

Increasing the awareness of the organisation to potential graduates was also seen as a legitimacy motivation for smaller and less well-known companies. This was often combined with the desire of an organisation to increase its reputation by having knowledgeable staff who can bring new ideas. The motivations for this industry supervisor for taking a student were:

To help shape future outdoor recreation professionals, increase awareness of our organization, take advantage of help in the business and tap into the experience of students who are in the middle of new/modern teachings (Industry Q25).

Efficiency contingencies are generally "internally, rather than externally, orientated" (Oliver, 1990, p. 245). In this study it was evident that industry motivations for forming a relationship were often driven by the need for extra resources to improve efficiency. A large number of the organisations that are involved in sport cooperative education (such as regional or national sports organisations) are 'not-for-profit', with small numbers of full time staff and a reliance on volunteers. The 'value added' short-term tangible returns were important for some:

It helps us with our workload. I have to be frank about that. Being a sports organisation we run pretty lean and so that helps from that side of things (Industry I3).

Oliver's (1990) framework provided a basis for understanding some of the determinants of partnership formation, however, other motives and factors were evident in the findings. Synergy was identified as an important concept in the formation of cooperative education partnerships. In synergistic partnerships, partners achieve more working together than they could by doing the same thing on their own (Breen, 2001). Several stakeholders expressed similar ideas represented in the following comments:

It's two or more groups, in this case three groups all gaining something that they cannot access themselves but by working together as a partnership can achieve outcomes that are positive (Industry I2).

I don't think the experience would be what it is if you didn't have [each] other. I don't think the university could replicate it without [the organization], I don't think the organisation could replicate such an experience without being pushed from the university behind them (Student I6).

The multiple stakeholder relationships involved in cooperative education called for different levels of involvement from the stakeholders, at different times throughout the experience. A stakeholder–integrated approach implies that to achieve mutually beneficial outcomes the level of control should be distributed equally and total dominance by one stakeholder in the partnership may lead to an ineffective relationship. Two academic supervisors suggested that they perhaps had more dominance or level of responsibility in the partnership:

Yeah I think it is a partnership, whether they're all equal partners I'm not quite sure…possibly we are slightly more dominant partner because we set the rules. Because there are certain requirements that we stipulate… but yeah to call it partnership is appropriate (Academic I5).

It's a three-way partnership and we can benefit as much as the student and the industry. I think it's quite an equal partnership I'm always conscience that I have a responsibility, possibly more than the industry supervisor because I am paid to support my student and because of that I also need to maintain a relationship with the placement where they are placed. So I feel I have an obligation to make it work really, and make that partnership work (Academic I3).

These views are in contrast to how some students viewed the partnership. Several students felt that they were in fact the main stakeholders in the relationship due to the investment that they were making in terms of themselves, time and money (fees). The amount of control they had, particularly in determining their learning goals and what they want to gain from the experience, was also evident in this comment:

You've invested a lot of time and money into what you're actually doing through the experience …you are the biggest stakeholder because of what you are doing and how you manage your time and all the processes that go with that create, they make you a stakeholder because you invested a part of yourself in the process… I had the ultimate, the biggest amount of control as to what was inputted into my particular project… I had the ability to effectively communicate what I wanted to study. Also I felt that I was paid attention to by both my supervisors, in terms of what my goals were (Student I4).

Although most stakeholders interviewed shared similar views of the overall concept of partnership, one industry supervisor had a contrasting view:

I don't know if actually partnership is too strong a word, I think because there's no outside indication of that so if for example we were a big organisation the rest of the organisation may not even know that we have got someone from AUT, and therefore it's hardly a partnership. It's not that we put it in our newsletter and tell the world. There is not a logo exchange, which you would expect with partnerships. So I think that is formalising it too strongly (Industry I1).

The views expressed also recognised that it was common in the BSR context for placements to be negotiated at an individual supervisor level rather than through a whole organisation partnership agreement. Personal connections and prior experiences were often the motivating factors for industry supervisors to become involved in cooperative education. As Babiak (2007) points out, collaborative relationships in the sport sector are often formed among people who know one another. Individual interactions are important yet may be limiting factors in providing an enduring partnership. However, for long-term viability, organisations (both industry and the university) need to align strategically rather than be based on individual interests alone.

Conclusion

Strong relationships between educational institutions and industry are fundamental to the tripartite nature of cooperative education. The relationships exist at the individual supervisor level or at times at whole organization or institutional level. The alignment of students, industry and academics' views, on the purpose of cooperative education suggests that the three stakeholder groups in this study were working towards a common goal. However, it was evident and of concern, that across and within the stakeholder groups there was a range of different interpretations of what cooperative education actually meant. The fundamental conception of integrating theory and practice that differentiates cooperative education from just 'work experience' was not clearly articulated by all parties. Multiple definitions of cooperative education exist across different contexts, however it is important that within the same context, stakeholders have a shared understanding of the definition and what this actually means. Therefore, clearer communication strategies are needed to ensure that all stakeholders involved with the BSR cooperative education programme are aligned as to what cooperative education means.

The perceptions of most stakeholders confirm that cooperative education was considered to be a partnership. Using Oliver's (1990) conceptual framework for IOR formation, a better understanding of partnerships in the sport cooperative education context has been gained. The students, industry and academics' views supported multiple contingencies such as reciprocity, efficiency, legitimacy and synergy as important in the formation of cooperative education partnerships. Understanding more about the views of the stakeholders in the partnership should contribute to improving the management of sport cooperative education experiences for students, the university and the industry.

Acknowledgements

The author acknowledges the support provided for this research through an AUT Learning and Teaching Fellowship award.

References

Babiak, K. (2007). Determinants of interorganisational relationships: The case of a Canadian nonprofit sport organisation. *Journal of Sport Management, 21*, 338-376.

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report, 13*(4), 544-559.

Beggs, B. A., Ross, C. M., & Knapp, J. S. (2006). Internships in leisure services: An analysis of student and practitioner perceptions and expectations. *Schole: A Journal of Leisure Studies and Recreation Education*, 1-19.

Breen, H. (2001). *Cooperative education partnerships: an examination of reciprocal relationships between universities and tourism and hospitality industry organisations in providing professional development education for their employees*. Southern Cross University, Lismore.

Cooper, L., Orell, J., & Bowden, M. (2010). *Work-integrated learning: A guide to effective practice*. London, UK: Routledge.

Harvey, L., Moon, S., Geall, V., & Bower, R. (1997). *Graduates' work: Organisational change and students' attributes*. Birmingham: Centre for Research into Quality, UCE.

Martin, A. J., & Leberman, S. I. (2005). Keeping up with the play: Practicum, partnership and practice. *Asia Pacific Journal of Cooperative Education 6*(2), 17-25.

Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass Inc.

Miles, M. B., & Huberman, A. M. (1994). *An expanded sourcebook. Qualitative data analysis.* (second ed.). Thousand oaks, California: Sage.

Oliver, C. (1990). Determinants of interorganizational realtionships: Integration and future directions. *Academy of Management Review, 15*, 241-265.

Patrick, C.-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL(Work Integrated Learning) report: a national scoping study (Australian Learning and Teaching Council Final report)*. Brisbane: Queensland University of Technology.

Copyright © 2012 Jenny Fleming

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Developing authentic professional knowledge through transformative community engagement in an interdisciplinary service learning project

Dr Jill Franz
Queensland University of Technology
Ingrid Larkin
Queensland University of Technology
Dean Brough
Queensland University of Technology
Dr Erin O'Connor
Queensland University of Technology
Natalie Wright
Queensland University of Technology
Dr Oksana Zelenko
Queensland University of Technology

This showcase presents a preliminary analysis of a community service learning project designed to align more authentically with contemporary society and emerging constructs of professional knowledge. As described in the paper, the project involves a multidisciplinary group of students working collaboratively with a community organisation to find creative responses to challenging issues concerning the organisation's identity, how it interfaces with stakeholders, and how it evidences its inclusive practice. Of particular interest is how the interdisciplinary practice of the students within a service learning context encouraged reconsideration of their world-view and their role as future professionals. Also highlighted is the need for greater congruence between the goals of the project and the structural elements of the curriculum.

Keywords: Community service learning, interdisciplinary community engagement, authentic knowledge

Context

One of the major roles for educators in higher education settings is the facilitation of professional knowledge which, when linked with employability, demands not only closer attention to those sectors in society where graduates will find employment, but also a focus on the nature of society and how it is changing. In terms of knowledge, this is reflected in a growing emphasis on a more 'socially robust' form of knowledge "…created within an expanded context of being useful. No longer confined to the university, it is interdisciplinary and conducted in active engagement and collaboration with society – the wider community, civil society, industry, and the region" (Gibbons et al, 1994 in Hazelkorn 2009, p. 5). Further, there is the need for graduates to be more socially aware and prepared for transformative engagement that transcends traditional professional and disciplinary boundaries.

The initiative showcased in this paper starts to explore the potential of service learning to facilitate community engagement, and to facilitate more contemporary and pedagogically authentic learning opportunities for students. In this context, service learning is understood as: "A pedagogy of engagement in which students address a genuine community need through volunteer service that is connected explicitly to the academic curriculum of their academic course through ongoing structured reflections designed for: maximizing a deep understanding of course content; addressing genuine community needs with impact; and developing learners' sense of civic responsibility" (Stewart 2012). Given presentation constraints, this paper attempts to capture some of the experiences of undergraduate students in a multidisciplinary team in a service learning pilot project. The paper does not provide a comprehensive description and evaluation of the pilot project, but seeks to provide one basis for reflection and review of the project for subsequent offerings.

Overview of the pilot service learning project

The project described in this paper is located within a larger university-wide Community Service Learning Lab (CSLL) environment, piloting several projects in units across a range of discipline. The specific project discussed in the paper involved a not-for-profit community organisation and a multidisciplinary group of third

and fourth year undergraduate students. The community organisation is committed to strengthening individual, family and community life through a range of community programs, and disability, foster care and family support services. The organisation services the outer southern region of Brisbane and Logan City, in Queensland. To provide a focus for service learning each community organisation partnering on projects in the CSLL was asked to identify a problem or issue to be addressed. At the end of 2011 and beginning of 2012, the projects were promoted through online teaching and learning sites, by email, and university student intranet and offered to students through units that allowed for independent or community-oriented projects, with assessment aligned across all units. In this way, students selected to participate in the service learning projects and enrol in associated elective units in their specific discipline areas. Each unit was a 12 credit point unit, the standard unit in both undergraduate and postgraduate courses.

The organisation proposed challenges around the organisation's identity as the problem or issue to focus on in the CSSL project discussed in this paper. The organisation sought to more effectively develop, document and, communicate its identity linked to its mission around strengthening individual, family and community life. Given this focus, the project known as the 'Identity, Interface, Inclusion' (3I's) project was promoted to business, psychology, law, legal studies, and creative industries students. The outcome was the formation of a group comprising seven students from multidisciplinary backgrounds and at various stages of undergraduate studies, as outlined in Table 1.

Table 1: Students listed by course, primary major, and completed credit points on enrolment in unit for CSLL project

Student	Course	Primary Major	Completed credit points when commencing project	Total credit points of course
A	Bachelor of Creative Industries/Bachelor of Human Services	Interactive and Visual Design	288 credit points	384 credit points
B	Bachelor of Business	Advertising	180 credit points	288 credit points
C	Bachelor of Creative Industries	Art & Design	168 credit points	288 credit points
D	Bachelor of Creative Industries	Fashion	204 credit points	288 credit points
E	Bachelor of Design	Interior Design	384 credit points	324 credit points
F	Bachelor of Design	Interior Design	384 credit points	312 credit points
G	Bachelor of Behavioural Science	Psychology	216 credit points	288 credit points

A student completing a Bachelor of Behavioural Science (Psychology)/Bachelor of Social Work from the same institution, completed a Social Work Field Education unit at the community partner, and acted as a key liaison point and conduit between the community partner and the team on the CSLL project.

The students worked collaboratively to produce a proposal for the community partner. The proposal identified, discussed, and provided recommendations to address challenges around identity. In line with the requirements for the units in which students were enrolled, there were three items formally assessed: a project proposal comprising individual and group components; four individual reflective blog entries across the semester; and an end of semester presentation to community partners, other project teams, and academics. The proposal for the community partner, the presentation, and individual blogs included students' reflections on experiences, drawing explicit connections to the influence on their professional learning including disposition and capacity to work in the community on complex social issues. With the permission of the students, these outcomes formed the data set analysed thematically to inform ongoing research, development and implementation. Some preliminary findings inform the following discussion.

Discussion

This section highlights some of the students' experiences as they relate to working in a multidisciplinary team and with a community partner as a client and collaborator.

Multidisciplinary becomes interdisciplinary

Analysis of the data reveals a strong desire by the students to participate as part of a interdisciplinary team working on a real project. Responses by several students suggest frustration to being 'locked' to a discipline, identifying the desire to transcend discipline boundaries and constraints. As conveyed by one student:

We've all made a choice to do this subject and that says something in itself. I think that perhaps we all wanted to explore, and expand our knowledge, and do something a little bit more than just our discipline perhaps let's us do.

In terms of the students' experience of interdisciplinarity in the project several point to positive outcomes such as developing a better understanding of and skills linked to collaboration and teamwork. One student noted that this was the first opportunity for a group project for the whole semester. In addition, students described how the project opened new possibilities of doing things differently:

…the interdisciplinary side of things, has just totally shifted the way I would approach a project like this.

The project informed new insights and ways of learning; facilitated the drawing together of prior experience and knowledge in such a way that the synthesis was more than aggregation; challenged professional stereotypes; and helped students make connections to other forms of knowledge, and to other learning experiences:

And I'm doing a subject at the moment, it's called Ragtrade, and we've got to help like a fashion label, like to help their business and their marketing, which sort of relates to how we're trying to help [community partner], so I've definitely drawn some connections there on that.

While the integrated nature of the group provided individual members with a sense of security enabling them to approach the academic team and challenge the weighting of the assessment items, it also highlighted insecurities, and conflicting emotions and assumptions that needed to be confronted and addressed in order to reduce the angst and continue as a productive team member. Also evident was the interplay between individual identity and collective identity and the extent to which individuals could make a valued and equal contribution to the project. This was particularly evident in the early stages of the project when members were still developing understanding of their own and others' discipline knowledge, strengths and weaknesses. The issue of the individual was also raised in relation to personality and how much personalities of individual members were understood to be significant in affecting group dynamics and project outcomes.

Several students commented on the diverse nature of the disciplines represented in the project and how this provided a greater opportunity to learn differently and employ a more holistic approach to understanding and beginning to address the identity needs of the community partner. In addition, one student noted how having another team member with a similar discipline was also helpful because they could speak the same language and bounce around ideas.

Community partner as collaborator client

Working with a community-based client was a different experience for several of the team, whose previous practical experience was restricted to discipline specific settings. Students noted how the social agenda of the community partner triggered introspection and made them critically aware of their own behaviour and how inadvertently one's practice can be discriminatory and oppressive. The focus of the project underpinned by the need to be inclusive and develop an inclusive interface for the community organisation also reinforced and helped consolidate a more inclusive and collaborative approach by the team. Several comments also suggested an increasing awareness of professional practice as a change agent and an opportunity to empower others as agents for change for the social good.

The complexity of community issues also became increasingly apparent to the team. For many members dealing with an open-ended issue that had no known or knowable outcome at the outset and required framing before a proposal could be formulated was particularly challenging and frustrating. As one student stated:

The unknown is scary. It's intangible. Unable to be grasped.

It was anticipated that introducing students to an inquiry led approach would provide sufficient support. The reflections of the students and experience of the teaching team revealed other aspects of the learning environment and the curriculum were not considered thoroughly enough, and in some instances, conspired to produce conflicting experiences for the students.

This is succinctly and powerfully articulated in the following student response:

This kind of experience we're having now is so authentic and to try and replicate that [in a presentation] makes it unauthentic, like it's not real then.

These and other findings will now inform the development of the unit for next semester with the outcome produced by the students further developed by the next cohort of students. Some of the existing students have indicated an interest in continuing with the project and supporting the new students as they move towards a more finalised outcome for the community partner.

Acknowledgments

The authors would like to acknowledge the enthusiastic involvement and generous support of the students, the community partner Kyabra, and collaborators across the CSLL initiative.

References

Hazelkorn, E. (2009). Community engagement as social innovation. *Retrieved from URL:* http://arrow.dit.ie/dirrebk/1*, March 2012.*

Stewart, T. (2012). Introduction to service learning & reflection best practices. (1987, April). *Teachers'. QUT presentation, 9 March, 2012.*

Copyright © 2012 Jill Franz, Ingrid Larkin, Dean Brough, Erin O'Connor, Natalie Wright, Oksana Zelenko

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Campus-based work-integrated learning: Opportunities for Health Education

Natalie Gamble
Faculty of Health Sciences, Australian Catholic University
Stephen Guinea
Faculty of Health Sciences, Australian Catholic University
Paula Williams
Faculty of Health Sciences, Australian Catholic University

Work-integrated learning has long been a substantive component of undergraduate Health education, but in the current higher education environment, universities are under pressure to provide students with equivalent experiences using alternative learning and teaching paradigms. Increasing student enrolment numbers has seen greater competition for already limited practicum opportunities, and in some instances has seen universities reduce the number of hours of practicum that they are able to provide per student. Hence, the quality and the breadth of learning experiences students are exposed to can be impacted. Given the value and the outcomes that are attached to on-the-job learning, the repercussions for Health students can be significant.

To counter a potential reduction in the availability and duration of supervised placements, and to further boost the work-readiness of graduates from the Faculty of Health Sciences, Australian Catholic University has endeavoured to bring aspects of the workplace into the classroom, developing a number of pedagogies, experiences and exercises for students across a range of disciplines that foster the development of practical skills.

Through online surveys, staff and student focus groups, and formal unit evaluations, the effectiveness of some of these pedagogies has been appraised.

This paper outlines and evaluates data from some of these campus-based work-integrated learning pedagogies, including inquiry-based learning, simulated patients, and simulated experiential learning. It overviews pedagogies for the classroom, the laboratory, and outdoor settings used in disciplines including Nursing, Midwifery, Paramedicine, Physiotherapy, and Exercise Science.
Strategies that encompass future approaches to campus-based work-integrated learning are also discussed, including the virtual clinical skills centre, and campus-based interdisciplinary clinics.

Keywords: simulation-based learning, inquiry-based learning, standardised patients, simulated patients

Background/Context

In response to the Australian Review of Higher Education (Bradley, Noonan, Nugent, & Scales, 2008), Australian universities have made efforts to boost student access and participation, resulting in increased student enrolments in most programs (Shah & Nair, 2011). The implications of this are far-reaching, and include an increasingly diverse student population (Daniel, Stoneman, & Greening, 2011), and a renewed emphasis on the student experience. For undergraduate Health programs, where work-integrated learning is a mandatory and significant component of student learning, there is increasing competition for already limited practicum opportunities (Bourgeois, Drayton, & Brown, 2011), meaning universities need to find alternatives to equip their students with hands-on skills and capabilities. Research also indicates that workplaces expect undergraduate students to actively participate in WIL experiences, and to bridge the theory-practice nexus during clinical placement (Lave & Wenger, 1991; Newton, Billett, Jolly, & Ockerby, 2011).

Health education relies on skill acquisition in practice to develop competencies, capabilities, and professional identity (Levett-Jones, Gersbach, Arthur, & Roche, 2011; Severinsson & Sand, 2010), with medical education originating from the 'apprenticeship model' (Brooks, 2009), and nursing and paramedic education evolving from vocational programs (Russell, 1990; B. Williams, Onsman, & Brown, 2010). However, increasing student enrolments means there are fewer hours of practicum available per student, as clinical environments are unable to offer increasing placement opportunities to match student growth. Consequently, there is less opportunity for each student to develop professional competence in the field.
To ensure that graduates from Health programs are equipped with the same skills and abilities as their predecessors, universities are looking to alternate learning and teaching strategies in order to provide students with exposure to a range of experiences, and to provide quality student learning outcomes.

One option is on-campus work-integrated learning. The WIL Report (Patrick et al., 2008, p. v) defines work-integrated learning as 'an umbrella term used for a range of approaches and strategies that integrate theory with the practice of work', and Australian Catholic University (ACU) is working with a number of pedagogical approaches that bring the realities of the workplace into the classroom (see Flowers & Gamble, 2012; P. Williams, Wong, Webb, & Borbasi, 2011, for example). Employers expect that graduates will be work-ready (Precision Consultancy, 2007), and universities are obligated to provide students with experiences that prepare them for what they will encounter.

Method

This paper draws on a number of methodologies developed to evaluate diverse pedagogies designed to facilitate skill development in undergraduate Health students. The studies utilised interviews, online surveys, focus groups, and formal unit evaluations (see Table 1). It should be noted that at least one of the authors of the present paper was involved with each of the studies included – the paper presents the overall results of a range of studies conducted within the Faculty of Health Sciences at ACU.

Table 1: Range of data collection methodologies for the present paper

WIL Pedagogy	Disciplines	Data Source(s) and Methodology Synopsis
Inquiry-based learning (IBL)	Nursing, Midwifery, Paramedicine	Formal evaluation via staff and student online questionnaires Learning and Teaching Evaluation Program data (student experience data)
Experiential learning	Paramedicine	Formal evaluation via a student questionnaire
Simulated patients	Physiotherapy	Interviews with academic staff
Standardised patients	Physiotherapy	Interviews with academic staff
High fidelity silicone mask patient simulation (HFSMPS)	Nursing	Interviews with academic staff

Results/Discussion

ACU has intentionally incorporated a number of campus-based work-integrated learning pedagogies to address a range of issues, including:

- Improved preparation of students prior to the commencement of practicum experiences (as distinct from replacing clinical practicum with simulation);
- The provision of exposure to increasingly diverse experiences, focusing on commonplace experiences in the workplace, with some attention to rare events; and
- Reduced practicum hours for students from a range of disciplines.

The effects of some of these pedagogies are discussed in detail below.

Inquiry-based Learning

Inquiry-based learning (IBL) involves students in activities that replicate the real world by encouraging them to draw on problem-solving skills and to solve health-related issues through a process of inquiry. It has been purposefully developed to facilitate the acquisition of critical thinking, teamwork, communication, and planning and organising skills. Inquiry-based learning is derived from problem-based learning pedagogies, and the two teaching approaches share some common features (Bebb & Pittam, 2004; Wozniak, Mahony, Everingham, Poulos, & Reid, 2005), with learners working together in groups to problem-solve a healthcare issue or scenario, with individual group members taking responsibility for the identification of issues and the collection of information. However, IBL differs in the sense that it begins with the presentation of a question, and not with a problem (Feletti, 1993). Additionally, IBL is more flexible, and can be used more readily in a variety of contexts (Wozniak, et al., 2005).

A recent survey of students enrolled in IBL units and their tutorial facilitators found that staff consistently rated themselves higher than students with respect to their group and inquiry facilitation skills, which may be attributed to the 'newness' of this student-centred learning approach (Flowers & Gamble, 2012). Additionally,

formal unit evaluations demonstrated that students could see the relevance of the IBL units, and that they enjoyed their learning experience.

Experiential learning

To capture the experience of workplace learning, the School of Physiotherapy at ACU has responded to anecdotal feedback from clinical partners to better prepare undergraduate physiotherapy students with generic skills required for the collection of client-related assessment data. Through careful curriculum design, undergraduate physiotherapy students experience the reality of making meaning of data retrieved from clients (simulated patients) and mock-case notes in real time. Through conscientious replication of the physical practice environment and of the ways in which clinicians use such practice environments, these students experience the realities of hands-on practice in a simulated clinic environment.

Students enrolled in the Bachelor of Paramedicine also have the opportunity to undertake experiential learning in the field, with an authentic search-and-retrieve experience staged in the wilderness. Students were called to the Diggers' Trail in Wombat State Forest to rescue a staged mannequin from difficult terrain, and were required to use navigation tools to locate the mannequin. The scenario was derived from actual cases attended by Ambulance Victoria paramedics. The exercise was the first of its kind in paramedic education, with undergraduate students participating alongside staff from Ambulance Victoria, Victoria Police, the Australian Army and ACU. Ambulance Victoria reviewed the outcomes of the exercise and indicated support for the Digger's Trail exercise. The wilderness medicine and navigation components were considered extremely valuable and an important extension of current paramedic education.

Simulated patients

Simulated patients are invaluable in bringing the workplace into the ACU Faculty of Health Sciences through role-play, paid actors and High Fidelity Silicone Mask Patient Simulation (HFSMPS). A simulated patient is defined by Churchouse and McCaffrey (in press) as a person who takes on a role whether this is scripted or improvised, but is usually bound by the learning objectives of the designed simulation.

Role play

ACU's School of Physiotherapy employs the technique of role-play to facilitate students' learning to assess a person who has experienced stroke. Physiotherapy students acting in the simulated patient role receive a detailed script and relevant clinical documentation. Scripts are generic themes and behaviours rather than prescriptive statements to encourage a more natural progression of the assessment encounter.

A more integrated approach to the use of simulated patients involves prudent curriculum design incorporating learning objects, and simulated patients in the context of assessment of the person who has experienced stroke. Here, third year undergraduate physiotherapy students witness an expert physiotherapist performing a complete stroke assessment on a client via video, then participate in a 90-minute simulation-based assessment of a person who has experienced a stroke (where the client is a simulated patient) and the completion of a workbook specifically designed for this client's profile. This learning experience culminates in a specific pre-clinical stroke assessment clinic visit where students employ their skills in comprehensive stroke assessment prior to commencing full clinical practicum.

High-Fidelity Silicone Mask Patient Simulation (HFSMPS)

In 2011, the School of Nursing, Midwifery and Paramedicine introduced High Fidelity Silicone Mask Patient Simulation (HFSMPS), a form of actor-based simulation which seeks to overcome the concern of participants seeing the actor rather than the patient by being able to "mask" the actor. Silicone patient simulation has been found to exhibit a high level of realism (Reid-Searl, Eaton, Vieth, & Happell, 2011) and when combined with effective scenario design and operator skill, enables the achievement of learning outcomes through a means not previously achievable at ACU.

Standardised patients

The School of Physiotherapy provides learners with real world experiences of health assessment by engaging with local community members in the form of standardised patients. Although considered a form of performance-based simulation, standardised patients differ from simulated patients insofar as standardised patients are members of the community who do not take on a role, play a part or act in any way as anyone but themselves (Churchouse & McCafferty, in press). Undergraduate physiotherapy students are confronted with the

challenges of clinical practice by being required to conduct a holistic assessment on a member of the community with real and existing co-morbidities. Authenticity is reinforced through actual patient documentation and completion of skill in a realistic time frame.

Future Directions

ACU is endeavouring to bring the realities of the workplace into the classroom using a range of simulated experiences that replicate the real world. The university is keen to provide students with opportunities to develop skills and capabilities in authentic learning environments, and for students to understand the relevance of those skills. Through campus-based work-integrated learning, it is anticipated that students will acquire some of the knowledge and capabilities traditionally associated with practicum, augmenting the practicum experience.
This paper is not arguing for simulated learning to replace clinical hours – instead, through well-planned and carefully integrated simulated experiences, students will be better prepared for practicum, and will maximise their learning opportunities in the clinical environment.

Future directions for ACU include on-campus clinics, virtual clinical skills centres, and video-data overlay.

References

Bebb, H., & Pittam, G. (2004). Inquiry-based learning as a 'whole-curriculum approach': The experiences of first year nursing students. *Learning in Health & Social Care, 3*(3), 141-153.

Bourgeois, S., Drayton, N., & Brown, A.-M. (2011). An innovative model of supporting clinical teaching and learning for undergraduate nursing students: The cluster model. *Nurse Education in Practice, 11*, 114-118.

Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). Review of Australian Higher Education: Final Report. Canberra: Department of Education, Employment and Workplace Relations (DEEWR).

Brooks, M. A. (2009). Medical education and the tyranny of competency. *Perspectives in Biology and Medicine, 52*(1), 90-102.

Churchouse, C., & McCafferty, C. (in press). Standardised patients versus simulated patients: Is there a difference? *Clinical Simulation in Nursing*. doi: 10.1016/j.ecns.2011.04.008

Daniel, G., Stoneman, L., & Greening, P. (2011). *Collaborative capacity building: Applying third generation principles in scaffolding first-year university student success*. Paper presented at the First Year in Higher Education Conference, Fremantle, 28 June - 1 July 2011. http://www.fyhe.com.au/past_papers/papers11/FYHE-2011/content/pdf/11D.pdf

Feletti, G. (1993). Inquiry based and problem based learning: How similar are these approaches to nursing and medical education? *Higher Education Research and Development, 12*(2), 143-156.

Flowers, K., & Gamble, N. (2012). An inquisition into inquiry-based learning: Are these student-centred approaches in nursing sustainable in today's higher education context? Paper presented at the 3rd International PBL Symposium, Singapore, 7-9 March 2012.

Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. New York: Cambridge University Press.

Levett-Jones, T., Gersbach, J., Arthur, C., & Roche, J. (2011). Implementing a clinical competency assessment model that promotes critical reflection and ensures nursing graduates' readiness for professional practice. *Nurse Education in Practice, 11*(1), 64-69.

Newton, J. M., Billett, S., Jolly, B., & Ockerby, C. (2011). Preparing nurses and engaging preceptors. In S. Billett & A. Henderson (Eds.), *Developing Learning Professionals: Integrating Experiences in University and Practice Settings* (pp. 43-58). Dordrecht: Springer.

Patrick, C.-j., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). The WIL (Work Integrated Learning) Report. Brisbane: Queensland University of Technology.

Precision Consultancy. (2007). Graduate Employability Skills: Prepared for the Business, Industry and Higher Education Collaboration Council. Canberra: Commonwealth of Australia.

Reid-Searl, K., Eaton, A., Vieth, L., & Happell, B. (2011). The educator inside the patient: Students' insights into the use of high fidelity silicone patient simulation. *Journal of Clinical Nursing, 20*(19-20), 2752-2760.

Russell, R. L. (1990). *From Nightingale to now: Nurse education in Australia*. Sydney: Harcourt Brace Jovanovich.

Severinsson, E., & Sand, A. (2010). Evaluation of the clinical supervision and professional development of student nurses. *Journal of Nursing Management, 18*, 669-677.

Shah, M., & Nair, C. S. (2011). Reviewing quality assurance at a time of turbulence. *Perspectives: Policy and Practice in Higher Education, 15*(3), 92-96.

Williams, B., Onsman, A., & Brown, T. (2010). Is the Australian paramedic discipline a full profession? *Journal of Emergency Primary Health Care, 8*(1).

Williams, P., Wong, W.-L., Webb, H., & Borbasi, S. (2011). *Mobile technologies in the field: iPads - Rescuer or rescuee?* Paper presented at the ASCILITE 2011, Hobart, 4-7 December 2011. http://www.leishman-associates.com.au/ascilite2011/downloads/ProceedingsV3.pdf

Wozniak, H., Mahony, M. J., Everingham, F., Poulos, A., & Reid, B. (2005). Inquiry based learning in the health sciences: Countering the limitations of 'problem based' learning. *Focus on Health Professional Education: A Multidisciplinary Journal, 7*(2), 18-30.

Copyright © 2012 Natalie Gamble, Stephen Guinea, Paula Williams

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Community based service-learning: Partnerships of reciprocal exchange?

Laura Hammersley
Macquarie University

Community based service-learning (CBSL) integrates experiential learning and academic goals with organised service activities designed to meet the objectives of community partners (Bringle & Hatcher, 1995). Although research remains inconclusive regarding the benefits of student outcomes, CBSL has been endowed with the potential to enhance (1) academic learning, (2) foster civic responsibility, (3) develop life skills and (4) transform student attitudes (Eyler, 2002). However, there is little research to support claims that benefits are mutual amongst host counterparts (Edwards et al., 2001; Ward & Wolf-Wendell, 2000). A lack of empirical research into community partner conceptualisations of best practice approaches, outcomes and impacts, not only reflects a uni-dimensional understanding of the mutuality of programs, but fails to challenge dominant power relations embedded in traditionally uneven partnerships. It remains problematic to engage with service-learning without considering underlying neo-colonialist ideologies that continue to permeate the ways community service, international development, and volunteering are defined and practiced. If CBSL builds upon reciprocity and collaborative partnerships, it follows that research practice should adopt similar principles. Drawing on development discourse and practice, this paper provides a critical review of the CBSL literature. First, this paper will demonstrate how closely intertwined CBSL is with contemporary development agendas; second, bring attention to the absence of partner perspectives and partner involvement within CBSL studies; and third, outline a CBSL research agenda.

Keywords: Community based Service-learning, reciprocity, mutual-benefit, community development, international service-learning, community-based research

Introduction

The institutional enthusiasm surrounding the potential for CBSL to transform both learning and teaching, has seen the expansion of service-learning activities in Higher Education and an increase in community-campus partnerships over the last two decades (Bringle & Hatcher, 2002). The increased growth of the service-learning phenomenon mirrors the increased popularity of student volunteerism within the local and global community (Mooney & Edwards, 2001). These two movements have been traced historically through time, however little attention has been given to their intersection within the development arena. This is despite the rise of public participation in social, environmental, economic and community development initiatives.

This paper uses a development lens to reframe service-learning theory and practice as a way to analyse power relations embedded within CBSL partnerships. A development perspective brings to the surface the often hidden, but deeply embedded ideologies that inform service-learning, also evident within community development and international volunteering. This paper focuses on CBSL programs that combine international travel, cultural exchange, academic credit and learning objectives with service activities designed to assist the priorities of community partners[15]. Such programs are distinguished from other service-learning initiatives by their intentional engagement with issues of social justice, oppression, poverty and inequality (Jones, 2002).

In the context of CBSL the legacy of colonialism pervades any attempt to collaborate, participate and interact. The hierarchies and binaries between the researcher and researched, and community and campus are so evident within the body of CBSL research that it does not reflect the current collaborative practice with which it advocates (Stocker, 2009a). Furthermore, a continuing bias toward research into student-learning goals, to the exclusion of any consideration of community development outcomes, means little is known if programs support community partner interests (Stoecker & Tyron: 2009). As such, this paper will 1) demonstrate how closely intertwined CBSL is with contemporary development agendas; 2) bring attention to the absence of community partner perspectives and involvement within CBSL studies; and 3) outline a CBSL research agenda.

[15] For the purpose of this paper, 'community partner' refers to those who are external to the university and are either actively involved with (e.g. as members of community-based NGO's), or influenced by CBSL activities.

International service-learning for development

Combining international travel with voluntary developmental service is by no means a recent concept. Developmental volunteering in its earliest form can be traced back to early missionary movements and the commencement of long-term United States Peace Corp projects in the 1960's. Only in recent years has it been characterised by the rapid expansion of specifically short-term, organised student/volunteer programs (Enrichs, 2000). Government and non-government organisations and more recently university institutions have encouraged public participation in community development programs in areas as such poverty reduction, business development, community work, environmental preservation, and cultural exchange (Lewis, 2005). International service-learning (ISL) programs and international development interventions are intimately connected, not only by the type of work (i.e. construction, education and healthcare) but by their aspiration to intervene and 'make a difference' to the lives of others (Crabtree, 2008; Mountz et al., 2008).

In response to the overly Eurocentric nature of top-down economic models to development, and to address concerns of unequal power relations created and sustained through such approaches, current thinking within alternative development has been concerned with participatory and people-centred approaches (Sanderson & Kindon, 2004). Arguments in support of participatory development are numerous and are predicated on the belief that such strategies are more likely to meet the needs of primary beneficiaries by giving them a voice and encouraging empowerment through inclusion (Cook & Kothari, 2001). However, in practice, such an approach has become anything but unproblematic and has come under increased scrutiny in its believed failure to transform and redistribute power relations (Cornwall, 2006).

Relationships of power are particularly apparent in debates around the highly problematic concept of participation. Participation can be a mechanism for empowerment, but can also be a mechanism for rendering the 'poor' even more powerless by an agenda that was not theirs to begin with (Chambers, 2005). In a colonial context of dominance, invasion and intervention, service-learning could be viewed as a "conscious intervention" that promotes change (or disturbance) within highly complex and potentially vulnerable contexts (Butin, 2010, pp.18-19). Conceptualisations of service-learning are historically intertwined with imperialistic ideology. Cruz (1990, p.322) for example reflects:

…I resist the notion of service learning for U.S. students in the Philippines, my country of origin, because I think it perpetuates a "colonial mentality" among Filipinos and a kind of "manifest destiny" among U.S. students. To my way of thinking, the results of the history of U.S. dominance in the Philippines is so overwhelming that it is almost impossible for a U.S. student doing what is regarded on both sides as "service" not to deliver a message of superiority.

Development practice and international aid can easily, unintentionally, and sometimes unquestionably replicate forms of neo-colonialism (Kahn, 2011). Although, contemporary development practice attempts to distinguish itself from the dominant development archetype by creating 'bottom-up' change that is collaborative, responsive and empowering to those who participate, discourses of colonialism remain apparent.
However, given the strong intersection between international development, volunteering and ISL activities, it is alarming that an analysis of service-learning within an international context has been relatively ignored (Crabtree, 2008). One exception is Bringle, Hatcher and Jones' (2011) edited book titled 'International service-learning' where only one contribution (see Kahn) focuses on ISL and its interception with neo-colonialist discourse, international aid agendas and dominant development paradigms. Furthermore, little to no attention has been given to international community partner perspectives (notable exceptions being Comacho, 2004; Porter & Monard, 2001). Scant research into ISL fails to recognise that 1) imperialist attitudes remain within the frameworks with which it originated and 2) service-learning still needs to undergo a process of decolonisation (Kahn, 2011). This is especially important considering the dominant and perpetual discourse of Western concepts of development and aid as unidirectional pathways to progress; a model which community engagement as a reciprocal exchange process is attempting to redefine.

Myth of mutual-benefit

The term engagement made a prominent appearance in the 1990's with the renewed vision of 'service' as more collaborative and equitable. The term was used to symbolise the two-way exchange process between campus and community (Carnegie, 2006; Weerts & Sandmann, 2008). Although much confusion remains centred around how to conceptualise CBSL, most definitions incorporate what Butin (2003) refers to as the four Rs – respect, reciprocity, relevance, and reflection. The role of reciprocity in the service-learning relationship in particular has received much scholarly attention with many (see Kendall, 1990; Porter & Monard, 2001; Robinson & Green,

2011; Simons & Clearly, 2006) highlighting mutual benefit as a defining feature of service-learning theory and practice.

However, critics of service-learning, question claims of mutual benefit (see Cruz & Giles, 2000; Stoecker & Tyron, 2009; Butin, 2003; Kendall, 1990; Oldfield, 2008) and of the transformative learning potential of service-learning for both students and community partners (Eyler & Giles, 1999). Recently Oldfield (2008, p.270) restated that much "research proceeds with the assumption that projects can be mutually beneficial, but without an empirical or conceptual analysis of how this mutuality is constituted." Others (such as Camacho, 2004; Weerts & Sandmann, 2008), challenge the notion of mutuality by suggesting it acts as a way of disguising relations of power, or question whether the concept of engagement is a marketing strategy more "symbolic than substantive" (Weerts & Sandermann, 2008, pp.99-100). Critics also conclude that service-learning programs exploit communities for free education (Eby, 1998); represent dominant charity models which are paternalistic in approach and reinforce the stereotype of communities as helpless (Brown, 2001; Marullo & Edwards, 2000; Ward & Wolf-Wendel, 2000); and are beset by partnerships with communication issues (Birdshall, 2005; Jones, 2003) and cultural differences (Bacon, 2002; Jones, 2003). Indeed, service-learning may not result in mutually beneficial exchanges, and in some cases might result in adverse affects for community partners.

Against this backdrop, there have been renewed calls to revisit the concept of reciprocity as it is dominantly understood within service-learning (see Henry & Breyfogle, 2006). For example, Porter and Monard (2001, p.1) suggest, rather than viewing reciprocity as a "hand-up" (as opposed to a hand-out), view it as a "hand to" in an attempt to "nurture mutuality by fostering respect and collaboration". Fox (2002, p.7) even suggests focusing on "learning as a form of service rather than on learning by way of service" to emphasise the importance of reciprocal learning as a key objective, outcome and mode of service exchange. This is a counter response to a service model which sets up undeliverable project outcomes, and in support of the notion that the sharing and exchange of ideas can lead to a level of cultural understanding that bridges current cultural divides (Porter & Monard, 2001). However, if learning is seen as a reciprocal exchange, it is also important to understand what community partners learn, how they learn, and whether there are any transformative impacts for them. This is not to suggest (although perhaps traditionally the case) that all Higher Education institutions adopt the role of expert or charity model that sees them *doing for* communities, as opposed to a *doing with* perspective. However, the neglect of academia to recognise the role of 'community' fails to shift the paradigm to one that focuses more on community and questions the bigger Western discourse of development and aid as unidirectional (Ward & Wolf-Wendel, 2000; Porter & Monard, 2001).

Promoting collaborative inquiry

The lack of research to support claims that programs result in mutually beneficial learning and engagement, and actively contribute to 'positive' social change can be attributed to the under-representation of community partner perspectives within academic research. In 2000, Cruz and Giles (2000, p.28) warned that service-learning literature was "almost devoid of research that looks at the community either as a dependant or independent variable", and over a decade later the field remains largely the same. This trend has been attributed to the ongoing and contentious debate around what constitutes 'community' (Cruz & Giles, 2000; Sandy & Holland, 2006). Although an important question, it appears the lack of research on, and more importantly from, community perspectives has been deduced to the theoretical and methodological challenges that surround the notion and nature of community.

The empirical research that does examine community partner impacts and perceptions refer, in most cases, to the directors, supervisors, and other related staff of community partner organisations, but do not include wider 'community' members who may also be influenced by service-learning programs. Furthermore, the majority of such studies use survey tools and follow-up interviews on partner (i.e. supervisor) satisfaction with students, community-campus partnerships and overall service performance, and conclude that community partners are relatively satisfied with service-learning programs and with the students that participate in them (see Edwards et al., 2001; Ferarri &Worrall, 2000; Ward & Vernon, 1999). Of particular significance, however, is the absence of community participation in formulating study measures and survey instruments. It remains unclear whether criteria used to measure responses are appropriate to assess CBSL if they have not been involved in their formulation (Reardon: 1998).

Host communities are increasingly seen as co-educators, but are yet to be recognised as collaborators of inquiry. If the practice of service-learning is to be built upon the foundations of reciprocity and collaborative partnerships, it follows that research practice should adopt similar underlying principles. In response, some commentators (Crabtree, 2008; Mountz et al., 2008; Reardon, 1998; Sandy & Holland, 2006; Stoecker, 2009a,

2009b; Stoecker et al., 2010; Tyron and Stoecker, 2008) have sought wider influence from post colonial, feminist and participatory action based approaches to inform alternative community-based research (CBR) methodologies that engage community partners as partners in the research and CBSL process.

CBR is an umbrella term for a diverse range of methodologies that centre around three concepts as outlined by Minkler (2005): 1) participation; 2) research; and 3) action. Alternative approaches to research, such as CBR, participatory action research, feminist community research, and post colonial research, all attempt to bring the forefront the voices of those often excluded in knowledge production and decision making. Stoecker et al. (2010) and Tyron and Stoecker (2008) highlight the importance of community consultation in social research, and in representing the diverse priorities of participants. These examples demonstrate how research participants can be involved throughout the research process, from question formulation, research design and data generation, through to data analysis, interpretation and the delivery of project outcomes. Crabtree (2008, p.26) suggests:

These alternative paradigms can inform ISL with a set of values, a language of critique, principles, and guidelines for appropriate collaboration and participation, and the shared goals of reciprocity, mutual empowerment, and social change.

This approach to research is most likely to effectively address questions regarding community involvement as it supports the action oriented aspect of research that not only seeks to understand and represent diverse perspectives, but use partner recommendations to inform and strengthen Higher Education service-learning practice (Stoecker, 2009a).

Conclusion

Viewing CBSL through a development lens offers a way of reframing some of the issues identified within service-learning theory, bringing to the forefront new ways of thinking, understanding, and researching service-learning practice. To decolonise service-learning, academics and practitioners need to recognise the modernist ideologies underpinning the conceptualisation of service-learning. This involves re-imagining service-learning in a way that incorporates the historically unheard voices of community partners whose engagement with students allow the enterprise to function (Camacho, 2004; Stoecker & Tyron, 2009).

Claims of mutuality, reciprocity and joint participation are not enough to fill gaps in the current literature and lack of community partner involvement in the research process. Despite service-learning being defined as collaboratively oriented, as a method of enquiry, CBR methodologies have not been adopted by service-learning as a way of strengthening relationships between the community and campus. This is particularly perplexing considering the increased call for universities and communities to share and create knowledge that contributes not only towards developing socially and environmentally conscious students, but the overall well-being of people and the planet.

Colonial histories continue to shape research practice, relationships of power, the production, control and ownership of knowledge, ideas of truth, and the representation of others (Frisby & Creese, 2011). Existing studies that examine service-learning from a uni-dimensional perspective, fail to address the potential lack of community impact, knowledge transfer and empowerment. Current research needs to move beyond assumptions that community participants are involved in an equally beneficial and reciprocal exchange process with students and Higher Educational institutions and start reflecting this within research and practice. Without the voices of community partners, research cannot sufficiently address ‘how’ the practice of service-learning can result in mutually beneficial exchange for all those involved. As a result, service-learning should continue to be critiqued for its politically contentious nature, especially considering it attempts to challenge power inequality and positions of privilege with no acknowledgment of its deep historical entrenchment. Only then can community-based service-learning become considered a partnership of reciprocal exchange.

References

Bacon, N. (2002). Differences in faculty and community partners’ theories of learning. *Michigan Journal of Community Service Learning*, *9*(1), 34-44.

Birdshall, J.T. (2005). Community voice: Community partners reflect in service-learning. *Journal of Civic Engagement*, 5. Retrieved May 30, 2012 from http://www.mesacc.edu/other/engagement/Journal/Issue5/Birdsall.pdf

Bringle, R.G., & Hatcher, J.A. (2002). Campus-community partnerships: The terms of engagement. *Journal of Social Issues*, 58(3), 503-516.

Bringle, R.G., & Hatcher, J.A. (1995). A Service-learning curriculum for faculty. *Michigan Journal of Community Service Learning*, 2, 112-122.

Bringle, R.G., Hatcher, J.A., & Jones, S.G. (Eds.). (2011). *International service learning: Conceptual frameworks and research*, Sterling, Virginia: Stylus.

Brown, D. (2001). *Pulling it together: A method for developing service-learning and community partnerships based in critical pedagogy,* Washington DC: Corporation for National Service.

Butin, D.W. (2003). Of what use is it? Multiple conceptualizations of service learning within education. *Teachers College Record*, 105(9), 1674-1692.

Butin, D.W. (2010). *Service-learning in theory and practice: The future of community engagement in higher education*. New York: Palgrave Macmillan.

Camacho, M.M. (2004). Power and Privilege: Community service learning in Tijuana. *Michigan Journal of Community Service Learning*, Summer: 31-42.

Carnegie Foundation for the Advancement of Teaching. (2006). *Community engagement elective classification.* Retrieved on April 17, 2012 from http://www.carnegiefoundation.org/classifications/index.asp?key=1213.

Chambers, R. (2005). *Ideas for Development*. Earthscan.

Cook, B., & Kothari, U. (2001). *Participation: The new tyranny*. London: Zed Books.

Cornwall, A. (2006). Historical perspectives on participation in development. *Commonwealth and Comparative Politics*, 44(1), 62-83.

Crabtree, R.D. (2008). Theoretical foundations for international service-learning. *Michigan Journal of Community Service-Learning*, Fall: 18-36.

Cruz, N. (1990). A challenge to the notion of service. In J. C. Kendall (Ed.), *Combining service and learning: A resource book for community and public service* (pp. 321-323). Raleigh, NC: National Society for Internships and Experiential Education.

Cruz, N. I., & Giles, D. E., Jr. (2000). Where's the community in service-learning research? *The Michigan Journal of Community Service Learning*, 7, 28–34.

Eby, J.W. (1998). Why service-learning is bad. Retrieved May 30, 2012 from http://glennblalock.org/~gblalock/glennblalock/wiki/uploads/ACSM1110f09/whySLbad.pdf

Edwards, B., Mooney, L., & Heald, C. (2001). Who is being served? The impact of student volunteering on local community organizations. *Nonprofit and Voluntary Sector Quarterly*, 30(3), 444-461.

Ehrichs, L. (2000). *"Volunteering" in development: A post-modern view.* Unpublished essay.

Eyler, J. (2002). Stretching to meet the challenge: Improving the quality of research to improve the quality of service-learning. In S.H. Billig & A. Furco (eds.), *Service-learning through a multidisciplinary lens*, (pp. 3-13) Greenwich, Connecticut: Information Age Publishing, Inc.

Eyler, J., & Giles, D.E., Jr. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass.

Ferrari, J.R., & Worrall, L. (2000). Assessments by community agencies: How the "other side" sees service-learning. *Michigan Journal of Community Service Learning*, Fall: 35-40.

Fox, D.J. (2002). Service learning and self-reflectivity in rural Jamaica. *Practicing Anthropology*, 24(2), 2-7.

Frisby, W., & Creese, G. (2011). Unpacking relationships in feminist community research: Crosscutting Themes. In G. Creese & W. Frisby (Eds.), *Feminist community research: Case studies and methodologies* (pp. 1-15). Vancouver: University of British Columbia Press.

Henry, S.E., & Breyfogle, M.L. (2006). Toward a new framework of "server" and "served": De(and re)constructing reciprocity in service-learning pedagogy. *International Journal of Teaching and Learning in Higher Education*, 18(1), 27.

Jones, S.R. (2002). In over our heads: The underside of service-learning. *About Campus*, 7(4), 10-15.

Jones, S. (2003). Principles and profiles of exemplary partnerships with community agencies. In B. Jacoby & Associates (Eds.), *Building partnerships for service-learning* (pp.151- 173). San Francisco: Jossey-Bass.

Kendall, J. (Ed.). (1990). *Combining service and learning: A resource book for community and public service* (Vol. 1). Raleigh, NC: National Society for Internships and Experiential Education.

Kahn, H.E. (2011). Overcoming the challenges of international service learning: A visual approach to sharing authority, community development and global learning. In R.G. Bringle, J.A. Hatcher & S.G. Jones (Eds.), *International service learning: Conceptual frameworks and research*, Stylus, Sterling: Virginia.

Lewis, D. (2005). Globalisation and international service: A development perspective. *Voluntary Action*, 7(2), 13-25.

Marullo, S., & Edwards, B. (2000). From charity to justice: The potential of university-community collaboration for social change. *American Behavioral Scientist*, 43,895.

Minkler, M. (2005). Community-based research partnerships: Challenges and opportunities. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 82(2), Supplement 2.

Mooney, L.A., & Edwards, B. (2001). Experiential learning in sociology: Service learning and other community-based learning initiatives. *Teaching Sociology*, 29(2), 181-194.

Mountz, A., Moore, E.B., & Borwn, L. (2008).Participatory action researcg as pedagogy: Boundaries in Syracuse. *ACME: An International E-Journal for Critical Geographies,* 7 (2), 214-238.
Oldfield, S. (2008). Who is serving whom? Partners, process, and products in service-learning projects in South African urban geography. *Journal of Geography in Higher Education*, 32(2). 269-285.
Porter, M., & Monard, K. (2001). Ayni in the global village: Building relationships of reciprocity through international service-learning. *Michigan Journal of Community Service Learning*, Fall: 5-17.
Reardon, K.M. (1998). Participatory action research as service learning. *New Directions for Teaching and Learning*, 73, 57-64.
Robinson, J.W., & Green, G.P. (2011). Developing communities. In J.W. Robinson Jr. & G.P. Green (Eds.), *Introduction to community development: Theory, practice, and service-learning* (pp.1-9). Los Angeles: Sage Publications.
Sanderson, E., & Kindon, S. (2004). Progress in participatory development: Opening up to possibility of knowledge through progressive participation. *Progress in Development Studies*, 4(2), 114-126.
Sandy, M., & Holland, B.A. (2006). Different worlds and common ground: Community partner perspectives on campus-community partnerships. *Michigan Journal of Community Service Learning*, Fall: 30-43.
Simons, L., & Clearly, B. (2006). The influence of service-learning on students' personal and social development. *College Teaching*, 54, 307-319.
Stoecker, R. (2009a). Are we talking the walk of community-based research? *Action Research*, 7(4), 385-404.
Stoecker, R. (2009b). Thinking about CBR: Some questions as we begin. Retrieved May 30, 2012 from http://students.berkeley.edu/files/osl/Cal_Corps/Students/Programs/Thinking_About_CBR_-_Some_Questions_as_We_Begin_Part_1_of_2.pdf
Stoecker, R., & Tyron, E.A., with Hilgendorf, A. (2009). The unheard voices: Community organisations and service learning. In R. Stoecker & E. Tyron (Eds.), *The unheard voices: Community organisations and service learning* (pp. 1-18). Philadelphia: Temple University Press
Stoecker, R., Loving, K., Reddy, M., & Bollig, N. (2010). Can community-based research guide service-learning? *Journal of Community Practice*, 18(2), 280-296.
Tyron, E., & Stoecker, R. (2008). The unheard voices: Community organisations and service-learning. *Journal of Higher Education Outreach and Engagement*, 12(3), 47-59.
Ward, K., & Wolf-Wendel, L. (2000). Community-centred service learning: Moving from doing for to doing with. *American Behavioral Scientist*, 43(5), 767-780.
Ward, K., & Vernon, A. (November, 1999). *Community perspectives on student volunteerism and service learning*. Paper presented at the annual meeting of the Association of the Study of Higher Education, San Antonia, Texas.
Weerts, D.J., & Sandmann, L.R. (2008). Building a two-way street: Challenges and opportunities for community engagement at research universities. *The Review of Higher Education*, 32(1), 73-106.

Copyright © 2012 Laura Hammersley

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Moving beyond the diary: innovation in design and delivery of reflection

Marina Harvey[16]
Learning and Teaching Centre, Macquarie University
Michaela Baker
Participation and Community Engagement, Faculty of Arts, Macquarie University
Agnes Bosanquet
Learning and Teaching Centre, *Macquarie University*
Debra Coulson
Learning and Teaching Centre, *Macquarie University*
Anne-Louise Semple
Faculty of Science, Macquarie University
Vanessa Warren
Learning and Teaching Centre, *Macquarie University*

Reflective practice is widely considered for its contribution to learning through experience (Caldicott, 2010). Current learning and teaching design across WIL often relies on reflective journals or diaries as the dominant form for documenting and assessing reflection (e.g., Clarke and Burgess; Stupans and Owens; McNamara, 2009). However, there are challenges inherent in this practice, such as what aspect of reflection is assessed and that the reliance on a particular genre of writing may be unfamiliar to both students and assessors (Winchester-Seeto, Mackaway, Coulson and Harvey, 2010).

Acknowledging the evidenced-based practice of the application of reflection in the design and delivery of WIL (Coulson, Harvey, Winchester-Seeto and Mackaway, 2010) this symposium accepts the challenge of exploring different and innovative ways of engaging with and documenting reflection. The paper opens the session with an overview of the role of reflection in learning through WIL, outlines the challenges of traditional approaches to reflective practice and presents the possibilities of moving beyond reflective journals or diaries to innovation in delivery through mediums such as art, twitter, dreams, dance, poetry, music, photography and video.

The accompanying workshop offers participants the opportunity to experience some of the innovative approaches to the practice and documentation of reflection. Processes using art, story and mindfulness will be briefly explored for their potential to engage the diversity of students in reflection for whole person learning (Yorks and Kasl, 2002), premised on the tenet that experiential knowledge is the foundation for all ways of knowing (Heron, 1992).

Keywords: Reflection, innovation, documentation, arts-based research

Introduction

Reflective practice has established for itself a pivotal role in Work Integrated Learning (WIL). Its application is expansive and well documented with 60 empirical studies alone included in one review of reflective practice for WIL (Coulson, Harvey, Winchester-Seeto and Mackaway, 2010). The widespread integration of reflective practice is a demonstration of the value held by educational communities of its potential to contribute to learning. Its role includes supporting learners to make sense and meaning (Schön, 1983; Rarieya, 2005) as they educe new learnings (Boud, Keogh and Walker, 1985) from their WIL experience.

Students, in the complex experience that is WIL, may be exposed to situations that require access to multiple intelligences (Gardner, 2004) and take them beyond their zones of proximal development (Vygotsky, 1978), triggering stress and emotions and even challenging their values and beliefs (Boud, Keogh and Walker, 1985) creating potential for both cognitive and affective, or whole person learning (Yorks and Kasl, 2002). They benefit, therefore, from a well-developed sense of agency (Bandura, 2006), inclusive of self-reflexivity, as they engage, bridge and negotiate these challenges across the learning environments of their classroom and host organisation and interact and learn with their teachers and host supervisors. They are realising praxis as they integrate their formal knowledge, as theory, with its practical enactment. Their reflective practice supports this

[16] Learning and Teaching Centre, Macquarie University, 61-2-98509779, marina.harvey@mq.edu.au

learning. The dominant form for documenting and assessing this reflective practice across WIL is the reflective journal or diary (e.g., Clarke and Burgess, 2009; Stupans and Owens, 2009; McNamara, 2009).

Documenting reflection through diaries

The documentation of reflection through journaling or diaries is a familiar form for students, teachers and host supervisors. This form can be simple to resource, easy to adapt to new contexts and flexible in structure and scope as the style and models possible are limitless.

However, there are also limitations with this language-based cognitive approach. A reliance on a particular genre of reflective writing may be unfamiliar to both students and assessors (Winchester-Seeto, Mackaway, Coulson and Harvey, 2010). As teachers we may aim to have our students achieve a deep level of reflection, but written reflections can become "mechanistic" and "reductionistic, facilitating mainly superficial" (McIntosh and Webb, 2006, p.1) and inadequate description (deFreitas, 2007, p. 340). Another challenge is around the assessment of written reflections, including should this written reflection be assessed, and if so, what aspect of the reflection is assessed? (Winchester-Seeto, et al, 2010).

Reflecting on the limitations of the written diary or journal for documenting reflection was the trigger that exacerbated the disjunct between our theoretical beliefs and our "theory-in-action" (Argyris and Schön, 1974). In-action, we have been conservatively limiting our students to the diary for their reflective tool. It has therefore becoming necessary to reconcile our beliefs and our actions. A diverse student body, engaging with diverse participation experiences requires the option of diverse and flexible ways of documenting reflection.

Moving beyond the diary

Reticence in offering innovative modes for documenting reflection rests in the culture of the academy. The influence of the scientific, positivist approach to our research results in a focus on evidence-based research which seeks the nature of truth through rigorous enquiry and validity (McIntosh, 2010). The WIL learning experience introduces a perspective of humanism with its nature on subjectivity "from within a given set of professional values and forms of thinking" (McIntosh and Webb, 2006, p2). We need to move away from the dichotomy between arts and sciences and agree that "...there is a need and vitality in synergising the use of conceptual, theoretical and methodological advances" (McIntosh, 2010, 179).

One advance is that of art-based research which provides a new conceptual framework full of possibilities for innovative reflective practice and documentation for WIL. Arts-based research is a "heuristic through which we deepen and make more complex our understanding of some aspect of the world" (Barone and Eisner, 2012, p.3), of our participation experience. Arts-informed researchers embrace the potential of art to inform scholarship (deFreitas, 2007, p. 339) by using art-based materials (Keddell, 2011) for the construction of knowledge. The outcome, or evidence, is a quality of insights that document practice together with the critical discourse that is an adjunct to the work.

We want to advocate for different approaches to reflective text. An arts-based approach invites us to "extend beyond the limiting constraints of discursive communication in order to express meanings that would be ineffective ... to 'say' in that form what cannot be said in others" (Barone and Eisner, 2012, p.1). This paper now introduces examples of innovative documentation of reflection: micro-blogging, dance, music, photography, art dreams and contemplation. These are reflective practices that encourage learners to explore their experiences and integrate the learning from both affective and cognitive perspectives. A more detailed discussion of each innovative form will be available in an aligned paper.

Micro-blogging provides an alternative form for journaling. It uses web based technologies such as social media to provide an avenue for a web log, a personal online journal. Twitter is a micro-blogging tool in which users post 140 character 'tweets' to their network of followers, who are able to reply or 'retweet' the message. As a journaling tool, twitter is a demonstration of reflection-in-action capturing the phenomenology of the immediate experience (Schön, 1987) or critical events (Cardona, 2005). For the participation student, micro-blogging from a distance, while at their host organization, can "nourish participant's needs for relatedness, personal growth and transcendence and suggest the creation of strong social bonds within groups of participants in e-learning settings" (Pauschenwein and Sfiri, 2010. p. 24) and, we posit, in WIL settings.

Understood anthropologically as one of humanity's oldest, near-universal mechanisms of storytelling (Hanna, 1990), an exploration of **dance** as a learning tool opens a rich avenue of reflection for WIL students and

teachers. It is particularly recognised for its transformative value in exploring emotional experiences, enhancing the development of key cognitive processes and communicating concepts otherwise "unsayable" through spoken or written language (Reason, 2010). While there is little research yet examining the use of dance as a learning tool in higher education, these qualities clearly situate dance as a particularly effective tool for reflective practice, especially in the potentially emotionally intense periods of adjustment and culture shock experienced by students participating in WIL.

A connection between **music** and reflective practice is also evident in the literature on reflection. Schön (1983) discusses jazz musicians improvising together as a paradigmatic example of reflection in action. The way in which music relates to the brain supports reflective ability. The right hemisphere of the brain is responsible for processes music and for our ability to discern paralinguistic aspects of experience such as 'intent, attitude, feeling, context and meaning' (Joseph, 1988, p. 633). Given that felt knowing and emotion play an integral role in reflective practice, music's connection to the parts of the brain responsible for this makes it an ideal vehicle for awakening reflection.

There is a growing literature on the value of **photography** in research, community-engaged learning and reflective practice. Photography can serve as an important tool for reflection as "visual data represents human experience whether that experience is of the individual(s) in the image, the experience of the image maker, or the experience of the image viewer" (Harper, 2000, p.18). Evidence of the link between photography and reflection can be found in the work of Pritchard and Whitehead (2004, p. 235), who have argued that pictures facilitate a deeper reflection: "students can express insights, understandings, disappointments, questions, commitments and more." In a separate study, photo-elicitation interviews of outdoor education students demonstrated how photography, through reflective practice, "can play a major role in how participants capture, record, share and make sense of their experiences" (Loeffler, 2004, p. 60), and by extension, of their WIL experience.

Experiments in neuroscience have recently identified links between **art**, imagery and emotional and cognitive functional integration and purposeful art making has been shown to encourage expression, understanding and integration of emotional reactions (Hass-Cohen, 2008). These results indicate potential for art-based reflective activities to support the processing of emotions arising from community-engaged learning experiences and affective learning. Bilateral art, where art making is combined with talking, has been linked to right and left hemispheric brain integration in psychotherapeutic settings (McNamee, 2003). Encouraging learners to share their experience of reflective art making with another (who is cautioned not to interpret what they see and hear) has potential to enhance integration of affective and cognitive learning.

Dreams offer pathways to the unconscious, bringing unbidden material to consciousness with potential for new awakenings (Balogh, 2010), thus are they of interest for reflective practice. Dreams, with their imaginative, often puzzling, sometimes bizarre portrayals of life, make natural stimulants for reflection. Dreams can play an important role in learning (Stickgold, Hobson, Fosse & Fosse, 2001). Students blogging their dreams demonstrated learning that internalised and synthesised course readings and experience (Tougaw, 2009).

Innovative ways of reflective practice can be strengthened when offered to our students together with an approach that integrates **contemplation**: meditation, mindfulness, focusing and felt knowing. A review of research related to the integration of meditation into higher education (Shapiro, Brown and Astin, 2008) identified that meditation may contribute positively to enhanced cognitive and academic performance, mental health and psychological wellbeing and the development of the whole person. Mindfulness-based meditation in particular, has been found to contribute to "qualities that produce well-rounded persons, reflected in higher creativity and greater capacities for positive interpersonal behaviour and healthy social relationships" (p.24), attributes that support the learner through their WIL experience.

Conclusions

Moving beyond the diary, for example, to micro-blogging, dance, music, photography, art, dreams and contemplation, provides a response to the diverse needs of the WIL cohort. An arts-based approach to developing innovative ways of reflecting and documenting reflections on the WIL experience offers multiple benefits to students learning through reflection.

This approach encourages students to make connections with their practice (Samaras, 2010) of experience. An arts-based approach supports a development *from* reflection on experience to reflexivity *in* experience (McIntosh and Webb, 2006), offering a relevant capability for the student during their WIL experience. As students interpret their innovative reflections, their metacognitive and reflective abilities develop, opening avenues for

deeper and life-long learning. An arts-based approach can be more holistic, encompassing cognitive and affective domains. The experience of innovative arts-based reflection aligns with the experiential component of learning through WIL. We conclude by calling for ongoing explorations of innovative ways of reflecting and documenting reflections on the WIL experience, systematically investigating their strengths, challenges and methods.

References

Argyris, M. and Schön, D. (1974) *Theory in Practice. Increasing professional effectiveness*. San Francisco: Jossey-Bass.

Bandura, A. (2006). Towards a psychology on human agency. *Perspectives on Psychological Science, 1*(2), 164-180.

Balogh, R. (2010). In dreams begins responsibility: A self-study about how insights from dreams may be brought into the sphere of action research. *Educational Action Research, 18*(4), 517-529.

Barone, T. & Eisner, E.W. (2012). *Arts based research*. Thousand Oaks: Sage.

Boud, D., R. Keogh and D. Walker, (Eds.) (1985). *Reflection: Turning Experience into Learning*. London: Kogan Page.

Caldicott, J. (2010). Fitting the critical reflection training wheels prior to the WIL journey: Embedding preparation into the tourism and hospitality curriculum. In M. Campbell, (Ed.) *Work integrated learning – responding to challenges: Proceedings of the 2010 ACEN National Conference*, (pp. 45-56). Perth, September 29 – October 1, 2010.

Cardona, A. (2005). The Reflective Bus has reached its destination, or is it still travelling on? *Reflective Practice*, 6, 393-406.

Clarke, D. & Burgess, C. (2009). Using practice based education to improve the student experience. In *The Student Experience: Proceedings of the 32nd HERDSA Annual Conference*, Darwin, 6-9 July 2009, (pp.73-80). Milperra, Australia: Higher Education Research and Development Society of Australasia, Inc.

Coulson, D.; Harvey, M.; Winchester-Seeto, T. and Mackaway, J. (2010). Exploring evidence for the role of reflection in learning through participation. In Campbell, M. (Ed.) *Work Integrated Learning – Responding to Challenges: Proceedings of the 2010 ACEN National Conference*, (pp. 92-103). Perth, September 29 – October 1, 2010.

deFreitas, E. (2007). Research fictions: arts-informed narratives that disrupt the authority of the text. *Interchange*, *38*(4), 335-350.

Gardner, H. (2004). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.

Hanna, L. (1990). Anthropological perspectives for dance/movement therapy. *American Journal of Dance Therapy, 12*(2), 115-126.

Harper, D. (2000). Reimagining visual methods: Galileo to Neuromancer. In *Handbook of qualitative research*, 2nd edition, Denzin, N and Lincoln, Y (Eds.), Sage, Newbury Park, pp. 717-732.

Hass-Cohen, N. (2008). Partnering of art therapy and clinical neuroscience, Chapter 1, pp. 21-42, in N. Hass-Cohen and R. Carr (Eds.) *Art Therapy and Clinical Neuroscience*, London: JKP.

Heron, J. (1992). *Feeling and personhood: Psychology in another key*. London: Sage.

Joseph, R. (1988). The right cerebral hemisphere: Emotion, music, visual-spatial skills, body-image, dreams and awareness. *Journal of Clinical Psychology*, *44*(5), 630-673.

Keddell, E. (2011). A constructionist approach to the use of arts-based materials in social work education: Making connections between art and life. *Journal of Teaching in Social Work*, *31*(4), 400-414.

Loeffler, T.A. (2004). A picture is worth…capturing meaning and facilitating connections: Using outdoor education students' photographs. *Australian Journal of Outdoor Education*, *84*(2), 56-63.

McIntosh, P. (2010). *Action research and reflective practice. Creative and visual methods to facilitate reflection and learning*. Oxon: Routledge.

McIntosh, P. & Webb, C. (2006). Creativity and reflection: An approach to reflexivity in practice. Paper presented to the *Professional Lifelong learning: Beyond Reflective Practice Conference*. Leeds, 3rd July, 2006.

McNamara, J. (2009). A collaborative model for learning and assessment of legal placements. Paper presented *WACE 16th World Conference*, Vancouver, Canada, 2009.

McNamee, C. M. (2003). Bilateral Art: Facilitating systemic integration and balance. *The Arts in Psychotherapy*, *31*(5), 283–292.

Pauschenwein, J. & Sfiri, A. (2010). Adult learner's motivation for the use of micro- blogging during online training courses. *International Journal of Emerging Technologies in Learning, 5*(1), 22-25.

Pritchard, F. F. & Whitehead, G. I. (2004). *Strategies for evaluating projects and celebrating growth*. *Serve and learn: implementing evaluating service-learning in Middle and High Schools*. Mahwah, NJ: Lawrence Erlbaum.

Rarieya, J. (2005). Promoting and investigating students' uptake of reflective practice: a Pakistan case. *Reflective Practice Journal, 6*(2), 285-294.

Reason, M. (2010). Watching dance, drawing the experience and visual knowledge. *Forum for Modern Language Studies, 46*(4), 391-414.

Samaras, A. P. (2010): Explorations in using arts□based self□study methods. *International Journal of Qualitative Studies in Education, 23*(6), 719-736.

Schön, D. (1987). *Educating the reflective practitioner.* San Francisco: Jossey-Bass.

Schön, D. (1983). *The reflective practitioner.* New York: Basic Books.

Shapiro, S.L., Brown, K.A. and Astin, J.A. (2008). *Toward the integration of meditation into higher education: A review of research*. Center for Contemplative Mind. http://www.contemplativemind.org/resources/research.html

Stickgold, R., Hobson, J., Fosse, R. & Fosse, M. (2001). Sleep, learning, and dreams: Off-line memory reprocessing. *Science, 294*, 1052-1057.

Stupans, I. & Owens, S. (2009). Planning and scaffolding for learning in experiential placements in Australian pharmacy schools. *Asia-Pacific Journal of Cooperative Education, 10* (1), 29-37.

Tougaw, J. (2009). Dream bloggers invent the university, *Computers and Composition,* 26, 251-268.

Vygotsky, L.S. (1978). *Mind and society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Winchester-Seeto, T; Mackaway, J; Coulson, D. & Harvey, M. (2010). But how do we assess it?' An analysis of assessment strategies for learning through participation (LTP). *Asia-Pacific Journal of Cooperative Education, 11(3),* 67-9.

Yorks, L. and Kasl, E. (2002). Toward a theory and practice for whole-person learning: Reconceptualizing experience and the role of affect. *Adult Education Quarterly, 52*(3), 176-192.

Copyright © 2012 Marina Harvey, Michaela Baker, Agnes Bosanquet, Debra Coulson, Anne-Louise Semple, Vanessa Warren

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

A Profession Engaged Learning Model for Industry Placements

Kathy Henschke
RMIT University

A relational model is proposed for sustaining and growing industry placements that encompasses the individual, social and contextual dimensions of work-based learning. The Profession Engaged Learning Model (PEL) Model for industry placements is designed around three interdependent, interlinked activities that encourage individual and social agency through (a) engaging in mutually satisfying and rewarding workplace relationships (relationship development), (b) promoting work-related knowledge construction and re-construction (knowledge development) and (c) nurturing and growing communities of practice (network development). The proposed Model necessitates the engagement of stakeholders across various levels of organisations and the University so that placement programs can be responsive to changing needs, strategic in direction, intentional in design and sustainable in practice.

Keywords: work-based learning, professional formation, industry engagement, identity development

Background

The fundamental concept of industry placement programs is neither novel nor new. Vocationally orientated programs such as nursing, engineering and education have included practical placements as graduate work preparation since certification was introduced. However a recent report published by the ACER (2010) state only 29% of final year university students in Australia have done internships or work experience in their field of study. One reason for this situation is that placement programs struggle for recognition as sites for learning. Although there has been some research promoting the educational value of placements the evidence is seen as anecdotal with little reference to learning theories (Coll and Eames, 2004). Consequently placements are not highly regarded by educators and continue to be sidelined in university curricula and not fully integrated within program design (Patrick & Peach, 2007). A number of authors (Wyn (2009); Fenton-O'Creevy (2007); Sovilla & Varty, 2004) suggest the educational potential of placement programs is being held back by universities' out-dated views on learning. Informal learning (in workplaces) is considered inferior to teaching delivered at universities. However substantial literature across the fields of workplace learning, professional development and adult education promote an admixture of both formal and informal knowledge to better equip students for the uncertainty of life and work. Eames and Cates (2004) amongst others suggest that drawing distinctions between learning in the workplace and in the classroom is unhelpful, and that each should be seen to complement the other in developing the "whole" student.

A lack of understanding and poor appreciation of the learning opportunities within placements generates industry-based programs (IBL) lacking innovative pedagogy. However, harnessing the educational potential of IBL programs requires highly qualified educators and practitioners to design appropriate curriculum and assessment. Yet universities have been found to under-resource co-op programs, offer few reward systems (e.g. promotion structures) to entice academic participation (Forbes, 2007) and promote traditional views of learning that handicap student learning and individual development (DEST, 2007).

An industry placement is unique with its own unique set of individuals, work activities and settings. However co-op programs are situated within a university curriculum and often delivered with a "one size fits all" approach to curriculum design, pedagogy, management and assessment. Also, the literature claims there is a general assumption that students will learn simply by being immersed in the workplace and that work supervisors and work colleagues will readily provide the scaffolding and resources for student learning and development. This "hands off" approach sees some students returning to university after their placement dissatisfied and unhappy. Research literature in the areas of workplace learning and professional practice highlight the need for supporting structures within workplaces. Such structures encourage social interaction, engagement and reflective discussions within a community of practice and 'self-correction' can be instigated and change initiated. There is little recognition and acknowledgement of the part both the workplace supervisors and the workplace context play in promoting student learning, professional formation and individual development.

Much of the research literature in the area of IBL and WIL programs is impressionistic with little evidence of studies that delve into the various assumptions and expectations held by the various participants of co-op on the

role of co-op programs and the part they and others play in it. This paper seeks to share findings of a study conducted to identify support structures for IBL programs that are most likely to maximise benefits for all the stakeholders involved and to sustain and grow such programs.

Method

A single case study approach was selected with an IBL program, within an undergraduate business information systems degree at an Australian University degree, as the unit of analysis. The degree is delivered over 4 years with a mandatory 40 week co-op work placement in the 3rd year. At any one time there are approximately 120 students working in co-op placements across a wide range of IT job, within a diverse range of small, medium and large business across the full range of industry sectors. Most placements are located locally. Students usually return to complete a final year of study after co-op in full or part-time mode.

The study adopted an inductive design and engaged qualitative techniques to guide the capture, interpretation and analysis of individual perspectives of a sample of stakeholders drawn from across academia, industry and the student body. The validity of findings was addressed through the triangulation of the multiple perspectives from the diverse set of stakeholders.

Twenty-six in-depth, one and half hour, semi-structured interviews were conducted with a cross-section of stakeholders. A variety of sampling strategies were used to capture the complex dimensions of the co-op program. The composition of the final sample included: five students currently enrolled in the degree (ages 18+), five alumni (ages 25+), five active workplace supervisors, five academics involved in the business information systems program (ages 30+), five managerial/executive level personnel (ages 30+) from both the University and industry and one representative from the Australian Computer Society representing the IT profession. Although the sample size was small the data collected was rich so as to capture the complexity of and uniqueness of each individual's perspective of co-op placements.

All interviews were recorded and fully transcribed, systematically coded and inductively analysed to evoke multiple and rich meanings. Key criteria essential to creating understanding of co-op were identified together with interesting affirming, contrary and surprising text was also identified. The text was chunked and coded with a word or phrase. The data categories appeared to fall into three main areas:

- what the stakeholder (employer/student/academic) brought to co-op (assumptions, experiences, histories, etc.);
- what the stakeholder got out of co-op (benefits, outcomes etc.); and
- what the stakeholder valued most from co-op.

The next section draws from the wealth of perceptions and insights collected to develop a holistic model for delivering the placement program in this undergraduate degree. "Fuzzy generalisations" (Bassey, 1998) or assertions (Stake, 1995) could potentially be made across other work placement programs.

Findings and discussion

The analysis of the data highlighted the diversity of co-op placement settings, the uniqueness and value differentiation of individuals involved, and the breadth of opportunities for learning, professional formation, individual development and industry engagement. Each individual experiences co-op differently and the learnings they take away are subjective. Adult learning charts a philosophy that embraces the diversity of each situation by acknowledging the interrelatedness of learner and educator within a context that is "active and dynamic" (Fenwick & Tennant, 2004, p. 55) and offers a particularistic approach where learning can be tailored to suit the context and the people involved. Also adult learning principles indicate that individuals learn best when they can take responsibility for their own learning.

The findings indicated that the extent of preparation of both the students and of the workplace before the placement has a great impact on the richness of the work place experiences and learnings. There was evidence to suggest that the value organisations place on industry placements is reflected in the supervision and support the student is given and the development of the student. Also the jobs needed to be meaningful and have some benefit to the organisation. Guidance, instruction, direction and support during work placements maximise learning opportunities.

It is proposed that this placement program can be best sustained and improved through a set of interdependent, relational processes that promote and support: (a) rewarding, satisfying relationships between stakeholders, (b) ever-expanding relational webs of practice and (c) continuing practical knowledge construction.

(a) Processes that develop mutually rewarding and satisfying relationships

The diversity of organisations and the uniqueness of individuals involved within each placement call for approaches that promote deep relationship development at a number of levels across university and organisational contexts. At the local level, key stakeholders involved in the industry placement (student, supervisor and university advisor) negotiate the rules of engagement, and together, monitor and review students' progress and well-being; at the undergraduate program level, partnerships are forged with the professional bodies through accreditation processes, and long-term industry collaborations and research partnerships with major organisations may be negotiated across higher management levels.

(b) Processes that build networks and communities of practice

Industry placement programs have the potential to provide useful feedback to the program team for course renewal and program accreditation and identify emerging industry trends requiring further research. Also, students located within organisations connect universities with organisations and become their ambassadors. Processes are required to promote the development of knowledge sharing and building networks across various cohorts of stakeholders, at different levels, for different purposes. For example the University should provide opportunities for connecting students with students, alumni and industry personnel for more informed industry placement preparation, promoting discussions between workplace supervisors for knowledge sharing and encouraging conversation to construct and reconstructing practice knowledge. These opportunities may develop into further research partnerships and industry collaborations.

(c) Processes that construct and reconstruct practical knowledge construction

Universities should implement processes that engage all stakeholders in practice knowledge construction and reconstruction before, during and after co-op placements. Universities can design and deliver programs and courses that intentionally inform and prepare their students and processes and resources that can guide organisations in planning for co-op. The curriculum design should be such that students are encouraged to take ownership of their own learning and development. Active learning environments have been found to be conducive to the development of proactive, agentive students. However, the design and delivery of such courses and conditions requires informed, capable and engaged teaching academics that have the relevant training and experience for designing curricula that incorporate work-related knowledge and delivery techniques that promote active learning environments. Processes should be in place during industry placements that intentionally guide learning and promote reflective conversations between the various stakeholders. Planned, regular interactions between various cohorts during the placement can ensure that continuing learning and development stay at the forefront of placement agendas.

Current models of work placement appear to focus on individual learning and transformation without acknowledging the social and contextual dimensions of learning, engagement and influence present at a number of levels. At micro levels there was evidence of students developing a number of identities in relation to the work-related knowledge and skills gained, the relationships developed and through their membership in various workgroups, organisation and the profession. At macro levels affordances offered by both university and organisations to the student, supervisor and academic were found to have an impact on the nature of the work placement experience and tied to responsible strategic decisions, appropriate learning cultures, suitable implementation structures, processes and management.

A holistic, relational, model of for work placements is proposed that encompasses the individual, social and professional dimensions of work-based learning, to encourage individual and social agency to engage in mutually satisfying and rewarding workplace relationships and promotes work-related knowledge construction and re-construction through nurturing and growing communities and practice. The model is contextualised within the university program, yet draws on resources (human and non-human) from various levels within the university, host organisations and a number of communities of practice.

The proposed model is designed around three inter-related, interdependent activities: Work-based Learning (WBL), Workplace Engagement (WPE) and Work-related Knowledge Construction (WRKC) sustainable

through connecting these activities: (1) developing mutually satisfying and rewarding relationships between stakeholders (relationship development), (2) growing communities of learning and practice (network development) and (3) constructing and re-constructing work-related knowledge bases (knowledge development). The term Professional Engaged Learning (PEL) has been selected as a name for this model to draw together the three interdependent activities of professional practice knowledge construction (P), workplace engagement (E) and work-based learning (L). Figure 1 provides a diagrammatic view of the proposed Model of Professional Engaged Learning (PEL) for industry placements.

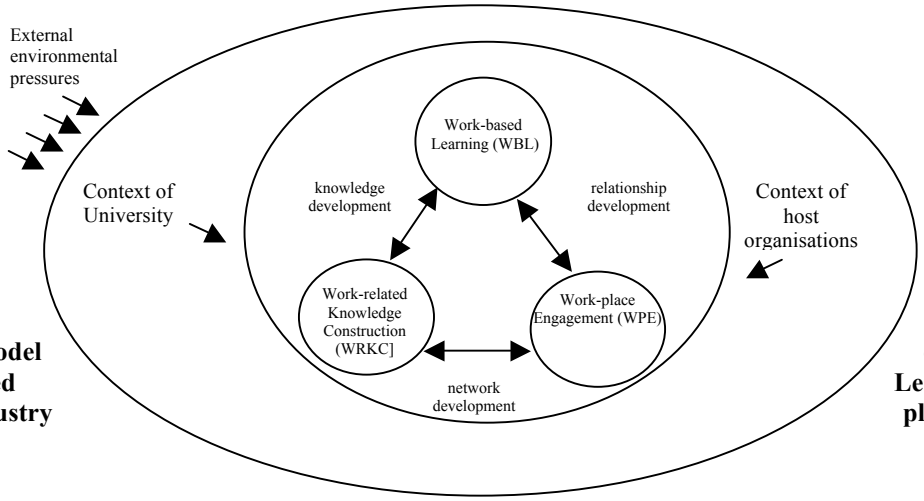


Figure 1 Model of Profession Engaged Learning (PEL) for industry placements

The successful implementation of these processes requires the involvement of individuals that cover various knowledge bases (such as information technology, professional formation, adult learning, teaching, workplace learning and organisational behaviour), working and teaching experiences and the necessary expertise to plan, design and implement and manage the above processes. The scope of knowledge and skills required may best be accommodated by a multi-functional, multidisciplinary team. In addition, the individuals (and the Team) need to be motivated. Recognition through promotion and reward structures offered by the University and by the respective organisations plays a major part in the extent to which both teaching academics and workplace supervisors become engaged in work placement programs.

Conclusion

The proposed Model of Profession Engaged Learning (PEL) for industry placements supports an educational goal of developing 'authentic' human beings (Barnett, 2006) who have the capacity for engagement with the world, are empowered to negotiate risk, reflexively construct their identities, make choices (Furlong in Wyn, 2009) and grow to become valued, respected members of their communities of practice. A learning-directed approach is proposed that seeks to maximise the learning opportunities of placements through making available the necessary arrangements and resources that empower, enable and grow relationships between individuals within groups and communities. It is proposed that processes and support structures need to be promoted across both university and host organisations that engage stakeholders in mutually satisfying relationships before, during and after industry placements and subsequently lay the foundations for relational webs of communities of practices. These communities in turn create bodies of new practice knowledge that sustain and grow university programs, strengthen the professional bodies and thereby enrich Society.

References

ACER (2010). *Doing More for Learning: Enhancing Engagement and Outcomes.* Camberwell, Australia: Australian Council for Educational Research (ACER).

B Barnett. (2006). Graduate attributes in an age of uncertainty. In P. Hager & S. Holland (Eds.)*, Graduate Attributes, Learning and Employability (pp.* 49-65). AA Dordrecht, The Netherlands: Springer.

Bassey, M. (1998). *Case Study Research In Educational Settings.* Buckingham: Open University Press.

Bates, M. (2004). From knowledge to action and back again: Building a bridge. *Asia-Pacific Journal of Cooperative Education*, 5(1), 7-14.

Beckett, D. (2010). Adult learning: Philosophical issues. In P. Peterson, E. Baker & B. McGaw (Eds.), *International Encyclopaedia of Education* (Vol. 6, pp. 114-120). Oxford: Elsevier.

Billett, S. (2007). Cooperative Education: Supporting and guiding ongoing development. *Journal of Co-operative Education and Internship 41(2),* 7-44.

Coll, R., & Eames, C. (2004). Current issues in cooperative education. In R. K. Coll & C. Eames (Eds.), *International Handbook for Cooperative Education.* Boston, USA: World Association for Cooperative Education, Inc.

Crebert, G., Bates, M., Bell, B., Patrick, C-J., & Cragnolini, V. (2004). Developing generic skills at university, during work placement and in employment: *Graduates' perceptions, Higher Education Research & Development*, 23(2), 147-165.

DEST. (2007). *Graduate Employability Skills*: A Report Commissioned by the Business, Industry and Higher Education Collaboration Council for Department of Education, Science and Training. Canberra: Commonwealth of Australia.

Down, C. (2006). Lifelong learning, graduate capabilities and workplace learning. In P. Hager & S. Holland (Eds.), *Graduate Attributes, Learning and Employability*. AA Dordrecht, The Netherlands: Springer.

Evans, K., Hodkinson, P., Rainbird, H., & Unwin, L. (2006). *Improving Workplace Learning*. Oxon: Routledge.

Fenwick, T. and Tennant, M. (2004). 'Understanding adult learners'. In G. Foley (Ed.), *Dimensions of adult learning: adult education and training in a global era*. Sydney and Milton Keynes: Allen and Unwin and Open University Press.

Fenton-O'Creevy, M. (2007) *Building the foundations of expertise: Towards a pedagogy of practice*. Paper presented at the WACE conference. Singapore 2007.

Forbes, E. (2007). *Learner Support and Co-ordination of Students on Work Integrated Learning Programs*. Paper presented at the 15th World Conference on Co-operative Education, June 2007, Singapore.

Hager, P., & Halliday, J. S. (2006). *Recovering Informal Learning: Wisdom, Judgement and Community*. Dordrecht, The Netherlands: Springer.

Patrick , C.-J., & Peach, D. (2007). *The Current Status of Work-Integrated Learning (WIL) in Australian Higher Education*. Paper presented at the World Association for Co-operative Education (WACE).

Sovilla, E. S., & Varty, J. W. (2004). Co-operative education in the USA, past and present: Some lessons learnt. In R. K. Coll & C. Eames (Eds.), *International Handbook for Cooperative Education: An International Perspective of the Theory, Research and Practice of Work Integrated Learning* (pp. 17-25). Boston, MA: World Association for Cooperative Education.

Stake, R. E. (1995). *The Art of Case Study Research*. Thousand Oaks, CA: Sage Books.

Te Waita, I. (2006). Generic attributes and the first job. In P. Hager & S. Holland (Eds.), *Graduate Attributes, Learning and Employability* (pp. 221-242). AA Dordrecht, The Netherlands: Springer.

Wyn, J. (2009). *Touching the Future: Building Skills for Life and Work*. Camberwell: Australian Council for Educational Research.

Copyright © 2012 Kathy Henschke

The author assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author.

Learning Integrated Work: inter-organisational collaborators reflect on provision of authentic virtual multimedia project experience

Ashley M Holmes
Learning and Teaching Education Centre, Central Queensland University
Ruth Kinslow
(formerly) Business Improvement, Queensland Alumina Limited
Michael Pope
Pump Crew Supervisor, Queensland Alumina Limited

This discussion paper outlines the experience of initiating and sustaining an authentic, team based, work integrated learning experience for advanced level, undergraduate students of collaborative multimedia design and production. It is a reflective account of how the needs of both organisations involved came to be addressed, creating a win-win-win outcome for the industry partner, the students and the university. Unusual aspects to do with the distance study mode of the students and the requirement for virtual collaboration are showcased. In the analysis, the difficulties experienced in initiating and sustaining such an inter-organisational relationship, especially where there is no direct vocational interdependency and so, no supportive administrative framework, are highlighted.

Keywords: authentic learning, vocational training, multimedia, teams, virtual collaboration, management

Introduction

It has been argued that, in the context of both undergraduate and post-graduate university education, work integrated learning opportunities, sometimes also known as cooperative learning or industry placements; do not typically fit a particular paradigm (Kelleher, Patil & Harreveld, 2011). Generally speaking, the primary objectives are to enhance students' experience of a profession, to develop their work readiness, and to provide opportunities for interaction between the university and industry stakeholders with the aim of ensuring that the development of theoretical knowledge and skill is congruent with the needs of industries. A common form of work-integrated learning is that where, as part of study and assessment, an individual student is 'seconded' to take on a particular part-time or full-time position—sometimes paid, sometimes voluntary—within an organisation for a defined period. This paper outlines a work-integrated learning collaboration atypical to that norm. Two teams, one from Queensland Alumina Limited Business Improvement area and the other from Central Queensland University undergraduate multimedia degree capstone course, each in the pursuit of separate organisational objectives, commit to 'client' and 'contractor' roles and realise projects that achieve mutually satisfying outcomes.

This paper provides a reflective account co-written from the points of view of both organisations involved. On the one hand, there is a business improvement coach, working with a mature age maintenance crew trainee and senior engineers to capture tacit knowledge at risk of loss through retirement to incorporate this knowledge meaningfully with other work process documentation. On the other hand, there is an academic course coordinator who supervises members of student teams as they undertake a prescribed course of collaborative project engagement. Because of the regional footprint of the university the team members are widely geographically dispersed over vast distances and are studying in distance mode. Some team members do not meet each other, their supervisor, or their client face to face. They are charged with project planning and production using virtual communication modes. Interactive multimedia workplace training manuals are the tangible product resulting from this collaboration. The authors discuss the challenges involved in bridging dissimilar organisational cultures and geographical distances. They reflect that there are numerous benefits—tangible and intangible—for all parties involved, and that this type of project also poses organisational problems.

The back-stories:

1/ Queensland Alumina Limited: pump maintenance training at Gladstone

During the period 2004 to 2008 the culmination of numerous workplace initiatives within a particular section of the high-pressure alumina refinery of Queensland Alumina Limited (QAL) at Gladstone gave rise to imperatives for action. Routine hazard reduction audits, procedural reviews and the requirements of competency-based training for pump maintenance crews had identified potential risks in that QAL environment consistent with those foreshadowed in literature about hazardous environment risks in general (Nichol, 2001, 21). A major risk, common in mature industries and their ever more rapidly changing workplace environments, is that key technically experienced staff with long-term knowledge of plant design, operation and maintenance are, for a variety of reasons, unable to transfer vital plant specific and tacit knowledge at a pace that keeps up with their rate of attrition (Hislop, 2009, 132-135; Leonard & Swap, 2005). A need was identified for a unified compilation and synthesis of the various modes and formats of existing information into a multimedia manual useful for the purposes of training and ongoing reference whether on location in the plant, in the engineering workshop, or the training room.

2/ Central Queensland University: collaborative multimedia courses

Tertiary education providers in the constantly changing field of digital media production are challenged to equip graduates with skills relevant to industry needs. In one recent survey (Haukka, 2010) found that 36% of employers in Australia's creative digital industries reported that it was difficult or very difficult to recruit aspiring creatives with the 'right' skills and attributes. Research on how creative production skills are typically applied throughout all sectors of industry raises questions about whether creative digital education providers should be concerned to identify fields with particular skill requirements to be satisfied, or rather be developing more generic, knowledge and technical skill-based graduate attributes that can readily be honed by employers to suit their particular needs. At Central Queensland University (CQU) multimedia program academics endeavour to strike a balance. It is considered that in a field where standards, protocols, technology and practices are rapidly evolving a fundamental error would be to bootstrap skill development to any one of them. Notwithstanding that creative and technical skills, aptitudes and practices specific to the discipline should fundamentally be developed, CQU data and experience concurs with the findings of Haukka: "Employers ranked team work skills, communication skills, motivation, problem-solving skills, and adaptability as the most important skills and attributes to their workplaces." (6)

The MMST13015/18 courses constitute a compulsory capstone experience in the Bachelor of Multimedia Studies degree (BMmSt) at CQU. The objective is to provide students with an opportunity to apply knowledge, skills and experiences accumulated throughout the degree program, to a 'real-life' major project undertaken for an external 'client'. Students work in teams that resemble those typically found in small to medium creative enterprises that offer digital and new media consultancy and production services in Australia (Barrett, 2001; Higgs, Cunningham & Pagan, 2007; Noacco, 1995). They are challenged to organise, initiate, plan, execute and evaluate a digital content project. They learn and practice requirements elicitation, technical specification, project design and development, management methodologies, and quality management processes and procedures. According to roles that each has negotiated through a team contract agreement they then contribute to the collaborative realisation of the project. The principle elements of engagement theory (Kearsley & Shneiderman, 1998) are operational in these courses.

The projects

In 2008 and 2009 two interactive training manual projects were undertaken for QAL in Gladstone. Pump Maintenance Crews are responsible for servicing heavy industrial equipment in the hazardous environment, with inherent procedural and occupational health and safety risks. The equipment is critical for the production of alumina. The existing documentation of the equipment and the site-specific maintenance practices had not been consolidated into a readily accessible format. In addition, the immanent retirement of experienced senior staff with accumulated technical know-how and tacit procedural knowledge was perceived as a risk. This risk required swift action to remedy. Knowledge specific to plant maintenance held by senior team members needed to be recorded and formalised to be compatible with QAL information systems. The projects also needed to comply with other corporate requirements such as OH&S, risk assessment, corporate style manuals, confidentiality, and with VET principles. It was envisaged that the project outcomes would be CD-ROM distributed manuals incorporating short, time-based audio-visual demonstrations, printable instructions incorporating text, diagrams and photo media elements, and accessed via an interactive interface.

Two projects ensued. The first, developed and produced during the period March to October 2008 concerned general safety induction, foundation training manuals and Pump Overhaul and Maintenance Procedures (POMP)

for the Elliot Turbine and Gearbox. The second, developed and produced during the period March to October 2009 documented procedures relating to assembly and overhaul of two slurry pumps:

- Worthington 12LN32
- Warman 8/6 FAN

The second training manual also incorporated quizzes to test knowledge transfer and comprehension.

Keys roles in the inter-organisational collaboration

Reflective analysis of the conduct of the two projects has identified four key instrumental roles:

- QAL project leader/translator
- QAL industry trainee and technical expert liaison
- CQU educational expert
- Student project teams

QAL project leader/translator

QAL regularly offers industry placement opportunities and traineeships for university students and graduates in a number of fields. However, the type of team-based collaboration described in this paper is unusual. There are no standard systems or practices instituted to accommodate the arrangements that transpired as there are with the more typical placement and traineeship arrangements. This person found herself in the position of blazing a trail through QAL systems to achieve what was required to get things going. It is significant that she had prior experience with both the industrial culture at QAL and the educational culture at CQU. Her knowledge of the systems and operations of both helped ensure that the needs of both organisations were satisfied – for example: the information systems and contractual and training requirements at QAL, and the semester timetable and the assessment routine at CQU. Her role involved liaising between the QAL parties who would need to be engaged in order to bring the project to fruition, such as:

- area supervisors, management and executives,
- technical experts and trainees,
- human resources,
- information systems,
- marketing and corporate image,
- contract and legal.

In some cases these persons were quite unused to dealing with ‘outsiders’, and in other cases what was asked of them was considered to be outside of the routine. For example, the ‘supply contract’ between the organisations involved no financial transaction. It is for these reasons that the role is referred to as ‘translator’. This person became the overseer of the whole project and the single point of contact for all parties with respect to forms, authorities, safety, funding and operations.

QAL industry trainee and technical expert liaison

This person is an experienced trade person employed in the pump maintenance section at QAL at Gladstone. At the time of the instigation of these projects he was a mature age trainee undertaking the Certificate IV in Competitive Manufacturing. It was he who, in a workshop with the Business Training Coach, suggested the possibility of involving an outside organisation to assist with resolving the training bottlenecks outlined above. He believed that video of suitably professional quality would provide a means of effectively recording demonstrations of technical procedures by key expert staff. Whilst the practice of audio visual recording of procedures for training purposes was becoming more common at QAL, the facilities and resourcing for post-production were almost non-existent. Internal roles attributed to him included liaison with plant maintenance engineers and process and resource owners to supply documents. He also provided expert advice to the student team during video capture and post-production, assisted with provision of voice-over talent, and participated in providing feedback on designs and testing of production prototypes.

At QAL the need to realise the production of training aids had not been an organisational priority. Together the project leader and the industry trainee succeeded in escalating the prioritisation of the proposed projects.

CQU educational expert

The course coordinator supervises and advises the teams, and is present as an observer during key presentations to the client and stakeholders. In all, over the two terms there are 19 items of team assessment to be submitted including two items of individual report and peer review. There is also a team appraisal mark provided by the

client and a tutor's evaluation of individual performance. The final mark allocated to each individual is combination of all of these team and individually awarded factors.

Student project teams

Guided by course instructions and resources, students organised themselves into roles and nominated a single point of contact for client and supervisor liaison. At the outset they negotiated a team agreement that included a conflict resolution strategy. Team members met regularly using virtual meeting technology including Skype. They were expected to keep meeting records, individual timesheets, and an intellectual property register that tracked all items they created and those that were received from the client. Weekly status reports were submitted to the client and to the supervisor. The activities of the first term were mainly concerned with project definition, concept development, design issues, project planning and the establishment of procedures for production management and quality control. In term two the teams swung into iterative production mode, presenting Alpha and Beta prototypes for evaluation and testing before presenting the final product for acceptance.

Evaluation

The products of the project teams met their acceptance criteria and are reported to be serving their purpose at QAL. No quantitative study has been conducted, but the authors are in reflective agreement that, in the instances described in this paper, the inter-organisational collaboration provided win-win-win outcomes for the key stakeholders. In a paper published in 2011, Holmes has characterised the outcomes as "reciprocal and complementary knowledge conversion" using Nonaka's (1994) Socialisation, Externalisation, Combination and Internalisation (SECI) model of knowledge transfer. That paper also provides a review of academic literature on the efficacy of multimedia modes of training.

For QAL as a whole the benefits were: the building of knowledge, increased productivity, and improved safety. The mature workers passing on their knowledge felt they were leaving a tangible legacy and that their knowledge and skill was being recognised. For the trainees and other plant maintenance workers learning on the job, the product facilitates fast tracking of learning. The risk of learning 'the hard way' through lack of detailed practical tuition is lessened.

The multimedia students gained authentic experience of effective teamwork in a configuration similar to that which might exist in small to medium consulting firms or public service project teams. They had to overcome the communication barriers inherent in their geographical separation to achieve collaboration. Even the students who could not visit the site gained insights into the operations of an industry they would likely have not otherwise. Each team took ownership and creatively resolved their product in a unique way.

Both the QAL project leader and the CQU educational expert agree that their tasks in organising the inter-organisational collaboration could have been facilitated by systems designed to support this less usual kind of inter-organisational engagement. In many medium-to-large organisations there are systems and procedures in place for handling the more common work placement and traineeship arrangements. The tasks involved have been somewhat routinised and resources allocated. Similarly universities and faculties are accustomed to finding places for individual students where cooperatives and placements are instituted and in some cases required by accrediting bodies as part of a course or a program of study.

The QAL project leader/translator met with internal resistance when initiating each project. The potential benefits had to be 'sold' to the resource owners whose cooperation would be essential. Where there is constant organisational change and shifts in strategy little heed is paid to small-time projects where there has been scant or no financial investment to date.

In short, undertaking these projects required considerable commitment of those persons undertaking the key roles—beyond their position descriptions. The fact is that these types of roles are yet to appear in any job description! In order to validate gains and, for such initiatives to continue, the commitment required needs to be formally and systematically recognised within the organisations involved in the partnership. Without this step the innovation involved may fail to become an integral part of either business. The projects risk becoming stand-alone and the potential for further significant gains lost over time.

Conclusion

This paper has outlined collaborative education ventures atypical of work integrated learning norms. It involved teams of undergraduate students of multimedia working virtually for a 'client' from whom they were remotely

located. The projects' outcomes were of significant benefit to all stakeholders. Yet this account by key personnel from both organisations involved highlights some of the significant internal and external hurdles to be overcome in maintaining the relationships required to initiate and sustain such engagements.

References

Barrett, R. (2001). Labouring under an illusion? The labour process of software development in the Australian information industry. *New Technology, Work and Employment*, 16, 18-34.

Haukka, S. (2010). From education to work in Australia's Creative Digital Industries: Comparing the opinions and practices of employers and aspiring creatives. *60Sox Report 2*, Creative Workforce Program, ARC Centre of Excellence for Creative Industries and Innovation.

Higgs, P. & Cunningham, S. (2008). Creative Industries Mapping: Where have we come from and where are we going? *Creative Industries Journal, 1*(1), 7-30. Intellect Ltd.

Higgs, P. (2008). *Australia's Creative Economy Information Sheet*: Creative Businesses are 6.6% of all Australian Businesses, http://eprints.qut.edu.au/11960/1/Australia_Creative_Economy_Information_Sheets_Release_1.pdf (accessed 3 December 2010).

Higgs, P., Cunningham, S. & Pagan, J. D. (2007). Australia's creative economy: Basic evidence on size, growth, income and employment. *Technical Report*, Faculty Research Office, CCI, http://eprints.qut.edu.au/8241/1/8241.pdf (accessed 3 December 2010).

Hislop, D. (2009). *Knowledge management in organisations: A critical introduction*. Oxford: Oxford University Press

Holmes, A. (2011). Reciprocal and complementary knowledge conversion in a work integrated learning collaboration. *Studies in Learning, Evaluation, Innovation and Development 8*(2), 40-52.

Kearsley, G., & Shneiderman G. (1998). Engagement theory: A framework for technology-based teaching and learning. *Educational Technology, 38*(5), 20-24.

Keleher, P., Patil, A. & Harreveld, B. (2011). Introduction. *Work Integrated Learning in Engineering, Built Environment and Technology: Diversity of Practice in Practice*. IGI Global.

Leonard, D. & Swap, W. (2005). *Deep smarts: How to cultivate and transfer enduring business wisdom*. Harvard University: Harvard Business School Press.

Nicol, J. (2001). *Have Australia's major hazard facilities learnt from the Longford disaster? An evaluation of the impact of the 1998 ESSO Longford explosion on major hazard facilities in 2001*. The Institute of Australian Engineers.

Noacco, D. J. (1995). Multimedia markets: A study of Australian content developers. *Australian Journal of Educational Technology, 11*(2), 52-74.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, *5*(1) 14–37.

Copyright © 2012 Ashley M Holmes, Ruth Kinslow, Michael Pope.

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Horses for courses? A comparison of four undergraduate WIL streams in tourism

Karen Hughes, Aliisa Mylonas, Pierre Benckendorff[17]
School of Tourism, The University of Queensland

This paper compares four WIL streams embedded in a Professional Development course for tourism, hospitality and event management students. Leximancer was used to analyse key themes emerging from reflective diaries completed by the 137 students in the course. Results highlight that learning outcomes and experiences differed depending on the WIL stream. These are explained using Aristotle's three approaches to knowledge.

Keywords: internship, placement, executive shadowing, reflection, tourism, phronesis, skills

Background and Literature

Several studies have explored the learning outcomes of industry placements in tourism and hospitality education (cf. Beggs, Ross & Goodwin, 2008; Busby, 2003; Collins, 2002; Mistilis & Harris, 2009). The most common conclusion is that tourism and hospitality internships play an important role in developing transferrable skills such as communication, customer relations, networking, team work, time management and problem solving (Beggs, Ross & Goodwin, 2008; Busby, 2003; Busby, Brunt, Baber, 1997; Lee, 2008; Leslie & Richardson, 2000) or technical knowledge of the discipline or field (Busby, Brunt, Baber, 1997; Lee, 2008). However internships also provide learning benefits that extend beyond the development of skills and knowledge. Some students have reported that their internship experience resulted in increasing confidence (Busby, 2003). Crossley, Jamieson and Brayley (2007, p.312) observed that hospitality internships provided "an opportunity to have an intensive, work-based exposure to a broad range of operations within a company" while Lee (2008) reported that students developed a better understanding of how organisations function. Similarly, some authors in the tourism literature have argued that students should have the opportunity to put theory into practice to ensure a balance between vocational and theoretical content (Airey, 1996; Busby, 2003). Recent work has focussed on the impact of internships on career planning and development (Chen & Shen, 2012).

A useful conceptual framework for understanding the outcomes of learning experiences is provided by the Greek philosopher, Aristotle, who argued that learning is associated with three kinds of competencies: *episteme*, *techne* and *phronesis*. *Episteme* (theoretical knowledge) is concerned with knowledge that is systematic and universal across particular contexts. *Techne* (practical skill) refers to the skills, routines and techniques associated with making, creating and doing. *Phronesis* (practical wisdom) is about the development and application of experiential knowledge to specific contexts. The distinction between *techne* and *phronesis* is important. *Phronesis* is not just about doing the right thing, but acting in the right way, for the right reasons and at the right time (Saugstad, 2005). *Phronesis* extends beyond skills and technique to include reflexivity and is cultivated through experience, practice and repetition (Jamal, 2004).

While the research on internships is useful and the findings are generally consistent, other WIL approaches in tourism, hospitality and events education are rarely discussed. As Patrick et al. (2008) note, there are a variety of WIL approaches that can be designed to introduce students to the world of work within a purposely designed curriculum. In tourism and hospitality education these have included, but are not limited to, practical or student consultancy projects (Haywood, 1983; Rimmington, 1999), shadowing programs (Solnet, Robinson & Cooper, 2007), industry immersion programs (Ruhanen, Breakey & Robinson, 2011) and industry mentoring.

This paper will address this shortcoming by comparing four WIL streams embedded in a compulsory Professional Development course designed to prepare undergraduate tourism, hospitality and event management students for a professional career. These streams include:

- *Industry Placement (IP)* – students gain work experience within the tourism, hospitality or events sectors
- *Reflection on Current Employment (ROCE)* - allows students to use their current employment as the basis for their reflection.
- *Tourism Regional Immersion Project (TRIP)* - small teams of students live in a regional destination for 4-6 days and complete an industry-determined research project
- *Executive Shadowing Program (ESP)* - students 'shadow' a senior manager in industry or government

[17] Corresponding author contact details; School of Tourism, The University of Queensland, +61 7 3346 7089, p.benckendorff@uq.edu.au.

Students are accepted into each stream based on their academic performance. In the case of ESP and TRIP students are also interviewed. The analysis will consider the 'student voice' and will attempt to situate the learning outcomes of each stream within Aristotle's framework of episteme, techne and phronesis.

Methodology

As part of the assessment for this course, students submit a reflective portfolio about their workplace experience, focusing on what they have learnt about the industry, workplace issues, and their own job-relevant strengths, weaknesses and general career-readiness. One hundred and thirty-seven reflective portfolios were categorised according to the four workplace streams, then analysed using Leximancer, a software system that performs a type of automated content analysis of textual documents in digital format, before producing a visual display (map) of the extracted information (Baggio & Marzano, 2007). Leximancer extracts thesaurus-based concepts from the text data, codes these concepts, and then creates a concept map (Smith and Humphreys, 2006) highlighting the frequency and connectedness of concepts. From this, themes of directly related concepts emerge. The key advantage of this approach is that it systematically identifies themes that are significant across the whole data set, a particular advantage with large volumes of text. Despite automating some aspects of qualitative data analysis human intervention and validation is still required at each stage of the analysis to remove unwanted concepts, to merge similar concepts and to interpret underlying themes and linkages.

Results and discussion

The first concept map (Figure 1) illustrates student reflections across all four WIL streams. The map includes concepts (indicated by the smaller grey nodes) which are grouped into themes (indicated by the larger coloured bubbles). Leximancer groups concepts into themes based on how often they appear together in a block of text (in this case a sentence). The concept map indicates that particular concepts and themes are more closely linked to some streams than others. The closer the concept appears to the stream name, the more often these concepts are mentioned in students' reflective portfolios. For example, the concept map shows that ESP students tended to focus on the **industry** as a whole, **business** issues, and the opportunity provided by the WIL **experience**, indicative of an experience where observation and shadowing of senior executives is paramount.

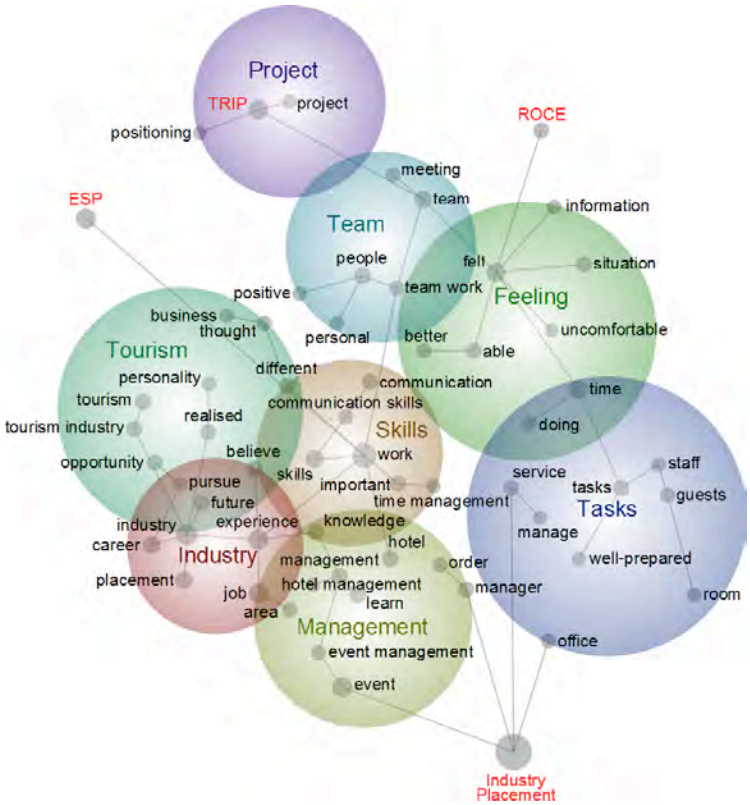


Figure 1: Concept map of student reflections in all four WIL streams

TRIP students were involved in small group projects in regional areas, working closely with their project supervisors. In these students' portfolios, concepts relating to the **project**, **teamwork, meetings**, other **people**

and **emotions** were dominant. For ROCE students, who could use their current employment as their WIL experience, **emotions** and **teamwork** rated highly while for IP students, whose positions and responsibilities were many and varied, relationships were less clear. The portfolios of IP students tended to reflect upon specific **tasks**, **duties**, **management** and the **hotel**, probably due to many students in this stream being placed in hospitality positions.

To better explore whether there are differences between the four streams of WIL and whether these represent any important implications, individual concept maps were produced for each stream. For the ESP stream (Figure 2), concepts centred on **work issues** such as time management, their thoughts, and management approaches; **the industry**, particularly in relation to their careers, future and the opportunity to meet people; and **the learning experience** itself – skills, what's important and what they had gained from the experience. These findings match the nature of the experience, as ESP predominantly involves observing, meeting and learning from industry leaders. Teamwork, being managed and emotions were less important for this group but, again, this reflects the observational and individual nature of the ESP experience. As ESP is a competitive stream (based on academic results, relevant work experience and interview performance), it was not surprising that the importance of interviews also featured in this map. ESP students benefit from gaining a managerial perspective of the workplace, enabling them to better understand the practical requirements of being a manager as well as reflect on the relevance of theory learned during their management degree studies. However, these students are not necessary learning by 'doing', so the emphasis tends to be on developing a knowledge of the industry and reflecting on the role of being a senior manager. Aristotle's notions of *episteme* and *phronesis* are most evident in this type of experience.

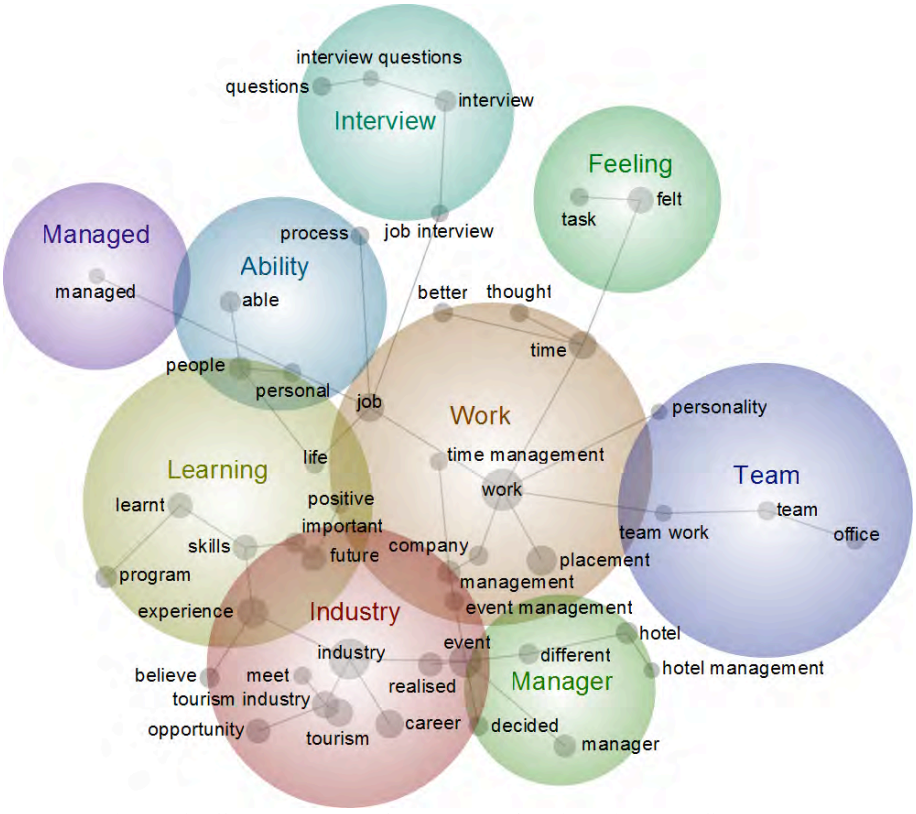


Figure 2: Concept map of student reflections in the ESP stream

Students in the TRIP stream complete team projects in regional areas, in response to regional tourism operators' needs (eg, designing tourist experiences, data collection, accommodation audits, etc). Figure 3 illustrates that for these students, issues related to **teamwork** - dealing with team members, reflecting on their abilities, research tasks - were paramount. Closely related to this were concepts linked to **work** – their feelings, their beliefs and the job itself. As TRIP students produce a research report as part of their immersion experience, '**report**' concepts rated highly. **Operators** also featured, particularly in relation to **communication skills**, though the concept was less important than expected given that TRIP students had to work closely with local tourism operators. The outcomes of this stream show a strong emphasis on the development of technical skills (*techne*).

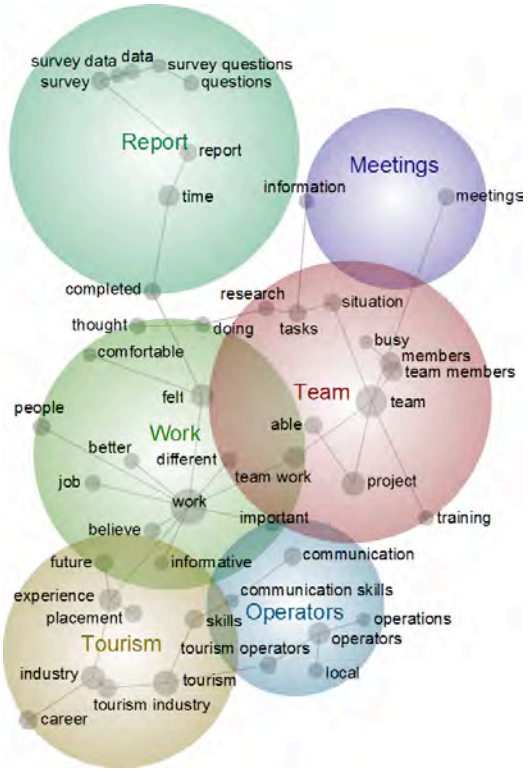


Figure 3: Concept map of student reflections in the TRIP stream

The IP map (Figure 4) indicates a somewhat diverse range of concepts – **work**, particularly in relation to management and hotels; **skills**, which incorporates aspects such as communication, understanding, learning and knowledge; **industry issues** such as management, opportunities, beliefs and experiences; **feelings** and **time management**. This diversity is not surprising considering the variety of placements on offer, the fact that most students are participating in their first 'real' industry placement, and that a significant proportion are international (NESB) students. Figure 4 provides an indication of issues graduates with little 'in-the-field' experience are likely to face when entering the workforce, and skills that should be developed via tertiary-based WIL experiences. There is a strong emphasis on 'doing' and developing skills (*techne*) but also on reflexivity (*phronesis*).

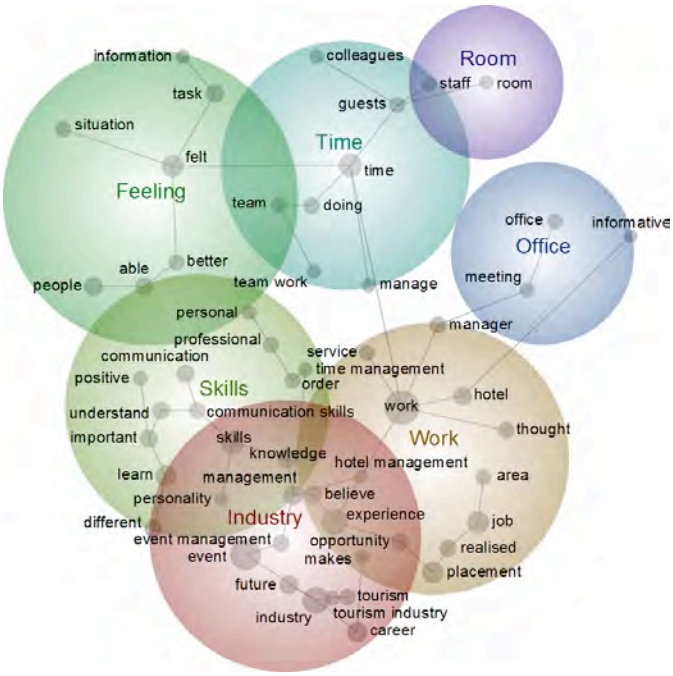


Figure 4: Concept map of student reflections in the Industry Placement stream

The themes emerging from the ROCE concept map (Figure 5) largely focus on specific tasks and duties related to work such as **training, managers and staff**; **guests** and **service**; **hotels** and **careers** in hotels; and **management**. Interestingly, concepts such as learning and feelings do not feature strongly in this group's portfolios although this is not entirely unexpected when considering the reasons students select ROCE, i.e., convenience of working in a familiar job along with the capacity to continue earning income without working, voluntarily, elsewhere. This suggests that WIL experiences that allow students to remain working 'within their comfort zones' may not 'add value' to professional career-readiness. While these students have undoubtedly already developed important skills (*techne*) and technical knowledge (*episteme*) through their current employment, ROCE may not add much value as a learning experience, other than providing students with an opportunity to reflect on their workplace.

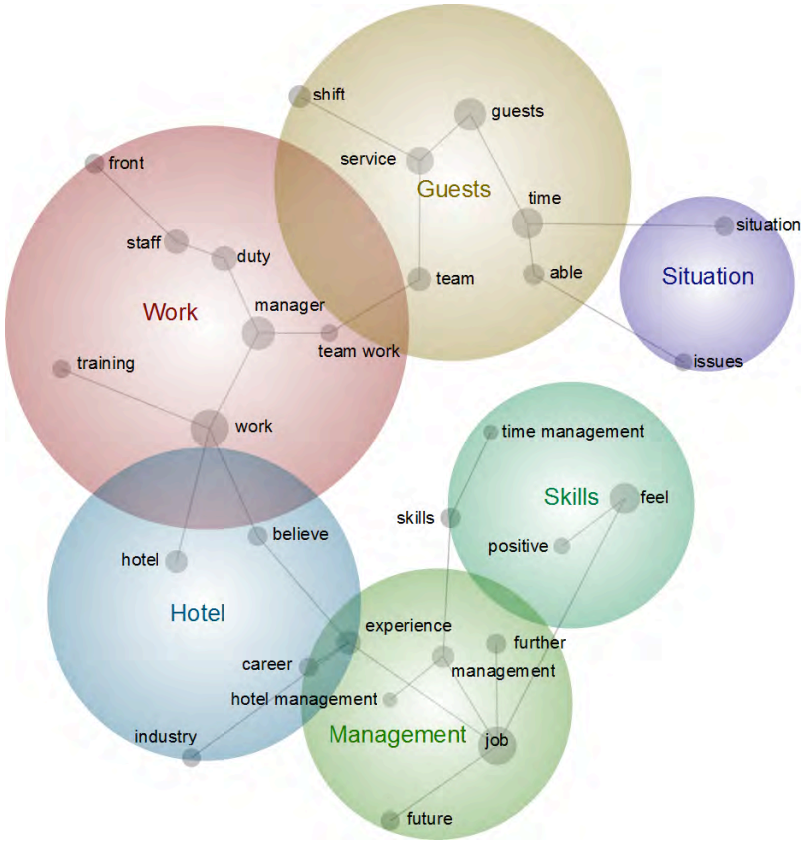


Figure 5: Concept map of student reflections in the ROCE stream

Conclusions

Aristotle's concepts of *episteme, techne* and *phronesis* have been used as a broad framework for situating the key themes that emerge from students' reflections. The content analysis highlights a number of thematic differences in the reflective discourse of students who have completed each stream. The ESP stream appears to be most successful in developing *episteme* and technical knowledge of being a manager in the tourism industry. The strength of TRIP is that it clearly develops project management and interpersonal skills that are valuable for career advancement in the tourism industry. IP is also useful for developing skills but the focus is more strongly on interpersonal skills. Arguably, while the experience itself may not develop *phronesis* in all streams, the requirement for all students to reflect on their experience does provide a learning opportunity once students return to the formal university setting. The results indicate that while a different pattern of knowledge and skills outcomes is apparent for each stream, all four streams offer valuable learning experiences which achieve the broad learning outcomes of the course. Future research might extend the approach used in this paper by analysing in more detail the qualitative text found in student reflections. This type of approach could also be applied to other disciplines to explore similarities or differences between various WIL options.

References

Airey, D. (1996) Tourism Education and Manpower Development in Central and Easter Europe. In Richard, G. (ed.). *Tourism in Central and Eastern Europe: Educating for Quality*. Tilburg: Tilburg University Press.

Baggio, R. and Marzano, G. (2007). Destination management plans: use of language as representation of power. *Council for Australian University Tourism and Hospitality Education Conference 2007*.

Beggs, B., Ross, C. M., & Goodwin, B. (2008). A comparison of student and practitioner perspectives of the travel and tourism internship. *Journal of Hospitality, Leisure, Sport, and Tourism Education*, 7(1), 31-39.

Beggs, B., Ross, C. M., & Goodwin, B. (2008). A comparison of student and practitioner perspectives of the travel and tourism internship. *Journal of Hospitality, Leisure, Sport, and Tourism Education*, 7(1), 31-39.

Busby, G. (2003). Tourism degree internships: A longitudinal study. *Journal of Vocational Education and Training*, 55(3), 319-334.

Busby, G. (2003). Tourism degree internships: A longitudinal study. *Journal of Vocational Education and Training*, 55(3), 319-334.

Busby, G., Brunt, P., & Baber, S. (1997). Tourism sandwich placements: an appraisal. *Tourism Management*, 18(2), 105-110.

Chen, T. L., & Shen, C. C. (2012). Today's intern, tomorrow's practitioner?—The influence of internship programmes on students' career development in the Hospitality Industry. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 11(1), 29-40.

Collins, A. B. (2002). Gateway to the real world, industrial training: dilemmas and problems. *Tourism Management*, 23(1), 93-96.

Crossley, J.C., Jamieson, L.M., and Brayley, R. E. (2007). *Introduction to commercial recreation and tourism: An entrepreneurial approach* (5th edn). Champaign, IL: Sagamore Publishing.

Haywood, K. M. (1983). Students as Consultants: a New Alternative in Experiential Learning. *Journal of Hospitality & Tourism Research*, 8(1), 69-84.

Jamal, T. B. (2004). Virtue ethics and sustainable tourism pedagogy: phronesis, principles and practice. *Journal of Sustainable Tourism*, 12(6), 530-545.

Lee, S. A. (2008). Increasing student learning: A comparison of students' perceptions of learning in the classroom environment and their industry-based experiential learning assignments. *Journal of Teaching in Travel & Tourism*, 7(4), 37-54.

Leslie, D. & Richardson, A. (2000). Tourism and Cooperative Education in UK undergraduate courses: are the benefits being realised? *Tourism Management*, 21, 489-498.

Mistilis, N., & Harris, J. (2009). *Tourism university student internships in Australia–a preliminary analysis*. Council for Australian University Tourism and Hospitality Education Conference 2009.

Patrick, C., Peach, D., Pocknee, C., Webb, F., Fletcher, M., Pretto, G. (2008). *The WIL report: A national scoping study*. Brisbane: Queensland University of Technology.

Rimmington, M. (1999). Vocational education: challenges for hospitality management in the new millennium. *International Journal of Contemporary Hospitality Management,* 11(4), 186-192.

Ruhanen, L., Breakey, N., & Robinson, R. (2011). Knowledge exchange and networks: a new destination for tourism internships? *Current Issues in Tourism*, 15(3), 183-196.

Saugstad, T. (2005). Aristotle's contribution to scholastic and non-scholastic learning theories. *Pedagogy, Culture & Society*, 13(3), 347-366.

Smith, A.E. and Humphreys, M.S. (2006) Evaluation of unsupervised semantic mapping of natural languge with Leximancer concept mapping. *Behavior Research Methods*, 38(2), 262- 279.

Solnet, D., Robinson, R., & Cooper, C. (2007). An industry partnerships approach to tourism education. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 6(1), 66-70.

Copyright © 2012 Karen Hughes, Aliisa Mylonas, Pierre Benckendorff

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Virtual WIL: A Collaborative approach to Work Integrated Learning using a virtual world

Pauletta Irwin
School of Health and Human Sciences, Southern Cross University
Allan Ellis
School of Health and Human Sciences, Southern Cross University
Iain Graham
School of Health and Human Sciences, Southern Cross University

XX (XX) School of xx has invested in creating a whole-of-school model for Work Integrated Learning (WIL). The WIL model situates the student at the core of the placement experience and includes pre-practicum theoretical learning, assessment and support during the experience. This paper presents the model paying particular attention to using Virtual Worlds (VW) specifically Second Life (SL) and its role in the WIL student experience. It discusses increasing industry partners' satisfaction and collaboration through projects involving post graduate interview simulations and virtual preceptor-student 'meet and greets'.

In response to the global upward trend of the adoption of VWs as an educational platform XX established Interaction Island in SL in 2009. Offering experiences in a virtual environment overcomes the geographical constraints of a multi campus university such as XX and provides a cost effective learning platform for staff and students. This paper reports on 2 virtual WIL projects launched on Interaction Island in 2012. The first project provides the opportunity for students to improve their recruitment performances through practice interview simulations. Invited academics and representatives from industry partners comprise the recruitment panel. This WIL project provides an opportunity for industry partners to promote their Health Care Facility (HCF) whilst students have the benefit of increasing market knowledge and improving their interview performance through rehearsal. The second project actively links preceptors with third year Bachelor of Nursing (BN) students prior to and following their clinical placement. These meet and greet sessions have an educational component where students have the opportunity to develop realistic placement objectives in collaboration with their placement preceptor. Future planned projects will seek to further integrate virtual WIL aligned activities into School wide curricula and be inclusive of a wider selection from industry partners and all academic years of study.

Keywords: Virtual world, SecondLife, collaboration, WIL

Introduction

The successful practical preparation of undergraduate nurses continues to be a contentious issue despite the move away from a hospital based apprenticeship model to tertiary based education featuring Work Integrated Learning (WIL) experiences. This move intended to enhance critical thinking and increased professional standing has left some with the view that practical skills and nursing knowledge is left wanting (Grealish & Smale, 2011). It is generally agreed that WIL is a shared responsibility between the health care organisations and higher education providers (McCormack, Pancini, & Tout, 2010). A recognised aim of WIL is to provide a standardised experience for the learner (Patrick, Peach, Pocknee, Webb, Fletcher, & Pretto, 2008) though achieving this goal is difficult where the footprint of XXX, a regional university, spans across multiple health services and states. In an era where there is a global nursing shortage (De Gieter, Hofmans, & Pepermans, 2011) effective WIL can help lessen workforce burden and improve recruitment and retention rates of graduate nurses (Bennett, Jones, Brown, & Barlow, 2012; Patrick, et al., 2008). This paper describes how through the use of a Virtual World (VW) Second Life (SL) there can be a positive influence on the WIL experiences in an undergraduate Bachelor of Nursing (BN) curriculum.

Virtual Worlds

A VW is a computer simulated three dimensional (3-D) mutli-media environment (Boulos, Hetherington, & Wheeler, 2007). Users of SL adopt the characteristics of an avatar (3-D representation of self) that is capable of movement, action, speech and text chatting. Interaction with other avatars is synchronous and as such a VW is capable of offering social characteristics of teaching and learning usually only afforded in a face to face environment (Bronack, Sanders, Cheney, Reidl, Tashner, & Matzen, 2008). Avatars have a long association with gaming and are now being researched for use in education. The immersive and authentic nature of VWs offers students a level of active engagement in an environment that is pedagogically sound and safe (Falloon,

2010). Through avatar abilities of gesturing and movement a sense of presence is further developed (Salmon, 2009). A growing body of research supports the use of VWs as a learning format with results that suggest that it can provide profound immersion (Warburton, 2009) whereby students using SL report authentic behaviours representative of real world (Johnson, Vorderstrasse, & Shaw, 2009).

The United States of America based 2007 *Horizon Report* predicted that the use of VWs would be taken up over the coming years at a pace similar to the uptake of the Web in the 1990s (News Media Consortium, 2007). These predictions have been realised it would seem as SL, a virtual platform developed by Linden Labs has currently over 20 million registered users. SL is globally the most popular VW available (Boulos, et al., 2007; Johnson, et al., 2009) and is recognised as being the most popular VW platform to use in tertiary education (Dalgarno, Lee, Carlson, Gregory, & Tynan, 2011). Just over three quarters of UK universities are actively developing in or utilizing SL (Warburton, 2009). Early reports from a scoping study in Australia mirror international results and demonstrate not only an increasing uptake of this technology but also the breadth of course content delivered or explored in this environment has expanded (Dalgarno, et al., 2011). XXX's staff and students continue to advance the adoption of this technology into the maintstream education arena and are exceeding initial intentions of the island build which were "…to encourage staff to explore the next phase of the Internet-based information and communications technology revolution…." (DIscover SCU, 2009, p. 1).

Background to Work Integrated Learning

The current WIL experiences offered by many international and Australian universities for BN students have similar features of multiple block rotations (from one to six weeks) in variety of health care facilities (HCF). The two most common models of WIL in a BN are the cluster model and preceptor model. The cluster model sees up to ten students allocated to a HCF and overseen by a Registered Nurse (RN) known as a Clinical Teacher (CT) or Facilitator (Sanderson & Lea, 2012). Students often work with a different preceptor (an RN) at the HCF. Within the preceptor model, students are paired with a preceptor RN and work corresponding shifts (Croxon & Maginnis, 2009).

Problems with current Work integrated Learning practices

The nationalisation of the nursing regulatory authority and the partial deregulation of the higher education sector combined with an ongoing global shortage of nurses has meant that HCFs are partnered with multiple Universities (Grealish & Smale, 2011). This means that students from varied tertiary organisations have their WIL experience at the same HCF. This can have a negative effect on individual WIL experiences. Preceptors particularly those working within a cluster model are exposed to multiple curricula and mentor many students, each of whom has their own personal life and learning history. This can translate into a preceptor exercising caution and limiting a student's WIL opportunities. This notion is consistent with studies that have identified that when students are 'let in' (Elock, 2007) or have a sense of 'belonging' (Levett-Jones, 2008) they are more likely to engage or be allowed to engage in a WIL experience. There are novel attempts to improve the student's WIL experience and improve recruitment opportunities by offering students internships or paid positions within the HCF (see Cantrell & Browne, 2006; Nelson, Godfrey, & Purdy, 2004). These opportunities are limited for regional students due to the lack of HCFs and positions within them.

Travelling away from home for WIL is likely for students studying at a regional university where the demands of meeting compulsory WIL curricula extend beyond the capacity of local HCFs. It is easy to draw comparisons with the mining industry's Fly In Fly Out (FIFO) jobs where community acceptance and retention of the workers are vexed (Beach & Cliff, 2003). Regional students who must travel for WIL have limited opportunity to develop an organisational commitment (De Gieter, et al., 2011) and can struggle to attain a sense of belonging and may feel isolated (Lea, Cruickshank, Paliadelis, Parmenter, Sanderson, & Thornberry, 2008). Furthermore, recruitment of graduating nurses is difficult if a student does not have an enjoyable experience or indeed has no exposure to a HCF they are less likely to apply for a post graduate position (Courtney, Edwards, Smith, & Finlayson, 2002). In these times of nursing shortage an opportunity to improve WIL experiences and increase the recruitment pool should be highly regarded.

Virtual WIL projects

WIL experiences are strengthened with improved coordination and communication between stakeholders (Patrick, et al., 2008). The use of SL offers engagement opportunities between students and HCFs that are not afforded with other communicative technology. Being able to offer equitable access is another goal of WIL and by overcoming geographical constraints and by being cost effective, the use of SL as part of WIL ensures an

equitable experience for all students (Patrick, et al., 2008). The following offers a concise description of two sub-projects of a larger research project at XXX where the use of SL is being utilised to improve WIL for all stakeholders.

The aim of the first sub-project is to increase communication between ground level stakeholders of the BN WIL program. Given the premise that pre WIL meetings strengthen the likelihood of a positive WIL for students and HCFs (Patrick, et al., 2008) in this project students, CTs and preceptors meet in SL prior to WIL experiences. Traditionally these meetings have not occurred because it is logistically problematic and costly to arrange face to face meetings or via traditional communication tools. Using SL as the platform to host pre WIL engagement creates a safe environment where shared objectives can be identified and professional relationships can be forged. Capitalising on the immersive nature of SL means that students who have to travel for their WIL experience can now meet their preceptors and CTs prior to commencing. SL also creates the opportunity for students to meet with preceptors from their allocated HCF as well as those from others.

The second sub-project extends the notion of collaborative WIL and the need for increased communication between the HCF and university. This project compliments traditional methods of preparing graduating BN students for post graduate interviews at XXX (written assessments) by offering what is regarded as the benchmark for interview preparation, the mock interview (Hansen, Oliphant, Oliphant, & Hansen, 2009). By presenting the opportunity to rehearse in a simulated interview in SL, the costly difficulties of being able to offer each student across three campuses an equitable experience are overcome. Participating academics and representatives from HCFs act as virtual panel members. Another unique facet of this project is recording each simulation. Recording the simulations is useful for panel moderation and as a tool for student reflection and group debriefing.

Conclusion

Outcomes of the two projects will be discussed at the 2012 Australian Collaborative Education Network (ACEN) national conference. The efficacy and functionality of the technology from each user group's perspective will be presented. Parameters that are seen to shape successful adaption of a VW into WIL programs will be acknowledged with the envisaged wider uptake in contemporary curricula across XXX's School of XX to be discussed. Broader adaption of this technology includes interprofessional WIL opportunities whereby communities of learners have the opportunity to engage collaboratively.

References

Beach, R., & Cliff, D. (2003). Turnover and FIFO operations: some facts, opinions adn theories. *AusIIM Bulletin, 5*, 64-65.

Bennett, P., Jones, D., Brown, J., & Barlow, V. (2012). Supporting rural/remote primary health care placement experiences increases undergraduate nurse confidence. *Nurse Education Today*.

Boulos, M. N. K., Hetherington, L., & Wheeler, S. (2007). Second Life: an overview of the potential of 3-D virtual worlds in medical and health education. *Health Information & Libraries Journal, 24*(4), 233-245.

Bronack, S., Sanders, R., Cheney, A., Reidl, R., Tashner, J., & Matzen, N. (2008). Presence pedagogy: Teaching and learning in a 3D virtual immersive world. *International Journal of Teaching & Learning in Higher Education, 20*(1), 56-59.

Cantrell, M. A., & Browne, A. M. (2006). The Impact of a Nurse Externship Program on the Transition Process From Graduate to Registered Nurse: Part III. Recruitment and Retention Effects. *Journal for Nurses in Staff Development, 22*(1), 11-14.

Courtney, M., Edwards, H., Smith, S., & Finlayson, K. (2002). The impact of rural clinical placement On Student Nurses' Employment Intentions. *Collegian: Journal of the Royal College of Nursing Australia, 9*(1), 12-18.

Croxon, L., & Maginnis, C. (2009). Evaluation of clinical teaching models for nursing practice. *Nurse Education in Practice, 9*(4), 236-243.

Dalgarno, B., Lee, M. J. W., Carlson, L., Gregory, S., & Tynan, B. (2011). An Australian and New Zealand scoping study on the use of 3D immersive virtual worlds in higher education. *Australasian Journal of Educational Technology, 27*(1), 1-15.

De Gieter, S., Hofmans, J., & Pepermans, R. (2011). Revisiting the impact of job satisfaction and organizational commitment on nurse turnover intention: An individual differences analysis. *International Journal of Nursing Studies, 48*(12), 1562-1569.

DIscover SCU (2009). *University enters the virtual world*. from <http://discover.scu.edu.au/2009/issue9/index.php/9/>

Elock, K. S., Curtis, P. & Sharples, K. (2007). Supernumeray status - An unrealised ideal. *Nurse Education in Practice, 7*, 4-10.

Falloon, G. (2010). Using avatars and virtual environments in learning: What do they have to offer? *British Journal of Educational Technology, 41*(1), 108-122.

Grealish, L., & Smale, L. A. (2011). Theory before practice: Implicit assumptions about clinical nursing education in Australia as revealed through a shared critical reflection. *Contemporary Nurse: A Journal for the Australian Nursing Profession, 39*(1), 51-64.

Hansen, K., Oliphant, G. C., Oliphant, B. J., & Hansen, R. S. (2009). Best practices in preparing students for mock interviews. *Business Communication Quarterly, 72*(3), 318-327.

Johnson, C. M., Vorderstrasse, A. A., & Shaw, R. (2009). *Virtual Worlds in Health Care Higher Education*.

Lea, J., Cruickshank, M., Paliadelis, P., Parmenter, G., Sanderson, H., & Thornberry, P. (2008). The lure of the bush: Do rural placements influence student nurses to seek employment in rural settings? *Collegian: Journal of the Royal College of Nursing Australia, 15*(2), 77-82.

Levett-Jones, T. L., J. (2008). Belongingness: A prerequisite for nursing students' clinical learning. *Nurse Education in Practice, 8*, 103-111.

McCormack, R., Pancini, G., & Tout, D. (2010). Learningful Work: Learning to Work and Learning to Learn. *International Journal of Training Research, 8*(1).

Nelson, D., Godfrey, L., & Purdy, J. (2004). Using a Mentorship Program to Recruit and Retain Student Nurses. *Journal of Nursing Administration, 34*(12), 551-553.

News Media Consortium (2007). *New Horizon Report*. Austin, Texas: News Media Consortium.

Patrick, C.-j., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL (Work Integrated Learning) Report: A national scoping study [Australian Teaching and Learning Council (ALTC) Final report]*. Brisbane: Queensland University of Technology.

Salmon, G. (2009). The future for (second) life and learning. *British Journal of Educational Technology, 40*(3), 526-538.

Sanderson, H., & Lea, J. (2012). Implementation of the Clinical Facilitation model within an Australian rural setting: The role of the Clinical Facilitator. *Nurse Education in Practice*(0).

Warburton, S. (2009). Second Life in higher education: Assessing the potential for and the barriers to deploying virtual worlds in learning and teaching. *British Journal of Educational Technology, 40*(3), 414-426.

Copyright © 2012 Pauletta Irwin, Allan Ellis, Iain Graham

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Community-based-learning in disaster zones: Ethics and economics

Jessica Johnston
University of Canterbury, New Zealand

Background

On 4 September 2010 at 4:35am, Christchurch New Zealand suffered a massive 7.1 earthquake. Through 2011 and 2012, the city continued to reel from "swarms" of earthquakes and aftershocks of magnitudes around 6+. Indeed, while completing this paper, a 5.2 temblor rocked the city halting demolition in the CBD for the day.

More than 180 people died ("February earthquake toll," 2012), with hundreds more across the city and its suburbs seriously injured. Thousands have been made homeless. The 22 February 2011 6.3 quake destroyed, or rendered fit for demolition, more than one-third of all buildings in the CBD. Roads, railways and bridges throughout the city heaved, buckled and disappeared, making the flow of goods and people into, out of, and through the disaster zone often difficult if not impossible. In low-lying "Red Zoned" suburbs, liquefaction caused water, mixed with silt and often sewage from quake-damaged pipes, to burst forth, consuming building foundations, opening up sink holes large enough to swallow vehicles, and burying entire neighbourhoods in more than 100,000 tons of toxic goo ("Christchurch quake: More," 2011). Severe damage to power-grids, water mains, and sewage pump-stations meant many went without vital services for extended periods ("Pump station repair," 2011). At the same time, damage to banks, supermarkets and petrol stations meant that, often for weeks, bottled water, food, fuel, and cash were not available. While recovery has begun, the damages throughout the last two years are cumulative, affecting land, buildings, and the human psyche.

At the University of Canterbury (UC), only nine of approximately 240 campus buildings suffered structural damage. The most substantial damage wrought by the quakes was loss of enrolments. Overall, the University suffered a 13% drop in enrolments, with 25% of first year students leaving, and 8% of continuing students opting not to return. International enrolments, coveted for their full-tuition fees, dropped by 30% ("Canterbury crumbles," 2011). The dollar value these lost and future enrolments represent, coupled with the costs of damage not covered by insurance, have left UC no choice, according to the Vice-Chancellor, but to "cut staff numbers by 50 each year for the next three years, as the financial impact of the quakes becomes clear" ("Massive Cuts," 2012).

Within this economic, environmental and human disaster, what role should a university perform, itself financially and structurally weakened, with its staff and students psychologically reeling from the cumulative effect of two years of such damaging earthquakes and aftershocks? Within this environment, how does a fledging internship programme cope with a loss of academic staff, a crumbling city infrastructure and the disappearance of established human networks, community organisations and businesses? This paper will explore the entwined narratives of opportunity and inequity associated with community-based-learning (CBL) in a disaster zone.

Keywords: Critical pedagogy, disaster studies, neoliberalism, commodification, qualitative research, ethics

Method

This paper is based on open-ended interviews with seven UC staff members—three lecturers involved in CBL and four members of the UC senior management team (SMT). As the number of UC staff members involved in CBL is so small, the lecturers' departments and SMT titles will not be identified to protect their anonymity. All were selected based on their interest in developing CBL. Questions were asked about their views surrounding the needs of, and problems with, CBL and UC's financial and environmental crisis. The open-ended questions are attached in the appendix. All interviews took place between August and October 2011. The seven interviewees were white males. While this small sample of seven white men limits the generalizability of this study, it is hoped that the analysis will raise awareness around the advantages and risks of CBL in disaster zones.

To frame those risks, a list of questions by Dave Hill is included to heightened awareness of social justice issues that all researchers, teachers and students should consider (Hill 2008). These questions provide a framework for both this paper and CBL grounded in critical pedagogy.

- Connections/ patterns: Has this been encountered before? Are there discernable patterns? Multiple causes/effects?
- Viewpoints: From whose viewpoint does the information come? Would this look different if s/he were in another place/time?
- Evidence: How do we know what we know? What evidence will be accepted? How credible will such evidence appear to others? What rules of evidence are appropriate to different scenes?
- Conjecture: What if things had been different?
- Audience: Who cares? Why? Does it matter? To whom?

These questions should orient and guide researchers, teachers and students to the social/cultural contexts within which theory and practice combine, leading to a CBL that is analytical, theoretical, as well as practical.

"Opportunity"

Disasters cannot be separated from the social contexts in which they occur. For example, in addressing Hill's questions, the disaster surrounding Hurricane Katrina was not "natural" but effected by neglect of the levees, over-reliance on large-scale flood control projects, the destruction of wetlands and barrier islands that could have buffered impacts of the hurricane, and decisions that put non-evacuees at risk of death and injury (Cutter 2005). The responses of UC staff to the earthquake and recovery are also socially located, reflecting and reproducing dominant structures and discourses of risk and rebirth, of inequity and opportunity.

Indeed, all interviewees continually emphasized the word "opportunity". All interviewees conceptualized the earthquake as forcing new beginnings, of wrenching people out of their "comfort zones". The earthquake eliminated old "baggage" and ideas, allowing opportunities for the growth of new models and concepts.

The earthquakes and everything were not our choice. But now that they've happened, we actually have a choice, to be different than we were. A year ago we didn't have as much choice, which is ironic. Now it's like "Cool, what do we want to do as a University? Or what do we want as a city?" Before, we were way more locked into the baggage of a hundred years.

The earthquakes destroyed the weight of 100 years of old notions, seemingly freeing individuals, the University, and the city to reinvent themselves. The space provided by this opening allows the self-proclaimed conservative University to try new schemes, reinventing itself as a 21st Century University with novel teaching and research initiatives. And because of the devastation and destruction to buildings and communities, community-based-learning emerges at the centre of that reinvention.

The interviews confirmed classic empirical disaster studies research around communities (Barton 1969, Dynes & Quarantelli 1971, Dynes 2000, Drabek &McEntire 2002). All university staff interviewed articulated feelings of commitment to and witnessing positive behaviours towards their community, enhanced community morale, declines in crime and other antisocial behaviour, reduction in status differences, suspension of pre-disaster conflicts in the interests of community, and institutional adaptation and innovation.

The Student Volunteer Army (SVA) encapsulates the most discussed innovation. SVA, organised by and for students through social networking, recruited a student labour force of 9000 students to provide assistance for those in need, by shifting silt and liquefaction, repairing fences, etc. And in response to that student innovation, a lecturer created a new course titled CHCH101: Rebuilding Christchurch - An Introduction to Community Engagement in Tertiary Studies. The course description states, "This course will integrate academic content on community engagement with students' previous field experiences in response to the Christchurch earthquakes." An SMT member describes hearing about the idea for this innovative innovated adaptive course:

I still remember the exact…, when we were in it. It was gloomy and dark and everyone was depressed and people were willing to listen to new ways of doing things. Within only a few days of that, [the lecturer] said, "We should think about doing service-work." And that, those two words—service and learning—probably were rarely connected at this University prior to that time. Again it was just a completely different receptive environment for new ways of doing things.

Service learning became the symbol of hope, marking a radical shift in receptivity to new ideas at UC. Both the SVA and CHCH101 became the University's beacon of community engagement, demonstrating enhanced social cohesiveness and the emergence of strong altruistic norms. One hundred and thirty students, volunteers in the SVA or other forms of service, were brought together in the course to critically analyse and evaluate themselves, their experiences and the social and cultural realities of who they were assisting.

Another topic highlighted by all interviewees was Tulane University's response to 2005's Hurricane Katrina. Tulane totally transformed its curriculum, requiring every graduate to pass at least two courses that included a community engagement component focused on rebuilding New Orleans. In 2010, Tulane received the highest number of applications (45,000 for 1,500 first year spots) of any US university. All interviewees highlighted this type of "good news about disasters" (Taylor 1977). "Tulane University has more than enhanced itself by the good works it's doing for the city of New Orleans." And "That's what Tulane basically did, they just planted their flag and said, 'Cool we're the experts in this now,' and then they were, you know." And "this is a good time to consider our strategy for the next year or so. Messages from Tulane and Harvard point to this approach being a real point of difference for UC." As Tulane increased student enrolments through recruiting students specifically interested in CBL, as Tulane became recognised as a leader in scholarly and public service initiatives developed in response to the needs surrounding Katrina, so too did UC envision itself as attracting students and contributing to its rebuild through community-responsive teaching and research.

Inequities

Studies on major disasters conducted by historians, political scientists, and sociologists also attest to the fact that, when disasters strike, alongside altruism and heroism, social divisions and patterns of unequal treatment continue. In relation to Katrina, Kate Tierney (2007) suggests that social divisions within disasters exasperate competition for the dwindling "windows of opportunity." "Opportunities" are not available to everyone equally. Indeed, in addressing Hill's questions, disasters provide direct benefits to some economic sectors more than others, with private interests concerned with response and recovery particularly profiting. At UC, one SMT member continually quoted American economist Paul Romer, suggesting "a crisis is a terrible thing to waste" ("Arts matters," 2011). In this view, the upheaval and recovery surrounding the earthquakes should not be "wasted"; the University needed to more fully capitalize and "leverage" the earthquake recovery opportunities.

Thus while all highlighted Tulane's exemplary success, several interviewees also questioned the cost and consequence of such a radical institutional shift. Significantly, from June 2007 until November 2009, Tulane was officially censured by the American Association of University Professors for violating the rights of academic staff in closing programs and firing staff ("AAUP lifts censure," 2009). Awareness of Tulane's deviations from its own ideals of community did not escape critique:

We can learn from other places that've been through these sorts of travails before us. I'm quite sure that we can learn something, even if it's how to not cock things up, because I think a lot of New Zealand institutions have the tendency to sort of re-invent the wheels. I think the Tulane example is absolutely fascinating because of the huge amount of investment that they've put into something, that was sold to us, here at UC, on the basis of being basically, you know, essentially free.

Tulane, used as an exemplar, highlighted how successful such transformative instances of disaster could be. However, it is a private university, not dependent upon public funds, with more resources and freedoms to transform itself. Such transformation also resulted in a large number of redundancies and program disestablishments. Indeed, the Tulane administration was accused of using the hurricane as an "opportunity"/excuse to enact restructuring plans it could not have otherwise ("Universatility: Rebuilding," 2011). The development, costs and consequences to staff around restructuring was not a "choice" or "opportunity" for everyone equally, highlighting how these terms are not neutral or value-free. Choice and opportunity reflect socially situated constraints. The financial costs and human toll extracted from restructuring an entire university remained invisible, hidden within the idealized promotion of transformative CBL.

The University also assumed, with its proximity to the earthquake and as the region's largest concentration of "intellectual firepower", it would, like Tulane, dominate as the academic contributor in post-disaster/recovery research. It would rework and "tremendously broaden what it means to be an educational engine." Competition developed however with other universities, with many interviewees seeing threats to UC's dominion over the recovery.

If we don't take this opportunity then I think several things will happen. One will be continued reputational decline—I don't know that we can go through much more of that. One other will be general bemusement amongst students internationally that there's not really a great deal on offer here that they can buy into. And another one will be that we will have researchers, in particular from every other New Zealand University, on what we, you know, like to regard as our patch.

UC's investment in CBL and research post-earthquake had been hailed as potentially a marketing tool, a revenue stream attracting international students, and academic acclaim. The earthquake and recovery were supposed to become part of the distinctive UC brand and identity—a UC that is responsive to, and invested in, the community, allowing students an entire spectrum of opportunities to learn and apply their knowledge in the real world. However, UC's "patch" is threatened by Auckland and Otago universities, which are "known for a fact," to be conducting disaster-related research within the Canterbury region. If UC does not advance community responsive research and teaching, if UC does not protect its "patch", it will suffer "reputational decline," loss of international students and "leverage" for UC in the international marketplace of tertiary education. It must protect its patch to achieve a Tulane-like status.

Another SMT member described the "opportunity" of one woman and her appreciative interactions with the SVA.

She was just so distraught. Her house is wrecked, the mud and stuff in the yard, inside the house, and she really did not know what to do. And she said she looked up and she saw this army of people walking down the street with shovels and wheelbarrows and she said it was like a miracle. And the opportunity to build on that—because it was good for everybody—it was good for that woman, it was good for the students, it was good for the city.

In this narrative, the earthquake and the resulting liquefaction destroyed this woman's house, leaving her homeless and vulnerable. The SVA altruistically supplies the manual labour shovelling layers of liquefaction, which she is said to describe as a miracle. The SMT member portrays this situation as "good for everybody". However, in applying Hill's questions, this situation is better for some than others, is an "opportunity" for some and not others. He reinterprets the woman's destroyed home as merely the backdrop to the SVA's good works. What is good for "the city" and good for "the students" and good for her is ultimately grounded in the absolute ruin of this woman's home.

There were many examples of this type of "good" opportunity which minimized or failed to recognise the pain and destruction left in the wake of the earthquake. These narratives highlight the social/economic system in which some benefit more than others. The personal toll and devastation are "leveraged" in order to be "good" for UC's recovery.

Conclusion

So CBL and research around the disaster, while contributing to information about the physical, social and environmental costs of catastrophes and recovery, also become promotional devices for both individual researchers and institutional marketing, and a branding device to internationally promote the institution. Several interviewees suggested UC could and should become the New Zealand, if not the Asia/Pacific centre for community responsive teaching and research, developing models for other universities unlucky enough to find themselves situated in disasters zones. One interviewee stated his strategy in response to the 2011 Hurricane Irene in the US:

What we just dummied up is an open letter to... we're going to start with the service learning people at Universities, starting at University of North Carolina in Wilmington, and all the way up the coast, for post-Irene, and just say "Hey, we developed a course on the fly to address students doing service related to the earthquakes. The content is malleable, you know, the goals could be the same. We're happy to collaborate with you." And I mean, so, we can hit the big ones, you know, Princeton was affected, Harvard, all the Boston area ones, Vermont. I mean, you can just go right up and down through there, it's every sort of big-name kind of place. And you know, why not?

Indeed, why not? The objective of this paper is to ask that question. Disaster response is a complex phenomenon whose components include variable and conflicting social imaginaries. The most optimistic (re)visioning framed UC's rebirth through CBL as the key contributor to the region's rebuild through students and faculty applying their knowledge to the betterment of the new city. While the disaster provided the impetus to engage in ethical questioning, the tensions exposed through applying Hill's questions, helps us to focus on the multiple and

conflicting values attributed to CBL, and allows us to consider the short- and long-term values of CBL, to question who CBL is for. These are questions that all CBL practitioners should address in their programmes. Asking Hill's questions about doing CBL, whether in a disaster zone or not, will help address: "Whose interests are served?", "Who wins?" and "Does it matter?", thus connecting CBL experiences to sites of struggle.

References

AAUP lifts censure of Tulane. (2009, November 12). Retrieved from http://www.insidehighered.com/quicktakes/2009/11/12/aaup-lifts-censure-tulane.

Arts matters (2011, August 19). [Electronic newsletter].

Barton, A. H. (1969). *Communities in disaster: A sociological analysis of collective stress*. Garden City, NY: Doubleday & Co., Inc.

Canterbury crumbles as enrolments decline. (2011, October 4). *The Australian*. Retrieved from http://www.theaustralian.com.au/higher-education/canterbury-crumbles-as-enrolments-decline/story-e6frgcjx-1226158056545.

Christchurch quake: More liquefaction than Sept. (2011, February 25). Retrieved from http://www.3news.co.nz/Christchurch-quake-More-liquefaction-than-Sept/tabid/423/articleID/199739/Default.aspx.

Cutter, S. L. (2006). The geography of social vulnerability: Race, class, and catastrophe. In *Understanding Katrina: Perspectives from the Social Sciences.* Retrieved from http://understandingkatrina.ssrc.org/Cutter/.

Drabek, T. E., & McEntire, D. A. (2002). Emergent phenomena and multiorganizational coordination in disasters: Lessons from the research literature. *International Journal of Mass Emergencies and Disasters*, *20*(2), 197-224. Retrieved from http://ijmed.org/articles/574/download/.

Dynes, R. R. (2000). The dialogue between Voltaire and Rousseau on the Lisbon earthquake: The emergence of a social science view. *International Journal of Mass Emergencies and Disasters*, *18*(1), 97-115. Retrieved from http://www.ijmed.org/articles/166/download/.

Dynes, R. R., & Quarantelli, E. L. (1971). The absence of community conflict in the early phases of natural disaster. In C. G. Smith (Ed.), *Conflict Resolution: Contributions of the Behavioral Sciences* (pp. 200–204). South Bend, IN: University of Notre Dame Press.

February earthquake toll hits 185. (2012, February 9). Retrieved from http://www.stuff.co.nz/national/6394084/February-earthquake-toll-hits-185.

Hill, D. (2008). *Contesting neoliberal education: Public resistance and collective advance*. Routledge: New York, NY.

Massive job losses at Canterbury University. (2012, Aug 1). Retrieved from http://www.stuff.co.nz/national/education/7392822/Massive-job-losses-at-Canterbury-University.

Pump station repair cuts sewage overflows. (2011, July 18). *The Press*. Retrieved from http://www.stuff.co.nz/the-press/news/christchurch-earthquake-2011/5299042/Pump-station-repair-cuts-sewage-overflows.

Taylor, V. A. (1977). Good news about disasters. *Psychology Today, 11(*5), 93–96.

Tierney, K. J. (2007). From the margins to the mainstream? Disaster research at the crossroads. *Annual Review of Sociology*, *33*, 503-525.

Universatility: Rebuilding in the wake of disaster. (2011, May 6). *UC Communications*. Retrieved from http://www.comsdev.canterbury.ac.nz/news/2011/110506a.shtml.

Copyright © 2012 Jessica Johnston

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Festival volunteer work-integrated learning placements: student experiences and outcomes

Derek Kosbab
Learning in the Workplace and Community Unit, Victoria University

Abstract

The research sought to build on reports of university student volunteers in festival-based activities and the accumulating body of evidence for the effectiveness of work-integrated learning placements for student' learning. The report describes findings from concurrent mixed-method research with 60 Australian university volunteers who participated in a diverse range of festival placements. Findings revealed that volunteering and work-integrated learning participation was effective for student' learning across the five surveyed learning dimensions of graduate capabilities, employability skills, personal attributes, employment-related characteristics, and, personal characteristics. Student' reported outcomes found concurrence with Australian, UK and Canadian research. The research also identified three differential learning outcomes not reported elsewhere in the literature: stronger learning for females than males, for students with lower compared with higher qualification levels, and for domestic compared with international students.

Introduction

Research from Australia, the United Kingdom (UK) and Canada on university-student volunteering and work-integrated learning (WiL) in festival-based activities has reported mainly positive outcomes for students. This paper seeks to build on that work by reporting research conducted with Australian university students who participated in a diverse range of volunteering and WiL placements across 11 culinary-themed activities, for three not-for-profit community organisations as part of the Feasting in Footscray Festival (FiFF).

The research explored the hypothesis that short-term volunteer and WiL placements are effective for student' learning across five learning dimensions: graduate capabilities, employability skills, personal attributes, employment-related characteristics, and, personal characteristics (see Appendix 1: Survey Questions 30-35).

The paper opens with a very brief review of volunteering and WiL literature. The research method, quantitative and qualitative results are reported and discussed. The paper concludes with a summary and implications of the findings.

Literature review

In the review that follows a distinction has been drawn between volunteering, WiL, and the often conflated activity of service-learning (SL). It has been argued that SL challenges students' values and ideas (Eyler & Giles, 1999). Also, that SL contributes to engaged citizenship with the intent of change for both the recipient and the provider of the service (Eyler, 2002). These features differentiate SL from volunteering and WiL as described below.

Volunteering

Three principles underpin volunteering: it is unpaid, uncoerced, and of benefit to others outside of one's family (Volunteering England, 2009). Following a comprehensive literature search on the benefits of volunteering Paylor (2011) concluded that volunteering had a positive impact on volunteers in terms of satisfaction, self-esteem and 'an increased stock of social capital' (p.28). Buckley, McPhee and Jensen (2011) found that university' student participation in festivals enabled students to develop transferable skills for future careers. Other research has found that volunteers derive a sense of purpose and increased feelings of self-esteem and self-confidence (O'Brien, Townsend & Ebden, 2008).

Work-integrated learning

An Australian report on WiL did not attempt to offer a unitary definition of WiL beyond: 'An umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum' (Patrick, Peach, Pocknee, Webb, Fletcher & Pretto, 2008, p.iv). WiL activities are

typically practical placement-based in industry and community contexts that enable students to integrate theoretical knowledge gained through university curricula with informal knowledge gained through the placements (Bates, 2008).

Across a broad range of the literature, there is general consensus that WiL produces benefits for students, such as: job readiness skills and knowledge; teamwork and collaboration skills; higher-order thinking skills; decision□making, interpersonal, and self-management skills towards students becoming adaptable and transformative employees.

Research method

Concurrent mixed-method design (Driscoll, Appiah-Yeboah, Salib & Rupert, 2007) was used to collect and analyse data from a purposive sample of 204 university students from across a range of university disciplines. Creswell and Plano Clark (2007) argue that, in combination, quantitative and qualitative approaches provide a better understanding of research problems than either approach alone.

The research was comprised of two parts. First, an online, post-participation, self-report survey: Q1-12 demographic/academic data; Q13-29 event participation data; and, Q30-35 five learning dimension scales on which respondents were required to respond to 53 statements on a five-point Likert Scale (see Appendix 1: Survey Questions 30-35). Second, semi-structured face-to-face interviews comprised of 30 questions collected respondent' views of their FiFF participation. Qualitative interview data was audio-recorded, transcribed and analysed thematically.

The research participants

Of 204 university students who participated in various FiFF events, 60 (29.4%) valid survey responses were suitable for analysis. Research participants were university students aged 18-56 years of whom six volunteered for face-to-face interviews.

Results and discussion

Quantitative findings

A detailed visual scan of the Likert scale individual responses across the five learning dimensions revealed that all respondent' responses were in the *Increased greatly/Increased/No effect* categories indicative of positive learning. Also, means analysis supported the hypothesis that short-term FiFF volunteer and WiL placements were effective for student' learning across the five learning dimensions of graduate capabilities, employability skills, personal attributes, employment-related characteristics, and, personal characteristics; and, in general terms found consensus with recent research findings of Paylor (2011). Means analysis of the survey results also revealed stronger learning for females N=55 than males N=5 on all five learning dimensions.

Canadian WiL research reported that all forms of work experience provided benefits for students; but, the impact depended on the degree to which the work was related to the student's program of study (Kramer & Usher, 2011). Extrapolating from that report the researcher hypothesised that FiFF students whose participation was assessable for course credit would report stronger learning outcomes than those students not receiving course credit. This hypothesis was confirmed by means analysis comparison; and, found concurrence with the Freudenberg, Brimble, Cameron and English (2011) finding that the impact on students' generic skills development was stronger for students in a WiL program in comparison to students in a non-WIL program.

Further means analysis found that on every learning dimension, respondents who participated in more event/hours reported stronger learning outcomes than students who participated in fewer event/hours. This revealed the not-so-surprising finding that more volunteer/WiL hours, on average, equals increased learning for students. This finding is similar to that of Mabry (1998) who found that students who participated in less than 14 hours of community-service derived less academic benefit that those who served for more than 15 hours.

Means comparison between students with lower or higher qualification levels found stronger learning outcomes for students with lower qualification levels on every learning dimension. This outcome might have been expected since students at higher qualification levels may have already earlier participated in WiL activities and commenced learning dimensions development. This coincides somewhat with the Freudenberg et al. (2011)

observation that students who had completed 12 months of an internship at the start of their third year of a degree may have had improved understandings of their skill base.

Means analysis found no differences in learning outcomes for unpaid placement N-57, paid placements N=1, or the combination of paid and unpaid placements N=2. Last, means analysis revealed that domestic students N=55 reported stronger learning on every learning dimension compared with international students N=5.

Qualitative findings

When questioned about personal and learning gains as a consequence of their festival participation the four female and two male volunteer/WiL participants—four domestic and two international—responded in the following typical ways:

- it reaffirmed my study/career choice (3F)
- it helped me to continue to adapt to the Australian culture (1F)
- my personal and people confidence increased (5F)
- now I've got some experience to put into my resume (2M)
- we had a fun time doing things we'd never done before (1M).

Analysis of the interview data identified the following common themes:

- increased knowledge of working roles
- increased confidence
- cooperation and experience working in teams
- how volunteering made them feel good about themselves
- the importance of the social aspects of volunteering such as meeting and working with other volunteers and festival attendees
- receiving appreciative comments from festival public attendees.

It was interesting to observe that some of respondents did not expand on their learning gains as self-reported in their survey responses but chose to focus on the social aspects of their volunteering. Perhaps this is indicative of their personal reasons for volunteering in the first instance; not so much as a discipline-related learning activity, but rather as a personal socially-oriented activity.

Limitation

Detailed analysis of individual responses to Likert scale statements in the online survey completed by festival volunteer/WiL participants found that some respondents who indicated *Increased greatly* or *Increased* with the first statement of a learning dimension, responded *Increased greatly* or *Increased* with all of the statements in that set. This is indicative of response set bias: "a tendency to respond to questions in a particular way that is unrelated to the content of the questions" (Weiten 2007, p. 59).

Conclusions

The survey and interviews research evidence supported the hypothesis that short-term volunteer and WiL placements are effective for student' learning across the five learning dimensions of graduate capabilities, employability skills, personal attributes, employment-related characteristics, and, personal characteristics. Further, that respondents whose FiFF participation was assessable for course credit reported stronger learning outcomes than those whose FiFF participation was non-assessable for course credit; and, respondents who participated in more event/hours reported stronger learning outcomes than those who participated in fewer event/hours. These findings indicate concurrence with Australian, Canadian and UK research on volunteerism and WiL.

Despite concurrence with the research literature, the findings also revealed three differential learning outcomes not reported elsewhere in the literature as follows. Means analysis on all five learning dimensions found that: 1. females reported stronger learning than males; 2. students with lower qualification levels reported stronger learning outcomes than students with higher qualification levels; and 3. domestic students reported stronger learning compared with international students.

These differential outcomes of volunteering and WiL imply the need for university curriculum designers to consider longer rather than shorter WiL placements; to consider starting WiL placements at lower qualification levels rather than waiting until penultimate or final years of study; also, to consider the provision of additional

preparation and support for males, and international students, prior to and during volunteering and WiL placements.

References

Bates, M. (2008). Work□integrated curricula in university programs. *Higher Education Research and Development, 27*(4), 305□317.

Buckley, N., McPhee, J., & Jensen, E. 2011. *University Engagement in Festivals: Top Tips and Case Studies*, University of Cambridge, vinspired students, and the National Coordinating Centre for Public Engagement.

Creswell, J.W., & Plano Clark, V.L. (2007). *Designing and Conducting Mixed Methods Research.* Thousand Oaks, CA: Sage.

Driscoll, D.L., Appiah-Yeboah, A., Salib, P., & Rupert, D.J. (2007). Merging Qualitative and Quantitative Data in Mixed Methods Research: How to and Why Not. *Ecological and Environmental Anthropology, 3*(1), 19-28.

Eyler, J., & Giles, D.E. Jr (1999). Where's the Learning in Service-Learning? San Francisco: Jossey-Bass.

Eyler, J. (2002). Reflection: Linking Service and Learning—Linking Students and Communities. *Journal of Social Issues, 58*(3), 517–534.

Freudenberg, B., Brimble, M., Cameron, C., & English, D. (2011). Professionalising Accounting Education: The WIL Experience. *Journal of Cooperative Education and Internships, 45*(1), pp. 80-93.

Kramer, M., & Usher, A. (2011). *Work-Integrated Learning and Career-Ready Students: Examining the Evidence.* Toronto: Higher Education Strategy Associates.

Mabry, J.B. (1998). Pedagogical variations in service-learning and student outcomes: How time, contact and reflection matter. *Michigan Journal of Community Service Learning, 5*(1), 32-47.

O'Brien, L., Townsend, M., & Ebden, M. (2008). *'I like to think when I'm gone I will have left this a better place' Environmental volunteering: motivations, barriers and benefits*, Report to the Scottish Forestry Trust and Forestry Commission, Deakin University, Australia.

Patrick, C-j., Peach, D., Pocknee, C., Webb, F., Fletcher, M., Pretto, G. (2008). *The WIL [Work Integrated Learning] report: A national scoping study [Australian Learning and Teaching Council (ALTC) Final report]*. Brisbane: Queensland University of Technology.

Paylor, J. (2011). *Volunteering and health: evidence of impact and implications for policy and practice: a literature review,* Institute for Volunteering Research.

Volunteering England (2009). *Definitions of Volunteering*, Volunteering England Information Sheet, http://www.volunteering.org.uk/images/stories/Volunteering-England/Documents/Free-Information-Sheets/IS---Definitions-of-Volunteering-(VE09).pdf accessed 5 November 2011.

Weiten, W. 2007. *Psychology: Themes and Variations, Seventh Edition.* Belmont, CA: Thomson Learning Inc.

Copyright © 2012 Derek Kosbab

The author assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author.

Appendix 1:
Survey Questions 30-35

30. Please assess the extent to which your employability skills and graduate capabilities and were affected by your Feasting in Footscray participation.

	Increased greatly	Increased	No effect	Decreased	Decreased greatly
problem solve in a range of settings					
locate, critically evaluate, manage and use written, numerical and electronic information					
communicate in a variety of contexts and modes					
work autonomously					
work collaboratively					
work in an environmentally, socially and culturally responsible manner					
manage learning and career development opportunities					
communication					
team work					
problem-solving					
initiative and enterprise					
planning and organising					
self-management					
learning					
technology					

31. Please assess the extent to which your Feasting in Footscray participation assisted you to develop the following attributes.

	Increased greatly	Increased	No effect	Decreased	Decreased greatly
Acquisition of new knowledge					
Application of my existing knowledge					
Integration of my existing knowledge					
Critical thinking skills					
Problem-solving skills					
Interpersonal skills					
Communication skills					
Responsible behaviour to self, others and society					
Teamwork skills					
Leadership skills					
Creativity skills					
Ability and desire for continuous learning					
My understanding of workplace culture					

	Increased greatly	Increased	No effect	Decreased	Decreased greatly
My understanding and application of workplace OH&S					
My ability to make effective contributions in the workplace					

32. Please assess the extent to which your Feasting in Footscray participation affected the following.

	Increased greatly	Increased	No effect	Decreased	Decreased greatly
My understanding and application of classroom-learned theories					
My technical knowledge related to my field of study					
My academic motivation					

33. Please assess the extent to which your Feasting in Footscray participation affected the following employment-related characteristics.

	Increased greatly	Increased	No effect	Decreased	Decreased greatly
My abilities to identify, assess and develop my workplace skills and personal competencies					
My abilities to write an effective cover letter and resume					
My abilities to effectively interview for an employment position					
My abilities to further my career planning					
Contribute to post-graduation employment					

34. Please assess the extent to which your Feasting in Footscray participation affected the following personal characteristics.

	Increased greatly	Increased	No effect	Decreased	Decreased greatly
Personal pride in what I accomplished during my volunteering					
Increased community awareness					
Better understanding of the points of view of others					
More organised					
Increased self-esteem					
Make friends more easily					
Better at forming my own opinions					
Skills development through hands-on experience					

35. Please respond to the following statements about your Feasting in Footscray participation

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I enjoyed being part of Feasting in Footscray					
Feasting in Footscray was a valuable learning experience for me					
Feasting in Footscray participation has improved my understanding of working in the industry related to my course at VU					
Feasting in Footscray participation has confirmed my decisions about my course and future career path					

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Feasting in Footscray participation has made me change my mind about my course and future career path					
Feasting in Footscray participation has helped me to better understand my course and subjects					
Feasting in Footscray has assisted me to better understand the organisation I participated with					

Incorporating career development learning in a business work integrated learning framework

Raymond Leong
School of Accounting, Economics & Financ,University of Southern Queensland

Abstract

Over the last decade, our ways of life have been dramatically altered by the effects of globalisation and increased geographical mobility. The concept of a job for life is now irrelevant. It is vital in an increasingly competitive labour market that university students graduate with all the qualities necessary to gain and retain fulfilling employment.

Developing employability skills for graduates is an issue not only in relation to the first job students may obtain after graduation but is also important at future points of career progression. Students should position themselves in relation to future work and what they perceive to be appropriate and meaningful courses of future action to stay employable. To achieve this, program curricula must develop learning, teaching and assessment practices to encourage employability development. This process can be facilitated through career development education.

This paper proposes incorporating Career Development Learning in an early stage of a business faculty's Work Integrated Learning Framework to prepare students on their career management journey and effectively develop essential career development and employability skills and attributes. It supports the development of university business graduates who can respond to changing economic circumstances making them more employable and adaptable at the workplace.

Keywords: Work Integrated Learning, Career Development, Employability, Lifelong Learning

Introduction

Over the last decade, our ways of life have been dramatically altered by factors such as globalisation, the rapid advances in information technology and significant demographic shifts (Miles Morgan Australia, 2010). The concept of a 'job for life' is no longer relevant. Most individuals will change jobs numerous times throughout their working lives. There has also been a trend away from permanent employment to contract/project/casual work. Now, both the individual and the labour market are subject to constant variation and transitioning from one work situation to another is common (Miles Morgan Australia, 2010).

It is vital in an increasingly competitive labour market, that students are equipped with all the qualities necessary to gain and retain fulfilling employment. To achieve this, course curricula must develop learning, teaching and assessment practices to encourage employability development to take place alongside developments in discipline specialisations (Pegg, Waldock, Hendy-Isaac, & Lawton, 2012).

One of the generic skills of concern is employability skills which relates to knowledge of the relevant profession, the ability to interact with the profession and seek a career (Freudenberg, Brimble, & Cameron, 2009). Developing employability skills for graduates is an issue for the higher education sector, not only in relation to the first job students may gain after their studies, but also important for graduate prospects at future points of career development or change (Pegg, et al., 2012). Students should position themselves in relation to

future work and what they perceive to be appropriate and meaningful courses of future action (Tomlinson, 2007). This can be facilitated through career education.

Career education refers to the development of knowledge, skills and attitudes through a planned program of learning experiences in education and training settings which will assist students to make informed decisions about their study and/or work options and enable effective participation in working life" (Career Industry Council of Australia, 2006). Within the Australian context (McCowan & MacKenzie, 1997; Patton & McMahon, 2001), career education aims to assist students to develop knowledge and understanding of themselves e.g. strengths, abilities, skills; develop knowledge and understanding of the range of career opportunities available; learn how to make considered choices and plan options and effectively manage the implementation of the considered choices in adult life and work life.

A career can be defined as "a lifestyle that involves the sequence of work, learning and leisure activities through a lifetime. Careers are unique to each person and are dynamic throughout life (Career Industry Council of Australia, 2006). Career Development Learning (CDL) relates to learning about the content and process of career development of life. The content of CDL represents learning about self and learning about the world of work. Process learning represents the development of the skills necessary to navigate a successful and satisfying life/career" (McMahon, Patton, & Tatham, 2003). CDL includes employability skills – skills, knowledge and attributes required in the world-of-work (Smith et al., 2009).

This paper proposes incorporating Career Development Learning in the early stages of a Business Work Integrated Learning Framework to effectively develop essential career development and employability skills and attributes. In the next section, relevant literature is discussed. Next, a discussion of the theoretical backing and pedagogical aspects details of CDL in the WIL framework is made. A brief conclusion will sum up this paper.

Literature Review

Career Development Learning and Work Integrated Learning

Work Integrated Learning (WIL) is a range of work-related activities and experiences built into a student's study program. Reeders (2000) defined WIL as "student learning for credit designed to occur either in the workplace or within a campus setting that emulates aspects of the workplace". WIL is a vehicle for developing essential graduate attributes are the qualities, skills and understandings that a university community agrees all its graduates should develop as a result of successfully completing their university studies.

WIL can be subsumed under and serve as a practical vehicle for the broader notion of Career Development Learning (CDL). McCowan and McKenzie (1997) argued that career education should be integrated with the curriculum rather than added as an extraneous service with its delivery shared by various parties and not simply by specialist groups.

CDL is a lifelong process of managing learning, work and transitions in order to move towards a personally determined and evolving future for the individual and society (Smith, et al., 2009). The process of CDL may be considered as cyclical stages, with a person progressively moving through each, generating an understanding of themselves at different points in time and finding solutions to career-related problems or challenges. It involves awareness of the many different lifespan roles and stages which require active involvement by individuals in decisions related to ongoing life transitions (Smith, et al., 2009).

Career management is essential to enhance chances of employability. This involves an intentional management of work, learning and other aspects of life through reflective, evaluative and decision making processes. It incorporates career building skills and self-management skills through acquisition, display and use of discipline specific skills and generic skills. Career building skills refer to skills relating to finding and using information about careers, labour markets and the world of work and then locating, securing and maintaining work as well as exploiting career opportunities to gain advancement or other desired outcomes. Self- management skills relate to the individual's perception and appraisal of themselves in terms of values, abilities, interests and goals (Bridgstock, 2009).

Employability is taken as a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations which benefits themselves, the workforce, the community and the economy (Yorke, 2006). The four critical pillars in the

USEM model of Employability (Knight & Yorke, 2003) comprises Understanding (of subject), Skills, Efficacy - beliefs, self-theories, personal qualities and Meta-cognition encompassing self-awareness.

According to Watts (2008), CDL address the key issues of directionality and sustainability in relation to employability and enterprise. Directionality is important because while some of the competencies are generic, others are linked more closely to some career pathways than to others. Sustainability is even more important because without it, employability tends to be narrowly defined as 'work-readiness'. It is CDL that transforms it into a focus on lifelong employability.

CDL takes a holistic approach in learning where it places the learner at the centre and focus to developing employability, which encompasses the value of learning in higher education as enabling and creative (Pegg, et al., 2012). CDL supports quality student centred learning opportunities across all aspects of students' lives. CDL is intrinsically student-oriented, entailing active student engagement. It is also critical that students be involved in the process of planning their learning experiences and participate in the selection and management of their WIL (Smith, et al., 2009). CDL is focused upon student learning plans and needs and it entails reflection upon learning undertaken in relation to those plans and needs. Including CDL activities in WIL can enhance its capacity for reflective learning (Smith, et al., 2009).

Theoretical Framework and Pedagogies

The field of career development is characterised by a variable and complex theoretical base. Three relevant contributions are listed and briefly described.

The Australian Blueprint for Career Development (ABCD) is a framework that can be used to design, implement and evaluate career development programs for young people and adults. The ABCD represents a significant policy outcome towards a national framework for lifelong career development. At its core, the Blueprint identifies the skills, attitudes and knowledge that individuals need to make sound choices and to effectively manage their careers (Miles Morgan Australia, 2010).

The Blueprint identifies eleven career management competencies that all Australians need to develop in order to manage life, learning and work. The blueprint also specifies competencies at different developmental stages of life. These are grouped into three areas: personal management, learning and work exploration and career building.

Personal management activities relates to the skills and self-knowledge, the types of work most suited to certain abilities, skills, talents and personal attributes like communications. Learning work exploration activities include knowing how to locate, interpret, evaluate and use career information and having knowledge of the world of work, society and the economy and understanding the interplay between each of these factors. Career building activities involve being able to identify work opportunities, secure/create and maintain a position in the workforce, having the ability to consider external factors in decision-making processes and improve career prospects, being able to balance work and personal life and managing a career to achieve specific goals (Miles Morgan Australia, 2010).

The Systems Theory Framework (STF) is construed as an overarching framework within which all concepts of career development described in the plethora of career theories can be usefully positioned and utilised in theory and practice (McMahon, 2002; McMahon & Patton, 1995; Patton & McMahon, 2006). A system is defined as a whole that functions as a whole by virtue of the interdependence of its parts (Kraus, 1989). Thus in terms of career development, an individual and his/her context would be regarded as a whole, and the reciprocity between an individual and his/her context would be regarded as the interdependence of its parts.

The centre of the STF is a circle representing the individual. The circle contains a range of intrapersonal influences on career development relevant to all individuals, yet different for each (McMahon & Patton, 1995). The path of career development needs to be considered in relation to contextual influences emanating from the past, such as family of origin and life experience and present influences such as stage of life and family life cycle. Future considerations such as anticipated lifestyle and employment market trends may also influence the career development of an individual (McMahon & Patton, 1995).

The STF is relevant for conceptualising work integrated learning through career development. Firstly, the centre of the STF highlights the range of personal factors which make up an individual's career and work integrated learning is influenced by or it influences those personal factors. Work integrated learning is not just

about developing skills – it can be a transformative pedagogy which entails a wider range of personal development and experiential learning (Smith, et al., 2009).

A conceptual framework developed in the United Kingdom which integrates the world-of-work, self-reflection and transferability across settings is the DOTS framework (Watts, 2006). The DOTS model consists of planned experiences designed to facilitate the development of Decision learning – decision making skills, Opportunity awareness – knowing what work opportunities exist and what their requirements are, Transition learning – including job searching and self-presenting skills and Self-awareness – in terms of interests, abilities, values etc.

Career Development in the university's WIL Framework

A comprehensive approach to formulating and delivering career development learning and work integrated learning should take into account if and how broader life and contextual factors impinge upon a student's experience and learning journey (Smith, et al., 2009). A contemporary approach to developing university students' and graduates' careers requires a theoretical framework that captures the complexity of the current world-of-work (McMahon, et al., 2003).

An Australian university aims to address the elements in the studies above and at the same time incorporating aspects of the ABCD, STF and DOTS frameworks by introducing Career Development Learning in a core course in the Business WIL Framework in semester 1 of 2012. The motivation is to use career development learning as the overarching term pertaining to deliberate activities that go toward the improvement of an individual's career including securing effective transformations from higher education into work life beyond university.

All the university's undergraduate business students have the opportunity to experience WIL as part of their learning. There are four types of WIL available to them in the WIL Framework (O'Shea, 2008). The Business WIL Framework is an adaptation of the generic WIL Framework and is depicted in Figure 1.

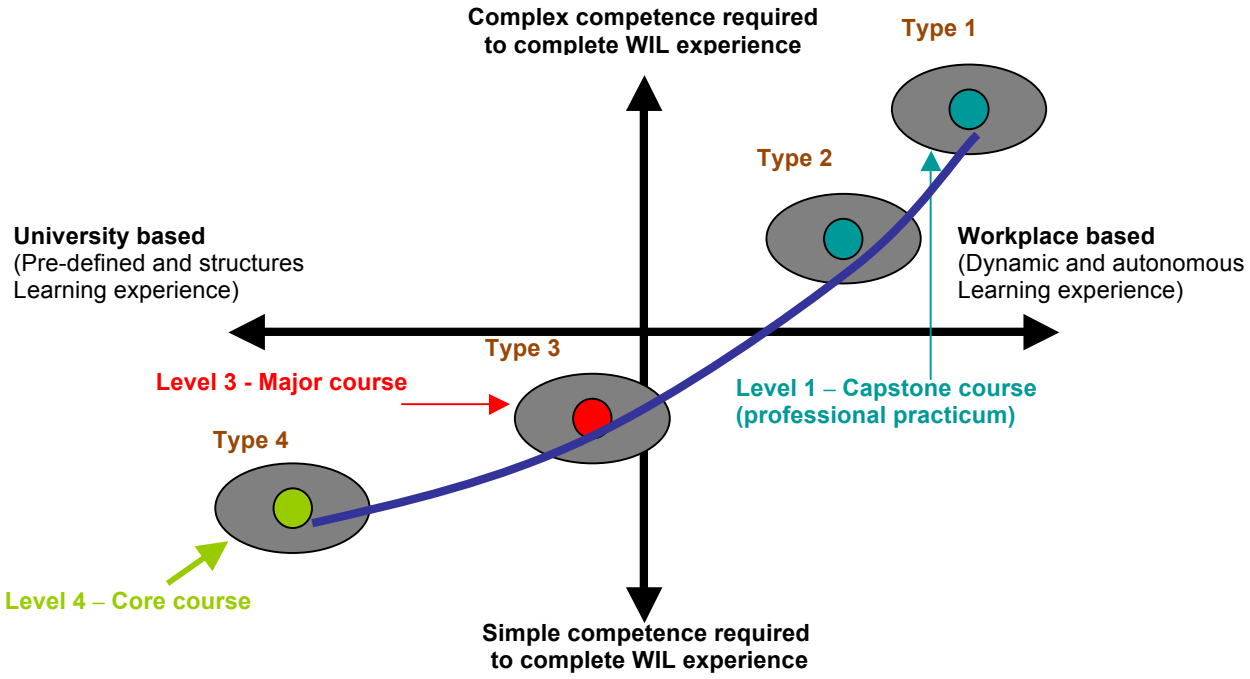


Figure 1: Business WIL Framework

The Business WIL Framework explicitly embeds skills development in three separate courses. These are in a core course in the first year, a major course in the second year and culminating in a capstone course Work

Integrated Learning in the final year. This Framework supports the development of business students' self-efficacy through CDL in WIL programs.

Self-efficacy is a central concept in social cognitive theory where it is defined as "beliefs in one's capabilities to organise and execute the courses of action required to produce given attainments (Bandura, 1997). The level of an individual's self-efficacy is seen to be an important determinant of how well the individual copes with learning and performing at the workplace. Perceived self-efficacy refers to beliefs in one's capabilities to organise and execute the course of action required to manage prospective situations. Efficacy beliefs influence how people think, feel, motivate themselves and act (Bandura, 1995).

Students tailor their study programs to meet the expectations of employers in the job market (career management) (Hancock, Howieson, Kavanagh, Kent, & Tempone, 2009). They take responsibility for reviewing or assessing their own employability skills, addressing gaps and then pursuing appropriate ways to report or present relevant information about their skills to prospective employers when seeking employment (BIHECC, 2007; Pool & Sewell, 2007). However, unless students are proactive and these skills development activities are compulsory and assessed, any CDL and WIL integration efforts will not realise full potential.

CDL based on the DOTS model should include activities that help students to become more self-aware, to enable them to give real consideration to the things that they enjoy doing, are interested in, to motivate them and suit their personalities (Pool & Sewell, 2007). It is introduced in a core course, Accounting for Decision Making in the first year to raise business students' awareness of employability and how to self-manage their studies and extra-curricular activities to maximise the employability. This approach is undertaken through curriculum-integrated strategies in which career development learning is an explicit vehicle for course-level learning outcomes (Smith, et al., 2009). These are tailored career and work-related tasks and events designed, delivered and supervised by the university and form the start of a student's career management process.

In semester 1 of 2012, students were asked to write an 800-word personal reflection journal (10% weight) on one of the recorded 1-hour campus presentations on 'Career Development and Employability' provided on the course homepage. The presentations involved the university's Careers and Employment staff in collaboration with the ore course academic staff at three geographically dispersed campuses. The Assessment required on-campus students to attend and listen to a guest presentation on Career development/management at their campus and write their reflection journal on their campus presentation. For External students, students had to listen to any or all of the recordings and choose one presentation to write their journal.

On the completion of this assessment, students were assessed on their ability to meet the requirements of the assessment and achieve pre-determined course objectives. These are:

- understanding the need for career development building/management
- understanding how effective career building can improve employability
- knowing the university's graduate qualities
- understanding what is reflective practice
- applying common models of reflective practice and
- writing reflective journals to demonstrate learning

In line with the university's practice of teaching, practice and assessment, additional resources were provided to assist students in their assessment. A recorded Power Point file on career development and reflection was made available as a teaching resource. Two additional readings on career development/management and reflection practices were also provided. Students were also given a practice recording for self-reflection with suggested pointers on coverage and scope. A marking rubric was also provided as a reference to students. Marks were awarded for description of the event, identification of employability skills required, emotional response, self-analysis, learning with changed actions and referencing.

Conclusion

The Business faculty's WIL Framework developed by incorporating CDL has concentrated on offering an opportunity to students to develop career development skills to enhance their future employability. By utilising CDL to connect workplace skills required and academic experiences, students develop a greater understanding of themselves, understand the employment opportunities available and prepare their transition strategies to employment or further study (Smith, et al., 2009).
Through initial reflection journal writing, personal development tools and careers advice are used to assist students in making connections between their career intentions and their learning, working, co-curricular and

extra-curricular activities. This approach connects labour market opportunities, personal development and aspirations, skills development, career management and learning support and informs students about the possibilities that exist for them in the working world (Pegg, et al., 2012).

Employability is not just about getting a job. It is about developing attributes, techniques and experience to enable a student to get a job and to progress within a chosen career with a long term and sustainability viewpoint. It is about learning and the emphasis is less on 'employ' and more on 'ability'. The emphasis is on developing critical, reflective abilities with a view to empowering and enhancing the learner (Harvey, 2003).
A graduate's potential career path may not be linear and straightforward. The path of career development is one of constant evolution and may be cyclical (McMahon & Patton, 1995) which requires the graduate to constantly manage his/her career in view of societal uncertainties to stay relevant and employable.

References

Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Ed.), *Self-Efficacy in Changing Societies* (pp. 1-45). Cambridge: Cambridge University Press.

Bandura, A. (1997). *Self efficacy: The exercise of control*. New York: WH Freeman.

BIHECC. (2007). *Graduate Employability Skills*: Business, Industry and Higher Education Collaboration Council.

Bridgstock, R. (2009). The graduate attributes we've overlooked: enhancing graduate employability through career management skills. *Higher Education Research & Development, 28*(1), 31-44.

Career Industry Council of Australia. (2006). *Professional standards for Australian career development practitioners*.

Freudenberg, B., Brimble, M., & Cameron, C. (2009). The Building of a Professional: Creating Greater Career Identity within a Degree. *The International Journal of Learning, 16*(10), 253-266.

Hancock, P., Howieson, B., Kavanagh, M., Kent, J., & Tempone, I. (2009). *Stakeholders' Perspectives of the Skills and Attributes for Accounting Graduates*. Paper presented at the 2009 AFAANZ Conference.

Harvey, L. (2003). Transitions from Higher Education to Work: A briefing paper.

Knight, P., & Yorke, M. (2003). Employability and Good Learning in Higher Education. *Teaching in Higher Education, 8*(1), 3-16.

Kraus, M. A. (1989). Beyond homeostasis: Toward understanding human systems. *Gestalt Review, 3*, 6-10.

McCowan, C., & MacKenzie, M. (1997). *The guide to career education. For careers personnel working in Australian schools and colleges.* North Sydney: New Hobsons Press.

McMahon, M. (2002). The Systems Theory Framework of Career Development: History and future directions. *Australian Journal of Career Development, 11*(3), 63-68.

McMahon, M., & Patton, W. (1995). Development of a Systems Theory of Career Development: a brief overview. *Australian Journal of Career Development, 4*(2), 15-20.

McMahon, M., Patton, W., & Tatham, P. (2003). *Managing life learning and work in the 21st Century*. Subiaco: Miles Morgan.

Miles Morgan Australia. (2010). *Australian Blueprint for Career Development*: Ministerial Council for Education; Early Childhood Development and Youth Affairs,.

O'Shea, A. (2008). A Developmental Approach to Work Integrated Learning. Unpublished Unpublished manuscript. University of Southern Queensland.

Patton, W., & McMahon, M. (2001). Implementing career development learning programs. In W. P. M. McMahon (Ed.), *Career development programs, Preparation for lifelong career decision making.* (pp. 10-21). Melbourne ACER Press.

Patton, W., & McMahon, M. (2006). The Systems Theory Framework of Career Development and Counselling: Connecting Theory and Practice *International Journal for the Advancement of Counselling, 28*(2), 153-166.

Pegg, A., Waldock, J., Hendy-Isaac, S., & Lawton, R. (2012). *Pedagogy for Employability*. York.

Pool, L. D., & Sewell, P. (2007). The key to employability: developing a practical model of graduate employability. *Education + Training, 49*(4), 277-289.

Reeders, E. (2000). Scholarly practice in Work-based Learning: Fitting the glass slipper. *Higher Education Research & Development, 19*(2), 205-220.

Smith, Brooks, S., Lichtenberg, A., Mcllveen, P., Torjul, P., & Tyler, J. (2009). *Career Development Learning: Maximising the contribution of work-integrated learning to the student experience. Final Project Report June 2009*: Australian Learning & Teaching Council, National Association of Graduate Careers Advisory Services.

Tomlinson, M. (2007). Graduate Employability and student attitudes and oreintations to the labour market. *Journal of Education and Work, 20*(4), 285-304.

Watts, A. G. (2006). *Career Development Learning and Employability*: The Higher Education Academy.

Watts, A. G. (2008). *Career development learning and work integrated learning: A conceptual perspective from the UK*. Paper presented at the National Symposium on Career Development Learning: Maximising the Contribution of Work-integrated Learning (WIL) to the Student Experience.

Yorke, M. (2006). *Employability in higher education: what it is - what it is not*. York: The Higher Education Academy.

Copyright © 2012 Raymond Leong

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

An assessment rubric on reflection in a career development learning component of a business course

Raymond Leong
School of Accounting, Economics & Finance
University of Southern Queensland

Abstract

It is vital in an increasingly competitive labour market, that students are equipped with all the qualities necessary to gain and retain fulfilling employment. One of the generic skills of concern is employability skills which relates to knowledge of the relevant profession, the ability to interact with the profession and seek a career. Students should position themselves in relation to future work and what they perceive to be appropriate and meaningful courses of future action. This can be facilitated through career development learning activities as part of Work Integrated Learning.

Career development learning aims to assist students to develop knowledge and understanding of themselves e.g. strengths, abilities, skills; develop knowledge and understanding of the range of career opportunities available; learn how to make considered choices and plan options and effectively manage the implementation of the considered choices in adult life and work life. This can be done through reflection.

This paper proposes the use of an assessment rubric in assessing reflection in a career development component of a business course.

Keywords: Work Integrated Learning, Career Development, Assessment, Lifelong Learning

Introduction

It is vital in an increasingly competitive labour market, that students are equipped with all the qualities necessary to gain and retain fulfilling employment. To achieve this, course curricula must develop learning, teaching and assessment practices to encourage employability development to take place alongside developments in discipline specialisations (Pegg, Waldock, Hendy-Isaac, & Lawton, 2012).

One of the generic skills of concern is employability skills which relates to knowledge of the relevant profession, the ability to interact with the profession and seek a career (Freudenberg, Brimble, & Cameron, 2009). Developing employability skills for graduates is an issue for the higher education sector, not only in relation to the first job students may gain after their studies, but also important for graduate prospects at future points of career development or change (Pegg, et al., 2012). Students should position themselves in relation to future work and what they perceive to be appropriate and meaningful courses of future action (Tomlinson, 2007). This can be facilitated through career education.

Within the Australian context (McCowan & MacKenzie, 1997; Patton & McMahon, 2001), career development learning aims to assist students to develop knowledge and understanding of themselves e.g. strengths, abilities, skills; develop knowledge and understanding of the range of career opportunities available; learn how to make considered choices and plan options and effectively manage the implementation of the considered choices in adult life and work life. This can be done through reflection.

Reflection can generally be defined as a cognitive process carried out in order to learn from experiences (Moon, 2004b) through individual inquiry and collaboration with others (Dewey, 1933). The focus of reflection can vary from a concrete technical aspect of an experience to the broader societal context of that experience, and the quality of reflection can be described through successive stages of augmentation: describing, justifying, evaluating and discussion (Leijen, Valtna, Leijen, & Pedaste, 2012).

This paper proposes the use of an assessment rubric in assessing reflection in a career development component of a business course. In the next section, relevant literature is discussed. A discussion on learning, reflection and assessment will follow. Future research on levels of reflection will be followed with a conclusion.

Literature Review

Career Development Learning and Work Integrated Learning

Work Integrated Learning (WIL) is a range of work-related activities and experiences built into a student's study program. Reeders (2000) defined WIL as "student learning for credit designed to occur either in the workplace or within a campus setting that emulates aspects of the workplace". WIL is a vehicle for developing essential graduate attributes are the qualities, skills and understandings that a university community agrees all its graduates should develop as a result of successfully completing their university studies.

WIL can be subsumed under and serve as a practical vehicle for the broader notion of Career Development Learning (CDL). McCowan and McKenzie (1997) argued that career education should be integrated with the curriculum rather than added as an extraneous service with its delivery shared by various parties and not simply by specialist groups.

CDL is a lifelong process of managing learning, work and transitions in order to move towards a personally determined and evolving future for the individual and society (Smith et al., 2009). The process of CDL may be considered as cyclical stages, with a person progressively moving through each, generating an understanding of themselves at different points in time and finding solutions to career-related problems or challenges. It involves awareness of the many different lifespan roles and stages which require active involvement by individuals in decisions related to ongoing life transitions (Smith, et al., 2009).

Employability is taken as a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations which benefits themselves, the workforce, the community and the economy (Yorke, 2006). The four critical pillars in the USEM model of Employability (Knight & Yorke, 2003) comprises Understanding (of subject), Skills, Efficacy - beliefs, self-theories, personal qualities and Meta-cognition encompassing self-awareness.

CDL takes a holistic approach in learning where it places the learner at the centre and focus to developing employability, which encompasses the value of learning in higher education as enabling and creative (Pegg, et al., 2012). CDL supports quality student centred learning opportunities across all aspects of students' lives. CDL is intrinsically student-oriented, entailing active student engagement. It is also critical that students be involved in the process of planning their learning experiences and participate in the selection and management of their WIL (Smith, et al., 2009). CDL is focused upon student learning plans and needs and it entails reflection upon learning undertaken in relation to those plans and needs. Including CDL activities in WIL can enhance its capacity for reflective learning (Smith, et al., 2009).

Learning and assessment

The notion of approaches to learning was developed by (Biggs, 1987). The level of learning may be classified into deep learning and surface learning. A deep approach is characterised by a desire to understand the underlying principles and favourable perceptions of the learning context and is associated with deep approaches to learning (Jackling, 2005a, 2005b; Lucas, 2001). The deep approach is indicative of a wider awareness that goes beyond the established parameters to find meaning by testing theories developed in range of different situations (Tempone & Martin, 2003). Reflection as a process leads to deeper learning (Moon, 2004b)

The following are some salient outcomes of reflective processes:

- Learning and material for further reflection
- Action
- Critical review
- Personal and continuing professional development
- Reflection on the process of learning or personal functioning (metacognition)
- Empowerment and emancipation
- Emotional development

(Moon, 1999)

Reflection is important in employability at least the following ways:

- As the means for students to gain, maintain awareness of, express and explore their abilities in general, and particularly in recruitment processes
- Preparation for lifelong learning

- As an aspect of good quality (meaningful learning)
  (Moon, 2004a)

Personal development planning (PDP) activities can aid the development of a link between reflection on personal progress and the program curriculum, encouraging greater awareness of how different aspects of learning develop relate to each other and how learning experiences contribute to employability (Moon, 2004a).

Rowntree (1977) defined assessment as "about getting to know students and the quality of their learning". Ecclestone (2003) subsequently expanded on this definition by including diagnosis, feedback, selection and recruitment, certification of achievements, quality control, motivation and life-long planning as additional purposes of assessment. Good curriculum design will embed generic capabilities into learning outcomes across the curriculum. There needs to be constructive alignment between learning outcomes and learning activities, assessment tasks and the criteria used to evaluate assessments (Biggs, 2003). Wood et al. (2009) states that embedding generic skills means assessing these skills.

Assessment in higher education has an important role to play in aligning assessment not only with immediate learning requirements but also with the longer-term to foster post-graduation learning, contributing to lifelong learning (D. Boud & Falchikov, 2006). A short term focus in assessment must be balanced against a longer-term emphasis for learning-oriented assessment to foster future learning after graduation. It was suggested that current assessment practices did not prepare students for lifelong learning and that assessment practices should help to equip students for their own lifelong learning needs after graduation to be sustainable (David Boud & Solomon, 2001). These assessment practices should promote skills needed for lifelong learning.

According to Boud & Falchikov (2006), eight points need to be considered to make assessment practices more sustainable. Amongst these are a shift in focus of assessment to measurement of learning rather than performance, assessment to incorporate elements of self-assessment, encouragement of reflection in learning and feedback on assessment tasks are internalised for further learning.

Career Development in a university's WIL Framework

All of a university's undergraduate business students have the opportunity to experience WIL as part of their learning. There are four types of WIL available to them in the WIL Framework (O'Shea, 2008). The Business WIL Framework is an adaptation of the generic WIL Framework and is depicted in Figure 1.

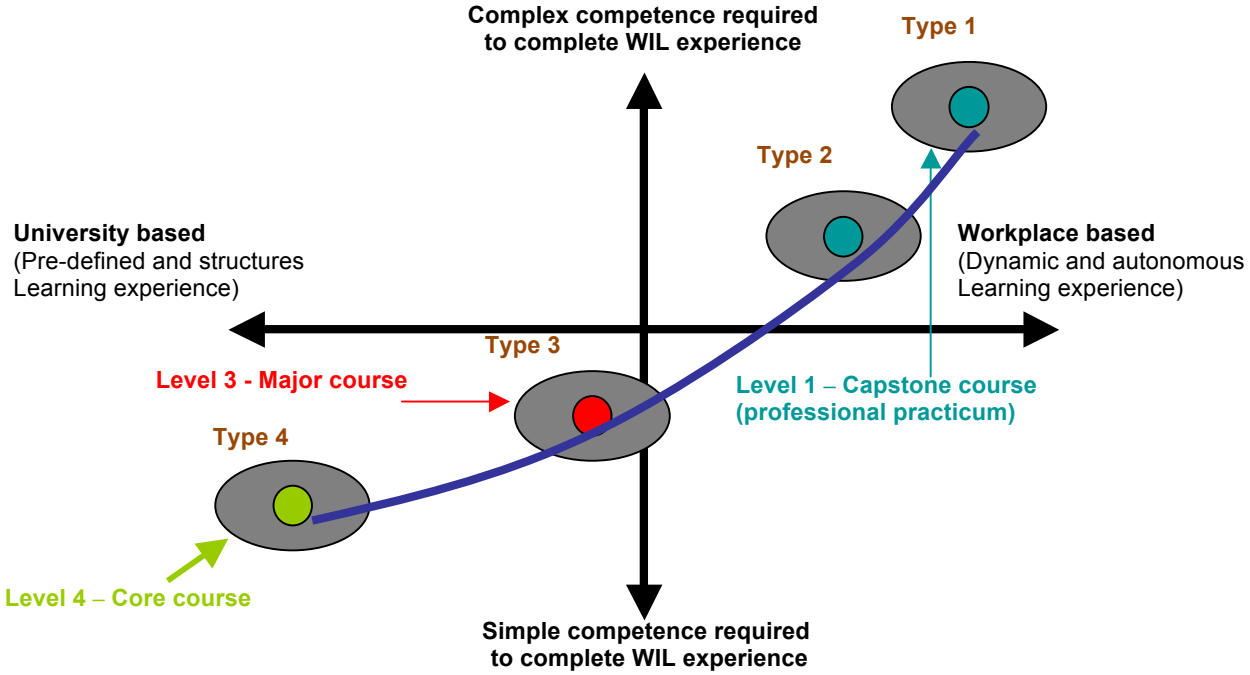


Figure 1: Business WIL Framework

The Business WIL Framework explicitly embeds skills development in three separate courses. These are in a core course in the first year, a major course in the second year and culminating in a capstone course Work

Integrated Learning in the final year. This Framework supports the development of business students' self-efficacy through CDL in WIL programs.

Self-efficacy is a central concept in social cognitive theory where it is defined as "beliefs in one's capabilities to organise and execute the courses of action required to produce given attainments (Bandura, 1997). The level of an individual's self-efficacy is seen to be an important determinant of how well the individual copes with learning and performing at the workplace. Perceived self-efficacy refers to beliefs in one's capabilities to organise and execute the course of action required to manage prospective situations. Efficacy beliefs influence how people think, feel, motivate themselves and act (Bandura, 1995).

Students tailor their study programs to meet the expectations of employers in the job market (career management) (Hancock, Howieson, Kavanagh, Kent, & Tempone, 2009). They take responsibility for reviewing or assessing their own employability skills, addressing gaps and then pursuing appropriate ways to report or present relevant information about their skills to prospective employers when seeking employment (BIHECC, 2007; Pool & Sewell, 2007). However, unless students are proactive and these skills development activities are compulsory and assessed, any CDL and WIL integration efforts will not realise full potential.

CDL should include activities that help students to become more self-aware, to enable them to give real consideration to the things that they enjoy doing, are interested in, to motivate them and suit their personalities (Pool & Sewell, 2007). It is introduced in a core course, Accounting for Decision Making in the first year to raise business students' awareness of employability and how to self-manage their studies and extra-curricular activities to maximise the employability. This approach is undertaken through curriculum-integrated strategies in which career development learning is an explicit vehicle for course-level learning outcomes (Smith, et al., 2009). These are tailored career and work-related tasks and events designed, delivered and supervised by the university and form the start of a student's career management process.

Assessment of reflection

In semester 1 of 2012, students were asked to write an 800-word personal reflection journal (10% weight) on one of the recorded 1-hour campus presentations on 'Career Development and Employability' provided on the course homepage. The presentations involved the university's Careers and Employment staff in collaboration with the ore course academic staff at three geographically dispersed campuses. The Assessment required on-campus students to attend and listen to a guest presentation on Career development/management at their campus and write their reflection journal on their campus presentation. For External students, students had to listen to any or all of the recordings and choose one presentation to write their journal.

On the completion of this assessment, students were assessed on their ability to meet the requirements of the assessment and achieve pre-determined course objectives. These are:

- understanding the need for career development building/management
- understanding how effective career building can improve employability
- knowing the university's graduate qualities
- understanding what is reflective practice
- applying common models of reflective practice and
- writing reflective journals to demonstrate learning

In line with the university's practice of teaching, practice and assessment, additional resources were provided to assist students in their assessment. A recorded Power Point file on career development and reflection was made available as a teaching resource. Two additional readings on career development/management and reflection practices were also provided. Students were also given a practice recording for self-reflection with suggested pointers on coverage and scope. An assessment rubric developed by the author (see Table 1) was also provided as a reference to students. Marks were awarded for description of the event, identification of employability skills required, emotional response, self-analysis, learning with changed actions and referencing.

An assessment rubric is an assessment or scoring tool commonly found in a matrix or grid format and is an example of a criterion-referenced assessment. It is a tool that guides the assessment and evaluation of the quality of students' assessment products., processes or performance (Brookhart, 1999; Pophman, 1997).

A criterion-referenced assessment evaluates students' assignments against criteria, defined as desirable qualities or dimensions of a student's performance. The assessment rubric is an excellent communication tool that explains and exemplifies explicitly performance standards to help students internalise disciplinary or

professional understandings of excellence and to begin evaluating their own individual performance against them. It assists learning: using criteria and standards making explicit to students the disciplinary understanding and skills they are expected to demonstrate in an assignment. An assessment rubric grades students according to explicit criteria and standards. It encourages all students to strive for high standards because there is no predetermined grade distribution.

An assessment rubric also enhances assessor accountability. Descriptive qualities and standards allow markers to make transparent and defensible moderation decisions about which grade level should be awarded. Subsequent feedback focusing explicitly on the criteria identifies specific points for commendation or improvement. Empirical evidence indicates that marking rubrics increase the consistency of scoring among markers, support student learning and improve teaching (Jonsson & Svingby, 2007).

As in most assessment rubrics, the university's rubric (see Table 1) has the following three components: criterion, grade or performance scale and performance descriptor. The criterion provides details of the qualities or components of the tasks against which students will be assessed. The grade or performance scale is a scale that shows the students how they have performed for each criterion ranging from poor to excellent. The performance indicator describes the performance of the criterion for each grade or performance level.

Table 1: Career Development/Reflection Assessment Rubric

Criteria (mark)/Grade	**HD**	**A**	**B**	**C**	**F+**	**F**
Brief description of event (1.0)	Full details of presenter, topic title, location, dates/times and other important details of event (1.0)	Critical details of presenter, topic title, location, dates/times and other details of event (0.8)	Important details of presenter, topic title, location, dates/times of event (0.65)	Some details of presenter, topic title, location, dates/times of event (0.5)	Insufficient details of presenter, topic title, location, dates/times of event (0.25)	No details of presenter, topic title, location, dates/times of event (0.0)
Identification and description of skills/attributes enhancing graduate employability (2.5)	Identification with excellent description of critical skills and attributes enhancing graduate employability (2.5)	Identification with very good description of critical skills and attributes enhancing graduate employability (2.0)	Identification with good description of most skills and attributes enhancing graduate employability (1.75)	Identification with description of some skills and attributes enhancing graduate employability (1.25)	Identification with some but insufficient description of skills and attributes enhancing graduate employability (0.75)	No identification and description of skills and attributes enhancing graduate employability (0.0)
Emotional response (personal thoughts etc.)(1.5)	Excellent expression of thoughts and personal feelings on the presentation content using extensive vocabulary (1.5)	Very good expression of thoughts and personal feelings on the presentation content (1.25)	Good expression of thoughts and personal feelings on the presentation content (1.0)	Some expression of thoughts and personal feelings on the presentation content (0.75)	Scant expression of thoughts and personal feelings on the presentation content (0.4)	No expression of thoughts and personal feelings on the presentation content (0.0)
Analysis (through personal reflection and course readings) (2.0)	Excellent analysis and reflection of current personal skill set with good reference to the presentation contents and career development readings (2.0)	Very good analysis and reflection of current personal skill set with reference to the presentation contents and career development readings (1.6)	Good analysis and reflection of current personal skill set with reference to the presentation contents and career development readings (1.3)	Some analysis and reflection of current personal skill set with some reference to the presentation contents and career development readings (1.0)	Scant analysis and reflection of current personal skill set with little reference to the presentation contents and career development readings (0.5)	No analysis and reflection of current personal skill set with no reference to the presentation contents and career development readings (0.0)
Learning and changed actions (2.5)	Excellent description of lessons learnt from the presentation with detailed personal courses of action elaborated to improve personal employability prospects (2.5)	Very good description of lessons learnt from the presentation with personal courses of action elaborated to improve personal employability prospects (2.0)	Good description of lessons learnt from the presentation with mention of personal courses of action to improve personal employability prospects (1.75)	Some description of lessons learnt from the presentation with some mention of personal courses of action to improve personal employability prospects (1.25)	Scant description of lessons learnt from the presentation with inadequate mention of personal courses of action to improve personal employability prospects (0.75)	No description of lessons learnt from the presentation with no mention of personal courses of action to improve personal employability prospects (0.0)

References (0.5)	Several high quality references using Harvard referencing style (0.5)	Several high quality references but not properly referenced (0.4)	Minimal references using Harvard referencing style (0.35)	Minimal references but not properly referenced (0.25)	One reference provided (0.15)	No references provided (0.0)

Future research

Four hundred and fifty (450) students in the semester 1, 2012 cohort submitted their career development reflection journals for assessment. These majority first year on-campus and external students come from diverse social and demographic backgrounds. Using this sample, future research will proceed to identify and assess the levels of reflective thinking in these journals and find common ground in different demographic groups. The basis of research will be based on the four constructs of habitual action, understanding, reflection and critical reflection developed by Kember and others (Kember et al., 2000; Kember, McKay, Sinclair, & Wong, 2008).

A coding scheme is also currently being developed to identify and assess levels of reflective thinking in students' written journals using NVivo software. Very preliminary results from the early coding of journals from a sub-sample of 99 students show 63% showed some levels of reflection but only 9% demonstrated higher levels of critical reflective thinking.

Conclusion

The university's business faculty encourage students' career development learning by supporting their capacity to systematically reflect, record and articulate the acquired employability skills (Smith, et al., 2009). CDL emphasises reflection through engaging students and making their learning experiences meaningful. It provides the process for ongoing transformation and lifelong learning (Smith, et al., 2009).

Through the introduction of career development learning , the university has adopted at least 4 of the 8 guiding principles for career development services (Career Industry Council of Australia, 2006). These are Promoting awareness of the service and service goals, giving students access to career information and assisting them in their understanding of that information, Differentiating service provision to accommodate diversity and collaborating with other facilitators of career development.

The element of reflection and evaluation is key to the development of the three Ss' namely self-efficacy, self-confidence and self-esteem (Moon, 2004a). The three closely-linked "Ss' provide a crucial link between knowledge, skills, experience and personal attributes and employability (Pool & Sewell, 2007). By providing opportunities, encouraging reflection and evaluation of experiences, self-efficacy can be increased. A graduate who believes they can do whatever is necessary if far more likely to gain a position and be successful in whatever occupations they choose than a graduate who does not have that self-belief (Pool & Sewell, 2007). If self-efficacy is seen as a belief that one has the capability in a particular situation, then self-confidence could be seen as the way that is projected to the outside world. An increase in self-efficacy should be reflected in an increase in demonstrated self-confidence (Pool & Sewell, 2007).

Through reflection journal writing, personal development tools and careers advice are used to assist students in making connections between their career intentions and their learning, working, co-curricular and extra-curricular activities. This approach connects labour market opportunities, personal development and aspirations, skills development, career management and learning support and informs students about the possibilities that exist for them in the working world (Pegg, et al., 2012).

References

Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Ed.), *Self-Efficacy in Changing Societies* (pp. 1-45). Cambridge: Cambridge University Press.

Bandura, A. (1997). *Self efficacy: The exercise of control*. New York: WH Freeman.

Biggs, J. B. (1987). *Study Process Questionnaire: Manual*.Unpublished manuscript, ACER, Melbourne.

Biggs, J. B. (2003). *Teaching for Quality Learning at University*. Buckingham, UK: Society for Research into Higher Education (SRHE) and Oxford University Press.

BIHECC. (2007). *Graduate Employability Skills*: Business, Industry and Higher Education Collaboration Council.

Boud, D., & Falchikov, N. (2006). Aligning assessment with long-term learning. *Assessment & Evaluation in Higher Education, 31*(4), 399-413.

Boud, D., & Solomon, N. (Eds.). (2001). *Work-based learning : a new higher education?* Philadelphia, Pa.: Society for Research into Higher Education & Open University Press.

Brookhart, S. M. (1999). *The Art and Science of Classroom Assessment: The Missing Part of Pedgogy*.

Career Industry Council of Australia. (2006). *Professional standards for Australian career development practitioners*.

Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. New York: D.C. Heath & Co.

Ecclestone, K. (2003). *Understanding Assessment and Qualifications in Post-compulsory Education: Principles , Politics and Practice*.

Freudenberg, B., Brimble, M., & Cameron, C. (2009). The Building of a Professional: Creating Greater Career Identity within a Degree. *The International Journal of Learning, 16*(10), 253-266.

Hancock, P., Howieson, B., Kavanagh, M., Kent, J., & Tempone, I. (2009). *Stakeholders' Perspectives of the Skills and Attributes for Accounting Graduates*. Paper presented at the 2009 AFAANZ Conference.

Jackling, B. (2005a). Analysis of the learning context, perceptions of the learning environment and approaches to learning accounting: a longitudinal study. *Accounting & Finance, 45*(4), 597-612.

Jackling, B. (2005b). Perceptions of the learning context and learning approaches: Implications for quality learning outcomes in accounting. *Accounting Education, 14*(3), 271-291.

Jonsson, A., & Svingby, G. (2007). The use of scoring rubrics: Reliability, validity and educational consequences. *Educational Research Review, 2*(2), 130-144.

Kember, D., Leung, D. Y. P., Jones, A., Loke, A. Y., McKay, J., Sinclair, K., et al. (2000). Development of a Questionnaire to Measure the Level of Reflective Thinking. *Assessment and Evaluation in Higher Education, 25*(4), 381-395.

Kember, D., McKay, J., Sinclair, K., & Wong, F. K. Y. (2008). A four-category scheme for coding and assessing the level of reflection in written work. *Assessment & Evaluation in Higher Education, 33*(4), 369-379.

Knight, P., & Yorke, M. (2003). Employability and Good Learning in Higher Education. *Teaching in Higher Education, 8*(1), 3-16.

Leijen, A., Valtna, K., Leijen, D. A. J., & Pedaste, M. (2012). How to determine the quality of students' reflections. *Studies in Higher Education, 37*(2), 203-217.

Lucas, U. (2001). Deep and surface approaches to learning within introductory accounting: A phenomenographic study. *Accounting Education, 10*(2), 161-184.

McCowan, C., & MacKenzie, M. (1997). *The guide to career education. For careers personnel working in Australian schools and colleges.* North Sydney: New Hobsons Press.

Moon, J. A. (1999). *Reflection in learning and professional development: Theory and practice*. London: Kogan Page.

Moon, J. A. (2004a). Reflection and employability: Learning and Teaching Support Network.

Moon, J. A. (2004b). *Reflection in learning and professional development*. New York: Routledge-Farmer.

O'Shea, A. (2008). A Developmental Approach to Work Integrated Learning. Unpublished Unpublished manuscript. University of Southern Queensland.

Patton, W., & McMahon, M. (2001). Implementing career development learning programs. In W. P. M. McMahon (Ed.), *Career development programs, Preparation for lifelong career decision making.* (pp. 10-21). Melbourne ACER Press.

Pegg, A., Waldock, J., Hendy-Isaac, S., & Lawton, R. (2012). *Pedagogy for Employability*. York.

Pool, L. D., & Sewell, P. (2007). The key to employability: developing a practical model of graduate employability. *Education + Training, 49*(4), 277-289.

Pophman, W. J. (1997). What's wrong and what's right with rubrics. *Educational Leadership, 55*(2), 72-75.

Reeders, E. (2000). Scholarly practice in Work-based Learning: Fitting the glass slipper. *Higher Education Research & Development, 19*(2), 205-220.

Rowntree, D. (1977). *Assessing Students*. London: Harper & Row.

Smith, Brooks, S., Lichtenberg, A., Mcllveen, P., Torjul, P., & Tyler, J. (2009). *Career Development Learning: Maximising the contribution of work-integrated learning to the student experience. Final Project Report June 2009*: Australian Learning & Teaching Council, National Association of Graduate Careers Advisory Services.

Tempone, I., & Martin, E. (2003). Iteration between theory and practice as a pathway to developing generic skills in accounting. *Accounting Education, 12*(3), 227-244.

Tomlinson, M. (2007). Graduate Employability and student attitudes and oreintations to the labour market. *Journal of Education and Work, 20*(4), 285-304.

Wood, L., Thomas, T., Petocz, P., Rigby, B., Clark-Murphy, M., Daly, A., et al. (2009). *Embedding generic skills means assessing generic skills*. Paper presented at the ATN Assessment Conference 2009.

Yorke, M. (2006). *Employability in higher education: what it is - what it is not*. York: The Higher Education Academy.

Copyright © 2012 Raymond Leong

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Critical reflection. What do we really mean?

Patricia Lucas
Auckland University of Technology (and PhD student Deakin University)

Do we really know what critical reflection means in the context of work-integrated learning, more specifically cooperative education? Critical reflection, in some form, is located within many higher education programmes, including cooperative education and many educators would say this is important for in-depth student learning. It is a form of reflection that is complicated as well as challenging for the learner and the educator. It would appear that there is a lack of consensus regarding the definition of critical reflection, as it is difficult to define and your definition may depend on your context and ideology. Many learning environments including teaching, nursing, business and social work utilize various strategies to facilitate reflection, including learning contracts and journals. Models of reflection, based on a philosophical approach, may be considered to assist students develop an understanding of critical reflection. The framework chosen to guide students' reflections may be determined by the expectations of the learning outcomes. It would seem that critical reflection is generally understood to be difficult, contested terrain, that appears to be attractive on paper but is complex to put into action. Further studies are required to identify the true nature of critical reflection in cooperative education.

Keywords: Work integrated learning, cooperative education, critical reflection, models

Introduction

The area of critical reflection is generally understood to be a difficult and contested terrain, that appears to be attractive on paper but is complex to put into action. Educators say this is an important capability for students to develop as it contributes to greater depth of understanding and learning (Boud, Cohen, & Walker, 1993; Lay & McGuire, 2010; Moon, 2006; Wolf, 2010). The wide range of approaches to critical reflection suggests the focus of learning is placed on technique rather than the broader purpose and outcomes of critical reflection. Critical reflection should not be a prescriptive activity (Moon, 2006) but guidelines should enable the student to develop their own style. This paper begins a conversation on the challenging topic of critical reflection in cooperative education.

Defining Critical Reflection

There appears to be lack of a clear understanding of critical reflection, as it is a contested term reflecting the ideology of the user. Depending on one's perspective critical reflection can be understood to mean very different things (Boyd & Fales, 1983; Brookfield, 2009; Gardner, 2009; Harvey, Coulson, Mackaway, & Winchester-Seeto, 2010; Hatton & Smith, 1995; Smith, 2011; van Woerkom, 2010) and varies within individuals and contexts. Critical reflection is widely recognised as a key component in the learning processes of individuals and is advocated in many areas of professional practice (Brookfield, 2009; Jarvis, 2010; Leijen, Valtna, Leijen, & Pedaste, 2011), especially within programmes where there is rich learning possible through specific experiences (Harvey et al., 2010).

The terms reflection, critical reflection, reflective practice, reflective thinking and reflexivity have similar meanings and application in educational literature, as well as, used interchangeably (Black & Plowright, 2010; Rogers, 2001). Authors consider that not all reflection is critical reflection and critical reflection maybe at higher, more complicated level that challenges the learner and the educator (Harvey et al., 2010; Hatton & Smith, 1994). Further unpacking is required to clearly identify the true nature of 'critical' reflection. Fook (2006) suggests work needs to be done from a "common basis of understanding" so the practice of critical reflection maybe refined and improved.

Mezirow (1990) considers critical reflection as a precursor to transformative learning, which may lead to changes in personal understandings and potentially behaviour. Students can use critical reflection practices for engaging in metacognition (Eames & Coll, 2010). It is associated with a number of learning outcomes including improved thinking, learning and assessment of self and social systems (Smith, 2011). Dewey (1938) states that while we cannot learn or be taught to think, we do have to learn how to think well and especially to acquire the practice of reflection. To use knowledge critically we do not accept the situation at 'face value'. This requires the ability to look beneath the surface to see what may influence the situation, resulting in critical depth to understanding. In addition, the ability to examine the bigger picture and view the situation more holistically develops critical

breadth. These enable us to develop a fuller understanding of experiences so we are better equipped to manage similar future situations (S. Thompson & Thompson, 2008). This ability to think critically is developed over time (Crowe & O'Malley, 2006) through guidance and support.

Critical reflection is advocated in many areas of professional development and practice, including the all areas of health care education, teaching, management, and research, as it encourages practitioners to gain insight into their own professionalism through their experiences. These programmes generally require some form of fieldwork to be closely integrated with academic study. Consequently there is wide variation in the techniques and approaches used in the practice of critical reflection. Approaches may range from informal discussions to highly structured formats. Guidelines in the literature on how to determine, facilitate and assess critical reflection in practice appear to be limited (Leijen et al., 2011; Smith, 2011).

Models of critical reflection

This vast area in the literature, which explores models of critical reflection, lacks clarity. There seems to be similarities within and across the various applications from many fields or disciplines of education that may have little or no areas of overlap (Fook & Gardner 2007). Many models of reflection based on a philosophical approach, may be considered to assist students develop an understanding of critical reflection. These have been briefly outlined in table 1.0 to help visualize the relationship between the models and frameworks. The framework chosen to guide students' reflections may be determined by the expectations of the learning outcomes. Some models of reflection may not encourage critical reflection. Models may guide the process of reflection but should not impose a prescription of what reflection is. It is not essential to follow a model and some practitioners choose not to. There is some criticism of models that reduce reflection to levels but this approach maybe useful for teaching what the focus of reflection entails. The student may choose whether or not to adopt a model to frame their reflection as a temporary measure until confidence in the reflective activity is gained and understood.

Table 1.0: Three models of critical reflection identifying two frameworks that provides guidance for reflecting within each model.

Model of critical reflection	Framework	General comments
Dewey's model of reflective learning		Knowledge can be constructed through active reflection on past and present experiences. Pragmatic approach.
	Gibb's model	A cyclic generic framework. A general and nonspecific approach to reflection. Novices may find it too vague requiring further guidance.
	Stephenson's framework	A detailed set of cue questions. Focuses on consequences of actions and examines practice knowledge.
Habermas's model of critical reflection		Based on 3 areas of knowledge: technical, practical and emancipatory. Critical theory approach.
	Taylor's framework	Describes activities associated with 3 types of reflection: technical, practical and emancipatory. Highly structured.
	Kim's framework	Called critical reflective enquiry. Three phases of reflection: descriptive, reflective, critical/emancipatory. Processes and products applied to each phase.
Kolb's model of reflexive learning		Attempts to integrate thinking and practice. Experiential learning approach.
	Borton's framework	Simplified model using 3 questions: What? So what? Now what? Very easy to remember.
	Rolfe's framework	Expanded Borton's framework. Added questions to each step. Turned the last

		step back to form reflexive cycle. Generic, easily adapted to suit most situations.

* Adapted from Rolfe et al (2011).

Critical reflection in cooperative education

According to Martin and Fleming (2010) cooperative education is more than work experience but a recognised pedagogical approach to learning. Critical reflection is an essential component of the pedagogy of cooperative education and other forms of work integrated learning. The process of critical reflection needs to be facilitated with structured strategies within the course that encourage engagement in reflection. It is important to create a culture where reflection is valued as a learning tool and it is safe to be honest. Practice and feedback on reflection throughout the program are important to enable the student to progress through their learning experience. Van Gyn (1996) suggests that reflective practice to enhance student-learning outcomes requires an organised partnership between the student, academic and industry supervisors.

There is a widespread assumption that reflection has positive outcomes for student learning. Cooperative education is student driven learning, which increases the need for the student to be self-motivated, proactive, organised and reflective. Critical reflection encourages students to be willing and able to question, explore and critique ways of behaving and thinking as they engage in workplace experiences (Higgins, 2011) and into the future. Consequently the student is better able to understand and gain insights into his/her skills, competencies and knowledge. The use of critical reflection in cooperative education increases the chances of the learning being relevant and meaningful to the student. Therefore the student's engagement in reflection can assist them in making sense of themselves, their learning experience and preparation for the future.

The importance of the social context (Fook, White & Gardner, 2006) of reflection should be considered, as personal reflection is part of the broader context of the organization culture and structure (Thompson & Pascal, 2012). The industry context is complex and may challenge other dimensions of reflection, such as emotional demands of the learning experience, power relationships and time constraints. The strategies that facilitate reflection should cater for the individual needs of the student, suit the learning environment and guide the development of students reflective skills (Martin & Fleming, 2010). Strategies may include learning contracts, reflective journals, progress reports, reports and oral presentations providing the student with many opportunities to practice critical reflection.

Conclusion

Critical reflection is used in education to encourage the integration of theory and practice while enhancing student learning and self-confidence. However, an extensive literature search on the role of reflection for learning through experience by Harvey et al (2010) concluded that the relationship between reflection and positive student learning outcomes was inconclusive. This suggests there is scope to explore the role of critical reflection in learning and the development of a theoretical basis in cooperative education. There is increasing interest in the concept of critical reflection (Boud & Walker, 1998) in work-integrated education and research (Brookfield, 2009).

References

Black, P. E., & Plowright, D. (2010). A multi-dimensional model of reflective learning for professional development. *Reflective Practice, 11*(2), 245-258. doi:10.1080/14623941003665810

Boud, D., Cohen, R., & Walker, D. (1993). *Using experience for learning*. Buckingham [England] ; Bristol, Pa.: Society for Research into Higher Education and Open University Press.

Boud, D., & Walker, D. (1998). Promoting reflection in professional courses: The challenge of context. *Studies in Higher Education, 23*(2), 191.

Boyd, E. M., & Fales, A. W. (1983). Reflective learning. *Journal of Humanistic Psychology, 23*(2), 99-117.

Brookfield, S. (2009). The concept of critical reflection: promises and contradictions. *European Journal of Social Work, 12*(3), 293-304.

Crowe, M., & O'Malley, J. (2006). Teaching critical reflection skills for advanced mental health nursing practice: a deconstructive-reconstructive approach [Article]. *Journal of Advanced Nursing, 56*(1), 79-87. doi:10.1111/j.1365-2648.2006.03982.x

Dewey, J. (1938). *Experience and education*. New York: Touchstone.

Eames, C., & Coll, R. K. (2010). Cooperative education: Integrating classroom and workplace learning. In S. Billett (Ed.), *Learning through practice* (pp. 180-196)

Fook, J. (2006). *Beyond reflective practice: reworking the "critical" in critical reflection*. presented at the meeting of the Professional Lifelong Learning: Beyond Reflective Practice, Leeds.

Fook, J., & Gardner, F. (2007). *Practising critical reflection : a resource handbook*. Maidenhead: Open University Press.
Fook, J., White, S., & Gardner, F. (2006). Critical reflection: a review of contemporary literature and understandings. *Critical reflection in health and social care*, 3-20.
Gardner, F. (2009). Affirming values: using critical reflection to explore meaning and professional practice [Article]. *Reflective Practice, 10*(2), 179-190. doi:10.1080/14623940902786198
Harvey, M., Coulson, D., Mackaway, J., & Winchester-Seeto, T. (2010). Aligning reflection in the cooperative education curriculum| Macquarie University ResearchOnline. *Asia-Pacific Journal of Cooperative Education, 11*(3), 137-152.
Hatton, N., & Smith, D. (1994, July 3-6, 1994)). *Facilitating Reflection: Issues and Research*. presented at the meeting of the Conference of the Australian Teacher Education Association (24th), Brisbane, Queensland, Australia.
Hatton, N., & Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teaching and Teacher Education, 11*(1), 33-49.
Higgins, D. (2011). Why reflect? Recognising the link between learning and reflection. *Reflective Practice, 12*(5), 583-584. doi:10.1080/14623943.2011.606693
Jarvis, P. (2010). *Adult education and lifelong learning : theory and practice* (4th ed.). New York: Routledge.
Larrivee, B. (2000). Transforming Teaching Practice: Becoming the critically reflective teacher. *Reflective Practice, 1*(3), 293-307. doi:10.1080/713693162
Lay, K., & McGuire, L. (2010). Building a Lens for Critical Reflection and Reflexivity in Social Work Education [Article]. *Social Work Education, 29*(5), 539-550. doi:10.1080/02615470903159125
Leijen, A., Valtna, K., Leijen, D. A. J., & Pedaste, M. (2011). How to determine the quality of students's reflections? *Studies in Higher Education*, 1-15. doi:10.1080/03075079.2010.504814
Martin, A., & Fleming, J. (2010). Cooperative education in outdoor education. *Australian Journal of Outdoor Education, 14*(1), 41-48.
Mezirow, J. (1990). How critical reflection triggers transformative learning. *Fostering critical reflection in adulthood*, 1-20.
Moon, J. A. (2006). *Learning journals : a handbook for reflective practice and professional development* (2nd ed.). London ; New York: Routledge.
Rogers, R. R. (2001). Reflection in higher education: A concept analysis. *Innovative Higher Education, 26*(1), 37-57.
Rolfe, G., Freshwater, D., & Jasper, M. (2011). *Critical reflection in practice* (2nd ed.). Houndmills, Basingstoke, Hampshire ; New York, N.Y.: Palgrave.
Smith, E. (2011). Teaching critical reflection. *Teaching in Higher Education, 16*(2), 211-223.
Thompson, N., & Pascal, J. (2012). Developing critically reflective practice. *Reflective Practice: International and Multidisciplinary Perspectives*(iFirst Article), 1-15. doi:10.1080/14623943.2012.657795
Thompson, S., & Thompson, N. (2008). *The critically reflective practitioner*. Basingstoke [England] ; New York: Palgrave Macmillan.
Van Gyn, G. H. (1996). Reflective Practice: The Needs of Professions and the Promise of Cooperative Education. *Journal of Cooperative Education, 31*(2-3), 103-131.
van Woerkom, M. (2010). Critical Reflection as a Rationalistic Ideal. *Adult Education Quarterly, 60*(4), 339-356.
Wolf, K. (2010). Bridging the distance: the use of blogs as reflective learning tools for placement students. *Higher Education Research & Development, 29*(5), 589-602.

Copyright © 2012 Patricia Lucas

The Author assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

How do I measure up? Supporting student self-assessment in skills and graduate attributes

Jacqueline Mackaway[18]
Learning and Teaching Centre and PACE Initiative, Macquarie University
Theresa Winchester-Seeto
Faculty of Human Sciences and Learning and Teaching Centre, Macquarie University
Anna Rowe
Learning and Teaching Centre and PACE Initiative, Macquarie University

For success in both educational and workplace settings, learners need to be able to accurately "self-assess", and to recognise evidence of their abilities and achievements. Work-integrated learning (WIL) provides a vehicle to foster these skills and capabilities and prepare students for the workplace. This paper showcases the *Skills and Capabilities Audit Tool*, a new self-assessment resource designed for students to use prior to and upon completion of a WIL activity. Emphasis on the development of capabilities which support learner agency, namely to independently self-appraise, reflect and manage personal learning, will help students maximise their WIL experience.

Keywords: Agency, Self-assessment, Graduate capabilities, Work ready graduates

Background / context

Over the past decade there have been increased efforts to find ways to better prepare and support students to maximise their learning experience in work-integrated learning (WIL) (Billett, 2011 & 2009). Learner agency is seen to play an important part in this endeavour (Billett, 2011 & 2009). Agency involves learners having the ability to make decisions, think critically, create meaning, and develop an understanding of self and their own potential (Bruner, 1996). These "agentic qualities", some of which are understood as "graduate attributes", are needed for student success in both educational and workplace settings (Billett, 2009; Barrie, Hughes, Smith, & Thomson, 2009).

The *Skills and Capabilities Audit Tool* presented in this paper is a new resource designed by the authors to foster some of these agentic qualities, specifically skills in accurate self-assessment and reflection.

The Self-Assessment Tool

A review by the authors of available self-assessment tools revealed limited suitable options. In general, self-assessment tools were found to fall into two categories: generic skills and specific vocation based skills. The Graduate Skills Assessment (GSA) and the Employability Skills Profiler (ESP) are examples of generic skills based tools, but issues related to validity and cost made them inappropriate for our purposes (Precision Consultancy, 2007, p.3). The vocation specific type assessments were found to be too narrow in what they assess and are designed more for job candidate "screening" purposes. The approach to self-assessment taken by the Career Development Planning and Personal Planning areas were found to be more aligned with our intention and informed the conception and design of our new Tool (Patton, & McMahon, 2006; Smith, et al., 2009; Watts, 2006).

The university's Graduate Capabilities framework was used to build exemplar lists of skills and capabilities. It was also recognised that disciplines each have their own emphases and consequently the tool was designed to allow users to modify and adapt the lists to suit their own requirements.

Essentially the resource is structured into four units or parts and includes a set of instructions to support and guide the students through each part and associated activities.

[18] Jacqueline Mackaway; Learning and Teaching Centre, Macquarie University, phone: +61 2 9850 8665, email: jacqueline.mackaway@mq.edu.au

Part 1 – Pre-activity self-rating: students are given a list of capabilities (Table 1) to undertake a self-assessment exercise before they commence their WIL activity. Students then choose six "target" capabilities or sub-categories they would like to concentrate on. The capabilities selected might be ones the student believes they need to develop, or ones identified as relevant to their future career, or ones related to a particular placement.

Table 1: Excerpts from the Skills and Capability Audit Tool

		Step 1		**Step 2**
Graduate Capabilities	**Description**	**Pre activity self - rating**	**Target Capability**	**Post activity self-rating**
Creative and innovative				
Creative thinking	Demonstrates awareness of problems/gaps in knowledge, considers different perspectives, adapts readily to new/uncertain situations, conveys ideas through a variety of mediums, thinks 'outside the square' to solve complex issues. Ability to respond to opportunities and challenges.			
Innovation	Identifies opportunities not obvious to others and finds innovative solutions, where conventional solutions have not worked or are unlikely to work.			
Application of critical, creative thinking	Finds effective alternative/novel solutions to problems. Applies skills and experience to areas other than prime discipline.			

Part 2 requires students to gather evidence during their WIL activity which demonstrates the attainment or improvement in those capabilities nominated in Part 1, and to collate and present this in a portfolio; this might include podcasts, photos, PowerPoint presentations, business reports, blogs, SWOT analyses etc.

Part 3 - Self rating – post activity: students revisit the table completed in Part 1 after they have finished their WIL activity and are asked again to self-assess.

Part 4 - Reflection and Analysis: this final part is designed to help students analyse and reflect on the process of self-assessment and the nature of evidence. Students are asked to assess their three best pieces of evidence and write a 1000 word "reflective" report. Prompts are provided to help students undertake this activity (Figure 1).
The overall aim is to encourage honest self-appraisal without the risk of this adversely affecting the final grade, therefore marks are not allocated to Parts 1, 2 and 3 but these components must be completed and submitted in order for Part 4 to be graded.

Figure 1: Part 4 – Reflection Activity

Reflection prompts

Based on your completed audit tool, how accurate were your pre-activity ratings? Were there any areas where you over or under estimated your abilities? Why do you think you might have over or under estimated your abilities? OR Why do you think your ratings were accurate?
How can you improve the accuracy of your self-assessment?
What kinds of evidence did you gather? What influenced your decision to gather these particular kinds of evidence? Looking back, are there any other kinds of evidence that might help demonstrate your abilities?
What kinds of evidence might you need to persuade an employer that you have particular skills and capabilities? How could you present these?

Evaluation

A focus group of WIL practitioners reviewed the Tool. Feedback centred on: the wording of some of the skills and capabilities; the size/length of the resource; and, the rating scale used. The suggestions related to improved clarity and overall meanings were incorporated into the final version of the Tool. Further evaluation is currently underway with a trial of the first version of the tool.

Discussion

The *Skills and Capabilities Audit Tool* is a flexible resource that can be utilised in a number of ways. Self-assessment skills, critical thinking and judgement skills can all be fostered via engagement with Parts 1 and 2, while the creation of a portfolio in Part 2 provides students with tangible products they can use to develop a resume and better present themselves to employers. This in turn builds self-confidence and, in more broad terms, promotes graduate work readiness (Pegg, Waldock, Hendy-Isaac & Lawton, 2012) and supports the employability and careers development purposes of WIL (**Patrick, et al., 2008**).

When the Part 3 pre-and post 'experience' 360 degree self-assessment and Part 4 reflection activities are also used, an extra layer of 'personal' learning is offered to students. These two parts emphasise the process of independent self-assessment and encourage students to be intentionally and critically engaged in appraising themselves and the outcomes of their efforts. The student has the chance to compare their initial 'baseline' measurement with their final self-assessment and make a judgement about where they were accurate or off the mark. Intentional pre and post self-evaluation prompts the student to consider who they are and who they are becoming, concepts essential to the notion of agency (Bruner, 1996). The ability to independently self-appraise, reflect and manage personal learning are capabilities every student will need throughout their professional life (Billett, 2011 & 2009).

Conclusion / Implications

The nature of the *Skills and Capabilities Audit Tool* makes this new tool a unique resource as it is built around a WIL activity and has a strong emphasis on the development of capabilities which support learner agency. The flexibility with which the Tool has been designed may also encourage academics to make use of the resource as it affords a relatively small, but easy, way to cultivate agentic qualities in students.

References

Barrie, S., Hughes, C., Smith, K., & Thomson, K. (2009). *The National GAP Issues Papers*. Retrieved from www.itl.syd.edu.au/projects/nationalgap/resources/resources/htm

Billett, S. (2011). Final Report for the Australian Learning and Teaching Council [ALTC]: Curriculum and pedagogic bases for effectively integrating practice-based experiences. Retrieved from www.acen.edu.au

Billett, S. (2009, March). *Final report for ALTC Associate Fellowship: Developing agentic professionals through practice-based pedagogies*. Retrieved from http://www.jcu.edu.au/teaching/public/groups/everyone/documents/advice/jcuprd_046192.pdf

Bruner, J. (1996). *The Culture of Education*. Cambridge, MA: Harvard University Press.

Patrick, C-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008, December). *The WIL [work-integrated learning] report: A national scoping study* [Australian Learning and Teaching Council (ALTC)

final report]. Brisbane: Queensland University of Technology. Retrieved from www.altc.edu.au **and** www.acen.edu.au

Pegg, A., Waldock, F., Hendy-Isaac, S., & Lawton, R. (2012). *Pedagogy for employability*. York: The Higher Education Academy (HEA). Retrieved from http://www.heacademy.ac.uk/assets/documents/employability/pedagogy_for_employability_update_2012.pdf

Patton, W., & McMahon, M. (2006). *Career development and systems theory: Connecting theory and practice.* Rotterdam: Sense Publishers.

Precision Consultancy. (2007). *Graduate employability skills.* Melbourne: Business, Industry and Higher Education Collaboration Council.

Smith, M., Brooks, S., Lichtenberg, A., McIlveen, P., Torjul, P., & Tyler, J. (2009). *Career Development Learning: maximising the contribution of work-integrated learning to the student experience.* [Australian Learning and Teaching Council]. Final Project Report June 2009. University of Wollongong. Careers Central. Academic Services Division. Retrieved from www.nagcas.org.au

Watts, A.G (2006). *Career Development Learning and Employability.* York: Higher Education Academy. Retrieved from http://business.heacademy.ac.uk/assets/York/documents/resources/resourcedatabase/id592_career_development_learning_and_employability.pdf

Copyright © 2012 Mackaway, Winchester-Seeto and Rowe.

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Enhancing Cultural Intelligence Through International Work Integrated Learning

Norah McRae
University of Victoria

Introduction

Work integrated learning is an educational model that aims to provide students with relevant work experience that helps them apply the knowledge they learn in the classroom to the workplace, and also to develop competencies that lead them to successful and rewarding careers. Core competency development in areas such as personal management, organizational skills and others are crucial, as are discipline specific competencies that will enable the student to be successful in their chosen career (for example, chemistry, biology, business management, mechanical engineering). Another set of competencies that is important for students to develop, however, is international competencies. These enable students to not only be effective in cross-cultural encounters, but could help them be successful in internationally focused careers. In today's globalized world, no matter what path students choose to take in their career upon graduation, they will be living and working in a culturally diverse setting. They will need to act locally and think globally (Kefalas, 1998).

Much research has been done in the area of global citizenship (as defined in a multitude of ways), and several tools have been developed to measure the development of these competencies. There is also significant research in the area of training to be successful working internationally. Despite this, little has been written about how to articulate the competencies students gain in such circumstances to prospective employers in order to improve their employment prospects. So while work integrated learning programs might be well positioned to help inform the discussion regarding international experiences and employability, not much has been reported to date.

Employability matters to students, and is one of the outcomes that motivates students to participate in work integrated learning. Employability also matters to institutions as they strive to produce global citizens who will contribute positively to their communities and society. It is an important factor that contributes to the success of graduates and their ability to contribute to the community, for only after they are successful at meeting their own needs can individuals effectively focus on contributing to others in society, be it by way of resources, or time and knowledge.
Can international experiences, and thereby the development of international competencies, help enhance students' employability? If so, how can institutions help students articulate the learning gained from international experiences so that they can improve their employment prospects? In trying to respond to these questions, the author will begin with a review of international competencies and tools available to measure their development. The concept of cultural intelligence will then be explored as a potential framework to connect the outcomes of international (work term) experiences to student employability. The chapter will end with a synopsis of the institutions' role in helping make this tool functional in this respect, for no matter how culturally competent one is, this asset lies dormant in an individual unless it is put into action to benefit the individual, and ultimately, society.

Assessing international experiences for learning outcomes

International competence, in the literature about internationalization, is referred to under different names: intercultural communication and intercultural sensitivity (Bennett, 1986), global competence (CIEE, 1988 and 1994), intercultural competence (Vulpe, Kealey, Protheroe and MacDonald, 2001; Landis, Bennett and Bennett, 2004; Deardorff 2006), global mindset (Javidan, 2007), and cultural intelligence (Earley and Ang, 2003). There appears to be some agreement, however, on the two dimensions that constitute global competence. The first dimension is passive skills such as general knowledge, skills and abilities for example language ability or knowledge of world geography and global political and social issues. The second dimension is active skills involving more personal qualities such as empathy, resilience to stress, adaptation skills, self-awareness and intercultural sensitivity.

The assessment of passive skills learning and development has mainly focused on foreign language acquisition, grade achievement for individuals studying abroad or task performance in international assignments for individuals working abroad (Massey and Burrow 2009; Caligiuri 2006). A wide array of assessments has been used to measure the development of active skills relating to international competence. These include the Cross-

Cultural Adaptability Inventory (CCAI), to evaluate an individual's ability to adapt to other cultures (Kelly and Meyers, 1995), the Intercultural Sensitivity Index (ISI) which allowed assessment of the relationship between international experience and second language acquisition, intercultural sensitivity and global competence (Olson and Kroeger, 2001), and the Intercultural Development Inventory (IDI) (Hammer, Bennett and Wiseman 2003). The IDI assesses where individuals are positioned on a scale of intercultural development ranging from extreme ethnocentrism to "ethno-relativism" based on Bennett's Developmental Model of Intercultural Sensitivity (DMIS) (1986). Bennett argues that the greater the intercultural sensitivity, the greater the potential for intercultural competence. The DMIS and IDI therefore focus on one's aptitude for intercultural competence, rather than the development of intercultural competence.

Braskamp, Braskamp and Merill (2010) developed a Global Perspectives Inventory (GPI) that measures the three major dimensions of a global perspective – cognitive, intrapersonal, and interpersonal. Another self-assessment instrument developed by the Kozai group (http://kozaigroup.com/) is the Intercultural Effectiveness Scale (IES) that evaluates the competencies critical to interacting effectively with people. Last but not least, Ng, Van Dyne and Ang proposed a conceptual model using Kolb's theory of experiential learning and the concept of cultural intelligence, to explain how individuals learn and benefit from international experiences (Ng, Van Dyne and Ang (2009).

Making sense of international work term learning outcomes using Cultural Intelligence
It is easier said than done to identify the learning that occurs during any type of experience, and perhaps even more complicated for international experiences. Overlaying the experience are elements of language, cultural values and norms, isolation and loneliness. However, there are parallels to what a student experiences when they engage in experiential education such as a co-operative education work term. Often students are moving from one culture to another as they transition from a familiar academic context to a workplace. Whereas they may still be speaking the same language, there may be very different terminology and understanding, values and norms may be quite new and often students do feel isolated and alone in a workplace. How can we use what we know about work-based learning to help us understand what is happening in an international context?

A framework that might support this learning process, and that recognizes the unique dimension of an international experience might be the concept of cultural intelligence (Earley & Ang, 2003). Cultural intelligence defined as "an individual's capability to function and manage effectively in culturally diverse settings" could be a concept that would be of benefit to international experience programs as well as programs sending students into a variety of workplaces that are culturally diverse.

The idea of cultural intelligence is rooted in other intelligences, such as emotional and social intelligence, but recognizes that being in an intercultural setting requires additional dimensions of intelligence. Earley and Ang's work identifies four factors that are critical to cultural intelligence: cognitive skills, metacognitive skills, a motivational dimension and a behavioural dimension (Earley & Ang, 2003). While measures of emotional intelligence (EQ) also have similar constructs of the cognitive, motivational and behavioural, studies have shown that just because someone has a high EQ does not mean that they will be able to interact effectively in an intercultural setting that requires "appropriate cultural knowledge, motivation and behaviour" and that this is best measured looking through a cultural intelligence lens (Kim, Kirkman & Chen, 2008).

Cognitive ability is important, as a certain amount of knowledge, including language is required to function in an international setting. Having an understanding of how things work, traditions and customs, values and norms are necessary. The meta-cognitive skills required relate directly to the Kolb/Hughes-Wiener models of learning. Being able to reflect, be self-aware, develop both emic and etic understandings are critical to learning and understanding in an international setting.

The motivational dimension links to emotions and those going into international settings need to have the predisposition to change and the ability to express emotions appropriately as the conditions require (Bhawuk, 2009). Recognizing and finding ways to articulate this dimension is key to Mezirow's notion of transformative learning, which takes the student beyond transmission and transactional learning into a place of owning the learning (Mezirow, 1991). The motivational piece is also central to the concept of self-efficacy, or a student's belief in their ability to manage and to persist under difficult circumstances (Bandura, 1977). Self-efficacy provides the motivational fuel to keep going.

It is one thing to understand what is going on in an international setting on a cognitive and meta-cognitive level and to have the right kind of motivational forces, but it is another to be able to act on that understanding and motivation in ways that are culturally appropriate. This is where the behavioural dimension is so important as

individuals who are living in another culture are learning new behaviours at the same time (Bhawuk, 2009). The central tenet of social learning theory is that people anticipate actions and their consequences and decide how to behave accordingly based on these previous observations and experiences (Bandura, 1977). Without the ability to make these adaptations it would be very difficult to function appropriately in an international setting.
Using this four-factor framework of cognitive, meta-cognitive, motivational and behavioural dimensions of cultural intelligence, an instrument was developed, the 20 item Cultural Intelligence Scale (CQS), see Table 1. Reliability and validity testing of the CQS has shown it to be a "clear, robust and meaningful four-factor structure" that is stable across samples, time, methods and countries. Research on cultural intelligence has demonstrated that it can be used to predict adjustment, well-being, cultural judgement and decision making, and task performance in culturally diverse settings. Furthermore, it has been shown to have predictive validity over and above demographic characteristics, personality, general mental ability, emotional intelligence, cross-cultural adaptability, rhetorical sensitivity, cross-cultural experience, and social desirability. (Van Dyne, Ang & Koh, 2008).

The CQS can also be used for self-reporting, peer-reporting and supervisor-reporting, with self-rated scores having been shown to be positively correlated with observer-rated scores (Van Dyne et al., 2008). This could provide the individual with a concrete frame to support their reflections, come to emic and etic conclusions about their experiences and have the vocabulary to articulate their learning and cultural intelligence to others, such as prospective employers.

Connecting Cultural Intelligence to Employability

Studies applying cultural intelligence as a framework to measure competence in a range of workplace settings show the connection to employability. In a study that gathered data from global managers about their use of cultural intelligence in their position, the researchers were able to not only show connections between the four-factors and twenty items in the CQS, but also identified additional items, such as knowledge of workplace behaviours and norms, that might be appropriate in the context of the workings of a global manager (Janssens & Cappelen, 2008).

Work done on expatriate success concludes that cultural intelligence plays a role in elements of success such as adjustment, performance, retention and career success (Shaffer & Miller, 2008). Shaffer and Miller's work suggest that cultural intelligence plays a role as a "moderator" in strengthening positive inputs (such as openness to new experiences) and lessening negative inputs (such as cultural novelty) to success. They also show how cultural intelligence acts in an "intervening" role, especially in language fluency and previous experience, to lead to greater success.

TABLE 1
The 20-item four scale CQS

The 20-item four factor CQS (the CQ Scale)

		Strongly DISAGREE						Strongly AGREE
CQ-Strategy:								
MC1	I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.	1	2	3	4	5	6	7
MC2	I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.	1	2	3	4	5	6	7
MC3	I am conscious of the cultural knowledge I apply to cross-cultural interactions.	1	2	3	4	5	6	7
MC4	I check the accuracy of my cultural knowledge as I interact with people from different cultures.	1	2	3	4	5	6	7
CQ-Knowledge:								
COG1	I know the legal and economic systems of other cultures.	1	2	3	4	5	6	7
COG2	I know the rules (e.g., vocabulary, grammar) of other languages.	1	2	3	4	5	6	7
COG3	I know the cultural values and religious beliefs of other cultures.	1	2	3	4	5	6	7
COG4	I know the marriage systems of other cultures.	1	2	3	4	5	6	7
COG5	I know the arts and crafts of other cultures.	1	2	3	4	5	6	7
COG6	I know the rules for expressing non-verbal behaviors in other cultures.	1	2	3	4	5	6	7
CQ-Motivation:								
MOT1	I enjoy interacting with people from different cultures.	1	2	3	4	5	6	7
MOT2	I am confident that I can socialize with locals in a culture that is unfamiliar to me	1	2	3	4	5	6	7
MOT3	I am sure I can deal with the stresses of adjusting to a culture that is new to me.	1	2	3	4	5	6	7
MOT4	I enjoy living in cultures that are unfamiliar to me.	1	2	3	4	5	6	7
MOT5	I am confident that I can get used to the shopping conditions in a different culture.	1	2	3	4	5	6	7
CQ-Behavior:								
BEH1	I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it.	1	2	3	4	5	6	7
BEH2	I use pause and silence differently to suit different cross-cultural situations.	1	2	3	4	5	6	7
BEH3	I vary the rate of my speaking when a cross-cultural situation requires it.	1	2	3	4	5	6	7
BEH4	I change my non-verbal behavior when a cross-cultural situation requires it.	1	2	3	4	5	6	7
BEH5	I alter my facial expressions when a cross-cultural interaction requires it.	1	2	3	4	5	6	7

Copyright © Cultural Intelligence Center 2005. Used by permission of the Cultural Intelligence Center. All rights reserved.

Note: Use of this scale is granted to academic researchers for research purposes only. For information on using the scale for purposes other than academic research (e.g., consultants and non-academic organizations), please send an email to cquery@culturalq.com.

For additional information see Ang, S., Van Dyne, L., Koh, C.K.S., Ng, K.Y., Templer, K.J., Tay, C., & Chandrasekar, N.A. (in press). Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation, and task performance. Management and Organization Review.

Considering the case of multi-cultural teams, (Shokef and Erez, 2008) concluded that facilitating employee's global identity and cultural intelligence "may help them adapt to work in global environments". With many current workplaces consisting of multi-cultural teams, this is a significant finding and supports the role that cultural intelligence can play in a number of contexts.

Capabilities in cultural intelligence have been linked to effectiveness in global managers, expatriates and effectiveness on multi-cultural teams. Clearly there is a connection between having successful cultural intelligence and working in an international context.

There exists, therefore, an opportunity for institutions and co-operative education professionals to use this tool to measure the effectiveness of international programs they offer. Inherent in this, exists an obligation to educate students on how to use this tool to enhance their chances of employment for work terms or post-graduate employment.

Role of institutions in developing helping enhance student employability

While research has looked at how international experience results in development of cross-cultural skills such as knowledge of the host country, self-awareness and personal development (Bond, 2009), Kitsantas (2004) determined that students did gain cross-cultural skills and global understanding as a result of international experiences, and that the most significant factor predicting this development was goal setting for cross-cultural competence (Kitsantas, 2004).

It falls on the institutions offering international experiences to students to help connect the dots for the students, to help see the linkages between students development as a result of international experiences, how those developments can be articulated and the connection to employment related skills and aptitudes.

For work-integrated learning educators, then, there exists an opportunity, indeed an obligation, to ensure that students embarking on international work terms have the best conditions possible within which to develop cultural intelligence. This ranges from the quality of the work term experience, to effectiveness of pre-departure training and onsite support that help establish and develop learning objectives specific to development of cultural intelligence, to post-work term debriefing sessions that would focus on how to articulate their international experiences and cultural intelligence on their resumes and during interviews to enhance their employment prospects.

Using the 20 items as a basis for reflection could occur at the beginning, in the middle and at the end of each international experience. Students could do a self-assessment using the scale. They could then identify certain areas from the items where they might want to develop, and set some specific learning goals accordingly. Mid-way through their experience they could then do another assessment that might be supplemented with an assessment by their work term supervisor. A final assessment could be done at the end of their experience to examine areas of growth, goal achievement and provide the students with some clear feedback regarding their cultural intelligence. Students could be encouraged to document evidence that demonstrates their cultural intelligence in some of the items.

An example of how the CQ model demonstrates cultural intelligence to students could be examining any of the twenty items before and after the experience. From the meta-cognitive factor a student might reflect on ways that they have demonstrated the item: “I check the accuracy of my cultural knowledge as I interact with people from different cultures”. Have they been thinking about their own views and biases when interacting with others? Have they asked others for clarification on their understanding of the culture? Reflective questions exploring the meta-cognitive skills of checking assumptions, strategizing before engaging with others and cultural self-awareness could be informative and lead to “etic” understanding.

From the cognitive factor a student might choose to find ways to demonstrate their cultural intelligence in the item: “I know the rules (e.g. vocabulary, grammar) of other languages” by identifying their level of language capability. They might also be able to demonstrate their knowledge of business practices, economic and legal systems, values, norms and religious beliefs.

Within the motivational factor a student might look at the item: “ I am sure I can deal with the stresses of adjusting to a culture that is new to me” by reflecting on times when they have done just that during their international experience. Students could offer examples of when they have demonstrated interest in other cultures, have experienced joy in exploring new cultures and acted with confidence when faced with challenges posed by international experiences.

For the behavioural factor a student might consider the item: “I change my non-verbal behaviour when a cross-cultural situation requires it” and give examples of how they have modified this behaviour accordingly. They might also describe culturally appropriate modifications to their verbal behaviours and to their speech acts such as the manner and content of their communications.

By considering all twenty items and reflecting on the ways they have demonstrated their capabilities with these items students come away armed with the ability to articulate their cultural intelligence to others. They should be able to provide concrete examples demonstrating their capabilities and be able to identify why these capabilities matter in the workplace and society.

Conclusion

Examining the contribution that international experiences might make to a student's employability is not only about success in getting a job. Fundamentally, if we want our students to act locally while thinking globally they will likely be doing that in some sort of workplace upon graduation. The will be enacting their "global citizenship" while an employee of an organization, whether that organization is a small business, a large multinational, the public service or a not-for-profit agency. A powerful measure of the success of international experiences could be how these students are able to learn from their experiences, develop international competencies, embrace a "global mindset" defined as "a set of individual attributes that enable an individual to influence individuals, groups and organizations from diverse social/cultural/institutional systems" (Javidan, Steers, & Hitt, 2007) and bring that to bear in employment settings.

The concept of cultural intelligence provides a mechanism by which students can achieve this level of success, not only in employment settings but in the enactment of their global citizenship as they strive to contribute to community and society.

References

Bandura, A. (1977). Social Learning Theory. Englewood Cliffs, NJ: Prentice-Hall.

Bennett, M.J. (1986). A developmental approach to training for intercultural sensitivity. International Journal of Intercultural Relations 10 (2), 179-96.

Bhawuk, D. P. S. (2009). Intercultural training for the global workplace: review, synthesis, and theoretical explorations.

Bond, S. (2009). World of Learning: Canadian Post-Secondary Students and the Study Abroad Experience. Ottawa, Ontario: Canadian Bureau for International Education.

Braskamp, L. A., Braskamp, D. C. & Merrill, K. C. (2010). Global Perspective Inventory (GPI); Its purpose, construction, potential uses, and psychometric characteristics. Global Perspectives Institute. https://gpi.central.edu

Caligiuri, P. (2006). Developing global leaders. Human Resource Management Review 16, (2) (6), 219-28.

Council on International Educational Exchange (1988). Educating for global competence: The report of the advisory council for international educational exchange. New York: The Council.

Council on International Educational Exchange (1994). Educational Exchange and Global Competence. New York: The Council.

Deardorff, D.K. (2006). Identification And Assessment Of Intercultural Competence As A Student Outcome Of Internationalization. Journal of Studies in International Education 10, (3) (September 1): 241-66.

Dewey, J. (1938). Experience and Education. New York: Macmillan Publishing Company.

Earley, P. C., & Ang, S. (2003). Cultural Intelligence: Individual Interactions Across Cultures. Stanford, CA.: Stanford University Press..

Hammer, M.R., Bennett, M.J., and Wiseman, R. (2003). Measuring Intercultural Sensitivity: The Intercultural Development Inventory. International Journal of Intercultural Relations 27, (4) (7): 421-43.

Janssens, M., & Cappelen, T. (2008). Contextualizing cultural intelligence: The case of global managers. In S. Ang & L. Van Dyne (Eds.), Handbook of Cultural Intelligence: theory, measurement, and applications (pp. 356-371). Armonk, NY: M.E. Sharpe.

Javidan, M., Steers, R., & Hitt, M. (Eds.). (2007). The Global Mindset (Vol. 19). San Diego: Elsevier.

Javidan, M., Steers, R. and Hitt, M. (Eds). (2007). The Global Mindset. Advances in international Management (Vol. 19). Amsterdam ; Oxford, UK: Elsevier JAI.

Kefalas, A. G. (1998). Think Globally, Act Locally. Thunderbird International Business Review, 40(6), 547-562.

Kim, K., Kirkman, B. L., & Chen, G. (2008). Cultural Intelligence and International Asignment Effectiveness. Armonk, NY: M. E. Sharpe.

Kitsantas, A. (2004). Studying abroad: The role of college students' goals on the development of cross-cultural skills and global understanding. College Student Journal, 38(3), 441-452.

Kolb, D. A. (1976). Management and the learning process. California Management Review, 18(3), 21-31.

Lambert, R.D. (1993). International education and international competence in the United States. European Journal of Education 28, (3, Cross-Cultural Competence in a Changing World): 309-25.

Landis, D., Bennett, J.M and Bennett, M.J.. (2004). Handbook of intercultural training. 3rd ed. (Eds). Thousand Oaks, Calif: Sage Publications.

Massey, J. and Burrow, J (2009). Evaluating the Experiences of Participants in Queen's University's International Exchange Program.

Mezirow, J. (1991). Transformative Dimensions of Adult Learning. San Francisco: Jossey-Bass.

Ng, K., Van Dyne, L, and Ang, S. (2009). From experience to experiential learning: Cultural intelligence as a learning capability for global leader development. Academy of Management Learning & Education 8, (4) (12): 511-26.

Olson, L.C., and Kroeger, K.R (2001). Global Competency And Intercultural Sensitivity. Journal of Studies in International Education 5, (2) (June 1): 116-37.

Shaffer, M., & Miller, G. (2008). Cultural Intelligence: A key success factor for expatriates. In S. Ang & L. Van Dyne (Eds.), Handbook of Cultural Intelligence: theory, measurement, and applications (pp. 107-125). Armonk, NY: M.E. Sharpe.

Shokef, E., & Erez, M. (2008). Cultural Intelligence and global identity in multicultural teams. In S. Ang & L. Van Dyne (Eds.), Handbook of Cultural Intelligence: theory, measurement, and applications (pp. 107-125). Armonk, NY: M.E. Sharpe.

Stronkhorst, R. (2005). Learning Outcomes Of International Mobility At Two Dutch Institutions Of Higher Education. Journal of Studies in International Education 9, (4) (December 1): 292-315. Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student leaving. The Journal of Higher Education, 59(4), 438-455.

Van Dyne, L., Ang, S., & Koh, C. (2008). Development and Validation of the CQS. In S. Ang & L. V. Dyne (Eds.), Handbook of Cultural Intelligence: theory, measurement, and applications (pp. 16-38). Armonk, NY: M.E. Sharpe.

Vulpe, T., Kealey, D., Protheroe, D. and MacDonald, D. (2000). A Profile Of The Interculturally Effective Person. Gatineau (Hull), Québec: Department of Foreign Affairs and International Trade.

Vygotsky, L. S. (1986). Thought and Language. Cambridge, MA: MIT Press.

Copyright © 2012 Norah McRae

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Reflections on twenty years of practicum, partnership & practice

Andrew J. Martin
School of Sport & Exercise, Massey University, New Zealand

Twenty years ago the development of a sports management program at Massey University was then the only one in New Zealand. Professional rugby was still a couple of years away. Kit McConnell, Head of the 2011 RWC and Tournament Director for the IRB, was a Masters student back then. He indicated that

the academic staff were doing something new – and special. For me, there was a good balance between having enough structure and learning about the elements of the industry and having freedom within the curriculum to explore what interested me (cited in Massey University, 2011, p. 15).

This paper provides an auto-ethnography related to the author's extensive involvement and self-reflection on leading the development of work based experiential education sport management and coaching related practicum programs at Massey University, for the purposes of developing further WIL understanding (Martin, Rees & Edwards, 2012), particularly in the sport context (Martin, Fleming, Ferkins, Wiersma & Coll, 2010). The research is interpretive in nature and philosophy and employs a collective case study methodology across different educational contexts. The implications are for reflective practice (Fleming & Martin, 2007), pedagogy development (Coll et al, 2009), and graduate attributes (Fleming, Martin, Hughes & Zinn, 2009).

Keywords: Reflective practice, pedagogy development; graduate attributes

Introduction

Despite the best intentions of academics to enhance graduates' employability within classroom settings, Bates (2008) and Cranmer (2006) indicated that the limitations consistently produce mixed outcomes. Furthermore it has been argued that work-integrated curricula (Patrick, Peach, Pocknee, Webb, Fletcher & Pretto, 2008) and applied learning experiences (Schwartzman & Bouas-Henry, 2009) positively affect graduates in the transitional stage into employment (Cranmer, 2006) and as on-going professional development (Leberman & Martin, 2005).

Massey University offers applied learning programs in real world community and industry contexts across business, education, science, humanities and creative arts degrees in related colleges. The aim of these courses is to embed applied learning opportunities increasingly across the curriculum, maintaining qualification relevance and opportunities for research partnerships and staff professional development. The paper provides the background that influenced the sport management practicum course design and gives examples, through participant observation, of the development of these courses over the past two decades (1992-2012).

The reflective practitioner

Auto ethnographies or narratives of self are highly personalized accounts for the purposes of developing sociological understanding (Ellis & Bochner, 2000; Martin, 2008; Sparkes, 2000). The current research presented in this paper, which draws upon the experiences of the author, was interpretive in nature and philosophy (Erlandson, Harris, Skipper & Allen, 1993; Lincoln & Guba, 1985), and employed a collective case study methodology (Bassey, 2003; Stake, 2008). It allowed the researcher to gain an in-depth understanding of the issues of interest and to explore meaning from a number of angles and across different sport management education contexts (Merriam, 1998). The qualitative research process involved participant observation (Denzin & Lincoln, 2008; Guba & Lincoln, 2005) and highlights aspects of learning as I developed as a reflective practitioner (Schön, 1987) involved in coordinating practicum programs. A cyclical process of personal reflection on action is central to the process of experiential learning (Boud, Keogh & Walker, 1985; Kolb, 1984; McNiff & Whitehead, 2001).

This paper provides critical self-reflection to relive the author's journey (Martin, 2008) of two decades of research into pedagogical aspects of applied experiential learning in sport management (Foster & Dollar, 2010), which involves participant observation of double semester undergraduate, postgraduate and distance based practicum courses. This paper also gives examples of how these applied experiential learning approaches have assisted graduate employability.

Background/context

All Black coach, JJ Stewart had visited Ireland in the 1970s and was impressed with their Rugby coaching program. When he became a member of the Massey University Council in the 1980s he lobbied for an initiative in rugby and, more generally, sport coaching. At the same time the changes from amateur to professional sport were happening in New Zealand, so any formal University initiative aimed to support the development of professionalism. There was a need for a sport coaching program, but also one that would train individuals to manage the various sports organizations, which at the time was unique in the New Zealand tertiary sector: At the beginning of 1992 the first six papers in sport management and coaching were offered with most of the initial coaching teaching material coming from the American Coaching Effectiveness Program (ACEP), which later expanded into the American Sport Education Program (ASEP). There was a major within the Bachelor of Business Studies in sport management and coaching as well as undergraduate and post graduate diplomas. A practicum component was an integral part of the program.

A conscious effort was made to achieve close relationships and joint high performance coaching programs with various sporting codes, as well as rugby, and to produce New Zealand based teaching material (Collins, 2000; Collins & Jackson, 2007; Leberman, Trenberth & Collins, 2006, 2012; Trenberth & Collins, 1994; 1999). As rugby went professional in 1996, the jointly awarded New Zealand Rugby Union (NZRU) and Massey University Certificate in Rugby Coaching provided a unique professional qualification at the time. The certificate consisted of the highest level NZRU rugby coaching practicum integrated with more theory based coaching papers. The coaching practicum required a season's critical reflection of training sessions, player and game analysis. In 1999 the Sport & Rugby Institute was built on the Palmerston North campus to provide a purpose built educational facility for rugby and other sporting codes. Team building programs were also developed in conjunction with the NZRU and Outward Bound (Chu, Leberman & Martin, 1998).

Within ten years the program had attracted in excess of 200 equivalent full time students, of whom more than 20% were postgraduate, and also had the first PhD enrolments. As sport related academic programs developed across the University, a management and coaching major in the Bachelor of Sport & Exercise was also added and a School of Sport and Exercise has subsequently been formed.

My interest in the development of applied experiential learning strategies in sport management is through a coordination and facilitation role of the practicum courses since 1994, in particular my research focus on communities of practice range from sport management, coaching, outdoor education and work integrated learning contexts.

Method/ approach

Ethnographic case study

This paper is based on an ethnographic case study involving participant observation (Sturman, 1997). My involvement as coordinator of a number of practicum courses means that I am an integral part of the research process and cannot easily be removed from it. Cohen, Manion and Morrison (2003) indicate that participant observation is central to every case study, with the researcher being part of the group or the activities that are observed (Yin, 2009). It also allows a holistic interpretation of the phenomena being studied (Cohen et al., 2003).

Credibility, transferability and ethical considerations

The use of participant observation in this sport management case study allows myself, as the researcher, to experience, observe, and be part of the applied experiential learning process. The descriptive account of the methods of course design and activities provide a greater insight and understanding of the sport management practicum experience. My prolonged involvement aimed to increase the study's credibility. Being a participant observer of a number of practicum courses in a variety of contexts importantly gave me an increasingly greater perspective of the phenomena and variables involved (Lincoln & Guba, 1985). This involvement also acknowledges my potential biases, but it should be noted that I have no vested [financial or otherwise] interest in positively reporting the programs. Ethical considerations of interpretive/ethnographic research, such as issues of confidentiality, anonymity and informed consent, are situational and contextual (Mauther, Birch, Jessop & Miller, 2002), "sharpens the senses, and ultimately refines and enhances the quality of the endeavour" (Fetterman, 1998, p.146). The nature of interpretive and case study research seeks to form a unique interpretation of events rather

than produce generalizations. Transferability, the interpretive equivalent to generalisibility, is enhanced here by the provision of a 'thick' description (Merriam, 1998).

Results/ discussion

Sport management practicum

Feedback from sport management graduates in the Bachelor of Business Studies between 1994 and 1999 indicated the value of the practicum, with the whole course of study being important to respondents, rather than the applied part as a stand-alone component. However, it was the overall business context within which the major is situated (the six sport management major papers are 25% of the business degree), which proved most helpful to respondents in their employment positions (Martin & Leberman, 2005). The course assists students in understanding various aspects of business philosophy or theory (e.g. finance, marketing, economics), but also provides links to practical or real life sport contexts and situations.

The 3rd year capstone and postgraduate practicum requires students to undertake 180 hours of project based work within a sport organization during a double semester period. The use and development of critical reflection strategies throughout the program helps them learn how to think in different ways – potentially outside the square. They are primarily encouraged to develop skills by following Gibbs (1988) and Moon's (2000) stages of reflection involving analysis, evaluation and planning future action. The level of critical reflection is also impacted by prior experiences (Boud, Cohen & Walker, 1993). For undergraduate students, the practicum may provide more personal development (self-confidence and self-esteem) opportunities and an initial stepping stone to employment. Whereas postgraduate and distance based students often value the opportunity to enhance their professional development through the reflective process (Leberman & Martin, 2005).

Investigation of the facilitated reflective strategies utilized in the Sport Management Practicum at Massey University, and also the Sport and Recreation Cooperative at AUT University, New Zealand illustrated the value of critical reflection to students' personal learning, professional growth and increased self-confidence. The research reviewed the processing of their 'reflection in action' and 'reflection on action' (Boud et al, 1993) over the period of their work placement through a document analysis of their reflective journals. Student feedback illustrated the skills learnt, the value of linking theory to practice, and the positive nature of their practicum experiences as professional preparation for careers in the sport industry (Fleming & Martin, 2007).

McGregor's X and Y theory (1960) relates to Maslow's hierarchy of needs (1962) in how human behaviour and motivation in the workplace assists in maximizing output. In relation to Theory Y, as a supervisor I aim to create the most symbiotic relationship between the supervisors and student, which relates to aspects of self-actualization and self-esteem (Maslow, 1962). The importance of managing and communicating both students' and supervisor's expectations is emphasized in the induction process (Martin & Leberman, 2005). Students are encouraged to be increasingly proactive rather than reactive, demonstrating initiative and adding value to the organization; aiming to move beyond the student persona and doing just a good (grade C) or very good job (B), but towards producing an outstanding professional performance (A) that adds value to the organization, takes work away from the supervisor and exceeds expectations. It is often through the support and advice of peers, supervisors and the development of industry networks, and the achievement of an A grade in the practicum paper, that provides the opportunity of immediate post practicum paid positions. Top students are often subsequently employed in their practicum organization or by previous graduates of the same program in other sport organizations.

Personal & professional development

My interest in applied experiential learning programs also led to changing an existing management development course, the Action Learning Management Practicum (ALMP), a 3rd year undergraduate program at Massey University from 2002 to 2004. It provided an outdoor experiential education for-credit course where, as facilitators, we used a more holistic model of course design (Leberman & Martin, 2005). The initial 5-day course integrated a range of physical, social, creative and reflective activities. The benefit of post course reflection (Leberman & Martin, 2004) was highlighted from data gathered from open ended questions about the course impacts and key factors in achieving these impacts sent to participants two weeks and again six months after the 5-day course. Reflection on the whole experience often draws parallels to organization and management theories. It provides a means for developing the whole person as advocated in the management education literature (Boyatzis & McLeod, 2001; Gray, 2007). These practicum experiences highlight that personal and professional development of managers often cannot be separated (Leberman & Martin, 2005).

Although intended, but not always explicit, pedagogies that aim to integrate theory and practice have been found to be implicitly or indirectly fostered by a variety of means (Coll et al, 2009). In the sport management context (Martin, Fleming, Ferkins, Wiersma & Coll, 2010), the principal means for fostering integration of on- and off campus learning is by assessment via, for example, reflective journals and assignments/reports post-placement (Hodges, 2011). This integration mostly consists of reflection-on-action (Schön, 1991), after the learning activities, and is primarily orientated towards personal growth for younger (aged 18-21) undergraduate students, and professional development for (older) distance based or postgraduate students.

Graduate feedback has indicated that to enhance employability in the sport and recreation industry, work integrated learning programs need to be designed so that students are provided with opportunities to facilitate the development of various competencies. In this context, attributes that are highly valued include the ability and willingness to learn/ enthusiastic participation (passion for sport), the use of initiative/ self-sufficiency, and personal organizational skills. Success in this industry relies on relationship building/ developing professional networks as well as teamwork and cooperation. Developing attributes such as strong oral and written communication skills, self-confidence, and customer relationship management (Fleming, Martin, Hughes & Zinn, 2009) highlight once again the importance of both personal and professional development throughout the practicum experience.

Conclusions/ implications

Drawing upon the experiences of the author/researcher, this ethnographic case study has allowed the development of an in-depth description of practicum course design across different sport management education contexts. Being an integral part of the research process, has allowed the researcher to be engaged in the group and activities that were observed. Whilst this paper has provided a personalised account, issues of credibility, transferability and ethical considerations have been addressed.

The findings from my participant observation, research, and prolonged involvement with the practicum courses over the past two decades suggest that these applied experiential learning experiences enhance graduate attributes and provide a point of difference that employers' value. The examples provided have illustrated the importance of integrating a variety of reflection opportunities over time to enrich curriculum and program design, which the ever expanding field of experiential learning in sport management worldwide needs to increasingly embrace. A defining feature of these applied learning practicum experiences is praxis (Bates, 2008; Kolb, 1984), which links scholarship, critical thinking, research, and theory with practice.

References

Bassey, M. (2003). Case study research. In J. Swann & J. Pratt (Eds.), *Educational research in practice: Making sense of methodology* (pp. 111-123). New York: London: Continuum.

Bates, M. (2008). Work□integrated curricula in university programs. *Higher Education Research & Development, 27*(4), 305-317.

Boud, D., Keogh, R., & Walker, D. (1985). *Reflection: Turning experience into learning*. London: Kogan Page.

Boud, D., Cohen, R., & Walker, D. (Eds.). (1993). *Using experience for learning*. Buckingham: Open University Press.

Boyatzis, R.E., & McLeod, P.L. (2001). Our educational bottom line: Developing the whole person. *Journal of Management Education, 25*(2), 118-123.

Chu, M.M., Leberman, S.I., & Martin, A.J. (1998). Developing people, developing teams: The New Zealand Rugby Football Union Academy Squad goes to Outward Bound. *New Zealand Coach*, *7*(1), 14-16.

Cohen, L., Manion, L., & Morrison, K. (2003). *Research methods in education*. London: Routledge Falmer.

Coll, R., Eames, C., Paku, L., Lay, M. Ayling, D. Hodges, D., Ram, S., Bhat, R., Fleming, J., Ferkins, L., Wiersma, C., & Martin, A.J. (2009). An exploration of the pedagogies employed to integrate knowledge in work-integrated learning. Journal of Cooperative Education & Internships, *43*(1), 14-35.

Collins, C.W. (2000). *Sport in New Zealand society*. Palmerston North: Dunmore press.

Collins, C.W., & Jackson, S. (Eds.) (2007). *Sport in Aotearoa/ New Zealand society* (2nd ed.). Auckland: Thomson New House.

Cranmer, S. (2006). Enhancing graduate employability: best intentions and mixed outcomes. *Studies in Higher Education, 31*(2), 169-184.

Denzin, N.K., & Lincoln, Y.S. (2008). Introduction: The discipline and practice of qualitative research. In N.K. Denzin & Y.S. Lincoln (Eds.), *Strategies of qualitative inquiry* (3rd ed., pp. 1-43). Thousand Oaks, CA: Sage.

Ellis, C., & Bochner, A.P. (2000). Autoethnography, personal, narrative, reflexivity. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp.733-768). Thousand Oaks: Sage.

Erlandson, D.A., Harris, E.L., Skipper, B.L., & Allen, S.D. (1993). *Doing naturalistic inquiry: A guide to methods* (pp. 66-79). California: Sage.

Fetterman, D.M. (1989). *Ethnography – step by step.* London: Sage.

Fleming, J., & Martin, A.J. (2007). Facilitating reflective learning journeys in sport cooperative education. *Journal of Hospitality, Leisure, Sport & Tourism Education, 6*(2), 115-121.

Fleming, J., Martin, A.J., Hughes, H., & Zinn, C. (2009). Maximizing work integrated learning experiences through identifying graduate competencies for employability: A case study of sport studies in higher education. *Asia Pacific Journal of Cooperative Education*, *10(*3), 189-201.

Foster, S., & Dollar, J.E (2010). *Experiential learning in sport management. Internships & beyond*. West Virginia University: Sheridan Books.

Gibbs, G. (1988). *Learning by doing*: *A guide to teaching and learning methods*. Oxford, England: Further Education Unit.

Gray, D.E. (2007). Facilitating management learning: Developing critical reflection through reflective tools. *Management Learning*, *38*, 495-517.

Guba, E.G., & Lincoln, Y.S. (2005). Paradigmatic controversies, contradictions, and emerging confluences. In N.K. Denzin & Y.S. Lincoln (Eds.), *The sage handbook of qualitative research* (3rd ed., pp. 191-216). Thousand Oaks, CA: Sage.

Hodges, D. (2011). Assessment of student learning in cooperative education. In Coll, R.K. & K.E. Zegwaard (Eds.). *International handbook for cooperative and work-integrated education* (2nd ed.) (pp. 53-62). Boston, MA: World Association of Cooperative Education

Kolb, D.A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, N.J.: Prentice Hall.

Leberman, S. I., & Martin, A.J. (2005). Applying dramaturgy to management course design. *Journal of Management Education*, *29*(2), 319-332.

Leberman, S. I., & Martin, A.J. (2004). Enhancing transfer of learning through post-course reflection. *Journal of Adventure Education and Outdoor Learning, 4*(2), 173-184.

Leberman, S.I., Trenberth, L.D., & Collins, C. (Eds.) (2012). *Sport management in Australia & New Zealand* (3rd ed.). South Melbourne, Vic: Cengage Learning.

Leberman, S.I., Trenberth, L.D., & Collins, C. (Eds.) (2006). *Sport management in Aotearoa/ New Zealand* (2nd ed.). Southbank, Vic: Thomson Learning.

Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic enquiry*. London: Sage.

Martin, A. J. (2008). A self-reflection on emergent research design. *Graduate Journal of Social Science*, *5*(1), 49-70.

Martin, A.J., Fleming, J., Ferkins, L., Wiersma, C, & Coll, R. (2010). Facilitating and integrating learning in sport studies cooperative education. *Journal of Hospitality, Leisure, Sport &Tourism Education 9*(1), 24-38.

Martin, A.J., & Leberman, S.I. (2005). Keeping up with the play: Practicum, partnership and practice. *Asia Pacific Journal of Cooperative Education*, *6*(2), 17-25.

Martin, A.J., Rees, M., Edwards, M. & Paku, L. (2012). An organisational overview of pedagogical practice in work integrated learning. *Asia Pacific Journal of Cooperative Education, 13(1), 23-37.*

Maslow, A.H. (1962). *Toward a psychology of being*. Princeton, NJ: Van Nostrand.

Massey University (September 2011). *Defining NZ*. Palmerston North: Massey University.

Mauther, M., Birch, M., Jessop, J., & Miller, T. (2002). *Ethics in qualitative research.* London: Sage.

McGregor, D. (1960). *The human side of enterprise.* New York McGraw Hill.

Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.

McNiff, J, & Whitehead, J. (2001). Action research: Principles and practice. London: Routledge Farmer.

Moon, J.A. (2000). *Reflection in learning and professional development: Theory and practice*. London: Kogan Page.

Patrick, C-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL [Work Integrated Learning] report: A national scoping study.* Brisbane, Australia: Queensland University of Technology.

Schön, D.A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions.* San Francisco: Jossey-Bass.

Schön, D.A. (1991). *The reflective practitioner: How professionals think in action*. Aldershot, Hants., UK: Arena.

Schwartzman, R., & Bouas-Henry, K. (2009). From-celebration to critical investigation: Charting the course of scholarship in applied Learning, *Journal of Applied Learning in Higher Education 1*, 3-23.

Sparkes, A.C. (2000). Auto-ethnography and narratives of self: Reflections on criteria in action. *Sociology of Sport Journal*, 17, 21-43.

Stake, R. (2008). Qualitative case studies. In N.K. Denzin & Y.S. Lincoln (Eds.), *Strategies of qualitative inquiry* (3rd ed., pp. 119-150). Thousand Oaks, CA: Sage.

Sturman, A. (1997). Case study methods. In J.P. Reeves (Ed.), *Educational research, methodology, and measurement* (2nd ed.) (pp. 61-66). Oxford: Pergamon.
Trenberth, L.D., & Collins, C. (Eds.) (1999). *Sport business management in New Zealand*. Palmerston North: Dunmore Press.
Trenberth, L.D., & Collins, C. (Eds.) (1994). *Sport management in New Zealand: An introduction*. Palmerston North: Dunmore Press.
Yin, R.K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.

Copyright © 2012 Andrew J Martin

The authors assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the authors.

Increasingly embedding workplace and applied learning opportunities within the curriculum: A resource based approach

Andrew J. Martin
Massey University, New Zealand
Malcolm Rees
Massey University, New Zealand

Note this paper is a summary version of
Martin, A. J., Rees, M., Edwards, M. & Paku, L. (2012). An organisational overview of pedagogical practice in work integrated learning. *Asia Pacific Journal of Cooperative Education, 13*(1), *23-37.*

Tertiary program curriculum design (in Australia and New Zealand) has increasingly emphasised work based experiential learning opportunities to enhance graduate attributes, employability and collaboration with industry (Freudenberg, Brimble & Cameron, 2009; Patrick, Peach & Pocknee, Webb, Fletcher, & Pretto, 2009; Orrell, 2011). This paper focuses on how resources have been published through Ako Aotearoa (National Centre for Teaching Excellence) to support strategic initiatives related to workplace and applied learning opportunities within the curriculum (Massey University, 2011).

At Massey University, New Zealand, WIL programs are coordinated across five faculties (business, humanities, education, science, and creative arts). Although there is a variety of WIL practice, structured guidelines provide clear outcomes for students, academic and workplace supervisors. The resources were developed through qualitative interview or questionnaire feedback from WIL stakeholders. 'A Template for Good Practice' (Martin, Rees & Edwards, 2011), provides a useful overview of key considerations for any tertiary provider either offering or considering WIL as an option for enhancing student learning. Further resources to support increasing WIL practice within tertiary education institutions need to be developed to ensure that the applied part of the whole degree program benefits both the students and organisations involved.

Keywords: Applied learning, stakeholders, competencies

Introduction

Work Integrated Learning (WIL) programs provide a bridge for the student between the academic present and their professional future (Patrick et al., 2009). WIL programmes seek to provide graduates with a comprehensive industry skill set desired by potential employers, in particular the development of behavioural competencies such as self-confidence, communication, customer relationship management, initiative, and relationship building (Archer & Davidson, 2008; Fleming & Ferkins, 2006; Martin & Hughes, 2009). These personal attributes and graduate capabilities are important for success in the workplace (Bell, Crebert, Patrick, Bates & Cragnolini, 2003). Previous research developed three resources 'How to Make the Most of Work Integrated Learning' (Martin & Hughes, 2009), which provide useful suggestions for WIL stakeholders to assist in achieving competencies needed in the workplace.

This paper highlights the specific components which, when melded together, enhance the WIL tripartite partnership of employer, academic staff, and student. The student brings to the WIL placement theoretical knowledge, industry skills and prior experiences, which have helped develop the person he or she is now (Boud & Knights, 1996). WIL then provides the opportunity for the student to develop both personal and professional attributes and enhance employability upon graduation. It adds a complementary, professional dimension to academia and builds networks. Done well, WIL benefits each stakeholder within the tripartite relationship.

The aim of this New Zealand case study was to provide an overview of a variety of WIL activities for tertiary providers either offering or considering WIL as an option for enhancing student learning. This study also aims to provide academic supervisor observations about WIL practice from a specific set of university programs for students, lecturers, and employers involved in the pedagogy of WIL so as to positively influence teaching and learning methods.

Method

This study employed a qualitative case study methodology (Bassey, 2003; Stake, 2008), which allowed the researchers to gain an in-depth understanding of the issues of interest and to explore meaning from a number of angles and across different work-based experiential education contexts (Merriam, 1998). Case studies are a common methodological approach used in WIL research because of the highly contextualized nature of such programs (Coll & Chapman, 2000). Semi-structured interview of a convenience sample of fifteen academic supervisors provided a snapshot of WIL activity from across a range of disciplines (e.g. business, creative arts, education, applied & social sciences). The participants related aspects of their WIL programs at Massey University, New Zealand and shared opinions on meeting learning outcomes and the needs of students during the WIL experience. The main research question, from an academic supervisor perspective, was what are the key factors of a WIL program that enhance the development of graduate attributes?

Whilst it is recognized that the extent of generalization from the research is limited, this is concordant with the nature of qualitative and case study research, which seeks to form a unique interpretation of events rather than produce generalizations (Stake, 2008; Yin, 2009). It is expected that the findings of this study will lend themselves to being transferred more widely to, or in other, WIL contexts i.e. by any tertiary provider either offering or considering WIL as an option for enhancing student learning. Human research ethics approval was acquired, which considered issues of confidentiality of participant identities and informed consent.

Results/Discussion

The qualitative data findings focused on six key factors (see Table 1): organization set-up; student preparation; supervision; competencies; pedagogies; and assessment (Martin, Rees & Edwards, 2011).

Table 1 Good practices for each of the six key factors

1. Organisation set- up a. Placement requirements and support b. Placement selection and location c. Risk management issues	4. Competencies a. Self-confidence b. Communication and people skills c. Teamwork d. Professional standards
2. Student preparation a. Pre-requisites and theoretical basis b. Careers interview skills and CV preparation c. Readiness for practice	5. Pedagogies a. Scenario based learning and project work b. Theory lectures and labs c. Oral presentations
3. Supervision a. On campus academic supervisor/ mentor b. Work place employer c. Work place university staff	6. Assessment a. Learning contract b. Reflective journal c. Final report d. Industry based competency checks e. Oral presentations

The importance of the WIL component to the overall program is highlighted in the following typical quotes:
WIL is the heart of the program …
…. serving as a culmination of theoretical studies...
… hands on experience... leads to a better graduate

The findings highlight that there are certain foreshadowing considerations that influence WIL set-up. Placement either was specified by the supervisor or was self-selected by the student. Self-selection allows students the capacity to choose an environment or organization about which they feel passionately
…the students select the companies they would like, or the type of product or market they want to work in and then they research that company or a number of companies, and then they look for a placement.

Placing commonly requires the university to have a long-standing relationship with the workplace organization.

Our relationship with the particular institutions is very close; it needs to be highly professional… so the type of relationship and discussion has to be of mutual trust… the nature of the practice, the nature of the work that we do together has to be on that basis.

Student preparation involves completing pre-requisite academic coursework and career readiness for the WIL placement (Johnston, 2011). "Preparation is important and applied learning can be integrated as part of the whole programme of learning" (Martin, Rees, & Edwards, 2011, p. 37).
A lot of the initial preparation is done in papers that they're doing as pre-requisites. They do lots of lab work and role plays as well as learning about the theories. They get to do some work around ethics and boundaries, supervision, integration of theory.

We prepare them in terms of the knowledge base of skills they need to go into a particular setting... A careers' person will come in and work with students … [giving] guidance with developing CV and a portfolio.'

Students should also research potential organizations, plan, be proactive and establish clear expectations of the placement and employer (Martin & Leberman, 2005).
We have documents that the students have to do before we look at placements for them… they are given specific guidelines of what we want and we check those before they go out.

Student learning is supported through appropriate industry and academic supervision (Martin & Fleming, 2010). By being open minded, observing, listening, asking questions, preparing documents, reflecting and requesting feedback, students develop self-confidence, people and communication skills supported by their supervisor's positive reinforcement, criticism and feedback. Engaging with different stakeholders and developing a network of contacts is important in enhancing future career opportunities (Martin & Hughes, 2009).
The best resources are the discussions they have from time to time with [the] mentor.
[The workplace supervisor is] the local expert… the internship host… someone on the ground who knows intimately what the business is trying to achieve and that kind of thing.

Academic supervisors also highlighted soft skill competencies related to self-confidence, communication and people skills linked to team work and professional standards, which support the student and employer findings of Fleming et al. (2009).
What a lot of practicums do is to give students confidence… They've seen how industry works. They can see why their technical skills are going to be wanted by the industry.

A particular strength of the WIL experience is the ability to enhance those soft skills that could not be learnt in the classroom environment (Fleming, Martin, Hughes & Zinn, 2009).
Other competencies get developed too… Students encounter the pressures of the workplace… They encounter the politics of the workplace… They're quite naïve when it comes to workplaces.

The teaching methods/pedagogies used consistently include theory-based lectures and labs, oral presentations, scenario-based learning (Kindley, 2002), and project work (Patrick et al., 2008). A variety of compulsory and optional WIL approaches were observed that included both scaffolded and final year projects/placements. Each approach has a place, purpose and constraints for further development that are largely based on strategic decisions within the organization and are contingent on the provision of appropriate organizational support of staff.
When we are teaching theoretical concepts we make them come alive through case-based learning, case studies, role plays, demonstrations, and then when they get into their actual applied papers that intensify more so that by the time they get to their internship they are seeing actual clients… to simulate what it's going to be like in the real world.

The main forms of assessment are an initial learning contract, followed by a reflective journal, oral presentation, and final report by the student and the supervisors. These forms of assessment support an evidence portfolio approach to WIL, as advocated by Hodges (2011). Formative feedback at various stages of the placement has also been advocated. For example, predetermining learning objectives between the student and academic supervisor before the placement, alongside ongoing feedback between the student and work supervisor during the course of the placement, recognizes that reality may dictate how well or even whether these outcomes can be met.
All of our assessment follows our learning outcomes so everything is tied to those learning outcomes that we've set for the papers.

This project supported the findings of Bates (2008) and Cranmer (2006) that the students:

… get to see what it's like in the real world as opposed to the classroom world. They get to figure out whether or not this field of practice is for them or not in terms of clients, and in terms of the profession.

Conclusions/Implications

The work-integrated learning (WIL) experience is increasingly providing a point of difference for students in enhancing their employability. Structured preparation and clear guidelines allow more effective applied learning as part of the whole program. This paper has highlighted that there are a number of considerations to be addressed in the resourcing of effective WIL programs (see Figure 1). These have been collated in to 'A Template for Good Practice' (Martin, Rees & Edwards, 2011), which provides a useful overview of key considerations for any tertiary provider either offering or considering WIL as an option for enhancing student learning. This resource supports the previous three resources 'How to Make the Most of Work Integrated Learning' (Martin & Hughes, 2009), which provide useful suggestions for WIL stakeholders to assist in achieving competencies needed in the workplace. These are available for download at www.akoaotearoa.ac.nz.

There are a number of accepted forms of WIL, particularly in professional programs. However, issues of access, equity and consistency (stakeholder expectation) need to be reviewed related to the learning outcomes, as does the level of integration (Patrick et al., 2009). WIL policy needs to be driven by institutional policy, which in itself needs to adequately resourced. Further research is needed to validate these current findings in other tertiary organization contexts, and to triangulate with the students themselves and employers or partner institutions, particularly in the development of new programs. In particular, further work is needed to validate the assessment of the soft skills that students learn through WIL.

Figure 1: Factors for WIL good practice (Martin, Rees & Edwards, 2011, p. 9)

Acknowledgements

These projects were funded by grants from Ako Aotearoa, New Zealand (National Centre for Tertiary Teaching Excellence).

References

Archer, W., & Davidson, J. (2008). *Graduate employability: What do employers think and want?* London: Council for Industry and Higher Education (CIHE).

Bell, B., Crebert, G., Patrick, C.J., Bates, M. & Cragnolini, V. (2003). Educating Australian leisure graduates: Contexts for developing generic skills. *Annals of Leisure Research, 6*(1), 1- 19.

Bassey, M. (2003). Case study research. In J. Swann & J. Pratt (Eds), *Educational research in practice: Making sense of methodology* (pp. 111-123). New York, NY: Continuum.

Bates, M. (2008). Work□integrated curricula in university programs. *Higher Education Research & Development, 27*(4), 305-317.
Boud, D., & Knights, S. (1996). Course design for reflective practice. In N. Gould & I. Taylor (Eds), *Reflective learning for social work* (pp. 22-34). Aldershot, UK: Arena.
Coll, R.K., & Chapman, R. (2000). Quantitative or qualitative? Choices of methodology for cooperative education researchers. *Journal of Cooperative Education*, *35*(1), 25-34.
Cranmer, S. (2006). Enhancing graduate employability: best intentions and mixed outcomes. *Studies in Higher Education, 31*(2), 169-184.
Fleming, J., & Ferkins, L. (2006). Enhancing student employability: A New Zealand case study of cooperative education in sport. In N. Becket & P. Kemp (Eds.), *Enhancing graduate employability in business and management, leisure, sport and tourism* (pp. 98-105). Newbury, UK: Threshold Press.
Fleming, J., Martin, A.J., Hughes, H., & Zinn, C. (2009). Maximizing work-integrated learning experiences through identifying graduate competencies for employability: A case study of sport studies in higher education. *Asia-Pacific Journal of Cooperative Education*, *10*(3), 189-201.
Freudenberg, B., Brimble, M., & Cameron, C. (2009). The building of a professional: Creating greater career identity within a degree. *The International Journal of Learning, 16*(10), 253-266.
Hodges, D. (2011). Assessment of student learning in cooperative education. In Coll, R.K. & K.E. Zegwaard (Eds). *International handbook for cooperative and work-integrated education* (2nd ed.)(pp. 53-62). Boston, MA: World Association of Cooperative Education
Johnston, N. (2011). Curriculum and curricular orientations in cooperative and work-integrated education. In Coll, R.K. & K.E. Zegwaard (Eds). *International handbook for cooperative and work-integrated education* (2nd ed.)(pp. 297-304). Boston: World Association of Cooperative Education
Kindley, R.W. (2002). Scenario-based e-learning: A step beyond traditional e-learning*, ASDT on-line magazine – learning circuits,* 3(5). Retrieved June 1, 2011 from http://www.astd.org/LC/2002/0502_kindley.htm
Martin, A.J., & Fleming, J. (2010). Cooperative education in outdoor education. *Australian Journal of Outdoor Education, 14*(1), 41-48.
Martin, A.J., & Hughes, H. (2009). *How to make the most of work integrated learning*. Palmerston North, New Zealand: Massey University.
Martin, A.J., Rees, M., Edwards, M. & Paku, L. (2012). An organisational overview of pedagogical practice in work integrated learning. *Asia Pacific Journal of Cooperative Education, 13*(1), *23-37.*
Martin, A.J., Rees, M., & Edwards, M. (2011). *Work integrated learning: A template for good practice*. Wellington, New Zealand: Ako Aotearoa.
Massey University. (2011). *The road to 2020*. Palmerston North, New Zealand: Massey University.
Merriam, S.B. (1998), *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
Orrell, J. (2011). *Good practice report: Work integrated learning*. Strawberry Hills, NSW: Australian Learning & Teaching Council.
Patrick, C-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL [Work Integrated Learning] report: A national scoping study*. Brisbane, Australia: Queensland University of Technology.
Stake, R. (2008). Qualitative case studies. In N.K. Denzin & Y.S. Lincoln (Eds), *Strategies of qualitative inquiry* (3rd ed.) (pp. 119-150). Thousand Oaks, CA: Sage.
Yin, R.K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.

Copyright © 2012 Andrew J Martin and Malcolm Rees

The authors assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the authors.

Leveraging work integrated learning through on-campus employment – A university-wide approach

Gaon Mitchell
Victoria University
Judie Kay
RMIT University

Student life at Victoria University is characterised by two features: the majority of students engage in paid employment alongside their studies; and, every student engages in work-integrated learning or Learning in the Workplace and Community (LiWC) as a key component of their academic course. This paper explores an innovative structured approach Victoria University has initiated which is emerging as a strategy to better align these two activities, the Students as Staff program. The program was designed to respond to VU's diverse student cohort and the pivotal role the university plays in the western region of Melbourne, Australia. Students as Staff is a term used to describe any current Victoria University student who is also working for pay on-campus. In 2011, one thousand students held positions at VU ranging from administration and peer-to-peer mentoring, through to research assistants and tutors.

The 2011 Students as Staff evaluation found that 20 per cent of students received academic credit for their on-campus employment, and many more indicated their roles were related to their study discipline. In addition respondents reported feeling significantly engaged with the institution and that work on-campus had contributed to developing their graduate capabilities. These evaluation results therefore indicate that on-campus employment through a structured program such as Students as Staff provides Victoria University with a mechanism to enhance student learning outcomes. This paper discusses key ways in which tertiary institutions can expand their capacity to support and enhance student learning and develop graduate capabilities through paid work opportunities; an increasingly necessary component of university life.

Keywords: Work-integrated learning; graduate capabilities; part-time work; on-campus employment

Introduction

The employment of students on-campus at Australian Universities is not a new phenomenon, and indeed has been occurring for as long as Universities have existed. Few however have taken a systematic approach to linking on-campus work with students disciplines of study, therefore resulting in a unique relationship between the student and the institution in a climate when student's on-campus engagement with their universities is increasingly diminishing.

Victoria University (VU) is a multi-sectoral institution with 10 campuses across the Western Suburbs of Melbourne. In the heart of one of the fastest growing population corridors in Australia (Australian Bureau of Statistics, 2012), it has a student cohort of 50,000 predicted to double in the next 20 years, and a staffing profile of close to 2000 academic, and 1500 professional staff. It is a richly diverse community with many members coming from low socio-economic backgrounds, being first in family to attend post compulsory education, and living in an environment where English is a second language.

In 2009 VU implemented a pilot known as the Students as Staff program. This pilot aimed to facilitate the employment of current VU students on-campus with Black et al (2010) noting "the impetus for the program relate[d] to:

- Boosting engagement with the University to impact on the attrition rates;
- Providing avenues to gain financial support on campus, not off campus; and
- Linking work and learning to enhance employability skills.

The results of the pilot were overwhelmingly positive with students self-reporting improvements to their employability skills, and graduate and professional capabilities. In addition they reported a greater connection to VU as an institution and an improvement in their studies.

Following the successful pilot, VU committed to a full scale implementation of the Students as Staff program in 2011 with a key focus on enhancing the link between on-campus employment and students study discipline. Across 2011 VU recruited and employed 1000 Students as Staff, which allowed the program team to explore factors that linked that work through to VU's highly successful Learning in the Workplace & Community (LiWC) initiative, VU's work integrated learning (WIL) program.

A survey of all Students as Staff in 2011 found that a higher than expected percentage (20%) of students were receiving some form of credit for their on-campus employment. The results also confirmed the pilot findings with students reiterating the role the financial support played in retaining them in post-compulsory education, and the enhancement of their employability skills, and graduate and professional capabilities.
The remainder of this paper discusses implementation of the program, explores factors which have contributed to the success identified by the evaluation findings, and suggests mechanisms which tertiary institutions can utilise to support student learning and develop graduate capabilities through paid work opportunities, particularly through expanding the link between on-campus employment and work integrated learning.

Study and Work

Despite the supposed adverse effects of working whilst studying, it is becoming a standard component of student life. The most recent Australasian Survey of Student Engagement (AUSSE) data indicates that 69% of Australasian University students work for pay on or off campus (ACER, 2010). Some studies (Devlin, James, & Grigg, 2008; Krause, Hartley, James, & McInnis, 2005) have linked high rates of off-campus employment with issues such as students not attending class in lieu of working. On-campus employment, however has been positively related to enhanced student progress and completion (Pascarella and Terenzini, 2005). Although it is acknowledged that on-campus employment is far less prevalent than off campus employment (Coates, 2011) and limited research has been conducted in Australia in relation to on-campus employment. Given universities' play a critical role in producing work ready graduates, there is now a strong impetus for universities to play a greater role in linking part-time work to students learning and development activities to ensure students can articulate and leverage these co-curricular activities for their future career outcomes. As noted by Hamish Coates, Executive Director Research, Australian Council of Educational Research, "this is a significant facet of Australia's higher education life that is slipping between the cracks" (2011, p.2).
Many Australian institutions have moved towards systematic work-related, experiential learning activities that take many guises – work-integrated learning, learning-integrated work, and service learning to name but a few. At the core of this is any form of intentional, organised and accredited educational activity that integrates theoretical learning and application in the workplace (Flinders University, 2012), or as defined by the 2008 WIL Report "An umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum" (Patrick et al, 2008, p.8).
At Victoria University this has been termed Learning in the Workplace and Community (LiWC), and is a key strategic initiative for the institution. All students must complete 25% of the assessment of their studies through some form of LiWC activity and these traditionally take the form of practical placements, industry and/or community projects, cooperative education, or internships. Now, under the banner of Students as Staff, linking on-campus employment with LiWC has become a new focus that will start to go part-way towards closing the gap between part-time work and studies.

Students as Staff at VU

Students as Staff was formally launched in August 2010 by the then Vice-Chancellor, Professor Elizabeth Harmen who set a stretch target of 1000 positions on campus by the end of 2011. At the time she noted the need for VU to "walk the talk" in terms of becoming an exemplary host organisation, and that Students as Staff was one of a range of strategic initiatives aimed at achieving that outcome. If VU was out in our community asking partner organisations to take on VU students for all forms of Learning in the Workplace and Community, VU needed to be leading the way in providing these opportunities to its own students.
Among the initial challenges was defining, and then implementing systems to measure and evaluate Students as Staff at VU. Through the ratification of a positioning paper in late 2010 Students as Staff at VU were defined as:

> *Any student who is also a paid member of Victoria University's staff profile, will be defined as a Student as Staff. Inherent in this is that the primary reason the student interacts with VU is as a student, rather than a staff member.*

Early data analysis through Human Resources identified approximately 5 out of every 10 casual staff members, undertaking significant study loads. This lead to the estimation that VU probably had close to 500 Students as Staff already on the payroll, however this needed to be further quantified. Working closely with Human Resources a Student as Staff tick box was added to every employment contract across both the higher education and vocational education sectors. This allowed the project team to track student employment on campus across 2011.
A key focus in the initial stages was to create a permeating cultural shift towards the employment of students whenever possible. A range of mechanisms were used to achieve this cultural shift, one example being 12 months of funding provided by the Vice-Chancellor to subsidise student salaries and establish the program.

Evaluation and Key Findings

In July 2011 the first full-scale evaluation of all identified Students as Staff was conducted – a total of 650 students at that point in the year. An electronic survey was utilised with a 40% response rate which gave significant weight to the results.

Key findings from the Students as Staff evaluation included:

- Students employed on-campus self-reported that they felt significantly engaged with Victoria University as an institution. 89% of students indicated that working at VU had made them more connected to University life;
- The remuneration for Students as Staff positions had a major impact on student's abilities to continue with study commitments at VU; and
- There was a marked disconnect between how related (somewhat or very) work activities were to studies (80%), and those that actually received any credit (20%).

In addition students self-reported that their work on campus had contributed to the development of VU's Graduate Capabilities as per **Figure 1** (Mitchell, G., 2012)
One limitation of the evaluation findings is that many Students as Staff are also actively involved in separate LiWC activities as part of their study programs, and/or other extracurricular activities, and this may have impacted the evaluation results.

Figure 1 : Graduate Capability Development

To what extent has your paid work at Victoria University contributed to your knowledge, skills and personal development in the following areas?

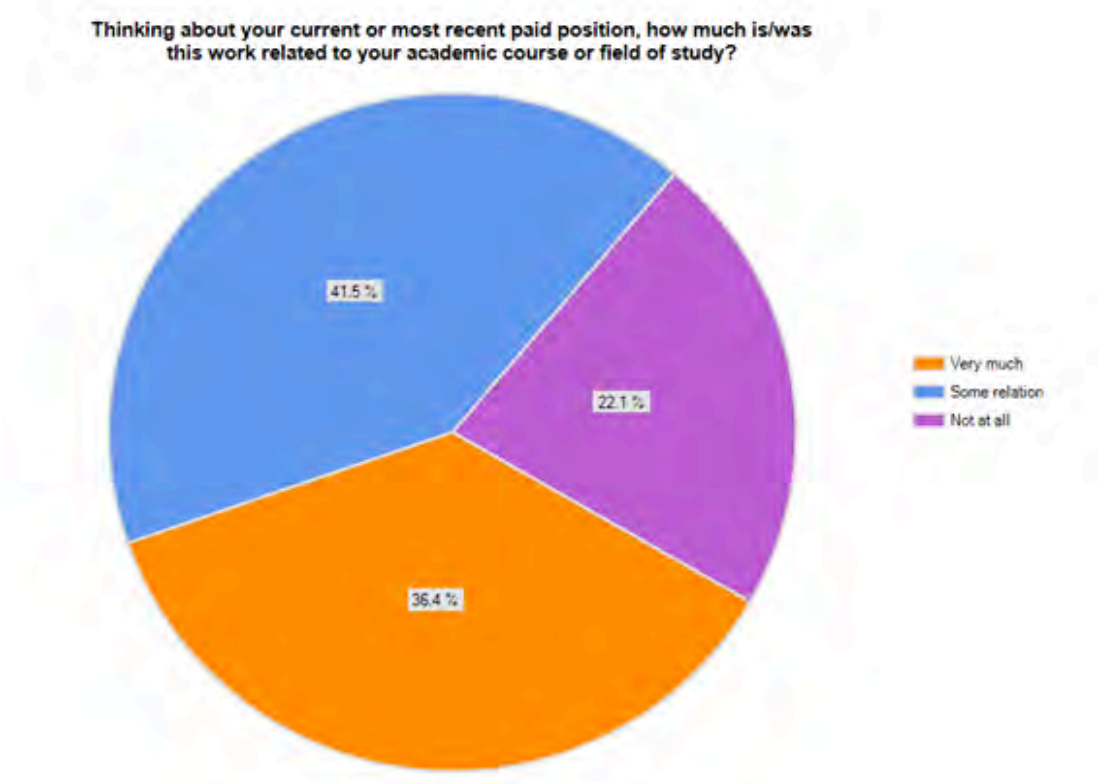
	None	Some contribution	Significant contribution	Rating Average	Response Count
Ability to problem solve in a range of settings	1.6% (4)	**56.5% (143)**	41.9% (106)	2.40	253
Ability to locate, critically evaluate, manage and use written, numerical and electronic information	7.9% (20)	**55.3% (140)**	36.8% (93)	2.29	253
Ability to communicate in a variety of context and modes	2.0% (5)	42.9% (108)	**55.2% (139)**	2.53	252
Ability to work both autonomously and collaboratively	3.2% (8)	47.8% (121)	**49.0% (124)**	2.46	253
Ability to work in an environmentally, socially and culturally responsible manner	4.4% (11)	44.4% (111)	**51.2% (128)**	2.47	250
Ability to manage learning and career	8.4% (21)	**49.8% (125)**	41.8% (105)	2.33	251

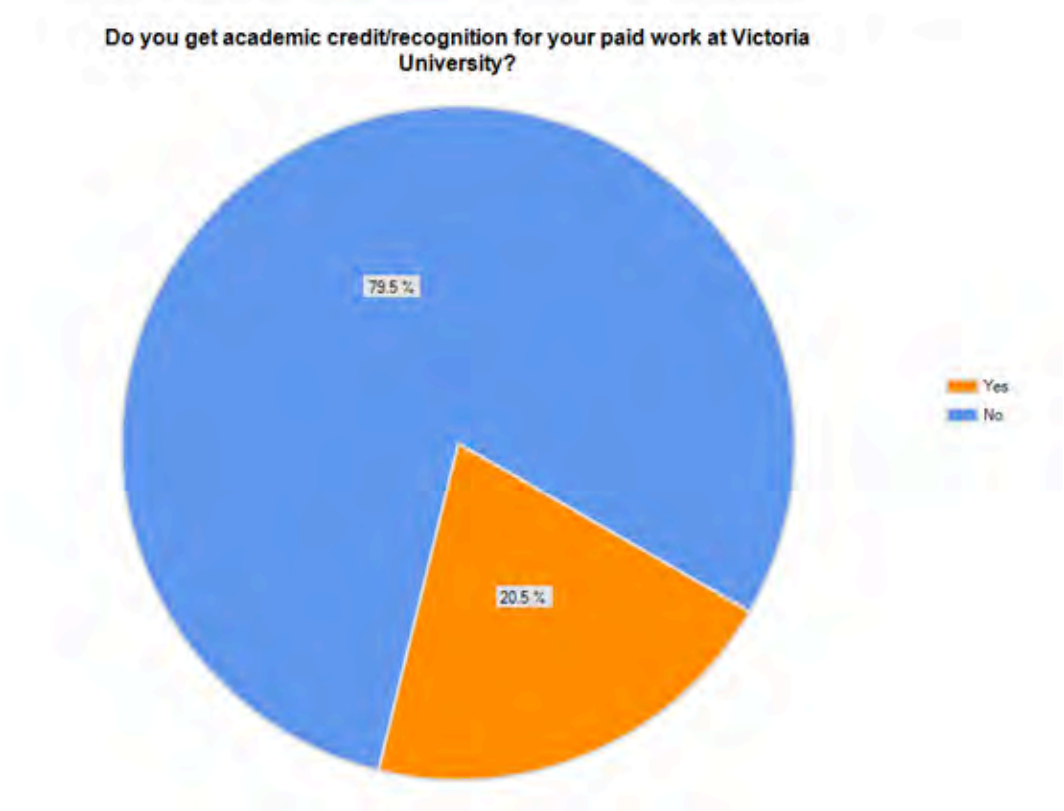
To what extent has your paid work at Victoria University contributed to your knowledge, skills and personal development in the following areas?					
development opportunities					

The evaluation question in relation to LiWC resulted in 20 % of students indicating that they received academic credit for their employment on campus. Examples included students working in the gymnasiums who were often undertaking Sports and Exercise Science qualifications and credit was granted for some of their work. Student Connections also offered all Students as Staff the opportunity to undertake a Certificate IV in Frontline Management, with all study components replaced with Recognition of Prior Learning (RPL) for on-the-job training, and a significant reflective writing process in place alongside the work.

In addition Students as Staff were asked whether they felt their work was very, somewhat, or not related to their discipline of study. 82% indicated work was somewhat or very related to their discipline of study which was a stark contrast to the 20% of students receiving credit for their study. This finding has initiated discussion within the University community and a key focus moving forward will be on finding mechanisms to support, enhance and grow the formal link between on-campus employment and study. See **Figure 2** (Mitchell, G. 2012).

Figure 2 LiWC - Relationship between part-time work and studies




Do you get academic credit/recognition for your paid work at Victoria University?
79.5 %
20.5 %
Yes
No

Discussion

The results of the Students as Staff evaluation at VU are consistent with previous research findings and highlights the role on-campus employment can play across dimensions of retention, engagement, and learning outcomes.
When examining VU departments where a direct link between a Student as Staff position and gaining credit under LiWC has been achieved, they can be clustered by the various drivers at play:

1. Historical Discipline Focused Programs: A range of long standing programs already in place at VU, particularly in areas of distinctive specialisations such as the link between the sports and fitness centre and sports and exercise science students which have grown and been aligned over time.
2. Innovative General Programs: Led by champions of Students as Staff who have built on both LiWC and Students as Staff as key strategic mechanisms for developing students employability outcomes at VU. In these instances the strong advocates of the program have been encouraged by the current university wide support for the program, seen the benefits of student employment in their own work areas, and then creatively linked the work to study programs and WIL. An example of this is the Student Connection area and their offering of the Cert IV in Frontline Management which extends a student's experience at University and adds to their employability upon graduation.
3. Individual Student Led roles: Students opting for positions within the university that have a strong link to their particular discipline of study and thereby creating the link themselves to enhance employability outcomes. In some instances the student has then needed to advocate within their discipline area to gain the credit for this work.

The evaluation of the program in 2011 and its successful outcomes has invariably identified a number of challenges in the employment of Students as Staff which are guiding program initiatives moving forward:

- Evidence of a highly casualised workforce;
- Variations in the provision and quality of supervision of students with in work areas;
- Variations in the work readiness of Students as Staff;
- Ensuring broad access to opportunities and avoiding an "elite" cohort of Students as Staff who get every role;
- Ensuring the student can understand and articulate their own learning;
- Increasing the opportunity to link on-campus employment and studies and their LiWC.

Looking forward

US literature (Pascarella and Terenzini, 2005) draws some favourable links between on-campus work and a range of engagement indicators, which unlike off-campus work, provides a growing argument for institutions to move in the direction of systematic on-campus employment opportunities for students. Not only does this initiative provide an income stream (in a safe environment) for students, but it also enables universities to develop good practices in the provision of work integrated learning on campus which can be transferred to partner organisations in the broader community. Examples include enhanced guidelines and training for supervisors of Students as Staff, and sharing of best practice through face-to-face and online Communities of Practice.
In support of work by Benckendorff & Blackman (2010), if further research can support the link between part-time work and useful integrative learning outcomes, then Universities exploring options for WIL may find a deliberate link between part-time work and study a useful alternative to more costly WIL programs.
All of these insights can be utilised to develop further strategies to enhance the links and take the VU Students as Staff program to the next level. Strategies can include:

- Showcase existing programs to department managers highlighting how the links with study and LiWC have been achieved;
- Developing strategies to inform and encourage students to forge the link with their study programs as part of their on-campus employment briefing;
- Provide institution wide incentives for university departments developing employment programs with the link to study incorporated;
- Broker conversations between academic areas and university departments to collaborate when developing on-campus employment and curriculum innovations.

Conclusion

The Students as Staff program has been a major institutional wide initiative that has resulted in 1000 students employed on campus at Victoria University during 2011. A recent evaluation has confirmed the success of the program for students and the institution.

The linking of the program to study and LiWC had not been a major focus in the initial stages but despite this has grown organically in a number of university department and areas. The evaluation of the 2011 program identified a higher than expected level of linkage between students on-campus employment and credit towards their studies. However the data also indicates an untapped potential for strengthening the link between on-campus employment and study. Understanding the different drivers which have shaped the various models for Students as Staff can inform future measures to enhance this link.

The evaluation has also highlighted the increased role on-campus employment can play in retaining students in post-compulsory education, increasing student engagement with the institution, and further developing employability outcomes through the link between part-time employment and study.

Further exploration would be interesting to identify if particular cohorts of students reported higher levels of work/study congruence than students from other disciplines, and whether part-time employment can become a viable alternative to other WIL approaches such as internships and simulations.

References

Australian Bureau of Statistics (2012). *3218.0 - Regional Population Growth, Victoria, Australia.* Retrieved May 29, 2012, from http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/3218.0Main%20Features52010-11?opendocument&tabname=Summary&prodno=3218.0&issue=2010-11&num=&view=

Australian Council of Education Research (2010). *Australasian Survey of Student Engagement. 2010 Institution Report.* Victoria University archives.

Benckendorff, P., & Blackman, A. (2010). *Learning and earning: What can business students learn from part-time employment*. Retrieved April 21, 2012, from http://www.acen.edu.au/conferences/archive/ACEN-2010-Proceedings.pdf

Black, J., Kay, J., & Penagandara, M. (2010). *Earning and Learning on Campus – The Students as Staff Program*. Retrieved April 21, 2012, from http://www.acen.edu.au/conferences/archive/ACEN-2010-Proceedings.pdf

Coates, H. (2011). *Working on a Dream: Educational returns from off-campus employment*. Retrieved April 21, 2012, from http://www.acer.edu.au/documents/aussereports/AUSSE_Research_Briefing_Vol8.pdf

Devlin, M., James, R., & Grigg, G. (2008) Studying and Working: A national study of student finances and student engagement. *Tertiary Education and Management*, 14:2, 111-122

Flinders University, Centre for University Teaching (2012). *Work Integrated Learning*. Retrieved February 10, 2012, from http://www.flinders.edu.au/teaching/wil/

Krause, K., Hartley, R., James, R., & McInnis, C. (2005). *The first year experience in Australian universities: Findings from a decade of national studies*. Canberra: Department of Education, Science and Training.

Mitchell, G. (2011). *Students as Staff 12 months on: Where to now?* Retrieved May 29, 2012, from Victoria University internal archives.

Pascarella, E. & Terenzini, P. (2005) *How college affects students volume: a third decade of research*. Jossey-Bass: San Francisco.

Patrick, C-j., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008, December). *The WIL [Work Integrated Learning] report: A national scoping study [Australian Learning and teaching Council (ALTC) Final report]*. Brisbane: Queensland University of Technology. Retrieved May 24, 2012 from www.altc.edu.au

Copyright © 2012 Gaon Mitchell, Judie Kay

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Serendipity: incidental learning associated with student-centred supervision

Dr Jan Moore
School of Health and Social Development, Deakin University
Ms Berni Murphy
Bass Coast Shire Council

Introduction: background context and research method

In health the purpose of field work varies with differing clinical or social health requirements for student experiences (Butterworth & Faugier 1992; Egan & Testa 2010). In public health education the focus of developing graduates to be work ready has concentrated on students undertaking set projects in a health related setting (Patrick & Moore 2008). Supervisory approaches vary according to the objectives of the field experience as detailed by the educational institution and workplace expectations (Egan & Testa 2010). Supervisor experience, background and practice style as well as the student's educational level and professional experience can impact on the supervisory approach taken (Cooper, Orrell & Bowden 2010). Hence, the supervisor-student relationship is critical to learning and development as Cooper and colleagues emphasise "… it is through this relationship that learning occurs" (Cooper et al. 2010, p.125). This paper argues project-centred approaches may miss important learning opportunities that equip students in the day to day operational activities of public health practice. Given the emphasis on the delivery of tangible outcomes for the agency, project-centred WIL settings have the potential to isolate the student from the real world of work, especially operational know-how or what is referred to in this paper as workplace intelligence.

Supervision of students is regarded as a process that involves a professional relationship between the student and agency supervisor with the aim to assist the student to prepare for professional practice (Egan & Testa 2010). Put simply, supervision is an exchange between professionals about practice (Butterworth & Faugier 1992). Social work literature suggests three functions of placement supervision; educative, supportive and administrative (Kadushin & Harkness 2002). Such functions could easily transfer to other allied health areas such as the supervision of public health students. Of particular interest to this paper are education and support in the supervision process, and how these functions are applied in practice. According to Egan and Testa (2010) an educative function promotes professional competencies and skill development in order to draw the links between theory and practice. An educative function is seen as a mutual process of giving and receiving and promotes opportunities to learn within the agency environment. Hence, this function encourages supervision that is responsive to student needs and integrates supervisor experience with student professional development (Egan & Testa 2010). Learning from a mentor in a supported environment is pertinent for preparing students for the world of work as expertise can be shared through questioning, reflecting and discussion, all ways in which the student can develop a better understanding of the incidental workings of practice (Cooper et al. 2010).

Integration of work with learning emphasises the need to differentiate from classroom learning with a shift from theory to a focus on practice, organisational outcomes and the working environment (Cooper et al. 2010). WIL curriculum in the final year of the public health degree requires students to complete 120 hours of practicum which is typically focused on the delivery of a tangible project or set of tasks for the host agency (Patrick & Moore 2008). This arrangement has worked well in the past given that host agencies partner with the university on a goodwill basis and have an expectation of set deliverables in exchange for hosting a student (Woodman 2007). However, research by Purcell (2009) on graduate perceptions of WIL experiences highlighted the importance of incidental workplace learning, what Cooper and colleagues (2010) refer to as the important development of tacit workplace knowledge. Such knowledge comes from working closely with a supervisor to observe and learn from the supervisor's experience, particularly their expertise to assess situations, make decisions and take appropriate action (Cooper et al. 2010). Therefore, if programs aim to provide an experience that prepares students for practice, it is important to understand how particular supervisory approaches enhance workplace intelligence of public health practice.

This paper presents a case study of Deakin University's public health practicum program. The case study draws on three separate data sets. The first involved a mixed methods analysis of agency perspectives of Deakin University's WIL programs in public health (Woodman 2007). The second was a qualitative study of graduate perceptions of Deakin University's WIL programs in public health (Purcell 2009). The final data set draws from reflective journal entries of an undergraduate student who was undertaking a WIL placement in February 2012.

The reflective journal entries are included in the findings to highlight the benefits gained from a more student-centred, less project-focused WIL experience. Thematic analysis was undertaken of the qualitative data from the first study, together with the data from the second study and the student reflections. Ethics for the two projects in 2007 and 2009 was approved by Deakin University. Permission to use reflective practice quotes was kindly granted by the undergraduate student in February 2012.

Findings

A case study approach was employed to capture a collective understanding of the stakeholders involved in the public health WIL program. This approach offers a means of gathering or binding information pertinent to the cohort (Patton 2002), often achieved by employing a number of different sources of evidence (Yin 2003). This case study draws on agency needs and barriers in hosting students, and highlights the value of WIL programs in developing student capacity and understanding of public health practice from a graduate perspective. It also demonstrates deeper learning in action through reflective comments from a public health student on practicum where student-centred supervision was employed.

Agency perspectives

Overall the public health practicum program is well received by partner agencies. With most keen to be involved as a means of increasing productivity in a resource poor sector (Woodman 2007). For example, students assist in the development of "… specific projects that may or may not have been done without students" (cited in Woodman 2007, p.48). Although agencies stated that their intention for hosting students was to provide learning opportunities in order to foster future public health professionals (Woodman 2007), the benefit of tangible outcomes tended to facilitate agency uptake of students in WIL opportunities. Consequently, agencies consider the quality of student knowledge, skill base and public health competencies as exceptional, particularly where project deliverables are met and implemented by the agency (Woodman 2007). However, it appears that a cyclical pattern of project-centred experiences that reward agencies with tangible outcomes dominates the student learning experience.

Additionally, Woodman's research identified supervisor time and a lack of organisational support as barriers to hosting students (2007). Supervisors suggested that workplace demands restricted face to face time with practicum students, which in turn impacted on the way they approached fieldwork supervision:

The only barrier from an organisation's point of view is the time spent and needed to support and supervise the student … there is insufficient time to provide proper supervision (cited in Woodman 2007, p.44).

Similarly, Woodman (2007) suggests that agencies felt there was a lack of understanding on how to adequately supervise students. Agencies wanted direction and training from the university in order to develop a greater understanding of agency roles and responsibilities in regard to student supervision (Woodman 2007).Clarity of agency, student and university roles was considered pertinent to the confidence and style of supervision agencies provided. Indeed developing confidence and capacity of supervisors has the potential to develop more competent, student-centred supervisory approaches in the future.

Student learning and development in the workplace is important to agencies. However, Woodman's research has identified barriers to supporting placements that foster workplace intelligence in readiness for practice. In particular the transfer of workplace know-how requires the university to support and equip supervisors to be more actively engaged in student-centred supervision. This shift in principal is important, but in practice faces challenges where public health practicum programs are reliant on agency goodwill.

Graduate perspectives

Engaging in WIL experiences provides substantial learning outcomes for students (Purcell 2009). Graduates felt a practicum experience gave valuable exposure to organisational structure and a greater understanding of the public health sector. Importantly, supervisory roles impacted on the overall rewards of a placement experience favouring qualities in supervisors where attention was given to mentoring and discussion of organisational know-how and responsibilities (Purcell 2009). Although set tasks and project work was invaluable to test theory and confidence, graduates felt they gained more from engaging in the activities of the workplace (Purcell 2009). For example, exposure to the intricacy of public health politics, funding, problem solving and decision making were critical to building graduate employability skills and attributes. Importantly, graduates acknowledged that before undertaking fieldwork such notions of workplace intelligence were not considered pertinent to professional development:

… there is value or understanding of where you sit organisationally within the broader health sector… [understanding] how you [your organisation] fit in based on your funding arrangements and the work you do is not appreciated as a student (cited in Purcell 2009, p.37).

Indeed for the participants of Purcell's research exposure to workplace intelligence and organisational culture facilitated a deeper learning experience and was considered by graduates as key lessons of the field (Purcell 2009). Most importantly, graduates came away from the practicum with greater confidence about the nuances of working in public health. Those who were mentored on the incidental activities of the workplace rather than simply supervised on a project were the students who gained more from the practicum experience (Purcell 2009). Mentoring aligns well with student-centred supervision where educative and supportive functions of supervision go beyond project content and encourage professional growth and career development. For graduates in Purcell's study the long-term mentor relationships that formed and continue beyond the student placement are highly valued outcomes of the practicum program.

Student perspectives

As noted in by Purcell (2009), when entering into a practicum arrangement, students tend to focus on the delivery of tangible outcomes for the host agency. They assume undertaking set tasks and project work is a test of academic knowledge and application (Purcell 2009). Thus, the following discussion highlights the rewards of one student entering a practicum experience that challenged both academic knowledge and the engagement in higher level thinking of agency strategies, problems and decision making. This student-centred supervisory approach required the student and supervisor to firstly negotiate and state what they both wanted from the WIL experience before commencing the practicum. Subsequent student tasks, roles, activities and observations of the workplace were established to deliver a set project, and also for the student to "… have an opportunity to experience aspects of public health practice in a real life context and to increase skills and experience of health promotion" (Journal Entry – February 2012). The student was required to work closely with the supervisor and attend to the daily operational management and implementation of public health initiatives and practice. Understanding the work environment in this way assisted in the development of contextual skills that drew academic knowledge and supervisor experience together to enhance the student's ability to react, manage, problem solve and contextualise aspects of the working role public health practitioners undertake:

My core project will be reviewing the Municipal Public Health Plan which will be an invaluable skill in the context of local government, … however, the daily tasks will involve me in a range of other council activities and will have me work on other projects (Journal Entry February - 2012).

Reflecting on this approach, the student identified the benefit of learning at work and how the educative function of supervision importantly develops and supports learning beyond theory. The student acknowledged the experience and qualities of the supervisor to provide learning opportunities that were challenging yet essential to public health practice, such as communicating, networking, collaborating and building partnerships:

What [my supervisor] designed is an authentic workplace experience by giving me a range of tasks and activities to undertake. I felt a little stumped for a while about how to approach something that was essentially made up of everyday activities until I realised that each of these types of activities were part of the one project – of having an authentic experience (Journal Entry February - 2012).

Importantly, what was valued by the student was the sharing of knowledge by the supervisor to assist the student to develop professionally. The mentoring relationship that emerged took the supervisor-student role to a deeper and more complex level in what Egan and Testa (2010) consider to be the educative and supportive functions of supervision:

…it is invaluable to have a supervisor that is knowledgeable, passionate and insightful, and that my supervisor is taking this role on as a mentoring opportunity. I am realising how valuable it is in promoting learning and understanding (Journal Entry February - 2012).

The journal entries highlight student development is far greater than undertaking set tasks and the delivery of project outcomes. A public health practicum experience that is student-centred and values participation and mentoring has the potential to "… enable students to recognise, access and understand tacit knowledge in operation" (Cooper et al. 2010, p.61).

Such a progression from project based experiences to a more integrated, student-centred approach to supervision takes leadership and mentoring qualities, however, the training and support of this approach needs to be acknowledged from universities and developers of fieldwork programs.

Conclusions

This paper provides a case study example of how a shift from a task oriented practicum to a more student-centred has merit in preparing students to be work ready graduates. Students bring theoretical content and knowledge to a practicum, however, this paper demonstrates the importance of the practicum experience in fostering workplace intelligence so that students develop a more complex understanding of the roles and responsibilities of public health practice. Hence, it is important for educators to acknowledge that WIL is not only about demonstrating theory in a workplace setting, but there is an obligation to enhance student experiences to be more supportive in the development of workplace intelligence. Documentation of a tangible piece of work while on placement may add value to a graduate's resume, however, the lessons gained from being involved in the day to day challenges of the field according to Purcell (2009) are as important to professional development.

Further research into supervisory approaches of WIL students in health courses that do not require demonstration of clinical competency (such as public health) will further the understanding of what experiences are important in developing more work ready graduates. Where opportunities are created to interpret the role of practice and the many facets of workplace intelligence, such as the day to day roles that require problem solving, prioritising of tasks, management and response measures, this serendipitous learning will become formalised and the value of workplace intelligence acknowledged.

References

Butterworth, T. & Faugier, J. (1992). *Clinical Supervision and Mentorship in Nursing,* 1st edn. London: Chapman and Hall

Cooper, L., Orrell, J. & Bowden, M. (2010) *Work integrated learning: a guide to effective practice*. Hoboken: Routledge.

Egan, R. & Testa, D. (2010). Models of supervision. In K. Stagnitti, A. Schoo & D. Welch (Eds), *Clinical and Fieldwork Placement in the Health Professions* (145-158) South Melbourne: Oxford University Press.

Kadushin, A. & Harkness, D. (2002). Supervision in social work. 4th edn. New York: Columbia University Press.

Patrick, R. & Moore, J. (2008). Transferring learnt knowledge to practice: an example from the health promotion field. In WACE/ACEN Conference E-Proceedings, *Asia Pacific Conference.* Sydney, Australia, September 2008. Accessed 20 April 2009 [http://www.acen.edu.au/images/resources/conferences/wace_conference_08/e-proceedings.pdf].

Patton, M. (2002). *Qualitative research and evaluation methods*. Thousand Oaks: Sage Publications.

Public Health Student. (2012). *HSH303 Public Health-Health Promotion Practicum*. Deakin University, Burwood, Victoria.

Purcell, M. (2009). *An Exploration of the Health Promotion Practicum*, Honours thesis, School of Health and Social Development, Deakin University, Burwood.

Woodman, E. (2007). *An Evaluation of Deakin University's Health Promotion Practicum Unit*, Honours thesis, School of Health and Social Development, Deakin University, Burwood.

Yin, R. (2003). *Case study research, design and methods*, 3rd edn, Thousand Oaks: Sage Publications.

Copyright © 2012 Jan Moore, Ms Berni Murphy

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

The ACEN Student Scholarship: a profile of financial hardship and Work Integrated Learning

Keri Moore
School of Health and Human Science, Southern Cross University.
Sonia Ferns
Curtin Teaching and Learning, Curtin University
Deborah Peach
Science and Engineering Faculty, Queensland University of Technology

An increasing emphasis on embedding Work-Integrated Learning (WIL) in the curriculum has impacted on teaching and learning approaches in Australian higher education institutions (Higher Education Base Funding Review: Final Report, 2011). Yet whilst the benefits and costs of these approaches have been identified (Bradley, Noonan, Nugent, & Scales, 2008; Patrick et al., 2009) insufficient attention has been paid to financial costs experienced by students studying subjects with a Work Integrated Learning component.
In 2010 the Australian Collaborative Education Network (ACEN) responded to this issue by offering three modest student scholarships based on evidence of hardship. Data collected from over 1000 applicants between 2010 and 2012 indicate travel, accommodation, food, clothing, equipment and loss of income are of major concern especially for students on lengthy placements involving relocation. At the same time the Australian Federal Government's review of base funding has recommended a detailed assessment of the costs of providing student placements across all disciplines - in particular health and education (DEEWR, 2011, p.94). This paper considers costs from the student perspective and highlights major concerns identified through ACEN scholarship applications over a three year period. The implications for ACEN are described and recommendations documented which outline ACEN's role in ensuring that these issues are given greater consideration across the sector.

Keywords: Work Integrated Learning, practice-based learning, financial hardship, costs, scholarship

Background

Most Australian universities now have operational and strategic targets associated with embedding WIL in the curriculum (Skills Australia Annual Report, 2010). Embedding authentic learning experiences in higher education curriculum to enhance the employability of graduates and ease the transition from study to work has become increasingly important. Curriculum design is expected to support the transition from student to professional and nurture intellectual, social and cultural capital (Knight & Yorke, 2004; Peach & Matthews, 2011). A blend of theory and practice in curriculum is integral to a holistic approach which broadens the educational experience and helps graduates develop the attributes, personal qualities, and self-efficacy necessary for a competitive, global employment market.

However, there are a range of variables that impact on the effectiveness of WIL in the curriculum and the cost implications for institutions, students, and industry partners. For example, participating in WIL can cause hardship for already disadvantaged students:

As much as this WIL placement may help me for my future, I have still been financially impacted as a result of it. I have lost my Centrelink Youth Allowance, which was roughly $250 per fortnight. In addition, I was working on a casual basis at a job that was situated near my home, and gave me a higher hourly rate than that of the WIL placement. I have lost my student travel concession, because I am no longer a full-time student as a result of the full-time WIL placement. I also need to catch the train to work every day, which equates to an expense of roughly $35 each week (Scholarship Applicant, 2011).

The federal government review of base funding to universities (DEEWR, 2011) acknowledges that WIL has spread widely through the disciplines at a time when increasing access and participation of disadvantaged students in higher education is a priority (DEEWR, 2011, p.115). Yet, many students need to be in paid work to have sufficient income to live; some struggle to live within Government support payments; and others may have multiple disadvantage e.g. rural, Indigenous, disability, and/or have carer responsibilities. For many low income students, total expenditure is often greater than income and engagement in WIL adds increased pressure to weekly costs of living such as rent, groceries and transport. Many students rely on help from their families and use credit cards or savings in order to meet these costs (QUT, 2011). Consideration must therefore be given to the financial hardships experienced by some students who participate in WIL. This paper contributes to our understanding of

these issues through a brief analysis of applications received for the ACEN Student Scholarships from 2010 to 2012. This analysis is intended to provide an evidence-base to identify and to understand the financial difficulties some students encounter when undertaking WIL activities. It is hoped that this analysis will inform the development of strategies to help address these issues. The paper provides an overview of the scholarship process, characteristics of the applicants, and a discussion of the costs and benefits identified by applicants. The paper concludes with implications of the findings for the scholarship scheme and recommendations for ACEN's role in ensuring that these issues are given greater consideration across the sector.

Employers and industry bodies are exerting increasing pressure on universities to produce work ready graduates who have had exposure to, and experience of, the workplace throughout their degree (Clements & Cord, 2011; Nixon, Smith, Stafford, & Camm, 2006). The ultimate outcome is to produce graduates who demonstrate proficiency in the skills and attributes employers deem to be essential for creative, innovative, and resilient employees. For example, professions such as nursing and engineering have traditionally stipulated professional competencies to be aligned to subject learning outcomes as evidence that the degree program will deliver appropriately skilled employees (Council of Higher Education, 2011). The approach of explicitly addressing industry defined attributes is being adopted by a growing number of professions (Milne, 2009). Industry accreditation is perceived as a mechanism for elevating the status of a profession and informs education standards and academic quality (Ewan, 2009). A work based experience of a specified timeframe frequently forms part of the criteria for a program of study to achieve industry accreditation. Despite mandatory work based WIL activities being resource intensive for both the institution and the student, they are an essential component of many degree programs to ensure students will gain employment upon completion.

The ACEN Student Scholarship

First introduced in 2010, the Australian Collaborative Education Network (ACEN) offers annual scholarships to provide financial support for students who are required to complete a WIL activity in the workplace as a mandatory component of their studies. Only students from universities that are financial members of ACEN are eligible to apply. Initially three scholarships of $1000 each were offered. In 2012, ACEN increased the funding allocation to five scholarships of $1500 each. The scholarships are advertised through the ACEN website and promoted by ACEN representatives at member institutions. In 2010, the first year scholarships were offered, 70 applications were received. In 2011, three scholarships were offered with 828 applications received from across all states of Australia, including two overseas applications. One hundred and twenty three eligible applications have been received for the five scholarships at $1500 each in 2012.

In 2010 applications were submitted in hard copy resulting in a manual selection process which incorporated time intensive administration. To improve efficiency and data collection methods, the process moved to an on line submission in 2011. The online application form used in 2011 and 2012 facilitated analysis of a large number of applications with data easily down loaded into an excel spread sheet. This made it possible for the selection panel to review columns of responses to the same questions as opposed to across rows of whole applications. This was found to be an effective and efficient way of sharing work load. This type of systematic approach also permitted the reviewers to engage in analysis of the applications on an *ad-hoc* basis. In 2011 other improvements were made in the application and assessment process and adjustments made to the questions to allow applicants to better describe their unique circumstances.

This analysis of the 2011 and 2012 applications is based on a mixed method approach to maximise the findings through the integration of both qualitative and quantitative data sets. Analysis of the quantitative data was undertaken to assess the impact of multiple aspects associated with financial hardship experienced whilst engaged in WIL. SPSS was used to analyse data where multiple responses were possible. Multivariate analysis of data was also undertaken. Qualitative data including direct quotes from applicants have been used to capture key themes present in the data. These quotes are presented verbatim with identifying features removed in accordance with ethics approval from Curtin University (HR33/2012).

Limitations of the analysis include difficulties in extracting data from the qualitative responses of the applicants. The open-ended questions used in the 2011 application created confusion for some applicants. In some cases applicants misunderstood the question, resulting in missing data. For other variables such as the location of the WIL activity, the question was vague. However, 366 of 826 in 2011 respondents indicated either the city or town where they were undertaking the WIL activity or identified that it was undertaken in a rural, regional, or metropolitan setting. These data strongly influenced the decision to change the criteria in 2012 thereby confining applicants to a more specified placement. Another limitation of this analysis is that it cannot be directly compared with the 2010 data due to changes in the questions and the method of analysis.

Where possible, broad trends in comparative data from 2011 and 2012 have been identified and are presented below. The next section presents the data related to the characteristics of the applicants including their study location, WIL location, sources of income, and financial impact.

Results

Study location

While applications were received from universities throughout Australia, not all universities were represented. Several universities had a significantly higher number of applicants in comparison to others. In 2010 Flinders University, Griffith University and RMIT University had the highest number of applications compared to Griffith University (22%), Charles Sturt University (17%) and Southern Cross University (10%) in 2011(see Table 1).

Table 1: 2011 Applicants by university

University	Number of applications
Griffith University	182
Charles Sturt University	139
Southern Cross University	88
Flinders University	77
University of Newcastle	51
Monash University	47
Curtin University of Technology	36
Queensland University of Technology	33
University of Ballarat	22
University of Canberra	20
University of the Sunshine Coast	18
University of New South Wales	15
Deakin University	12
University of Technology Sydney	11

Universities with less than 10 applications were: University of Sydney, University of Tasmania, Australian Catholic University, University of Melbourne, Victoria University, RMIT University, University of Western Australia, Macquarie University, Adelaide University, La Trobe University, Wollongong University, Queensland University of Technology, Charles Darwin University.

In 2012, Curtin (20%), Flinders (16%) and Griffith (14%) had the most applications (see Table 2). The number of applications is likely due to the promotion of the scholarship opportunity at those universities.

Table 2: 2012 Applicants by university

University	Number of applications
Curtin University of Technology	24
Flinders University	20
Griffith University	17
Monash University	14

Universities with less than 10 applications were: University of Western Sydney, Southern Cross University, Charles Sturt University, James Cook University, Victoria University, University of Sydney, Central Queensland University, Notre Dame University, Edith Cowan University, Murdoch University, Queensland University of Technology, RMIT University, Canberra University, University of Newcastle, The University of Queensland, University of South Australia and University of Southern Queensland.

Academic programs

The most represented academic programs in 2010 were Bachelor of Education, Bachelor of Applied Science and Bachelor of Social Work compared to Bachelor of Nursing, Bachelor of Education and Bachelor of Occupational Therapy in 2011. For the purposes of analysis in 2011, course names were consolidated (e.g. Bachelor of Teaching and Bachelor of Education were considered to be the same) and majors were excluded. Scholarship applicants

were studying in 91 different academic programs. Seventy-nine applicants were undertaking master programs and 5 applicants were completing doctoral programs. Sixty-seven students were undertaking double degrees. Five applicants indicated they were studying by distance education. The majority of applicants were studying a Bachelor of Nursing (23%) or a Bachelor of Education (20%).The bulk of applicants were female and this is reflected in a high proportion of the applicants studying nursing and education. Table 2 shows the 2012 applications by degree.

Table 3: 2012 Applicants by degree

Degree	Number of applicants
Nursing	33
Medicine Surgery	10

There were less than 10 applicants from each of the following Bachelor Degrees: Applied Science- Medical Imaging (Medical Radiations- Medical, Imaging/Radiography), Nutrition and Dietetics, Business in Hotel and Resort Management, Education - Early Childhood Education, Education (Primary), Engineering, Environmental Science and Management, Learning Management (Early Childhood), Music Education, Occupational Therapy, Pharmacy, Physiotherapy, Physiotherapy/ Exercise Science, Social Science with Honours, Social Work, Speech Pathology and Veterinary Science.

Also, there were less than 10 applicants from each of the following Graduate Diplomas: Dentistry, Education (secondary), Learning and Teaching, Graduate Entry Masters of Occupational Therapy, Graduate Entry Medical Program, Medicine, Surgery. Less than 10 were received from the Masters of Engineering Science, Environmental engineering, Nutrition and Dietetics, Occupational Therapy, Diagnostic Radiography, Engineering in Structural and Geotechnical, Nutrition and Dietetics, Physiotherapy and Social Work
Table 3 highlights the emphasis of health disciplines, possibly a result of large cohorts, professional accreditation requirements, and an increased awareness of the demands WIL places on students.

Location of WIL placement

In 2010 and 2011 applicants were not asked directly where their placement was located. However in 2011, 366 applicants stated the location of their placement, or that they would be undertaking their placement in a rural, regional or metropolitan setting. Of those applicants who did not state where their placement was located, many had not had their placement allocated at the time they applied for the scholarship. The following definitions were used for rural, regional and metropolitan where applicants named a town or city as the location of their placement during the 2011 applications:

- Rural – population less than 10,000
- Regional - population 10,000 – 200,000
- Metropolitan - population greater than 200,000 or capital city.

Of the 366 students where location of the placement was known, 32% indicated that they would be undertaking their WIL in regional areas, 31% in metropolitan areas and 31% in rural areas. 5.5% of applicants indicated they were intending to undertake overseas placements (2% of the total 826 applicants). In 2011 all States had applicants undertaking metropolitan placements and in either regional or rural locations. New South Wales, Queensland, South Australia and Victoria had students undertaking placements in metropolitan, regional, rural and overseas settings. Tasmania had only metropolitan and regional settings. In Western Australia, no regional placements were identified. Charles Sturt University, University of Newcastle and Southern Cross University had the highest number of rural and regional placements however, it should be noted that all three of these universities are located in regional areas. Applicants intending to participate in overseas placements were also enrolled in a range of universities across the country.

In 2011 the Bachelor of Education, Bachelor of Occupational Therapy and Bachelor of Physiotherapy had the highest number of applicants undertaking rural and regional placements. Bachelor of Veterinary Science and Bachelor of Veterinary Biology had significantly high numbers undertaking rural placements. Bachelor of Social Work had the highest proportion of applicants undertaking metropolitan placements while the Bachelor of Business had the highest proportion of applicants undertaking overseas placements.

In 2012 scholarship eligibility was limited to those students undertaking work placements in rural and remote locations requiring students to relocate from their existing place of residence. Rural and remote locations were determined on the basis of the RA2- RA5 on the National Map from the Australian Government, Department of Health and Aging (2012).

Sources of income

In 2010 and 2011 most applicants had multiple sources of income with 61% in 2011 receiving Youth Allowance or other Centrelink benefits and many supplementing this income with casual or part time work. In 2011 nearly 10% of applicants had received a scholarship of some sort for their studies (not including the Youth Allowance "scholarship" that all Youth Allowance students receive). See Figure 2. Applicants in 2012 were not asked about sources of income.

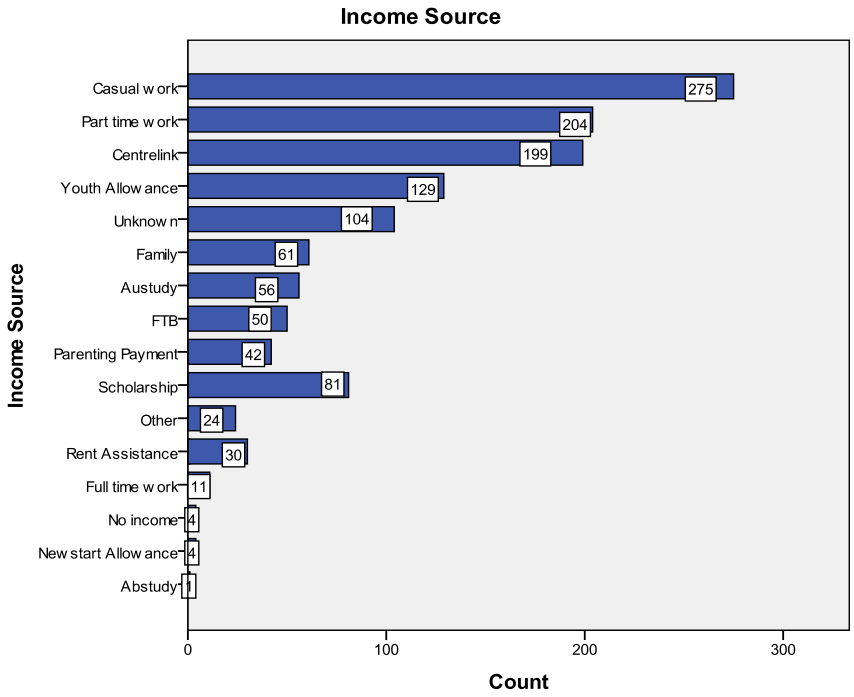


Figure 1: Applicants income sources of income for 2011 (multiple responses allowed)

Financial impact of WIL

In the 2011 scholarship round, loss of income was reported as the primary concern for most applicants with 72% indicating that they would have to give up paid work in order to complete their WIL activity. A small number of applicants also indicated they would have reduced Centrelink benefits as they would no longer be considered full time students whilst undertaking WIL. Five percent of applicants reported that their WIL would cause them to lose all sources of income for the duration of their placement (see Figure 3). (FTB: Family Tax Benefit).

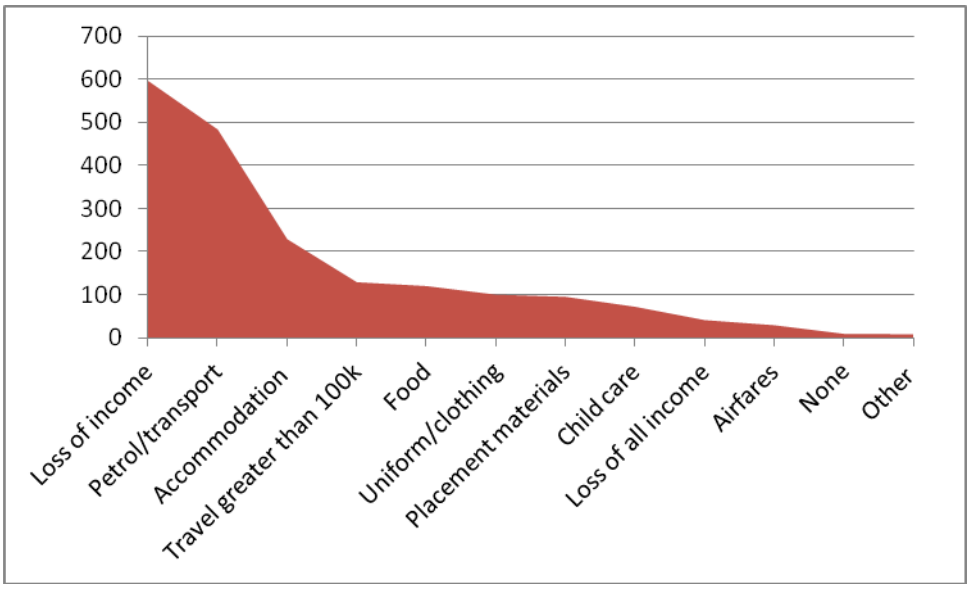


Figure 2: Financial impacts of WIL for 2011 scholarship applicants (multiple responses allowed)

In 2011, 59% of applicants also indicated that travel to and from their placements would be a significant cost either due to the cost of fuel or public transport. This was particularly the case where applicants were planning to drive to rural or regional placements. Nearly 28% of applicants were concerned that they would have to pay for accommodation when on placement, while maintaining their existing place of residence.

Fourteen point five percent indicated that they would spend more on food when on placement. Some applicants spoke of this in terms of buying food when relocating for placement, while others felt they would need to buy lunch at work when on placement. Some applicants were simply unsure how they would meet the cost of this necessity on such a tight budget with the additional costs of WIL. Twelve percent of applicants mentioned they would need to purchase uniforms, professional clothing, or protective clothing for their placements, and 11% stated they would need to purchase a range of materials for their placements, including texts, tools, police checks, or have vaccinations (e.g. Hepatitis B for clinical placements).
A further 9% of applicants indicated that child care costs would be incurred as a direct result of their WIL placement. Three point five percent of applicants indicated they would need to cover the cost of airfares for their placements. This included students travelling interstate, or to regional areas as well as students planning overseas placements.
The self-reported living status of the 2012 applicants, Figure 3 shows 50% applicants were single, self-supporting.

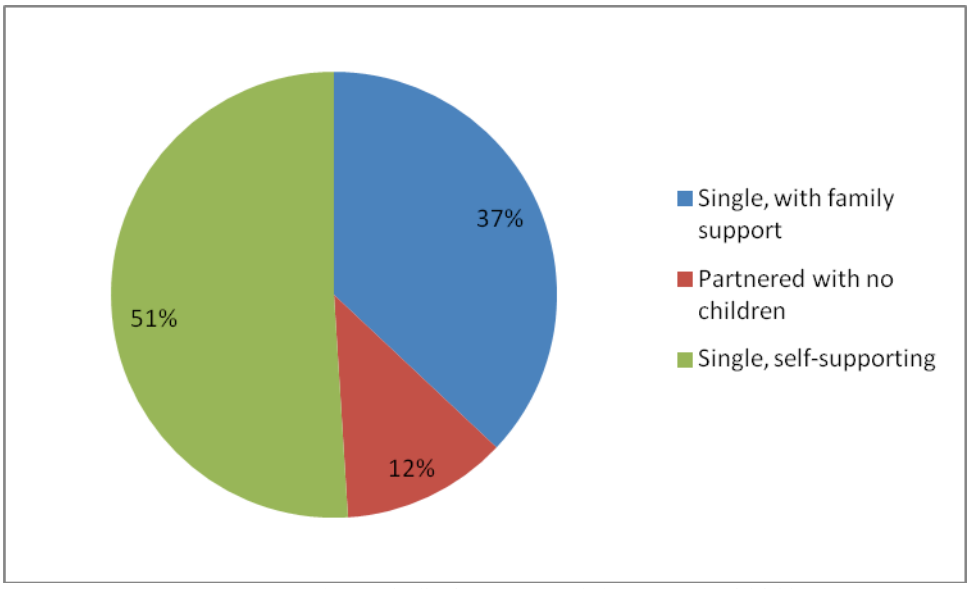


Figure 3. Self-reported living status of 2012 applicants.

Fifty-six percent of the 123 applicants for the 2012 scholarship said they would need to pay rent at the location of the WIL placement while continuing payment for their existing place of residence. Eighty-two percent said they would lose income whereas 10% said they would earn income while on placement. In 2011 the loss of income, the cost of petrol or other transport and the cost of food was of considerable concern to applicants across academic programs, particularly for those studying Bachelor of Nursing and Bachelor of Education. Funding the cost of uniforms or suitable clothing was a recurring theme, particularly for these applicants.
The cost of materials required to successfully complete the WIL placement was also high for applicants studying the Bachelor of Education. In 2012, 58% of applicants cited rent, 60% food and 81% transport as out-of-pocked expenses incurred during WIL.

Discussion

Benefits of WIL Placements

The majority of scholarship applicants stated WIL was an extremely valuable part of their education. There was no indication from applicants that WIL was too much to bear, albeit some found it extremely difficult. Most applicants were grateful for a rare learning experience linked to career aspirations. For example:

Opportunities exist in [name of country] for product development, as it is a country that has only recently been open to foreign markets. I have a specific career goal of working for an organisation that practices the principles of fair trade; creating real opportunities for otherwise disadvantaged people (Scholarship Applicant, 2011)
I envisage the opportunity to complete this internship will be both challenging and rewarding and will help me to develop the skills required in textile product development. Plus, I will be exposed to a completely different culture and trust that I can learn from this both personally and professionally (Scholarship Applicant, 2011).

One month working in [name of organisation] will expose me to cutting edge interventions used to treat the most serious and complicated of ... conditions… This placement will also allow me to give something back as a medical student to the hospital system in which I have trained, as I will be working as a Doctor in ... in particular, volunteering whatever skills I have that may be needed in a somewhat resource-poor setting (Scholarship Applicant, 2011).

….. involved attending at least five of the women's antenatal appointments with either their midwife or doctor, attend their birth which could take up to 12 hours and attend at least three of their postnatal appointments with their midwife or doctor. This involved travel to and from the hospital for shifts and births and also travel to and from wherever the women saw their midwife or doctor (Scholarship Applicant, 2011).

Although extremely time consuming and demanding the placement is invaluable to my learning experience (Scholarship Applicant, 2011).

Clearly, the examples given above highlight the extraordinary opportunities students have exposure to during their tertiary education to delve deeply into their disciplinary practices in a variety of settings (Patrick, Peach & Pocknee, 2009). Nonetheless the larger number of applications showed beyond any doubt that even WIL activities undertaken locally add significantly to already stretched, day-to-day expenses. These exacerbated financial difficulties can impact on course completion; deter students from some fields of study; and create a sense of despair and anxiety in students with increasing indebtedness (QUT, 2011).

Structure of WIL Placements

The structure of WIL placements appears to have significant impact on the ability of students to cope financially. Block placements of 4 to 6 weeks full time work significantly reduce the amount of time available for part time or casual work.

My placement is six weeks of full time unpaid work as a result I was forced to cut down my paid working hours from 15hrs-20hrs/week to 4 hours a week. In addition to that petrol, food, rent and other work related expenses placed more pressure on my budget (Scholarship Applicant, 2011).

Some students reported being advised by their academic advisors not to undertake other forms of paid work during their placements, so as not to adversely affect their performance whilst on a WIL placement.

We were told by our lecturers that we will be unable to work due to the full-time work commitment (Scholarship Applicant, 2011).

Unpaid placements that take place over the summer break are also problematic as many students use this time to work full time in order to supplement reduced income during semester. Undertaking an unpaid WIL placement at this time has the potential to reduce earning capacity and financial stability during the year.

A concern for many students was the number of placements they were required to undertake over the course of their degree where they incur a financial loss with each placement. The applicants who were required to undertake multiple placements over the entire degree program reported an inability to recover from each financial loss before the next placement occurs.

Without completing every placement successfully we are unable to demonstrate that we will be able to work constructively, independently and precisely within a healthcare environment. The added strain that financial worries will add while I'm on placement adds an extra unnecessary stress while trying to complete such an important assessment (Scholarship Applicant, 2011).

Several students also reported that they would face reduced Centrelink benefits or lose benefits entirely as they would no longer be considered full time students whilst undertaking WIL. These students were extremely concerned about their financial stability as they felt they would lose all sources of income including paid work as well as benefits.

Of the 2012 applications, 1% reported the placement would last one week, 3% two weeks, 6% three, 13% four, 17% five and 60% other lengths of time. 92% said they would be engaged in the placement for more than 4 days of each of those weeks.

The Costs of WIL

A high number of applicants in 2011were undertaking placements in rural or regional settings. Many of these applicants spoke of wanting to gain a range of experiences in diverse metropolitan, regional, and rural settings. Others stated that gaining experience across an array of metropolitan, regional, and rural settings was a requirement of their academic program. A reverberating theme was the concern over a need to relocate, the period of time away from home, the associated costs, and loss of income. This was particularly prevalent in education degrees.

We have been told we may not even get placed in our town of residence, so if this was to occur I would be out of pocket alot, due to rent and bills having to be paid back home, childcare and babysitting for my son during the weekdays and also travel expenses and any expenses while I am wherever they choose to send me (Scholarship Applicant, 2011).

The cost of petrol, public transport and other travel was also of concern to most applicants. Applicants were concerned at the cost of driving long distances to rural and regional placements, as well as the cost of driving every day to local placements.

I will be travelling the 160km round trip each day to the placement, as we live 80 klms away from [name of town], where the school is, and so will incur large expenses for petrol costs (Scholarship Applicant, 2011).

Other applicants were concerned about the cost of public transport, or felt they would need to utilise taxis regularly due to a lack of public transport and their inability to drive. Several applicants who were required to undertake shift work for their placement mentioned using taxis to get home late at night as they felt unsafe on public transport.

Out-of-pocket expenses I will incur when on placement involve transport costs. I will need to purchase bus tickets and on my late shifts I will need to pay for a taxi to drive me home, for safety reasons (as opposed to taking a bus) (Scholarship Applicant, 2011).

The cost of food was of concern to a large number of applicants. Many felt they would have increased costs as they would need to purchase lunch while on placement. Others were concerned about the cost of food in rural and regional locations. Many applicants were concerned with how they would meet this basic necessity with a reduced income and the increased cost of WIL.

The costs of uniforms or appropriate clothing and placement materials were also mentioned. Placement materials varied from teaching resources for Bachelor of Education students, to stethoscopes and medical equipment for nursing and medical students. Vaccinations, police checks, and text books specific for placement were also classified as placement materials for the purpose of analysis.

These costs were quite high for some students. With Bachelor of Education students for example, placement materials tended to be listed by those who had been on placement before and had a better idea of what would be required of them and that they would need to bring some teaching resources for their classrooms.

I will have to purchase teaching resources, stationary, art/craft supplies and the incidentals that are associated with teaching. Previous experiences predict that I will be spending anywhere from $50 to $100 a week on resources and/or material (Scholarship Applicant, 2011).

Child care costs were of concern to both sole parents and partnered parents in 2011. Twenty-two per cent of applicants were parents, and almost half were concerned about costs of child care. As well as the financial impact of child care, parents spoke of the difficulty in negotiating their day around the opening hours of child care centres. Several partnered applicants spoke of loss of income due to their partner taking time to pick up children from childcare or taking leave from work to assume child care duties. Parents also spoke of the difficulty in balancing paid work, study, family responsibilities, and the added complexity of undertaking a WIL placement.

During the 5 week placement I will have my 1 year old son in day care 3 days a week which will cost us approximately $120 per week, and my husband will look after our son 2 days a week, which will diminish our weekly income by approximately $300 per week (Scholarship Applicant, 2011).

Conclusion

This analysis of ACEN's WIL Scholarship applications between 2010 and 2012, shows that students value the opportunity to participate in WIL programs and appreciate the subsequent learning and experience. However, there is no doubt that WIL placements create financial hardship for many students. Loss of income as a result of a reduction in paid work, loss of government benefits in some instances; and increased living expenses in order to undertake the placement causes additional stress for students.

The data show that while universities mentioned in the applications are providing a good mix of metropolitan, regional, and rural placements across disciplines, participation in placements that require travel creates additional financial strain. Accommodation, fuel, transport, and the costs of uniforms, clothing and placement materials are identified as key expenditures for most students. Child care costs are also significant for those students who are parents, whether they are partnered or sole parents. Whilst this hardship can be complex; relative; and difficult to define and measure an integrated, long-term effort is required for change. The core challenge is to make university affordable and accessible to all those who aspire to further education (QUT, 2011). ACEN will continue to offer the scholarship into the foreseeable future in efforts to support students most in need. However, the scholarship is a limited resource and more needs to be done to raise concern across the sector about the cost of WIL to students. This paper is intended to raise awareness so that ACEN, in collaboration with colleagues from the disciplines, university equity services, and student associations can advocate on behalf of students. Approaches must also be made to federal government and industry to find ways to increase funding and develop strategies to reduce costs for this important aspect of the university curriculum.

Recommendations

Academics need to be mindful when designing WIL activities so that students are not overburdened with excessive costs. Universities may need to consider offering different modes of WIL for the same learning objectives to accommodate students' diverse needs and circumstances.

Future research

The findings here have stimulated further research into the costs of WIL to the students.
ACEN members have generated a research proposal: *Responding to inequity and disadvantage within work integrated learning experiences.*

References

Australian Government, Department of Health and Aging (Doctor Connect). Map: (Accessed, May, 2012) http://doctorconnect.gov.au/internet/otd/publishing.nsf/Content/locator)

Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). Review of Australian Higher Education: Final Report. Canberra: Department of Education, Employment and Workplace Relations.

Clements, M., & Cord, B. (2011). Assessment guiding learning: developing graduate qualities in an experiential learning programme. *Assessment & Evaluation in Higher Edcuation*. doi: 10.1080/02602938.2011.609314

Ewan, C. (2009). Learning and teaching in Australian universities: A thematic analysis of cycle 1 AUQA audits: ALTC and AUQA.

Higher Education Base Funding Review: Final Report (DEEWR, Trans.). (2011).

Knight, P., & Yorke, M. (2004). Self-theories: some implications for teaching and learning in higher education. *Studies in Higher Education, 29*(1).

Milne, P., (2009). A model of work-integrated learning: Optimizing student learning outcomes. University of Canberra.

Nixon, I., Smith, K., Stafford, R., & Camm, S. (2006). Work-based learning: Illuminating the higher education landscape. Final Report

Patrick, C.-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2009). The WIL Report- A National Scoping Study. Brisbane: Australian Learning and Teaching Council.

Peach, D., & Matthews, J. (2011). *Work integrated learning for life: Encouraging agentic engagement*. Paper presented at the HERDSA, Melbourne.

Skills Australia Annual Report 2009-2010, (2010). DEEWR. Retrieved from http://www.skillsaustralia.gov.au/about-skills-australia/annual-report/documents/Skillsaustraliaannualreport2009-2010.pdf

Supporting low-income students and widening participation at QUT. (2011). *QUT Equity Services Training and Development Program*

Work-integrated learning: Good practice guide. (2011). Pretoria: Council on Higher Education.

Copyright © 2012 Keri Moore, Sonia Ferns, Deborah Peach

The author assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author.

A longitudinal evaluation of the Career Change Program at Victoria University 2005-2011

Rodney Moore
School of Education, Victoria University, Melbourne
Jayne Pitard
Teacher Development Unit, Victoria University, Melbourne

Abstract

The Career Change Program (CCP) is a DEECD initiative offering an alternative teacher education program for hard to staff schools across Victoria. Schools select their own candidates thereby gaining the skills and abilities most needed. Successful candidates commence on an instructor's wage with the support of a supervisor and mentor within the school. As a WIL teacher education program, the CCP embraces the skills and experience of individuals with an industry background as they complete either a Bachelor of Education (VET Secondary) or Graduate Diploma in Secondary Education at Victoria University. The use of praxis inquiry ensures that reflective practice and workplace assessment underpin the WIL that takes place. Quantitative and qualitative data gathered over 8 years reveal the experience of these 'beginning' teachers as they study and enter the profession simultaneously. The findings of the study most pertinent to the WIL approach of the program are a higher rate of retention for CCTs, early appointment to positions of responsibility, and schools able to utilize the knowledge, skills and experience of CCTs gain the most benefit. Using the voices of participants in the program, the elements of this teacher education program which have strengthened the capability of these graduates becomes apparent.

Introduction

The Career Change Program (CCP) is an initiative of the Victorian Department of Education, Employment and Early Childhood Development (DEECD) designed to offer an alternative teacher education program to place teachers in hard to staff schools across Victoria. Successful candidates commence their teacher education whilst teaching on an instructor's wage with the support of a supervisor and mentor within the school. As a Work Integrated Learning (WIL) teacher education program, the CCP embraces the skills and experience of individuals with an industry background as they complete either a Bachelor of Education (Vocational Education and Training (VET)/Secondary) or Graduate Diploma in Secondary Education (GDSE) over two years at Victoria University. For those candidates undertaking the Bachelor of Education (VET/Secondary) a credit of two years for a trade qualification plus 8 years industry experience has been negotiated with the Victorian Institute of Teaching (VIT). They also have the benefit of gaining the Certificate IV in Training and Assessment (TAA) and a Graduate Certificate in VET as they are being specifically trained to teach VET in Schools. The program uses work integrated learning by placing the student teacher in a teaching position within a school and locating the focus of the teacher learning in the teaching experience gained in the classroom. This Praxis Inquiry model of teacher education was developed in the School of Education at Victoria University (VU) as a partnership between the School of Education, the Teacher Development Unit at VU and the VIT. The recruitment of industry professionals via salaried teaching integrated with a teacher education program has provided over 200 teachers who have successfully participated in the CCP from 2005-2011. A longitudinal study on the outcomes of the CCP for graduates was conducted by Victoria University in 2011 and this paper reports on those outcomes. This longitudinal study provides a framework for on-going improvement in the future development of similar programs. The findings of the study which are most pertinent to the WIL approach of this teacher training are a higher rate of retention for CCP than for mainstream teacher graduates, CCTs are assigned positions of responsibility and leadership very early in their careers as teachers and schools that are able to utilise the knowledge, skills and experience of Career Change teachers benefit the most.

Aims

This study sought to:

- Examine, analyse and interpret the relationship between Career Change teachers' (CCTs) experiences of teaching and learning and the curriculum of the CCP
- Identify the professional learning processes and practices of Career Change teachers as they develop as teachers
- Determine the success of the CCP in terms of
  - retention rates
  - career advancement through positions of leadership
  - teachers' satisfaction with their career choice

Method

Multiple data collection activities were employed at both the program and participant level. DEECD data relate to retention rates and positions of responsibility. Data from three previous surveys and semi-structured interviews with small groups of Career Change teachers and mentor teachers give insight into the CCTs' experience of their work integrated learning. In addition, all graduates from the original 2005 cohort and some from other early years whose contact details were still current were invited to a research forum held on 14/10/2011. The majority of the original 2005 cohort attended and additional CCTs from other early years who responded to the invitation also attended. A Principal whose school has consistently employed CCTs was also invited to this research forum and attended.

Analysis

The literature in relation to alternative teacher education programs identifies three major variables – the integrity of the program, the quality of the implementation and the level of individual support. The first variable is the *integrity* of such programs based on (i) how coherence between practice and theory is matched by flexibility in delivery (Darling-Hammond 2007; Feiman- Nemser 1990) and (ii) how the trainee teacher's competence, practical knowledge and theoretically based understanding are integrated (Gore 1995, Kruger et al 1999, Lovat & Smith 1995). Darling-Hammond in her interview states 'an interesting and little-known fact is that the better prepared teachers are, the longer they're likely to stay in teaching'.

The integrity of the CCP is enhanced through the use of the praxis inquiry model. Kolb (1984) a recognised authority on the central role of experience in the learning process, recognises that the paramount importance of reflective practice in interpreting and understanding experience forms the bridge between academic learning and practice in the workplace. Reflective practice based on work experience mitigates the inherent danger of mere acceptance of established practices. In understanding the need to explore theory-based knowledge in practice CCP students are at an advantage as being placed directly in a school which provides CCTs with the opportunity to document the authentic practices they experience in schools. Documenting practice has two purposes: it directly supports CCTs' coursework in the B.Ed(VET/Secondary) and GDSE; and it also is the basis for enhancing CCTs' understanding which occurs when teams of student teachers, mentor teachers and teacher educators engage in thoughtful inquiry into, analysis of and reflection on practice.

The second variable identified is the *quality* of such programs. Given that there is variability in outcomes for both traditional and non-traditional programs, attention should be paid to the quality and nature of teacher preparation as well as implementation (Ball, Wilson, 1990 in Dill, 1996, p947; Darling-Hammond, Chung, Frelow, 2002, Moore, Cherednichenko 2007, Griffiths 2007). Haberman suggests that given the multitude of alternative programs and the great variance in 'traditional' models, it comes down to an issue of 'quality control', with the focus on '(1) selection, (2) faculty, (3) content, (4) method, and (5) evaluation' (Haberman, 1990, in Dill, 1996). Haberman adds that traditional criteria used to select candidates into traditional teacher training programs is based on who will pass the exams to satisfy licensing criteria. He argues, however, that admission criteria should instead predict who will be effective in dealing with diversity and students at risk of dropping out of the system. The selection of candidates for the CCP is undertaken by the schools themselves ensuring they gain the best fit for the needs of the school. In the early years of the program this was somewhat problematic as there was no standard consideration given to the ability of the candidate to undertake the higher level study of a Bachelor Degree. This was communicated to DEECD and the selection process was streamlined to promote consideration of both the ability to handle difficult students and the ability to deal with study at undergraduate level.

Assessment for the CCP was generally designed as learning in the workplace projects exploring the concept of theory in practice. CCTs were asked to produce a portfolio of artifacts as evidence of their growing teaching capability and to reflect on the development of their knowledge through experience. It is acknowledged that learning emerging from applying theory through practice-based analysis in the workplace is likely to have greater utility (Chisholm Harris Northwood Johrendt 2009). Epstein (1994 p92) agrees believing that work-based experiences are more compelling, more likely to influence behaviour, 'produce permanent shifts in feeling than abstract knowledge drawn from text or lecture'. The central role of experience in the learning process is acknowledged by a number of authors (Kolb,1984; Sims & Sims,1995; Hoult, 2006; Knowles 1980). The CCTs agreed as testified in these statements.

You really seemed to understand that we were getting a lot of our knowledge and practice on the job and (you) showed us you recognised the value by not over loading us. I put lots of what I learnt directly into practice (CCT 2005)

The emphasis on being a reflective practitioner enabled me to refine my methods, behaviours and content as a normal course of action. It has enabled me to be reactive to student abilities and to embrace individualised learning plans and create student centred learning environments. (CCT 2006)

The content of the course was developed specifically for the CCP cohort and has been monitored for quality through a system of evaluation, peer review, and a full course re-accreditation process which occurred two years ago. This process of peer review and course re-accreditation focused on content and method of delivery. As an example, as the program has evolved over its 7 years and in response to student feedback, there has been a greater emphasis in content on aspects such as classroom management and lesson delivery.

As part of the program, CCTs undergo 4 weeks of intensive face-to-face training prior to entering the classroom. In a survey of CCTs undertaken in 2008, the averaged response to those who felt they were '*Well prepared'* or '*Reasonably well prepared'* to enter the classroom rated between 46% to 49%,'*As well as could be reasonably expected'* 43%to 46%. '*Not at all prepared'* 7%. The individual response to this initial preparation varies according to previous learning experiences and levels of self-efficacy. A strong sense of efficacy will foster an expectation of being able to deal with the issues of potential failure and struggle engendered through a career change (Bandura 1994). In contrast, those who generally doubt their capabilities may doubt their ability to deal with the difficult issues of teaching no matter how much pre-training they have. In general there is recognition, as the statistics verify, that 'reasonable expectations' of the summer school pre-training have been met. However, the program has received criticism from a few individuals who felt the need for specific curriculum content that would cover all possible scenarios for subject, year level and diversity within a class. This is an expectation that cannot be met even in mainstream teacher education.

The third variable identified is the *level of individual support* required not only for successful induction into the school and teaching but also for mastery of the academic requirements (Moore, Martino & Cherednichenko, 2005, Moore, Cherednichenko 2007). A high degree of personalisation is also emerging as a factor in levels of support offered by university staff (Bolhuis, 2002; Moore, Martino & Cherednichenko, 2005). The geographic isolation of CCTs meant that the exigencies of distance are an obstacle to regular attendance at the university. For this reason attendance is broken into blocks of time ranging from 3 weeks to 3 days at regular intervals throughout the year. However, the intensive interaction over these sessions is felt to be a positive for the CCTs. The intensity of group learning, both with each other and from each other, is supported by the establishment of a Community of Practice internet meeting place (Ning) where CCTs share experiences, ask for help, explore possible solutions and often clarify assessment tasks. All lecturers communicate with each other regularly on the progress of CCTs and encourage CCTs to stay in regular contact, responding to emails within a 24hour period. Maintaining support for CCTs through well-timed communication is vital to engaging the student living within the teacher.

Appointing a mentor within the school adds an extra dimension of individual support, although mentors often failed to fulfill their role. The data record the support offered by a mentor *with whom they meet as required* has fallen from 81% in 2007 to 48% in 2010. Alarmingly the opportunity for CCTs to meet with their mentor at *a specific time each week* has only increased from 5% (2007) to 9% (2009/2010). Greater assistance comes from colleagues who *teach in the same method area*. This has increased from 47% (2007) to 61% (2010). The year level coordinator in the school is seen as an avenue of support. Ideally the opportunity for CCTs to experience an initial period of induction at the school involving observation and supervision should exist but has only occurred in 5% of cases (2007) increasing to 16% (2010).

Discussion/Findings

DEECD data indicate a higher retention rate than for traditional teacher training programs. In an Age Education article (2011) a study at Monash University was reported as stating that between 25 and 40 per cent of teachers leave the profession within five years of starting, according to estimates in numerous surveys by teacher unions and education academics. An accurate national figure is not publicly available because exit statistics are kept and collated differently by individual education authorities in each state and territory. In contrast, of the 20 CCTs who completed the CCP in 2005, 19 remained in teaching, but not necessarily in the same school. Retention rates for other cohorts are: 2006 – 76%, 2007 – 96%, 2008 – 88%. This equates to a retention rate of 79% over a period of 7 years. Figures for subsequent years cannot be considered as teachers are still working under the terms of their contract which stipulates that they must remain with their school for 2 years after graduation. Schools with high retention rates have much in common including formalised mentoring, professional learning teams, a culture of collaboration and mutual support, a strong sense of community, strong leadership, a united sense of purpose and clear lines of communication.

Another positive indicator of the success of the CCP is the degree to which CCTs have quickly been elevated to leadership positions and positions of responsibility. A group of CCTs from the original cohort of 2005 and other early cohorts attended a forum on 24 October 2011. Attendees at the forum offered a representative sample of the program:

1. VCAL coordinator, daily organiser and VET coordinator
2. Leading teacher, Acting Assistant Principal
3. Leading teacher, Yr 8 Coordinator, Head of Junior School 2012, Acting Assistant Principal when Assistant Principal (AP) on Long Service Leave.
4. Leading teacher 3 years.
5. Careers Coordinator. Completed further post graduate studies- Education (Career development)..
6. Acting Leading Teacher (3 ½ yrs), Junior School Coordinator, Professional Development coordinator. AP roles on some days.
7. Yr 8 Coordinator, Teacher and Learning Leader Technology, OHS committee. Undertaking course for Careers Practitioner.
8. Yr Level Coordinator 4 yrs
9. Yr 8 team and year level leader.
10. Acting AP 3 terms.
11. Peer coaching, VET coordinator, Member consultative committee, mentoring new graduates.
12. Leading Teacher Curriculum Development and Student pathways

The CCTs who participated in the Research Forum were able to describe a range of benefits they accredited to their life and work experiences. With 4-7 years of teaching experience they have begun to recognise there is a greater range of skills and aptitudes they can bring to the job than they initially identified. These skills include capacity for change, skills for effective communication, stress management, organizational skills, strong work ethic, lateral thinking, resilience, desire to succeed, awareness of industry standards, and an ability to identify with non-engaged students and develop strategies to re-engage them.

Conclusion

Victoria University values the development of graduate capabilities which transcend the technical and curriculum content of a course. The CCP is a benchmark practice in the University commitment to enable graduates to be work, career and future ready. The WIL approach of this teacher training program has facilitated a higher rate of retention than for mainstream teacher graduates, CCTs are assigned positions of responsibility and leadership very early in their careers as teachers and schools that are able to utilise the knowledge, skills and experience of CCTs benefit the most.

References

Bandura, A, (1994). Self-efficacy in V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* Vol. 4, pp 71-81. New York: Academic Press. (Reprinted in H. Friedman [Ed.], *Encyclopedia of mental health*. San Diego: Academic Press, 1998)

Ball. D. L., & Wilson, S. M. (1990). Knowing the subject and learning to teach it: Examining assumptions about becoming a mathematics teacher. (Research Report 90-7). East Lansing, MI: *National Center for Research on Teacher Education*. ED 232 207 as cited in Dill 1996

Bolhuis. S., (2002). Alternative Routes to Teaching in Secondary Education in The Netherlands *European Journal of Teacher Education*, Vol. 25, Nos. 2 & 3, 2002.

Chisholm. C., Harris. M., Northwood. D., & Johrendt J, (2009). The Characterisation of Work-Based Learning by Consideration of the Theories of Experiential Learning*, European Journal of Education*, Special Issue: Work-based Learning in Higher Education, Volume 44, Issue 3, pages 319–337, September

Darling-Hammond. L.,(2007). Interview – the Key components of effective teacher preparation. Edutopia online. The George Lucas Educational Foundation. www.glef.org Date accessed: 11/05/2012.

Darling-Hammond L, Chung R, & Frelow F.(2002). Variation in Teacher Preparation: How Well Do Different Pathways Prepare Teachers to Teach? *Journal of Teacher Education* Vol 53 No 4 285-302

Dill. V. S,, (1996). Alternative Teacher Certification. *Handbook of Research on Teacher Education*, Second Edition, Houston

Epstein. S,, (1998). Constructive Thinking: The Key to Emotional Intelligence. Greenwood Publishing Group. Westport, CT

Feiman-Nemser. S., (1990). Teacher Preparation: Structural and Conceptual Alternatives *Handbook of Research on Teacher Education*, Houston

Gore. J., (1995). Emerging Issues in Teacher Education. Perth: Innovative Links Project. Murdoch University, Perth

Griffiths. V., (2007a). Experiences of Training on an employment-based route into teaching in England. *Journal of In-Service Education*. Vol. 33, No. 1, March 2007, pp107-123

Haberman, M., (1991). Can cultural awareness be taught in teacher education programs? *Teaching Education*. 4:1,Fall,1991as cited in Dill 1996

Hoult. E,, (2006). *Learning Support: a Guide for Mature Students* Sage London,

Knowles. M. S., (1980). *The modern practice of adult education: from pedagogy to andragogy.* Cambridge, New York. In Sims p4)

Kolb. D. A., (1984). *Experiential Learning: Experience as the Source of Learning and Development* Prentice-Hall, Edgewood Cliffs, New Jersey.

Kruger. T., (Chair) (1999). *Innovative Approaches to Site-Based Teacher Education*, Report to DETYA, Victoria University of Technology

Lovat. T., Smith D, (1995). *Curriculum: Action on reflection revisited.* Sydney: Social Science Press

Milburn. C., (2011). *More teachers, but fewer staying the course,* The Education Age, http://www.theage.com.au/national/education/more-teachers-but-fewer-staying-the-course-20110304-1bhuv.html#ixzz1wj8nQAye

Moore. R. & Cherednichenko, B., (2007, September) *Understanding Quality in Career Change Teacher Education: the Ontological Teacher or Cloned Technician?* Paper presented to the European Educational Research Conference, Ghent.

Moore. R., Martino. J. & Cherednichenko. B., (2005). *Changing Lanes: Learning About Teaching As The Next Career.* Paper presented to the RiTE Mini-Conference, Victoria University, 25 November.

Sims. R. R. & Sims. S., (1995). *The Importance of Learning Styles* Greenwood Press, Westport, Connecticut.

Copyright © 2012 Rodney Moore, Jayne Pitard

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Work integrated learning for the development of professional skills of Information Technology graduates

Srivalli Nagarajan
Faculty of Health Sciences, University of Sydney

This paper reports on findings from a recently completed doctoral education research that studied the professional work experiences of recent Australian Information Technology (IT) graduates. In particular, it will focus on IT graduate perspectives on the relevance of WIL for the development of professional skills that graduates believe are required for their work. While the focus of this work is on recent IT graduates, much of the discussion is relevant to other professions or indeed to all graduates.

Keywords: Work integrated learning, Professional Skills, IT workplace experience, Graduate attributes

Introduction

The transition from the world of higher education into the world of work is complex. According to Dahlgren et al. (2006), much of the research studying the relationship between higher education and work looks at the match between the outputs of higher education and the demands for trained workers. They state that few studies examine what the work requirements are or the relevance and impact of education to such work requirements. Teichler (2007) says,

information on the relationship between higher education and the world of work is far from satisfactory (Paul, Teichler and van der Velden, 2000). It is amazing to note the scarcity of the sources of information on a topic that is so high on the agenda in public debates.

Several institution specific data collections aimed at understanding graduate experiences and destinations have been carried out internationally (Teichler, 2007; Little, 2008; Purcell et al., 2005) and in Australia (James, 2001; Booth and Runge, 2005; Goyal and Weiler, 2006). The majority focussed on the transition of students from study to employment. Little attention was paid in these studies to the skill requirements of work or the work experiences of recent graduates.

Crebert et al. (2004) investigated a selected group of university graduates (Microelectronic Engineering; Criminology and Criminal Justice and Leisure Studies) about their perceptions of the contributions that the learning contexts of their universities, work placement and post graduation employment made to the development of their generic skills. The graduates' response showed that they greatly valued the experience of learning in the workplace in their subsequent employment. Another study funded by the Australian Learning and Teaching Council examined the perceptions of recent IT graduates in the
workplace to help inform the curriculum and found that many graduates felt satisfied as to how their university had prepared them for their work but perceived themselves as being under prepared in areas such as interpersonal and business skills (ALTC, 2009). Limited research is available in understanding the relevance of university degrees to workplace requirements particularly from graduates' viewpoint.

For many IT students, one of the main objectives of studying at university is to prepare for employment in the IT workforce. The concept of how well a university prepares its graduates to take up the challenges of the workplace and meet the needs of industry has been widely debated. The professional body, the Australian Computer Society promotes mandatory work integrated learning (WIL) for all IT students to develop their work ready skills. The need for the increasing recognition of knowledge growth via learning by doing (at workplaces) in addition to the knowledge acquired from university is supported by such initiatives. According to Patrick et al. (2009), work integrated learning includes a "range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum". The main purpose of WIL is to include professional experience, employability, and job ready skills for all IT students using a combination of external models (industry-based work experiences such as placements, internships or work shadowing) and internal models (university-based experiences such as project work, case studies and simulated opportunities) (ACDICT &ACS, 2010).

The relevance of WIL for the development of professional skills of recent Australian IT graduates is the focus in this paper. Professional work experiences are defined as the parts of a graduate's work that cover professional or non-technical skills such as communication, teamwork etc. Twenty four Australian IT graduates mostly from

NSW participated in the study. They were employed in a paid IT professional position from 0.5 - 3 years. Participants came from a broad spectrum of cultural and ethnic background, worked for small, medium and large sized companies that were either multinational or local and were employed across a variety of IT roles. Some key ideas from grounded theory (theoretical sampling, constant comparison, theoretical saturation, open coding, axial coding and selective coding) were used for data collection and analysis. Interviews and qualitative online surveys were the research methods used (Nagarajan, 2011).

Study findings and IT graduate perspectives on work placement

IT graduates face a number of challenges when they first enter employment. Major categories of professional skills that IT graduates believe they require for their work are communication, time management, teamwork, working with people, working across cultures, project management, business skills and personal attributes. The study found that graduates' professional skills are developed in multiple ways including academic, social, personal, professional and other work experiences or a combination of these. The perceived lack of preparation of IT graduates to face new, unfamiliar, unknown or unknowable situations was also highlighted by the study. Some skills (such as working with international clients in different time zones and from different cultures) are currently developed only outside university studies. The IT graduates who participated in the study did not develop these professional skills from their university studies. However, the development of these skills at university is not impossible and would be a useful addition to the IT curriculum. IT graduates in the study believe the most useful components of their university studies when they first entered employment are work placements and "real life like" projects. One graduate says,

……The kinds of things I did ranged..…. Being able to have exposure to clients and professionals helped to practice professional social engagement skills. Having to present reports that have your own name on them (being responsible for the content) helps to feel more accountable for success. Meet contacts and network! I got my job from the networking I did on my second industry placement, Put education and theory into practice, to test maturity and responsibility in situations where things can go wrong - i.e. away from the safety of a learning environment.

Other subjects such as projects and project management taught students key professional skills such as teamwork and project coordination. Graduates identified communication skills as the most important professional skill for workplaces. Graduates feel that although most university IT courses include a subject about communication, such subjects are theoretical and do not seem to prepare IT graduates to face the complex communication requirements of workplaces (Table 1).

Table 1: Communication skills IT graduates believe are required for their work

Communication skills	Requirements
Appropriate use of language for different purposes	Use of language in communication with clients/peers/superiors; Communication style (formal versus informal); Communication mode (verbal, written, e-mail, online, face-to-face meetings); Documenting communication; Structure of messages; Choice of language in business and technical communication; Ability to communicate bad news – tactical communication
Communication with senior colleagues and people from different cultures	Communication with older colleagues; Communication in an international work environment with people from different cultures
Communication while working in a group	Meeting facilitation; Feedback communication; Communication to solve problems; Communication to sell ideas
Timing of Communication in project work matters	Timeliness of communication; Type of work and communication (project scope communication, project risk communication etc.)

Further IT graduates believe that some professional skills developed at university are applied differently at work contexts. For example, acceptable standards of work submission are different at university from IT workplaces. The study findings demonstrate the complexity involved in the development of professional skills, how and where they are developed and who (university or employers or graduates) assumes responsibility for their development (Nagarajan, 2011). Other findings suggest that some professional skills can be developed only outside the university studies. Further, certain professional skills are difficult to develop except on real work sites.

There is a particular subject that we did it was a software engineering subject. The objective of the subject was that you actually worked on a real industry problem out at the sponsoring company … it also gave an opportunity to be out in the industry to see how people dress and how people communicate……. It takes away from that brand new, the unknown and makes you more comfortable because you have already had exposure …

WIL approaches such as work placement, in particular, has the potential to contribute to the development of the major professional skills IT graduates believe are required for their work. A pathway between studies and the world of work is provided by work placement. The benefits are:

Exposure to IT workplace culture and practices;
First hand experience of how IT teams work and being a part of one;
Opportunities to develop key skills such as communication and time management;
Opportunities to work with people from different cultures and non-IT backgrounds;
Building of networking skills with other IT professionals;
Enabling students to take responsibility for their own work; and
The putting of theory into practice.

Through such work experiences students can see their own progress and the development of personal skills such as self-confidence, independence and self-reflection. Scott et al. (2004) discuss experiential learning (this is what graduates who go into work placement and subsequent employment may be able to obtain) as a valuable addition to generic skills development and professional development. A foundation for new ideas, development of a new sense of self, extension of experience beyond academic learning and assistance for students to critique their own experience are some advantages of experiential learning. Multiple skills can be developed through multiple placements in different organisations. If the numbers of work placement opportunities could be increased, IT graduates would gain the opportunity to develop different skills by possibly working with employers with different cultures or in large, small and medium sized companies. For example, in a small enterprise, individuals might be required to work in many different roles (technical and non-technical) while large employers may be able to provide more experiences of teamwork or well-defined roles and tasks.

Developing employability and work ready skill sets

Harvey (1999) states that work placement is seen as a model in which students learn principles of lifelong learning, situated learning and transformative learning. Students are provided with a sense of real life workplace settings and helped to exercise their disciplinary knowledge as well as their personal skills in a combination to achieve the employer/client needs. An ALTC study found that Australia's ICT graduates are technically proficient but not work ready (ACSF, 2009). It reported that 70% of the ICT graduates wished they had undertaken more work experience at university and this observation aligns with most graduate views including my research on work experience and its relevance to work readiness. Crebert et al. (2004) state that graduates believe their workplace learning occurs through collaborative works, their own mistakes, and interaction with colleagues. They conclude that work placement plays a vital role in the preparation of graduates for employment. In my study, many graduates had learned their work ready skills from being "thrown in to the deep end" and "sink or swim" situations rather than through formal learning opportunities.

Dreyfus and Dreyfus (1986) developed a model of skill acquisition which shows that skills are acquired in five levels namely: novice, advanced beginner, competent, proficient and expert. In discussing this model, Eraut (1994) raises the questions:

- What is best learned in higher education?
- What is best learned in professional practice? and
- What is best learned through an integrated course involving both contexts?

Significant interaction between teaching and professional workplaces is needed for a well-planned and integrated project at university. Eraut states that the time required for learning propositional knowledge is considerable as is the time required to learn how to use it (some is suitable for learning after qualification). In IT, a direct responsibility is placed on employers to assist graduates progress from novice to higher levels.

Facilitating work placement experiences

Provision of work placement opportunities alone is insufficient. The quality of a student's work placement learning experiences is dependent on effective liaison between an academic supervisor and industry supervisors. In

IT degrees, a year of placement or distributed placement experience during the study years is sometimes offered by so-called *'Sandwich degrees'*. Such degrees have the potential to successfully incorporate work based learning within the curriculum. Yorke and Knight (2002) recommend that work experience be a separate component of a degree requiring students to produce a satisfactory report accepted by both the workplace supervisor and academic tutor. However, they acknowledge the practical problems involved because employer and academic schedules do not dovetail and small companies may be unable to afford the costs and time associated with such partnership commitments.

Encouraging part-time employment in parallel with university studies

Any part-time work opportunities whether related to IT, or not, have the potential to provide students with many of the work ready skills they require at IT workplaces. Although, there is evidence that the additional burden of part-time employment can adversely affect graduates' academic performance (Barke et al., 2000), it can be viewed as a learning opportunity rather than as a threat (Yorke and Knight, 2006). The relevance of studies to employment scenarios becomes more evident when graduates can see the knowledge they have gained from their studies has the potential to go beyond the subject or the degree. One IT graduate says,

Any kind of part-time jobs really because when you're working in a team, so I worked in McDonalds for two years, worked at a pub, things like that help you with your communication, verbal communication and negotiation and conflict skills

Providing work based learning (WBL) options

Learning and work can be related in three ways (Seagraves et al., 1996) and choosing the right learning approach is dependent on understanding the how, where and when learning occurs.

- Learning for work (general vocational education);
- Learning at work (in-house education and training); and
- Learning through work (application of job related knowledge and skills to tasks and processes).

Rossin and Hyland (2003) believe that in higher education, learning for work can be achieved through a combination of learning at work and learning through work. This view is applicable to IT education. It is challenging for employers to manage and facilitate learning opportunities at work but IT employers' commitment to understanding their workers as learners and supporting their learning from work during the first few years of their employment could greatly assist the development of professional skills of IT graduates.

Conclusion and future work

From the analysis of IT graduate perspectives it appears that work placement works well as a model of WIL to ensure students are work ready. The major conclusions of this paper are: 1) Certain IT work skills are difficult to develop except on real world sites 2) WIL approaches (such as work placement, real-life like project work) have an important role in the development of the professional skills of graduates and 3) Different players (professional faculties, employers, professional associations and graduates) need to work together to develop, implement and facilitate WIL approaches that would ensure work readiness of graduates. I believe that the conclusions of this study will be applicable to other IT graduates in the rest of the country and that many of the conclusions apply to more disciplines than just IT. These beliefs could be verified by similar studies in the future both within IT and other disciplines.

References

Australian Council of Deans for Information and Communication Technology (ACDICT) & Australian Computer Society (ACS) industry forum (2010). *Outcomes of the ACDICT/ ACS Industry Forum 22 November 2010*, Sydney.

ACS F (2009). *Study Finds Australia's ICT Graduates Technically Proficient But Not Work Ready*, Australian Computer Society Foundation, viewed 15 January 2010 <http://www.acsfoundation.com.au/index.cfm?action=show&conID=study>.

ALTC (2009). *Managing educational change in the ICT discipline at the tertiary education level*, Australian Learning and Teaching Council and University of Wollongong, Australia.

Barke, M., Braidford, P., Houston, M., Hunt, A., Lincoln, I., Morphet, C., Stone, I. & Walker, A. (2000).

Students in the labour market: nature, extent and implications of term-time employment among University of Northumbria undergraduates, Department of Education and Skills, Research Report 215, London.
Booth, T. & Runge, J. (2005). Factors influencing the employment experience and aspirations of a cohort of beginning teachers: Two years on, *Proceedings of the 33rd Annual Australian Teacher Education Association Conference* Brisbane: Centre for Professional Development, Griffith University, Crown Plaza Surfers Paradise, Australia, 6-9 July 2005, 62-69.
Crebert, G., Bates, M., Bell, B., Patrick, C. & Cragnolini, V. (2004), Developing generic skills at University, during work placement and in employment: graduates' perceptions, *Higher Education Research and Development*, 23(2), 147-165.
Dahlgren, M.A., Hult, H., Dahlgren, L.O., Hård af Segerstad, H. & Johansson, K. (2006). From senior student to novice worker: Learning trajectories in political science, psychology and mechanical engineering', *Studies in Higher Education*, 31(5), 569-586.
Dreyfus, H.L. & Dreyfus, S.E. 1986, *Mind over Machine: The Power of Human Intuition and Expertise in the Era of the Computer*, Basil Blackwell, Oxford.
Eraut, M. (1994). *Developing professional knowledge and competence*, Falmer Press, London.
Goyal, K. & Weiler, B. (2006). University Education and Employment Outcomes: Brand Matters, *Monash Business Review*, 2(3), 1-6.
Harvey, L. (1999).*New realities: The relationship between higher education and employment*, viewed 10 August 2005 <www.uce.ac.uk/crq/publications/cpeair99.html >.
James, R. (2001). *Graduate Views on the Quality and Relevance of Their Course and University Experience*, University of Melbourne, Melbourne.
Little, B. (2008).Graduate Development in European Employment: Issues and Contradictions', *Education + Training*, 50(5), 379-390.
Nagarajan, S. (2011). Professional Work Experiences of Recent Australian Information Technology Graduates, *Doctor of Education Thesis*, University of Technology Sydney, Australia.
Patrick, C., Peach, D., Pocknee, C., Webb, F., Fletcher, M. & Pretto, G. (2009). *The WIL [Work Integrated Learning] report: A national scoping study; Australian Learning and Teaching Council (ALTC) Final report]*, Australian Learning and Teaching Council.
Paul, J.J., Teichler, U. & van der Velden, R. (2000). Higher education and graduate employment, *European Journal of Education*, 35(2).
Purcell, K., Elias, P., Davies, R. & Wilton, N. (2005). *The Class of '99: a Study of the Early Labour Market Experiences of Recent Graduates*, Department for Education and Skills, University of Warwick, Warwick.
Rossin, D. & Hyland, T. (2003). Group Work-based Learning within Higher Education: an integral ingredient for the personal and social development of students, *Mentoring & Tutoring: Partnership in Learning*, 11(2), 153-162.
Scott, D., Brown, A., Hunt, I. & Thorne, L. (2004). Identity, in, Chapter 9, *Professional Doctorates: Integrating Professional and Academic Knowledge,* Open University Press, Maidenhead.
Seagraves, L., Osborne, M. & Neal, P (1996). *Learning in Smaller Companies. Final report*, University of Stirling, Stirling.
Teichler, U. (2007). Does Higher Education Matter? Lessons from a Comparative Graduate Survey, *European Journal of Education*, 42(1), 11-34.
Yorke, M. & Knight, P. (2002). Employability through the curriculum', *Tertiary Education and Management*, vol. 8, 261-276.
Yorke, M. & Knight, P.T. (2006). *Embedding employability into the curriculum,* viewed 15 October 2009 http://www.heacademy.ac.uk/assets/York/documents/ourwork/tla/employability/id460_embedding_employability_into_the_curriculum_338.pdf

Copyright © 2012 Srivalli Nagarajan

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Developing an Objective Structured Clinical Examination to Assess Clinical Competence

Fiona Naumann
Faculty of Medicine, School of Medical Sciences, Exercise Physiology . The University of New South Wales
Faculty of Medicine, Prince of Wales Clinical School , The University of New South Wales
Keri Moore
Learning and Teaching Unit, The University of New South Wales
School of Health and Human Sciences, Southern Cross University

Keywords: Exercise Physiology, Objective Structured Clinical Examination, Work-simulated Assessment of clinical skills.

Abstract

The distinguishing features of skill-based learning situations are that they are inherently variable, unpredictable, sometimes brief, high risk learning events which are not replicable, and this presents challenges for the quality assurance requirements of the assessment process (Cooper, Orrell & Bowden; 2003, Hodges, 2011; Yorke, 2011). One potential method for assessing clinical competence in the university setting is the Objective Structured Clinical Examination (OSCE).

This paper describes an action research project, a three-phase pilot of an OSCE for Exercise Physiology undergraduate students. Fifty-six students participated. As a means of assessing validity, after each of the three pilots the following elements of the design and implementation reviewed: number of stations, time allocated to station, content of each station, descriptors' of tasks, preparation and training of simulated patients and examiners and assessment criteria.

Based on a comparative analysis all station and domain items, in the first OSCE, the Cronbach alpha for the examination was 0.52 and in the third OSCE 0.86, indicating continued improvement. This suggests the results would be reliable for making a summative judgement of student performance of Exercise Physiology clinical skills.

Introduction

In order for Exercise Physiology students to be accredited to practice, they undertake university studies and are required to complete practicum experience in a range of settings and environments. It is generally expected that during the practicum students will be assessed on their application of theory to practice. It is expected that these activities strengthen the work readiness of graduates.

However, assessing students during a practicum can be highly variable in terms of the opportunities for assessment and the skills of the examiners. This means some students face more stringent examinations than other students which raises questions of the equity of in-situ exams. Universities are rethinking curriculum design and assessment practices related to work-integrated learning (WIL) (Cooper et al, 2010). Therefore researching the effectiveness of skill-based assessment, work-simulated assessment practices, is both timely and pertinent to the current climate.

One potential method for assessing clinical competence in the work-simulated setting is the Objective Structured Clinical Examination (OSCE). The OSCE was first described by Harden et al. (1975) as a means to assess the clinical skills of final year medical students. Since its development, the OSCE has gained acceptance as a benchmark for assessing clinical competence (Bartfay et al. 2004) and has been adopted by several health professions including radiography (Marshall and Harris, 2000), nursing (McKnight et al., 1987; Alinier, 2006),

physiotherapy (Nayer, 1999) and dentistry (Brown et al. 1999). As Exercise Physiology is a relatively new allied health profession, it is critical to demonstrate that exercise physiologists have proficient clinical skills and OSCE was regarded by the team as a viable option.

The OSCE aims to enhance the validity of clinical assessment by simulating realistic clinical scenarios to reflect real-life professional tasks. Typically, an OSCE consists of multiple stations at which students are required to perform a range of tasks to demonstrate competency in relevant skills. During OSCE students rotate through the various stations spending a predetermined time. At each station the students are instructed to complete specified tasks in the time allocated. Stations can involve actual patients or surrogate volunteers who are normally trained to present a standardised portrayal of the clinical problem. Each station is scored separately using either detailed checklists or global rating scales.

Establishing reliable assessment is critical to the success of the Exercise Physiology Program. The underlying premise is that standardised assessment procedures ensure objectivity and maximise reliability (Bartfay et al. 2004; Major 2005). The aim of this study was to assess both the validity and reliability of an OSCE for assessing clinical skills of final year Exercise Physiology students. That is, we explored if each station in the Exercise Physiology OSCE tested the construct that it was intended to assess.

Methodology

This action research project constituted three pilots of an OSCE in the Exercise Physiology OSCE during 2011. Fifty-six final-year students participated. In addition to analysis of data from test results, feedback from examiners, clinical education staff and students provided insight into how the OSCE were perceived, the learning value and what improvements might be made.

The OSCE

The content of the work-simulated examinations were based on the diversity of skills expected of an exercise physiologist. Careful design of stations was required to ensure systematic and sufficient samples of the skill- based competencies, a key element of validity. A range of clinical presentations, typically expected in daily practice, were selected. These included the screening of healthy persons as well as assessment of patients with metabolic, cardiovascular, neuromuscular and musculoskeletal disorders. Each station assessed the student's competency in the following domains:

- communication skills;
- clinical and procedural skills; and
- technical skills.

The assessment criteria and grading system used at each station evolved as the series of pilots progressed. Initially, checklists for assessing station-specific tasks were used. These were replaced by a global rating scheme employing criteria aligned to three competency domains mentioned above. A numerical scale was used for statistical analyses of test results. Therefore, each station was graded as follows:

- F for failed performance (score 0);
- P- for borderline performance (score 1);
- P for good performance (score 2); and
- P+ for excellent performance (score 3).

To strengthen validity, after each pilot, elements of the design and implementation of the OSCE were scrutinised. The elements reviewed were the:

- number of stations;
- time allocated to station;
- content of each station;
- descriptors' of tasks;

- preparation and training of simulated patients; and
- preparation and training of examiners and assessment criteria.

Statistical analysis

The reliability of the examinations were analysed using methods based on **classical test theory**. This included **generalisability theory** which is an estimate of the examination's reliability to consistently rank students. This means, in order for a station to be considered reliable, it should assess various tasks across the three competency domains and, distinguish between the best and worst performing students.

The **measure for internal consistency** utilised Cronbach alpha. The results for all marking criteria as well as the aggregate results from stations and competency domains were analysed. We were looking for a value >0.7 from the Charonbach alpha and generalizability coefficients analysis. All statistical analyses were performed using SPSS v20 with significance set at $p<0.05$.

Discrimination index was ascertained using Pearson's correlation

In addition, in order to determine the effect of varying the number of stations or competency domains, Decision (D) studies were performed. This showed the minimum number of stations and domains needed to produce a reliable exam result.

Content validity was measured by using feedback from clinical education experts, examiners and academic staff. Assessing the content validity ensured representation of the diversity of clinical conditions typically encounter in clinical practice and the clinical competencies required to assess and manage patients.

Results

Based on analysis of all station and domain items in the first OSCE, the Cronbach alpha for the examination increased from 0.52 in the first OSCE to 0.86 for the third OSCE, indicating improvement across time which infers the OSCE is reliable for making a summative judgement of student performance (Table 1).

Table 1: Cronbach alpha across all items of the 3 pilot OSCEs

	Cronbach's Alpha	N of Items
OSCE 1	0.520	22
OSCE 2	0.740	20
OSCE 3	0.863	20

Table 2 shows the results of analysis of the Discrimination index (measured by Pearson correlation) for each station. Significant discrimination index's (the tern, significant indicates that the ranking of students at these stations, correlate with the overall OSCE performance ranking which were as follows.

- OSCE 1, there were only two such stations: which were significant
- OSCE 2, the discrimination index was significant for four stations.
- OSCE 3, the discrimination index was significant for all stations indicating that the ranking of students in these stations correlated strongly with the overall ranking

The aim of a good exam set up should be to have good students perform well at all stations. If there is an anomaly, it indicates the station could be suspect. The terms, significant meant that the top students did well on all stations

Table 2: The mean, SE and discrimination index for all OSCE stations

OSCE 1				OSCE 2				OSCE 3			
Station	**Mean**	**SE**	**R[a]**	**Station**	**Mean**	**SE**	**R[a]**	**Station**	**Mean**	**SE**	**R[a]**
CV Oncology	0.65	0.19	**0.81***	CV Oncology	0.66	0.04	**0.96***	CV Oncology	0.66	1.93	**0.76***
VO_2 interpretation	0.50	0.60	0.62	Diabetes	0.71	0.06	0.12	Diabetes	0.66	1.44	**0.58***
ECG interpretation	0.51	0.64	0.38	ECG	0.72	0.05	0.51	ECG	0.66	1.87	**0.69***
ROM	0.54	0.53	0.60	Rest				Rest			
Lung function	0.60	0	NA	Lung function	0.51	0.06	**0.69***	Strength	0.68	1.64	**0.65***
Falls	0.57	0.16	0.15	Falls	0.67	0.04	0.54	Falls	0.57	1.97	**0.64***
Health & Fitness	0.60	0	NA	7. Health & Fitness	0.62	0.03	**0.76***	Health & Fitness	0.64	1.41	**0.60***
Mus-Sk	0.48	0.55	**0.86***	Mus-Sk	0.70	0.06	**0.82***	Mus-Sk	0.73	1.49	**0.82***

Key:
CV Oncology – Cardiovascular oncology; VO_2 interpretation – maximum Oxygen consumption
ECG Interpretation – Electrocardiogram interpretation; ROM – Range of Motion;
Mus-Sk – Musculoskeletal assessment; * Pearson correlation with total scores. Significant at the 0.05 level (2-tailed).

The effect of varying the number of domains and stations was explored Decision (D) studies. Figure 1 shows increasing the number of domains from more than three had little effect on the generalizability coefficient >0.7 with only seven stations. Similarly increasing the number of stations beyond seven had little effect on improving generalizability.

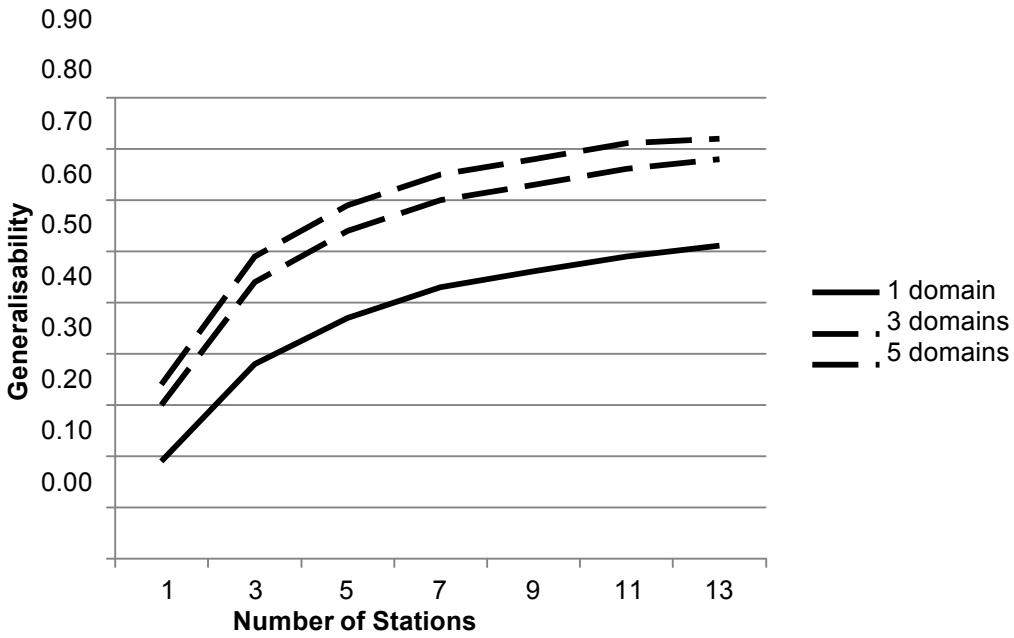


Figure 1: Generalizability Coefficient by domain and station number.

As far as content validity is concerned, staff and Clinical Educator feedback enabled station task and assessment criteria refinement throughout the project. Analysis of student feedback indicated that overall the OSCE was well perceived as a good way to assess their clinical competency. The student cohort remarked that it is essential to fully brief them on the format of the exam and assessment criteria. Staff and Clinical Educator feedback fully supported to use of the OSCE to assess clinical competence.

Discussion and Conclusion

Statistical analysis allowed improvements to be made to the reliability of the OSCE, exceeding the accepted Cronbach alpha benchmark of 0.7. This is consistent with the reported reliabilities for an OSCE in the medical and other allied health fields. This would suggest that the results from this examination would be reliable for making a summative judgement of Exercise Physiology student's performance. Improvements in exam reliability were achieved through better selection and training of volunteer patients and surrogates, better preparation of the students, improved assessment criteria for the examiners to work from and a refinement in task requirements to be performed within the allocated time.

It is critically to successful implementation of an OSCE to determine the optimal number of stations and domains required to provide a reliable assessment of student performance. Decision (D) studies aid this process. Based on generalizability theory, Decision (D) studies can estimate the effect of varying conditions on the generalizability of an examination. Data from OSCE 2 and OSCE 3 shows the combination of seven stations: Cardiovascular oncology, diabetes, SCG interpretation, Strength, Falls, Health and Fitness and Musculo-skeletal assessment, each with three domains: communication, clinical and procedural skills and technical skills, achieved satisfactory generalizability. Increasing the number of stations or domains would not improve the reliability of the examination significantly.

As far as administration is concerned, an OSCE is both labour and time intensive. Nevertheless, one of the many benefits was that this study showed through an iterative process involving analyses of staff and student feedback along with statistic data from three pilot examinations, an OSCE can evolve into a reliable and valid means of assessing, via simulation, clinical skills in Exercise Physiology students.

An additional benefit was that the process of developing the OSCE facilitated a review of the curriculum. This project enables a fresh look at all aspects of clinical competency requirements throughout the curriculum. In some institutions, an OSCE is conducted prior to students undertaking WIL experiences. In this instance however, we used the OSCE after the WIL experience. Given that assessing students skills in-situ, during real- time clinical consultations can be highly variable an OSCE facilitates greater efficacy and equality in the assessment of a range of clinical skills. An OSCE is a valuable tool in the overarching assessment strategy of the clinical component of the Exercise Physiology curriculum.

Limitations of the study

The limitations are that this study focused on a small student cohort at one University.
The student cohort were inexperienced taking this sort of exam. In future, an OSCE will be conducted in second year, to get them ready for the 4th year OSCE?

Directions for future research

This project has been followed by a second study in which we compared examiner reliability for assessment of the exercise physiology objective structured clinical examinations using observation of filmed student performance. It is anticipated that this project will add further academic rigor to the assessment of the students skills prior to engaging in and after WIL.

References

Alinie, G., Hunt, B., Gordon. R., & Harwood, C. (2006). Issues and innovations in nursing education. Effectiveness of intermediate fidelity simulation training technology in undergraduate education. Journal of Advanced Nursing 54: 539–569.

Bartfay, W., Rombough, R., Howse, E., & Leblanc, R (2004). The OSCE approach in nursing education. *Canadian Nurse* 100: 18–23.

Brown, G., Minogue, M., & Martin, M. (1999). The validity and reliability of an OSCE in dentistry. *European Journal of Dental Education* 3: 117-125.

Cooper, L., Orrell, J., & Bowden, M. (2003). *Workplace-learning management manual. A guide for establishing and managing university work-integrated learning courses, practical, field education and clinical education*, Australia: Flinders University Staff Development and Training Unit.

Cooper, L., Orrell, J., & Bowden, M. (2010). *Work integrated learning: A guide to effective practice.* Routledge: USA.

Harden, R.M., Stevenson, M., Downie, W.W., & Wilson, G.M. (1975). Assessment of clinical competency using objective structured examination. *British Medical Journal* 5: 447–451.

Hodges, D. (2011). *The assessment of student learning in cooperative and work-integrated education*. International handbook for cooperative & Work-Integrated Education (2nd ed) . World Association for Cooperative Education Inc.

Major, D. (2005). OSCES – seven years on the bandwagon: the progress of an objective structured clinical evaluation programme. *Nurse Education Today* 25: 442–454.

Marshal,l G.,& Harris, P. (2000). A study of the role of an objective structured clinical examination (OSCE) in assessing clinical competence in third year student radiographers. *Radiography* 6: 117–122.

McKnight, J., Rideout, E., Brown, B, Ciliska, D., Patton, D., Rankin, J., & Woodward, C. (1987). The objective structured clinical examination: an alternative approach to assessing student performance. *Journal of Nursing Education* 26: 39–41.

Nayer, M. (1999). An overview of the objective structured clinical examination. *Physiotherapy Canada*. 45(3): 171-8.

Yorke, M.. (2011). Work-engaged learning: towards a paradigm shift in assessment. *Quality in Higher Education*. 17:1. 117-130.

Copyright © 2012 Naumann F.L, Moore K.M.

The author assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author.

High-risk, high-stake relationships: building effective industry-university partnerships for Work Integrated Learning (WIL)

Deborah Peach
Queensland University of Technology
Ingrid Larkin
Queensland University of Technology
Elizabeth Ruinard
Queensland University of Technology

Many industry peak and professional bodies advocate students undertake professional work placements as a key work integrated learning (WIL) experience in accredited university degree courses. However, mismatched expectations and gaps in the way industry partners (IPs) are supported during these work placements can place these high-stake alliances at risk. A review of models and strategies supporting industry partners indicates many are contingent on the continued efforts of well-networked individuals in both universities and IP organisations to make these connections work. It is argued that whilst these individuals are highly valued they often end up representing a whole course or industry perspective, not just their area of expertise. Sustainable partnership principles and practices with shared responsibility across stakeholder groups are needed instead. This paper provides an overview of work placement approaches in the disciplines of business, engineering and urban development at an Australian, metropolitan university. Employing action research and participatory focus group methodologies, it gathers and articulates recommendations from associated IPs on practical suggestions and strategies to improve relationships and the resultant quality of placements.

Keywords: risk, work integrated learning (WIL), high-stake partnerships, Industry Partners (IPs)

Introduction

Australian universities are experiencing overwhelming pressure to meet increasing industry requirements for work-ready graduates (Peach & Matthews, 2011; Patrick, Peach, Pocknee et al, 2009; A.C. Nielsen Research Services, 2000; Universities Australia, 2008). As a result most institutions have increased curricular opportunities for students to engage in diverse forms of work integrated learning (WIL). These opportunities seek to improve work-readiness and retention, promoting social inclusion and fostering student career development (Smith et al, 2009). Evidence suggests work placement opportunities enhance student engagement and learning, but improved engagement between universities and IPs is urgently needed (Patrick, Peach, Pocknee et al, 2009). The *Australian Workforce Futures Report* (Skills Australia, 2010) has formulated a new approach to partnerships for workforce development, to be led by government and industry, with the Council of Australian Governments, Ministerial Councils for tertiary education, industry, workplace relations, regional development and industry peak bodies endorsing a National Workforce Development Reform Agreement and committing to industry-wide implementation. It further recommends the establishment of a 'Workforce Development Observatory' for workforce collaboration.

In this broader national context the resourcing of WIL in higher education has become a vital consideration as evidenced by the inclusion of a discussion around its high cost in the federal government's *Base Funding Review* (Department of Education, Employment and Workplace Relations (DEEWR), 2010a and 2010b). To enable more students to experience 'authentic' WIL through real work engagement, understanding of effective industry-university partnerships must be optimised. This paper provides an overview of national and international strategies for supporting IPs; an overview of work placement programs in the disciplines of business, engineering, and urban development at a large, industry-linked university; consideration of recommendations from associated IPs; and a summary of practical suggestions and strategies.

'Partnerships' and boundary spanning – the interface between IPs, students and universities

Recent WIL literature highlights the vital nature of responsive partnerships between IPs, students and universities to augment the benefit of WIL. Peach et al (2011) borrow from organisational psychology in invoking such partnerships as boundary spanning. An acute understanding of partner requirements implicates the need for IPs, students and universities to forge connections across diverse communities of practice. Wenger (1998 cited in Zaitseva & Mitchell, 2007) describes boundary spanners as brokers between communities possessing cross-cultural and communication skills apt for implementing successful connections within various organisational frames.

Boundary spanning characteristics include:

- having a wide array of contacts and exceptional interpersonal skills;
- being effective disseminators of information;
- being trusted and respected by diverse stakeholders;
- understanding the organisational complexities of collaboration;
- convening diverse and eclectic partners around shared concerns;
- moving flexibly within and between communities and organisations (Miller, 2008).

The functions of boundary spanning have been classified into key activities, such as representing, transacting, administering, scanning, monitoring, protecting, and linking (Pruitt & Schwartz, 1999). The key activity of linking in this context is exemplified by the offering by Queensland University of Technology (QUT) of real world placements, projects, case studies, simulations, guest lectures and workshops (Peach, et al, 2011).The active and conscious participation, cooperation and collaboration of stakeholders might be deemed partnership, suggests Fleming (2012) but the nature and the quality of the partnership depends ultimately on each partner's engagement and their levels of interaction. It seems probable that a lack of shared understanding of meaning and purpose, along with differing stakeholder expectations and motivations regarding WIL, pose a high level of risk to such potentially valuable partnerships.

A desktop audit of strategies adopted by Australian universities to manage relationships with IPs reveals the following examples:

- Deakin University provides web resources for IPs on insurance, relevant contacts, and confidentiality;
- Flinders University has a website designed to educate IPs about WIL, including case studies and press articles, contacts and a central way to register interest;
- La Trobe University has similarly tailored its portal to direct IPs towards discipline contacts and information;
- Macquarie University, featuring international internships, focuses upon the information needs of IPs;
- Murdoch University's WIL website targets industry with a PDF downloadable kit about WIL benefits and how to get involved;
- The University of Newcastle has an all-inclusive WIL website with detailed information for IPs, with emphasis on the use of 'learning contracts' to manage partnerships;
- The University of Western Sydney also provides detailed IP information;
- Victoria University presents a WIL DVD.

Ako Aotearoa, the New Zealand Centre for Tertiary Teaching Excellence, has recently published four resources to support the development of WIL programs in tertiary organisations. The first three booklets *How to Make the Most of Work Integrated Learnin*g (Martin & Hughes, 2009) are based on research related to graduate attributes/competencies, whilst the fourth *A Template for Good Practice* (Martin, Rees & Edwards, 2011), provides an overview of key areas in WIL.

At QUT WIL is an integral component of curriculum design, where WIL units are integrated in curriculum and assessment. Existing in various forms such as placement, internship, virtual placement, and co-operative education, these approaches underpin the university's vision to build mutually beneficial and long-term outcomes and to integrate the ethos of WIL across whole courses (Peach & Matthews, 2011). University policy identifies IPs as responsible for affording students a safe work environment, suitable induction and training, a positive learning environment with varied experiences, and guidance and mentoring in professional behaviour. A gap exists, however, in the provision of consistent and accessible support to IPs. Whilst identifying the responsibilities of all stakeholders, what is lacking is a systematic approach to supporting IPs to manage expectations and experiences of different WIL stakeholders spanning the boundaries between university and the workplace. The next section reports on feedback from IPs in the disciplines of business, engineering, and urban development on ways to improve these high-risk high-stake relationships and minimise the risks of possible partnerships not realising their potential.

WIL models in QUT Business, Engineering and Urban Development

Students from advertising, marketing, public relations, and international business disciplines at QUT Business School can undertake an elective internship as a WIL unit. The internship is available to undergraduate students over three semesters per year, where up to 100 students participate in a semester. Students complete a minimum of 120 hours work placement in industry over a thirteen week semester. They locate their own placement in agencies or consultancies, government departments and/or not-for-profit organisations, or apply for placements and projects advertised on the university's CareerHub site or through other contacts.

In contrast in the disciplines of engineering and urban development WIL is practised as placement, is mandatory, and often paid. The onus is on undergraduate students to locate a work placement and to negotiate its terms. Most students

commence a placement from second or third year, and undertake a 12 credit point WIL unit in final year (approximately 1000 students per year). This distinguishes the model from those where work placement and WIL units occur simultaneously. In this model responsibility is with students and IPs to negotiate the arrangement with minimal university intervention. Depending on the sub-discipline students are required to complete from 30 to 90 days of discipline-relevant work experience. This model also offers the opportunity for students to undertake a WIL minor (up to five units).

In both instances, learning activities from purposefully designed curricula guide students. Focusing on workplace experiences and facets of career development learning (CDL), students develop strategies for ongoing professional development and 'lifewide learning' (Jackson, 2011). Successful participation requires the maintenance of reflective journals, field notes, and work logs evidencing workplace learning. Table 1 summarises the features of these models.

Table 1 Comparative WIL features: QUT business, engineering and urban development disciplines

WIL Features	Disciplines	
	Business	Engineering and Urban Development
Type of WIL	Internship	Work Placement
Status	Elective	Mandatory
Disciplines	Undergraduate advertising, marketing, public relations and international business in business	Undergraduate engineering and urban development
Duration	120 hours over 13-week period	30-90 days depending on discipline
When offered	3 times per year including summer	3 times per year including summer
Paid/unpaid	Usually unpaid	Usually paid
Method of matching student-IP	Students secure placement through applying for opportunities negotiated by the university, or through their own research and networks, and negotiate work program with IP and academic supervisor	Students find own placement, negotiate work program and register placement with Faculty
Preparation for WIL	Opportunities advertised on unit's Blackboard site. Students apply for and undergo interview and selection process with IPs. Completion of preparatory online career modules devised by Careers and Employment includes focus on aspects of ethics, confidentiality re intellectual property, student resilience and workplace expectations	Community Blackboard site provides tools on finding a work placement; what to do during a work placement; and completing a WIL unit. Workshops are also provided each semester on *Preparing for WIL*
Context	Up to 100 students per semester	250-350 students per semester
Delivery	Face-to-face sessions supplemented by weekly optional online chat sessions facilitated by academic staff	Blended delivery, introductory face-to-face seminar, webinars facilitated by academic staff through the semester of enrolment in WIL unit/s
Assessment	Development of internship plan, job application including responses to selection criteria, reflective poster or digital story about experience	Two reports based on observation, reflection, and participation in workplace experiences and ongoing personal, professional development
Other requirements	Reflective blog, IP feedback.	Reflective field notes, work logs, IP feedback.

One issue arising from these models derives from the students' ability to negotiate a program of work with the IP. Associated challenges reside in the IP being able to provide appropriate supervision once the program is negotiated,

where both student and IP take responsibility for the success of the experience. Fleming (2012) argues that the state of university-IP partnerships can be precarious and can fail to be realised as partnerships if there is not a similar degree of commitment and motivation on both sides.

What do IPs want?

A 2011 collaborative engagement project between business, engineering, and urban development provided the opportunity to scope existing approaches to WIL partnerships. A series of focus groups with relevant IPs was conducted. Three, two-hour focus groups were held in mid-2011. Thirty participants were invited, with twelve attending from government departments, advertising agencies, communication and public relations consultancies, and engineering and construction companies. Participants were asked to consider questions such as what motivates them to continue to provide WIL opportunities for students, what constitutes a successful WIL experience, how to manage the challenge of supervising WIL students, and what additional information, support and resources could QUT provide. An analysis of these recorded discussions yielded common themes related to communication, mutual expectations, student resilience, and confidentiality.

The need for "clearly communicated expectations" from QUT was flagged, so that IPs understand exactly what is required of them. Several wanted far greater precision in the communication of expectations as these were considered to not be sufficiently spelled out in current practice. The university response to this, collected through interviewing academic staff, was that while they try to articulate expectations, WIL experiences are potentially quite different and often have to be negotiated on a case by case basis. It was further asserted that "expectations [when hosting WIL students] are high", suggesting aligned expectations between academic staff and students but that IPs don't always understand students' WIL aspirations. One IP highlighted:

The companies don't really value the work of WIL students and don't know the questions to ask them, don't know what tasks they can be beneficially assigned.

This lack of familiarity with the skills, attributes and potential that students bring has been described as an 'expectations gap' (Patrick, Peach & Pocknee, 2009). Whilst overarching expectations are articulated through generic learning contracts and/or internship plans this area needs further clarification. For example, one respondent added:

It is necessary to have clarity about the kind of placement – does it involve a mentoring relationship? Is the student a project assistant to someone in the company? Is job shadowing to occur?

Those IPs represented in the focus groups agreed that expectations should be set from the start e.g. whether the placement was project based or not and what assessment was required. Again, students and/or WIL academic staff must take care to communicate this information clearly and stress that expectations have a tendency to evolve and change in certain instances. There was agreement that the university must work harder in setting expectations around robust initial and ongoing discussions between the student and IP.

Other respondents highlighted the benefits of a rigorous selection process and matching between student and IP. Unfortunately the resources needed to match large cohorts of students (e.g. in engineering and urban development) are not available and students and IPs are expected to be proactive. It makes sense that the responsibility for accurate matching is located more intensely in the IP-student negotiation process, especially in situations where there are strong IP expectations that the WIL student "will match a need and deliver". Yet despite highlighting the resourcing restrictions, respondents argued that IPs need ongoing university support to help manage students on work placement and that greater energy needs to be directed to the early stages of initiating and undertaking the work placement. It was also suggested that IPs be encouraged to conduct their own reviews on the conclusion of the work placement to ascertain lessons learned from the experience for next time. Another suggestion was that devising a list of requirements for students to meet during their workplace placement was a way of addressing current mismatches.

Focus group participants affirmed students need to have realistic expectations about teamwork and fitting into organisational cultures and settings. Students are prepared for teamwork through the university's strong emphasis on group assessment, although in the workplace teamwork is at times more closely linked to productivity. Respondents also reported some students had unrealistic expectations about the level or type of work they would be undertaking on placement. IPs also reported the need for students to be more resilient when receiving workplace feedback and instructions. The development of resilience is closely linked to learning how to reflect and (re)constitute professional identity (Ryan & Ryan, 2011). It was suggested that workplace exposure, in the form of industry case studies, industry lectures and CDL, should be introduced to students early in their degree. Some IPs reported instances where placement

students had not paid due attention to protocols of confidentiality in a way that might damage commercial-in-confidence projects. The formation of professional identity does not happen instantaneously but respondents agreed that more could be done early in the degree to address professional ethics.

Practical suggestions and strategies

Whilst the focus group feedback highlights the value of WIL it also points to a gap in understanding of the different roles of the stakeholders and the meaning and purpose of the activity.Table 2 summarises suggestions from IPs on principles and practices that could help improve relationships and the quality of placements. These have then been formulated into achievable responses and recommendations to be implemented over a longer term, arrived at on the basis of shared expert knowledge.

Table 2 Five broad strategies to improve industry-university partnerships

IP suggestion	Achievable response by university	Further suggestions
Define placement expectations	Template of expectations customised according to situation	Implement WIL checklist for IP and student and expand use of learning contracts; IP and university to collaboratively benchmark skills and knowledge
Improve communication of expectations	IPs to email WIL staff; IPs to conduct own reviews of lessons learned from WIL experiences; identify multiple champions	Implement training in supervision – making expectations clear but also highlighting diversity
Improve matching and selection of student and IP	Develop signed agreement between IP and student detailing mutual commitment	Use boundary spanning to invigorate partnerships and encourage student and IP to assume mutual responsibility
Improve management of placement	Support IPs via email and phone to resolve issues	Post strategies for managing placement and supervision on university website
Improve student understanding of workplace culture	Integrate CDL modules into courses in early years building student agency, resilience, teamwork protocols, ethics, and respect for confidentiality	Integrate WIL into whole course

Attention must be directed towards students and IPs in the initial framing of the placement and the negotiation of the relationship and expectations. Use of a learning contract is critical here (Larkin & Beatson, 2010). Most students require assistance to develop as agentic and lifewide learners, through opportunities for critical reflection and peer learning. Within resource constraints the university has to find ways to enhance IPs' understanding of WIL and required supervisory skills. The suggestions in Table 2 will be explored further in the next phase of this research with a focus on developing supervisory skills for WIL; developing checklists for WIL and use of learning contracts; encouraging students to be agentic; developing online resources to support IPs in placement management; and intensifying the integration of WIL and CDL over courses and in core and capstone units.

A focus on developing supervisory skills will enable the development of effective characteristics of workplace supervision identified by Cooper, Orrell & Bowden (2010). That is, asking questions; seeking clarification; demanding analysis of interactions; requesting an evaluation of workplace effectiveness; exploring the use of affective and interpersonal skills; testing student knowledge and understanding; connecting practice knowledge with theoretical constructs; and modelling mental processes by verbalising practice thinking. A more extensive use of learning contracts will help clarify mutual expectations and facilitate collaboration between students and IPs to develop learning goals, timelines, and placement details. Since the focus groups, QUT has worked with IPs to develop their supervisory skills through the delivery of face-to-face workshops for IPs in Business and Law, matched by review and refinement of workbooks and other support materials for IPs. These workshops are the basis for workshops for QUT as an IP, where QUT staff members supervise students undertaking placements within a QUT work environment. An institution-wide approach documenting conditions of work placement has also been developed, to clearly define conditions of placement for the institution, student, and IP. In an associated way, the Innovative Research Universities recently completed a project around the development of supervisory resources and checklists for IPs.

Conclusion

This investigation of high-risk, high-stake WIL relationships in the discipline contexts of business, engineering and urban development has yielded a multi-dimensional perspective on the challenges of building sustainable relationships with existing and potential partners. The focus group discussions identified strategies having the potential to take WIL beyond reliance on the efforts of key individuals to an adaptable and transferable framework to better manage stakeholder expectations, responsibilities and experiences. The next phase of this research will canvass IP and student reactions to these recommendations, scoping a format for supervisory training for IPs, along with the production of relevant resources.

References

A.C. Nielsen Research Services, (2000). *Employer satisfaction with graduate skills – Research Report.* http://www.dest.gov.au/archive/highered/eippubs/eip99-7/eip99_7pdf.pdf

Cooper, L., Orrell, J. & Bowden, M. (2010).*Work Integrated Learning: A guide to effective practice*, Oxon: Routledge.

Department of Education, Employment & Workplace Relations (DEEWR), (2010a). *The Higher Education Base Funding Review*.http://www.deewr.gov.au/HigherEducation/Policy/Documents/BFR_BackgroundPaper.pdf

Department of Education, Employment & Workplace Relations (DEEWR), (2010b). *The Higher Education Base Funding Review*.http://www.deewr.gov.au/HigherEducation/Policy/Documents/BFR_ConsultationPaper.pdf

Fleming, J. (2012).Stakeholder perspectives on cooperative education partnerships. NZACE 2012 Conference Proceedings.Hamilton (unpublished conference presentation).

Jackson, N.(2011). *Learning for a Complex World: A Lifewide Concept of Learning, Personal Development and Education*. Authorhouse, Surrey, U.K.

Larkin, I. & Beatson, A. (2010). Assessing and learning in internships: Reflecting on pedagogy and progress. *International Conference on Work Related Learning University-Industry Collaboration for Real Life Education*, 2010 World Association of Collaborative Education (WACE) Conference, 3-5 February, 2010, Hong Kong.

Martin, A. & Hughes, H. (2009). *How to Make the Most of Work Integrated Learning: A Guide for Students, Lecturers and Supervisors*. Massey University, Palmerston North

Martin, A., Rees, M. & Edwards, M. (2011). *Work Integrated Learning: A Template for Good Practice.* Ako Aotearoa, Wellington.

Miller, P. (2008). Examining the work of boundary spanning leaders in community contexts. *International Journal of Leadership in Education, Theory and Practice*, 11(4), 353-377.

Patrick, C-j, Peach, D. Pocknee, C., Webb, F., Fletcher, M. & Pretto, G. (2009).*The WIL [Work Integrated Learning] report: A national scoping study.*[Australian Learning and Teaching Council (ALTC) Final report]. Brisbane, Queensland University of Technology.

Peach, D. & Matthews, J., (2011). Work integrated learning for life: encouraging agentic engagement. In *HERDSA Conference 2011: Higher Education on the Edge*, 4-7 July 2011. Gold Coast.

Peach, D., Cates, C., Jones, J., Lechleiter, H. & Ilg, B. (2011). Responding to rapid change in higher education: enabling university departments responsible for work related programs through boundary spanning. *Journal of Cooperative Education and Internships*, *45*(1), 94-106.

Pruitt, D. & Schwartz, R. (1999). *Student affairs work as boundary spanning: An exploratory study. College Student Affairs Journal, 19(1), 62-87.*

Ryan, M. & Ryan, M.(2011), Positioning Reflection in WIL, *Draw Project*, QUT, Brisbane. *http:www.qut.edu.au/research/research-projects/developing-reflective-approaches-to-writing-draw*

Skills Australia (2010). *Australian Workforce Future: A National Workforce Development Strategy.* http://www.skillsaustralia.gov.au/PDFs_RTFs/WWF_strategy.pdf

Smith, M., Brooks, S., Lichtenberg, A., McIlveen, P., Torjul, P. & Tyler, J. (2009). *Career Development Learning: Maximising the contribution of work-integrated learning to the student experience* [ALTC Final Project Report]. http://www.nagcas.org.au/uploads/file/ALTC%20Report%20July.pdf

Universities Australia (2008).*A National Internship Scheme: Enhancing the skills and work-readiness of Australian university graduates*: Position Paper No. 3/08. http://www.universitiesaustralia.edu.au/documents/publications/discussion/National-Internship-scheme-May08.pdf

Zaitseva, E. & Mitchell, E. (2007). Employing sabbaticals: Experience of boundary crossing. S. O'Doherty (ed.) *Education in a Changing Environment*: *Conference Book*, Liverpool,John Moores University, 317-327.

Copyright © 2012 Deborah Peach, Ingrid Larkin, Elizabeth Ruinard

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

To grade or not to grade: Student perceptions of the effects of grading a course in work-integrated learning

Gregory Reddan
Griffith University

Assessment is an integral component of a student's education and is recognised as an important factor in student learning (Irons, 2008). Assessment involves making judgements about the extent to which the performance of students meets particular standards. It also plays a significant role in fostering learning and the accreditation of students (Boud & Associates, 2010). As universities struggle to keep pace with a rapidly changing global context, assessment practices need to be reviewed and re-evaluated, particularly in relation to work integrated learning.

If we establish appropriate assessment processes, effective teaching and learning will follow (Curtis, 2010). 'The act of assessment signals the importance of what is being assessed, so assessment is a driver for learning' (Eisner, 1993). Pellegrino, Chudowsky and Glaser (2001) summarised the purposes of assessment as:

- Promoting learning;
- Measuring individual achievement; and
- Evaluating programs

Curtis (2010) considers that the answer to the first purpose may lie in formative assessment. He considers several aspects of assessment contribute to its formative effects. Firstly, assessment needs to be embedded into learning routines e.g. prompting learners with questions on aspects of a problem or task. Secondly, such assessment needs to occur frequently, thus the need for embedding in routine learning and teaching practices. Thirdly, it must be accompanied by informative feedback to learners about their learning progress. Good teachers are able to identify the gap between what students know and can do now and the goals for what students should 'know and be able to do' (Curtis, 2010, p.10). A fourth element of formative assessment is that learners must engage in the learning process. One of the most effective ways to encourage students to engage in assessment is through self-assessment, although peer-assessment is also used (Black & Wiliam, 1998; Boud & Hawke, 2003; Sadler, 1989; Wiggins, 1998). Curtis (2010) quoted Boud (2002, p.43), who argued:

> By deliberately keeping assessment out of the hands of the hands of learners,
> we are denying them one of the essential tools – perhaps the essential tool –
> which enables them to become lifelong learners.

Assessment of work integrated learning produces different challenges for students who are accustomed to assignments and examinations. The strategies that students have used in these types of assessment may not necessarily be successful in the workplace setting. Stagnitti et al. (2010) indicate several differences of assessment conducted during fieldwork placement when compared to assessment in formal academic settings:

- Continuous assessment where aspects of performance are regularly assessed;
- Developmental process, providing opportunities for feedback;
- Ongoing learning occurring during assessment;
- Multiple assessors may be involved;
- Limited time for preparation and revision;
- Multiple sources of data can be utilized;
- Assessment is contextual and less controllable;
- Multiple criteria are involved;
- More abstract complex concepts are assessed; and
- Assessment is based on practice and performance rather than theory.

Assessing student performance in work integrated learning is a difficult task involving many decisions by a number of stakeholders (Billett, 2008). Validity and reliability are particular concerns due to the "multiple variables that affect both the design and subsequent implementation of assessment practices" (Hodges, Smith & Jones, 2005). Criterion-referenced assessment, which compares an individual's score with a specific criterion, is the form of assessment most commonly used in work integrated learning (Brown & Knight, 1994) and considers the competency of a student along a continuum of achievement. The purpose of this process is to determine the extent to which the standards have been achieved (Abeysekera, 2006; Bates, 2003) to allow more consistent and objective judgment (Biggs, 2003).

In the context of higher education, Laska & Juarez (1992) suggested that the use of grades for learning has been the subject of a long, ongoing debate. Original research by Colvin (1912) associated students' pursuit of good grades with workers' performance for pay and concluded that grades reward students for high academic standards. Laska& Guarez (1992) examined the semester grade point averages (GPA) outcomes between students whose grades are averaged into their cumulative GPA with those who take courses that use a pass/fail basis. They found that students in the former category had an increase of 11.4% above the average in the mean semester GPA and that for study-abroad students who took courses on a pass/fail basis, the results suggested that academic incentives were adversely affected by this grade transfer policy.

Thompson et al. (1996) noted that there was no universal agreement on the meaning of the term 'grading' and defined it as 'the practice of assessing and reporting levels of performance in ... competency-based vocational education and training, which is generally used to recognise merit and excellence' (p.3). Rumsey (1997, p.62) defined graded assessment as an approach that 'provides grades for combinations of demonstrated knowledge and performance'. Other terms that have been utilised to describe grading include 'performance levels' (Smith, 2000), 'levels of performance' (Thompson et al. 1996), 'levels of competency' (Dickson & Bloch, 1999) and 'levels of achievement' (Strong, 1995).

Thompson et al. (1996) conducted a comprehensive investigation into graded competency-based assessment in Australia. They considered the practices and policies of 'grading' levels of performance in vocational education and training programs provided by technical and further education (TAFE) institutions. Many of the results of their study are relevant to courses taught within Australian universities. The major proponents for the use of graded assessment were private educational providers, particularly with fee-paying students enrolled in tourism and hospitality courses. Thompson et al. (1996) provided an analysis if the particular stakeholder groups which advocate specific purposes for the use of grades. They indicated that teachers or trainers supported graded assessment for motivational purposes and also as a reward for excellence. This group also emphasised the role of graded assessment in improving the level of confidence in the assessment process, as well as providing information about the amount and quality of learning achieved. Similarly, the employer group supported the use of graded assessment for its capacity to motivate and reward, for the provision of feedback on learning outcomes and for the purposes of promotion and recognition for entry into other educational programs.

Tertiary institutions also supported its use for assisting in decisions about selection, whilst community groups supported the use of grading for providing feedback about learning achieved. However, the authors stressed that other members of these same stakeholder groups did not support grading. Opponents to the use of graded assessment indicated that the practice was inconsistent with the principles of competency-based assessment (Thompson et al. 1996). Some respondents suggested that grading created a competitive environment between students, where greater emphasis was placed on comparing individual students, rather than meeting an identified standard. Thompson et al. (1996) recommended further research be conducted to develop quality instruments and investigate the influence of graded assessment of student learning.

Williams & Bateman (2003) reviewed further research conducted on the grade debate and concluded that grading added to the complexity of assessment. They reported that the main drivers for graded assessment came from industry and students, who demonstrated dissatisfaction with the competent/ not–yet competent reporting. Rumsey (1997) and Smith (2000) identified that some training providers used graded assessment as a marketing tool in the belief that dispensing a significant number of high grades makes the provider 'look good'. Strong (1995) suggests that grades in TAFE courses are relied upon to predict success in further study. Dickson & Bloch (1999) suggested graded assessment 'added value' to competency standards, where these standards provided a starting point for improvement, whilst Griffin et al. (2001) indicated that the selection paradigm, drives the need for graded assessment.

Rumsey & Associates (2002) developed the 'West Australian Model', which has been a significant contributor to the Australian debate on graded assessment in competency-based programs. The main principle underpinning this model is that:

- Competency must be assessed first, and grading is applied to the achievement of additional standards based on the Mayer key competencies (Maxwell, 2008).
- Rumsey & Associates (2002, p.46) describe those Mayer key competencies as:
- Demonstrated breadth of underpinning knowledge applied to the assessment task;
- Communication, people networking, language and interpersonal skills;
- Techniques and processes;
- Autonomy and performance in work tasks; and
- Work organisation

As feedback on performance can have significant influence, it is important that it should be as close as possible to true achievements. Johnson (2008) asserts that graded reporting affords such an outcome as it potentially provides more information than binary reporting techniques. Smith (2000) reported a majority of respondents interviewed for his research suggested that (ungraded) competency-based training and assessment were promoting mediocrity in the learning process. He considered the merits of grading from the viewpoint of an assessor and reported that grading can improve the validity and consistency of assessments because it forces assessors to analyse students' performances with greater care than in non- graded reporting systems, particularly as they have to consider the evidence of a performance in more specific detail in relation to set criteria. On the other hand, Williams and Bateman (2003) reported that lower ability students might be adversely affected by grading. Thus, the effects of grading may not be consistent for all learners and that the characteristics of specific learner groups need to be considered.

Andre (2000) indicated that the use of graded competency-based performance measures in assessing workplace performance needs consideration. With the current international trend for nurse education and other clinical sciences to be situated within the university sector, clinical assessment based on merit rather than pass/fail or non-graded pass is becoming more relevant. Benner (1984) suggested that varied levels of performance occur in clinical practice beyond what is regarded as an 'acceptable' standard. Thus, the use of pass-fail grades limits the reporting of performance standards to acceptable and non-acceptable practice. A meritorious grading system denotes standards beyond a mere pass, including the communication of exemplary levels of performance. High achieving students are disadvantaged by non-graded or pass/fail grading systems, as their achievements are not reported to employing bodies, selection committees for postgraduate programs and scholarships (Biggs, 1992). Andre (2000) suggested that grading categories should be consistent with standard university graded assessment policy e.g. 85-100% would be classified as a high distinction, 75-84% as a distinction.

In relation to medical education, Miller (2009) suggested that the primary purpose of any grading system is to measure the achievement of specific learning objectives. The information collected allows individual students to know where they stand in relation to the development of needed competencies, as well as supplying faculty and medical administration with information about the effectiveness of teaching strategies. Miller (2009) indicated that a traditional grade stratifies students according to their levels of achievement, can motivate students, rewards effort and may demonstrate suitability for a potential area of study, whereas a pass/fail grade indicates simply that a student has achieved an expected level of competence. She noted that if students are hypercompetitive, it is unlikely that the grading system alone is responsible for creating that behaviour. Similarly, if students consistently aim at minimal standards, the teaching-learning environment might lack the ingredients to inspire excellence.

Competency-based assessment may differ from other forms of assessment because its outcomes may be based on observed performances carried out in a variety of contexts, such as workplaces or university-based simulations. Measures need to be taken to ensure that assessment decisions are consistent across these contexts (Johnson, 2008). Another problem is that competency-based qualification stakeholders can perceive graded assessments to be the same as norm-referenced assessments (Peddie, 1997; Williams and Bateman, 2003). This situation may lead to 'competent' being equated with 'average' or 'pass'. Schofield and McDonald (2004) suggest that the status of a competent result might be devalued by graded assessments. They highlight the potential risk of 'competent' judgments might equate with a 'bare minimum', rather than acknowledgement that the learner has reach a pre-determined standard.

Hager, Athanasou and Gonczi (1994) suggest that it is possible to both support and oppose graded assessment, depending on the circumstances. They infer that the decision to grade or not to grade is ultimately a policy decision, which should be based on the benefits to be gained and whether grading is the most appropriate strategy to achieve the desired benefits. Quirk (1995) adopted a similar approach, noting that the benefits and purposes must be clearly identified when making a decision to grade or not to grade.

Case Study

Griffith University has several campuses located in Brisbane and the Gold Coast, Queensland. Griffith University's teaching and learning programs aim to provide opportunities for students to acquire knowledge and skills that can be applied in the community. Griffith aims to include work-integrated learning in at least 70% of all degree programs by 2010 (Griffith University, 2006). Field Project B is an optional third year course in the Bachelor of Exercise Science program conducted at the Gold Coast campus. Normal enrolments in the course range from 20-50 students out of a cohort of approximately 120. The rationale for including this course is to make students aware of the requirements of the industry they wish to enter and the working environment of various organizations in which they may wish to seek employment. The course is designed to link and complement the student's program of study by introducing them to the work environment. The main purposes of this course are: (a) to provide students with work experience within the

industry they may seek employment; (b) to introduce students to various topics concerning the work environment; and (c) to provide career planning procedures and job search skills training. Students are required to complete a minimum of 80 hours work experience in an industry of choice (approximately one day per week) throughout the semester.

The course includes both career development learning and work integrated learning. 13 two-hour lecture/workshops in which students are introduced to professional and personal techniques to assist them to gain entry into the workplace and to function successfully once they are in the workplace. The course is staff-intensive with input from lecturers from the School of Physiotherapy and Exercise Science, Careers and Employment Services and relevant employer groups. The lecture/workshops include:

- Introduction to the world of work (1 week)
- Career education lectures (7 weeks)
    - Career planning, job search, resume, applications, selection criteria, interviews, mock interview, cultural inclusiveness
- Presentations by industry representatives (5 weeks)
    - Fitness, cardiac services, sleep disorders, sport & recreation, sports coaching & administration, event management, pharmaceutical sales, rehabilitation, physiotherapy

The course had been non-graded until 2010 with students receiving either a non-graded pass or fail grade. Students in the previous year's cohort suggested that the course should be graded to increase their motivation and performance in the various assessment items. Discussion took place between the lecturer and the students concerning the items that should be included as assessment tasks. Students individually recorded the various percentages that they considered should be allocated to each item respectively. A median score for each assessment item was calculated with the results as follows:

Attendance and participation	5%
Resume and job application	15%
Interview performance & reflection	20%
ePortfolio	15%
Performance in field work placement	20%
Placement handbook completion	5%
Critical reflection report	20%

This structure was adopted in the course assessment design in 2010. This particular research focused on an evaluation of the perceived effectiveness of the assessment procedures following the completion of the course in 2010.

Research Methodology

Research Purpose
This research examined the effectiveness of the assessment procedures in Field Project, a work-integrated learning course focused on preparing students for real-world positions in industries relevant to their undergraduate studies in Exercise Science. The results will be used to improve outcomes for future students. The study included the following research questions:

What were the perceived advantages and disadvantages of a graded, rather than a non-graded, status for Field Project?
How valid did students consider the individual assessment items?
How fairly did students perceive the individual assessment items had been marked?
How has grading of the course affected:
Student motivation and effort in the course?
The level of student reflection and critical thinking?
Student interaction within the course?
Group cohesion and competition?
Students' sense of achievement at the completion of the course?
The attitudes of students towards lifelong learning?
Student overall enjoyment of the course?
Other relevant learning outcomes?

Data Collection
The research was conducted using 29 third year Exercise Science students who made up the entire cohort in Field Project at Griffith University. Students responded to a self-completion questionnaire specifically designed for this study

(appendix A). The two-page questionnaire allowed students to provide specific information on aspects of assessment and grading (questions 1-3). In addition, seven (7) students volunteered for a 10-15 minute interview to seek more in-depth responses on the effects of grading (question 4).

Research Findings

The research findings are reported here using the four research questions as headings:

What were the perceived advantages and disadvantages of a graded, rather than a non-graded, status for Field Project?

The students indicated a number of advantages of grading the course. The most common benefits suggested (number of students shown in brackets):
Improved Grade Point Average to assist entry into postgraduate programs (16);
Increased motivation and effort (13);
Take the course mores seriously/ get value from the course (8); and
Recognition, reward and satisfaction (5).
In response to their perceptions of the disadvantages of grading the course, 13 students (45%) suggested there were no disadvantages. Other responses included:
Takes up extra time and reduces time to spend on other courses (2);
No reward for effort (2); and
Focus on marks rather than performance on placement (2).
How valid did students consider the individual assessment items?
Students were asked which individual items they considered to be valid for assessment purposes. Overall, their responses indicated highly positive perceptions in relation to the validity of the assessment items. All students suggested that the cover letter and resume, interview performance and fieldwork placement were valid items. 25 (86%) students agreed that the interview reflection provided appropriate validity, whilst 24 (83%) indicated that the poster presentation was a suitable item of assessment. Several students had minimal prior experience and feedback in writing concise accurate statements, which would account for only 21 (72%) suggesting that the writing of weekly postings was a valid assessment item.

How fairly did students perceive the individual assessment items had been marked?
Criteria sheets were provided to students in relation to each assessment item. The majority of students considered that the assessment items were marked fairly with a mean score of 95% of positive responses. All students indicated that the cover letter and resume, fieldwork placement and poster presentation had been marked fairly, whilst 97% agreed with the fairness of the marking of the interview performance and reflection. The lowest score (75%)was recorded in relation to the marking of the weekly postings, indicating that students require more feedback and perhaps the opportunity to resubmit a posting if they are dissatisfied with the mark awarded.

How has grading of the course affected:

Student motivation and effort in the course?
The general consensus of responses suggested that grading had significant positive effects on student motivation and effort in the course. Student 1 indicated that, if the course had been non-graded, she would have aimed only for a pass standard. Student 6 expressed a similar opinion: “I aimed for a HD. If it was pass-fail, I would have only made a pass effort. I think that definitely affected the effort I put in. I was motivated to get a better mark”. Student 2 noted: “I wouldn’t be paying as much attention if I knew I wouldn’t be graded”. Student 3 was more forthcoming and commented that she would not have enrolled in the course if it was not graded. She indicated that the grading provided recognition for work completed and that feedback throughout the semester motivated her to work harder to ensure her marks were of the highest standard. Student 4 also considered that there was no motivation for any extra effort if the course had been non-graded. “I wouldn’t have prioritized the assessment so highly. I would have done what was necessary to get through and put more effort into other projects or subjects that are marked and graded, so I guess grading facilitates you taking the course more seriously”. Several students mentioned the effects of grading on their GPA (Grade Point Average). Student 5 indicated that “if you didn’t have the grading going towards your GPA, you would have a lot of people who would not do their best work and would rush it to get just a pass. It’s made me realise that it’s very important to be prepared for going into the workforce”. Student 7 emphasized the importance of receiving regular feedback and marks as an indicator of the direction in which she was heading. “Getting a good mark keeps you motivated, whereas getting no mark you might slack off a bit”.

Students were required to make 100 word postings related to the weekly lecture/ workshop. Student 1 suggested that the grading motivated her to strive to get full marks for each posting, even though each was only worth 2% of the total assessment. Student 2 indicated that the regular grading and feedback related to weekly postings made a significant difference to his motivation. "If you saw you were doing something wrong, you could fix it for next time. The feedback made a difference". Student 6 noted that grading motivated her to make more effort in the standard of writing in each posting. "I thought about what I was writing. I tried to put it in a professional manner. If it wasn't graded, I would probably have only put in a pass effort. This will do – I hope it gets by. Each week I was aiming for a HD. I was aiming for that little bit extra, rather than a pass. Student 7 emphasized the value of a weekly assessment item in reducing the pressure related to major assessment items. "It kind of kept your mind active in the subject. The grading was good because it was still worth something, but it wasn't a massive percentage towards the final grade, so you could build up marks as you go, which means that the bigger assessment items weren't worth as much. There's not as much pressure in the end".

In relation to their performance at the interview, students generally considered that grading had positive effects. Student 3 indicated that grading ensured the interview was at a professional standard, whilst student 4 suggested that grading "stands me in good stead for future interviews". Furthermore, student 6 perceived that grading ensured the interview became more like a real-life scenario. "If it was ungraded, I wouldn't have been as nervous or taken it as seriously". Similarly, student 7 noted that a grade demonstrates "how well or poorly you have done", which is important feedback for future interviews. Student comments on the grading of the interview reflection were rather mixed – some students perceived there were minimal effects, whilst others suggested that grading forced them to take a more serious look at their reflection and focus on specific aspects of the interview.

The majority of students indicated that the grading of the resume and cover letter had beneficial effects. Student 4 suggested: "I needed that experience as people will be critical when they read my application. The critical judgment was more friendly than it would be in an employment situation. It showed me the weaknesses in my resume when applying for jobs in the future". Student 6 stated: "If it was non-graded and I only received feedback that it was a pass, I wouldn't feel very confident giving it to an employer". Similar statements were provided as to the effects of grading on student efforts in the development of the posters. Student 6 represented group opinion and emphasized the amount of time spent on the poster. "If it was pass-fail, I would probably not have even done a draft. I think the quality of the poster was very good at the end. If it was non-graded, I would not have produced as good a quality poster".

Students expressed varying thoughts on the effects of grading on their motivation and effort during their 80 hour placements. Student 2 noted: "A mark is not appropriate because of the different assessors – would have been better to have had a pass-fail competency test", whilst student 6 indicated that grading made no difference as he was in a professional environment "and would have performed the same regardless". On the other hand, student 3 suggested that the grading helped him to strive to work harder and provided recognition for work completed. "You need to make a difference to get a good report from your supervisor". Student 7 reiterated these comments: "You had to try really hard to make the supervisor believe that you deserved the mark you got. Being graded gives you the motivation to do your best in the placement".

The level of student reflection and critical thinking?

Six out of the seven students interviewed suggested that grading the course increased their level of reflection and critical thinking, with student 4 indicating that he "already did a fair bit of that kind of thinking". Student 1 noted that there were more reflective activities in this course than any other course in the program. This was particularly evident in the required weekly reflections as students needed to personally reflect on the content of the lecture/ workshops and write a 100 word statement, which was graded against set criteria on a weekly basis. Student 7 noted that the "weekly reflections were good for that. Being graded you really had to think about what you had done that week and what you had taken out of it".

Students were also required to write a 250-300 word reflection on their performance in a mock interview. Student 3 perceived:

> I didn't realise how much I could understand myself and I wouldn't have done it if it wasn't for marks. It's not something that's easy to do – to criticize yourself – if you're not going to get any benefit out of it. In fact, the long-term gains we got out of all the exercises that we have done are all so beneficial.

Student 5 suggested that grading the course definitely improved the way he approached writing and reflecting on tasks. "The grading made me more aware of my grammar and sentence structure. It made me check over my work, which is important in a work placement. Simply sending an email can be a reflection on you". Student 6 indicated that grading

particularly affected the development of his resume, taking on the feedback received and applying more effort "because my resume is going out into the real world".

Student interaction within the course?
Opinions were mixed as to the effects of grading the course on student's interaction with their peers. Three students indicated that grading created more interaction, whilst four suggested that it had little effect. Student 1 perceived that there was more interaction due to the small class size. "We were all interested to know what marks we got and to try to give feedback to each other". Student 3 enjoyed the competition that grading created on a week-to-week basis. He noted:

> I was disappointed when my mark was not as good as some of my friends.
> It actually made me look at other students' work (which was freely available)
> to try to match their grades because I wanted to excel in the subject".

Student 7 reiterated these comments and also indicated that students sought to help each other improve their work. "I noticed my mate was struggling at the start of the semester so I proofread his work a couple of times....The grading gives you the feedback you need. It really puts gauge on how you're going".

On the other hand, student 2 indicated that grading made no difference as she was friendly with quite a few students beforehand. Student 4 provided similar comments but noted that students reviewed other students' work for comparative purposes. "I knew who were the high performers in the group, but not a personal level". Student 5 indicated that she sat with the same person in the same place each week and suggested that greater interaction could be developed through more group activity. Student 6 believed that the interaction was no greater, but students probably spoke to each other on a more professional level. "If the course was non-graded, I probably would have been more casual and that would have been reflected in the assessment items as well. Our discussion in the course was mainly about what we were doing in our work placements, how we were going in our assessments and that sort of thing".

Group cohesion and competition
In general, students perceived that the grading of the course produced healthy competition, which assisted the development of group cohesion. Student 3 represented student opinions when he asserted:

> There was a level of healthy competition. I think it pulled us together. It really built my
> Self-confidence because you are learning about yourself and everyone else is doing the same thing. We're all growing together in the same aspects. It was a really healthy
> environment, really supportive and we were getting good feedback, nothing negative.
> It was all about everyone progressing. It was good to progress together. That definitely happened.

Student 4 emphasised that self-competition was intrinsically related. "It was all about advancing my own mark about myself. I would very competitive with my own mark but not so much with others. Grading increased my motivation not to let anything slide". She would read through her drafts, make changes and became more critical of her own work. Student 5 noted that weaker students asked those who gained good marks to proofread their work and suggested that "it was a good idea to have the individual marks visible", as it made those who scored low marks realise that they needed to put in greater efforts to improve their results. Student 6 similarly commented that students made a conscious effort to assist each other to achieve their goals.

Students' sense of achievement at the completion of the course?
All students commented that the grading of the course had a positive effect on their sense of achievement. Student 1 indicated she gained more in the classroom activities than in the workplace. "The workplace was great – it provided a different experience which I really appreciated". Conversely, students 2 and 4 suggested that their greatest sense of achievement came from their workplace assessments. Student 3 noted that grading had made the course more worthwhile. "I loved the course but I loved it more because I have recognition of how much effort I put in. I'm sitting on a HD and I've really put my all into this course because I've got so much out of it. I can't stress that enough". She considered that the course not have had such outcomes if she couldn't compare her marks with other students. She indicated that:

> I would not have that self-satisfaction without the marks. It's me progressing –
> the combination of the two – that provides the evidence. I wouldn't have gained
> that confidence, the proof that you're growing so I think grading is vital. You're at
> uni to do your best.

Student 5 provided a similar viewpoint and inferred that a non-graded pass does not produce the feeling that the student has achieved a good result. "I don't think anyone would try as much in the subject". Student 6 reinforced this notion and considered that "if I put in this much effort and only received a Non-Graded Pass, I would have looked towards the course a little negatively. I've put in the hard yards and got a good mark". She suggested that there was a strong relationship between a student's effort and grade, which would not have been evident if the course had been non-graded. Student 7 described a good mark in a course as "a real accomplishment, which reflects on your efforts in the course. Without that grading you are left with a pass and it's all over. Getting a good grade makes you really proud of what you have achieved –it's all worth it". There was a significant number of high grades in the course, but student 7 considered:

> The high grades might not suit the Bell curve, but that just shows what a great course it was and how motivated students were towards achieving. Field Project provides stuff you really want to do, which may be different to other courses, as it's real life stuff and you try as hard as you can. It's not just a textbook.

The attitudes of students towards lifelong learning?
Five students commented that the grading of the course had changed their attitude towards lifelong learning. Student 1 suggested that she was learning every single day on the work placement. "if you are interested in something, you'll go and do more research – trying to get patients to exercise, check files, speak to physios. I apply this attitude to all aspects of my life". Student 3 inferred that grading provided the motivating factor for the increased interest in exploring career opportunities. "This is how you want to set up your life up every day so you are become professional in your attitude". Student 5 indicated that grading the course had helped him realise that minor details are important as they highlight the areas on which to focus. Student 6 commented that he probably took the lectures from different employer groups mores seriously knowing that he had to complete a graded weekly reflection." I really listened and paid attention to each lecturer and what they had to say". Student 7 stated that the grading of the course and within her university degree in general have affected her attitude towards lifelong learning. "When you out in the real world, you are going to be judged on what you are doing. If you don't keep up with the latest readings and technology, then you're going to be left behind".

Student 2 indicated that the grading of the course had no effect on her attitude to lifelong learning. However, she noted that she had no interest in research before the course, but after her work placement, in which she observed her supervisors reading journal articles and researching best treatments, she now considered that research was not as much as a chore as when she was in the role of a student at university. Student 4 suggested that the grading of Field Project had similar effects on his attitude towards lifelong long as other courses as all courses at university are graded. "I think your learning doesn't stop, it just changes. Grading adds to the motivation to continue learning, but is not essential".

Student overall enjoyment of the course?
Six of the seven students interviewed considered that grading had increased their enjoyment of the course. One student indicated that grading probably made little difference to his enjoyment, but he stated that he would not have taken the assessment items as seriously if they had been non-graded. Student 1 mentioned that the grading of the course had introduced an element of competitiveness into the course. The positive effects were obvious as she suggested that "she liked to push myself a little harder to do as well as I can. I scored almost 98% overall –I was really impressed with it". Student 3 perceived that she would not have had the level of enjoyment she had experienced if she had not received a grade. "If I didn't get the recognition of how hard I worked, I would just be so disappointed. The grading makes it worthwhile – it's vital. I would not have picked the opportunity to self-propel myself forward like this course has provided if it wasn't graded".

Student 4 noted differences in her attitude to the effects of grading at different stages of the course. "If you asked me at the start of the semester if I wanted to be graded or not, I probably would have said no because this would have been one less stress to worry about. I could go through the course and enjoy it being relaxed". However, at the end of the semester, she noted:

> Now I would say yes, because I have had a good experience with it. My enjoyment of the grading of the course would depend on my final mark. There is a direct link between enjoyment and your result. I think it would be sense of wasted effort, a sense of purposelessness if the course was not graded.

Student 5 perceived that she gained more enjoyment as she would not have applied herself as much if it was non-graded. She indicated that students demonstrate greater application and gain most benefit from the learning experiences when courses are graded. The effects of grading on student enjoyment are clearly evident in the response from student

6. “As the course is graded, I probably enjoyed it more because there was a greater sense of satisfaction from the results I was getting. I was putting in more effort and getting good results, so I was enjoying it”. Student 7 expressed similar sentiments, suggesting that grading provides a direction for the course. “Getting a good mark puts you in a positive mindset – it makes you want to keep achieving that same mark. I think that maintaining good grades, which I managed to do throughout the course, really helped me”.

The breakdown of marking and the spread of workload within the course played important roles in the students’ enjoyment of the course. Student 7 reported:

> Having something to do each week assessment-wise was great. Some other courses have end-of-semester exams worth 50%, which is a lot to do in one slice. Breaking the assessment down makes it more achievable, whereas doing assessment in a big lump puts a lot of pressure on people and they suffer. When you have so much to learn at one time, it becomes more like rote learning than actually maintaining the information you have stored in your head. Step-by-step learning really reinforces what you are learning as you go is a lot better way to do it.

Copyright © 2012 Gregory Reddan

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

That's not really WIL! – building a typology of WIL and related activities

Anna Rowe[19]
Learning and Teaching Centre and PACE Initiative, Macquarie University
Theresa Winchester-Seeto
Faculty of Human Sciences and Learning and Teaching Centre, Macquarie University
Jacqueline Mackaway
Learning and Teaching Centre and PACE Initiative, Macquarie University

Increasing interest in experience based learning (EBL), and work-integrated learning (WIL) in particular, by the higher education sector has generated much debate over what constitutes WIL and the types of activities that characterise it. Placement activities undertaken off-campus are the most widely reported and accepted form of work/community related learning. However, in response to broadening conceptualisations of WIL and various forms of EBL, increasing competition for places and other drivers, universities are considering the use of a wider range of activities than before. This paper considers the following questions: What is an acceptable WIL activity? What are the boundaries? Do activities such as virtual projects, simulations and job readiness programs have advantages over placements for some situations and outcomes? Through a review of the literature of 255 sources including academic papers and vignettes, the authors develop a typology of WIL activities. The typology is discussed within the context of benefits and drawbacks of placements versus other types of participation activities.

Keywords: Placements, Typology of WIL activities, Work-integrated learning

Introduction

An increasing interest in WIL by the higher education sector in Australia and globally has generated much debate over what constitutes WIL and the types of activities that characterise it. Despite its long history, notions of WIL are 'evolving' (**Groenewald, Drysdale, Chiupka, & Johnston**, 2011), due in part to the lack of attention this area has received from educational researchers. This paper addresses some of these issues by offering a typology of activities that fall under the broad umbrella of WIL and other types of experiential learning.

Terminology

The terms WIL, work-related learning, workplace learning, project learning, industry-based learning, and some versions of EBL are used interchangeably in the literature, and there is a lack of consensus over their meaning. Nevertheless, there is agreement that WIL programs do not lean towards 'neat compartmentalisation' (Hawke, Mawer, Connole & Solomon, 1998, p. i), and this has contributed to diverse perceptions of what constitutes specific types of WIL, both within and between institutions and globally (Bennett, 2009; **Patrick et al., 2008**). WIL has been conceptualised as:

An umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum (Patrick et al., 2008, p. iv).

The process whereby students come to learn from experiences in educational and practice settings and integrate the contributions of those experiences in developing the understandings, procedures and dispositions required for effective professional practice, including criticality (Billett, 2009, p. v).

An intentional aspect of a university curriculum whereby the learning is situated within the act of working, whether that work occurs within a recognizable workplace or a community (Cooper, Orrell & Bowden, 2010, p. 1).

These definitions promote WIL as the integration of theory and its application to the workplace, situated within a purposefully designed curriculum. While there is no stipulation that WIL needs to take place within the workplace, often the term implies a narrow focus - specifically, that the activity relates only to (and is located within) the workplace, thereby excluding other forms of EBL such as Service Learning. In this paper the term WIL is used in its broadest sense, that is, to accommodate the diverse range of activities that fall under the umbrella of both WIL and other forms of EBL including Service Learning. Our objective is to promote a conceptualisation of activities that

[19] Anna Rowe; Learning and Teaching Centre, Macquarie University, phone: +61 2 9850 1937, email: anna.rowe@mq.edu.au

include WIL, but also activities such as case studies, community programs, fieldwork, role plays and virtual projects, which may or may not be situated within the workplace.

Literature review

Placement type activities undertaken off-campus are the most widely reported and accepted form of WIL. Examples include internships, teaching practicum, clinical placements, volunteering and internships. In response to broadening conceptualisations of WIL, increasing competition for places (particularly in disciplines such as nursing and teaching where they are a compulsory part of the curriculum) and other drivers (e.g., varying aims and purposes of WIL programs), universities are considering the use of a wider range of activities than before. It is our intention to promote active choice in the selection of activities for WIL, rather than just following the traditional path of placements, which may or may not be the most effective type of activity to support the achievement of learning outcomes in some courses.

Recent attempts to define WIL and develop taxonomies have tended to focus on different models of practice (e.g., community, professional, industry), rather than on the activities themselves (e.g., Groenewald et al., 2011). More recently, universities have begun incorporating classifications of activities into their WIL policies, which has led to the development of typologies for different types of WIL activities. These classifications are based on varied approaches (most draw on several approaches), including: continuum of experiences, i.e., from classroom to the workplace (**Jones et al.,** 2009); specific types of programs and models (e.g., cooperative, service learning) (Calway & Murphy, 2007; Cooper et al., 2010; Freestone, Thompson & Williams, 2006; Keating, 2006; Sattler, Wiggers & Arnold, 2011); types of activities (e.g., fieldwork, simulations) (Lawson, Fallshaw, Papadopoulos, Taylor & Zanko, 2011), pedagogical foundations (Guile & Griffiths, 2001); and purposes of the activity/course (CHE, 2011; Groenwald et al., 2001; Trigwell & Reid, 1998). They are also based on diverse types of evidence, including: case studies (CHE, 2011); interviews (Sattler et al., 2011); theory (Guile & Griffiths, 2001); reviews of literature (Sattler et al., 2011; Trigwell & Reid, 1998) and experiential pedagogies (Drysdale et al., 2011 cited in Groenwald et al., 2011).

There are a number of variables that can be used to classify WIL activities. These include the location of the activity (i.e., on or off-campus), length and purpose of the activity, whether academic credit is awarded, degree of community engagement, the type of industry/historical context and so on. The multitude of variables that influence WIL activities make the development of typologies a difficult task - there are many variations of activities reported in the literature, with some involving multiple components (e.g., on-campus activities can include fieldwork, industry/community projects and placements, which are often considered off-campus activities). Fewer classifications based on types of WIL activities appear in the literature – rather they are incorporated into typologies based on WIL models and programs.

Aims

This paper considers the following questions: What is an acceptable WIL activity? What are the boundaries? Do activities such as virtual projects, simulations and job readiness programs have advantages over placements for some situations, students and learning outcomes?

Method

A literature review was undertaken to identify various types of WIL activities. The purpose was to overview the range of WIL activities reported in the literature, not to carry out an exhaustive search. Knowing the literature was vast, sources were sought that covered a broad range of disciplines, and included non-placement activities. Sixty vignettes from the Australian Collaborative Education Network website (ACEN, 2011), and academic papers published in the *International handbook for cooperative education* (Coll & Eames, 2004) were consulted as a first step. A more targeted search of educational databases (e.g., ERIC) was then undertaken using discipline specific search terms (e.g., 'placement', 'practicum'), as the term 'WIL' often failed to locate non-placement options. In all 255 sources were reviewed. They were distributed amongst the team, who read and reviewed each source, recording information on a supplied template. The template was designed to capture the extensive range of activities and information about a number of aspects including: type of activity, on or off-campus, degree of community engagement, degree of contact with host, degree of contact with academic support, length of placement, mode and structure of activity, group or individual activity, assessment etc. Templates were collated and analysed. Sixteen common variables were identified.

Findings – Typology

WIL activities as reported in the literature were classified as off-campus and on-campus activities. There are many examples in the literature of activities which combine both on-campus and off-campus components. For this reason the information was presented as a Venn diagram to show the relationship between the activities with examples of each (see Figure 1)[20]. Because the terms used to describe various participation activities (e.g., placement, practicum, WIL, internships, community projects) are not always clear and have been used interchangeably in the literature, they do not always indicate the main features of a WIL activity. For example fieldwork is not necessarily undertaken off-campus – it could be completed on-campus or a combination of both. For simplification purposes participation activities have been separated into two types: those that occur predominately off-campus, and those undertaken predominately on-campus. There are many variations of activities reported in the literature, with some involving both on and off-campus components. Further there are varying degrees of community engagement each activity entails. Generally off-campus activities have a higher degree of obvious community engagement, but that does not mean that on-campus activities do not. There are many activities on-campus that can, and do involve a high degree of community engagement. For example, moot courts or other types of role play where students receive direct feedback from industry representatives. The typology and findings from the literature review were initially published as a discussion paper (Rowe, Kelliher & Winchester-Seeto, 2012).

Discussion

Literature to date has tended to focus on defining and classifying WIL. While WIL is an important part of EBL, the term is not often inclusive of all types of EBL experiences. The majority of typologies developed so far have been based on specific types of models or programs, an approach which can be problematic because terms such as WIL, co-op, internship often hold different meanings or are used interchangeably. Further, they imply set boundaries or end points. It is our view that the boundaries in WIL are often unclear because of the complex relationships that exist between many of the variables which affect the suitability of activities.

As noted by Sattler et al. (2011, p. 6) there is no 'ideal' type of activity or experience - each offers different benefits, and best supports different learning outcomes (Billett, 2009). Within the literature there is a widely held assumption that placements are often the most effective or appropriate activity for WIL experiences. This is likely because placements have a long history in the literature, particularly in disciplines such as teaching, social work, nursing, engineering and business. While placements provide a valuable opportunity for applying theory to practice, enhancing graduate employability and allowing students to 'try' out their chosen profession prior to graduation, they also have a number of drawbacks and are not necessarily the most suitable activity for supporting all learning outcomes. Table 1 presents a comparison of benefits and drawbacks for placement and non-placement activities. Note that these are examples, and there may well be others. It is intended only as a starting point for discussion drawing on the authors' knowledge of the area, rather than an in-depth analysis based on empirical evidence. Placement in this context is defined as an activity which takes place outside of the classroom in a workplace or community organisation.

[20] Figure 1 is located in Appendix A (after the reference list).

Table 1. Examples of benefits and drawbacks for placement versus other WIL activities

Criteria	Placement	Other WIL activities
Benefits	Application of theory to practice Development of transferrable skills Work readiness Improved prospects for employment Career exploration and development Professional socialisation Networking opportunities increase students contacts and potential references Possibility of paid employment	Application of theory to practice Development of transferrable skills Preparation for graduate employability More controlled and scaffolded learning environment More options for students who are 'difficult to place' Flexibility where practical/ logistical reasons make 'real world' experiences difficult to offer, e.g. OHS issues, simulations provide students in high risk areas with an opportunity to practice skills in a low risk setting Some activities better able to support learning, e.g. introductory activities Greater choice of activities in fields where there is high competition for placements Less reliant on community/industry support Cost effective
Drawbacks	Heavily reliant on community/industry support Competition for placements means delays to student progress if placements cannot be secured May not suit all types of learning objectives Potential high risks in some areas, e.g. student, client safety Variability in host supervisor availability/competence High administrative costs	Less direct contact with the workplace means fewer opportunities for networking, professional socialisation, potential employment, career exploration etc. Less opportunity to develop tacit knowledge May not capture ambiguity/complexity of workplace or organisation

This paper has identified the broad range of activities reported in the literature that potentially fall under the umbrella of WIL. The development of a typology based on WIL activities provides a unique contribution to current scholarship focused on classifying such experiences. As this is an emerging area of scholarship, there are many promising areas for future research including clarifying the boundaries of WIL activities, assessment of the educational effectiveness of certain types of activities for specific learning outcomes, and exploring the influence of different models over time.

References

ACEN. (2011). *Curriculum vignettes.* Retrieved from http://www.acen.edu.au/vignettes/

Bennett, K.C. (2009, June). *Speaking the same language: Relevance for a global ontology of work-integrated learning*. Paper presented at the World Conference on Cooperative Education and Work Integrated Learning, Vancouver, Canada. Retrieved from http://www.waceinc.org/papers/vancouver/Australia/Bennett.pdf

Billett, S. (2009, March). *Final report for ALTC Associate Fellowship: Developing agentic professionals through practice-based pedagogies*. Retrieved from http://www.jcu.edu.au/teaching/public/groups/everyone/documents/advice/jcuprd_046192.pdf

Calway, B.A., & Murphy, G.A. (2007). The educational imperatives for a Work-Integrated Learning philosophy. *Journal of Cooperative Education & Internships, 41*(2), 12-22.

Coll, R.K., & Eames, C. (Eds.) (2004). *International handbook for cooperative education*. Boston, MA: World Association for Cooperative Education.

Cooper, L., Orrell, J., & Bowden, M. (2010). *Work integrated learning: A guide to effective practice*. London: Routledge.Council on Higher Education (CHE) (2011, August). *Work-integrated learning: Good practice guide*. HE Monitor No. 12. CHE: Pretoria, South Africa. Retrieved from http://www.che.ac.za/documents/d000217/Higher_Education_Monitor_12.pdf

Hawke, G., Mawer, G., Connole, H., & Solomon, N. (1998). *Principles for public funding of workplace learning*. Sydney: Research Centre for Vocational Education and Training. Retrieved from http://www.eric.ed.gov/PDFS/ED465084.pdf

Freestone, R., Thompson, S., & Williams, P. (2006). Student experiences of work-based learning in planning education. *Journal of Planning Education & Research, 26*, 237-249. doi: 10.1177/0739456X06295027

Groenewald, T., Drysdale, M., Chiupka, C., & Johnston, N. (2011). Towards a definition and models of practice for cooperative and work-integrated learning. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education* (2nd ed., pp. 17-24). Lowell, MA: World Association for Cooperative Education.

Guile, D., & Griffiths, T. (2001). Learning through work experience. *Journal of Education & Work, 14*(1), 113-131.

Jones, M., Jackson, J., Coiacetto, E., Budge, T., Coote, M., Steele, W., Gall, S., & Kennedy, M. (2009). *Generating academic standards in planning practice education: Final report to the Australian Learning and Teaching Council*.

Keating, S. (2006, September). *Learning in the workplace: A literature review*. Melbourne: Victoria University. Retrieved from http://tls.vu.edu.au/portal/site/liwc/resources/PEC%20LIW%20literature%20review%20final%20doc.pdf

Lawson, R., Fallshaw, E., Papadopoulos, T., Taylor, T., & Zanko, M. (2011). Professional learning in the business curriculum: Engaging industry, academics and students. *Asian Social Science, 7*(4), 61-68. doi:10.5539/ass.v7n4p61

Patrick, C-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008, December). *The WIL [work-integrated learning] report: A national scoping study* [Australian Learning and Teaching Council (ALTC) final report. Brisbane: Queensland University of Technology. Retrieved from www.altc.edu.au and www.acen.edu.au
Rowe, A., Kelliher, M., & Winchester-Seeto, T. (2012). *Typology of participation activities*. Retrieved from http://staff.mq.edu.au/teaching/curriculum_development/pace/resources/effective_curriculum/

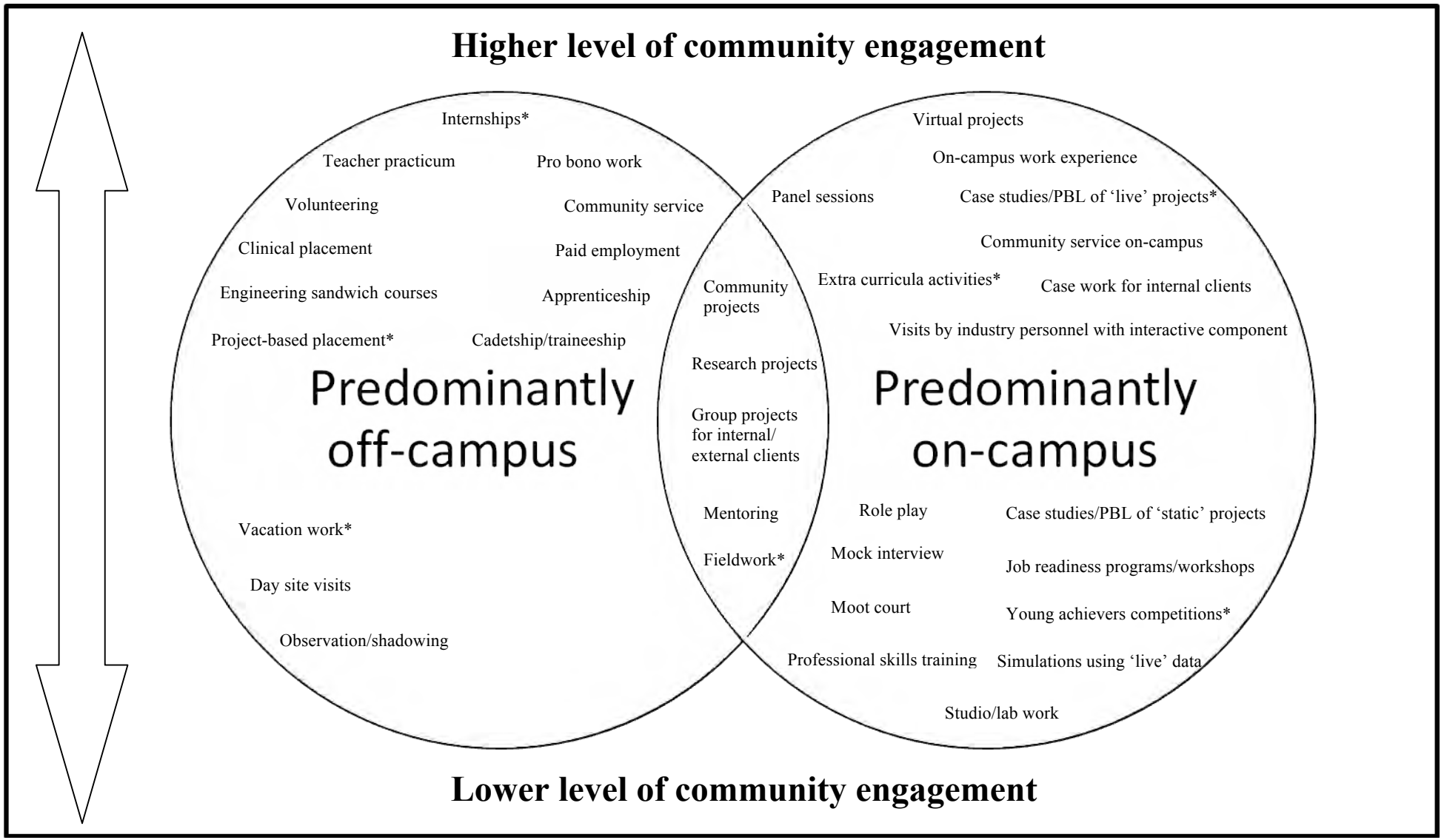
Sattler, P., Wiggers, R.D., & Arnold, C. (2011). Combining workplace training with postsecondary education: The spectrum of Work-Integrated Learning (WIL) opportunities from apprenticeship to experiential learning. *Canadian Apprenticeship Journal, 5* (online). Retrieved from http://journals.sfu.ca/caj/index.php/caj-jca/article/view/74/131

Trigwell, K., & Reid, A. (1998). Introduction: Work-based learning and the students' perspective. *Higher Education Research & Development, 17*(2), 141-154.

Copyright © 2012 Rowe, Winchester-Seeto and Mackaway

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Appendix A. Venn Diagram of WIL Activities



*Depending on the actual structure of the activity this might be high or low community engagement

Figure 1: Selected examples of potential WIL activities

The Building Consultancy – a case study of collaborative multi-disciplinary approaches to work integrated learning

Leoni Russell
Curriculum Innovation Unit, Victoria University
Lyn Hannah
Manager Teaching and Learning, Faculty of Technical and Trades Innovatio, Victoria University

Abstract

Victoria University (VU) has implemented a university-wide strategic initiative to ensure all of its courses across higher education, vocational and further education include a range of work-integrated learning (WIL) activities for its students. This paper showcases the 'Building Consultancy' project, a collaborative WIL approach developed by the Faculty of Technical and Trades Innovation. This case study explores the challenges, successes and outcomes, of a multi-disciplinary WIL project involving the design and construction of a fully functioning Building Consultancy. This initiative brought together students and staff from across a range of courses to work on a live project which is supported by industry. The project took place over an 18 month period and involved mainly trades courses at apprenticeship level as well as a number of higher AQF level courses. Preliminary evaluation of this project has identified a range of outcomes and challenges for all stakeholders, which will be followed up in the comprehensive evaluation. For many students, the project provided an authentic learning experience on a 'real live' project that enhanced their team work, problem solving and communication skills. Although faced with some significant curriculum and logistical challenges the majority of staff embraced the multi-disciplinary project model. Industry and university partnerships were developed and strengthened and students became more familiar with industry products and different ways of working.

Keywords: multi-discipline work integrated learning, student engagement

Introduction

This paper explores a multi-discipline Practice Firm project that the Faculty of Technical and Trades Innovation at Victoria University (VU) embarked upon throughout 2009 and 2010, in response to the university's strategic initiative to provide all students with a Work Integrated Learning (WIL) experience. Using a case study approach to inform preliminary evaluation, this paper identifies a range of outcomes for staff and students involved in a live work collaborative project.

In 2007, VU commenced a strategic whole-of-university journey which aimed to place students' needs at the centre of all its activity. A key component of this initiative focussed on student employability which was underpinned by the inclusion of WIL into all VU courses. In 2008, VU's Pro-Vice Chancellor (Teaching and Learning) Belinda McLennan, suggested that embedding WIL in the curriculum in a way that produces good quality learning outcomes which address graduate attributes and employability skills is a significant challenge and requires a sophisticated understanding of the field (McLennan, 2008 p11). Over the past five years, VU has experienced the numerous challenges and successes commonly associated with WIL implementation. It has continued to focus on utilising workplace or community settings as a context where students can learn *in* and *through* work, rather than just learning *about* work.
Cooper et al (2010 p31) commented on the VU approach to WIL, stating 'this whole of institution initiative is in its early stages and not without challenges and challengers.' Teaching staff strongly supported the notion that workplaces, as learning environments, provide students with the opportunity to integrate theory and practice and experience the world of work while gaining a cultural awareness of their discipline (Patrick et al, 2009).

The Building Consultancy Practice Firm

For many years the School of Construction Industries has built made-to-order, full size transportable buildings as part of the pre-apprenticeship course in Carpentry. These buildings are built to a set, limited number of designs and have traditionally employed outside trades' people for plumbing, electrical, painting and other services to complete the building. The construction of the transportable buildings had the potential to incorporate all the elements of designing, planning, costing, building and installation with involvement of over 13 qualifications across the trades' areas. A successful grant application provided the opportunity to realise this potential. This 18 month project evolved into a complex and multi-faceted WIL activity for numerous students and teachers, supported by industry involvement. The Building Consultancy Practice Firm was purpose built as a transportable primarily to be used by VU students as a fully

operational office, offering building consultancy services to clients. The building is also available for university and community activities, including trade fairs and open days. It has been built using green technology and materials that are not commonly available to students in the usual course of their learning due to cost and availability.

Preliminary Evaluation

As the Practice Firm project commenced, it was agreed that preliminary evaluation would provide some understanding of the impact of the project on students, staff and industry and go some way to informing a more comprehensive evaluation of WIL practices for the future. Cooper, Orrell and Bowden (2010 p35) suggest that "evaluation is often overlooked in work integrated learning", and where evaluation does exist, it is generally too reliant on student feedback alone, and that the information which is gathered is then underutilised by universities. The project team wanted to collect feedback and explore perceptions from all stakeholders, so a mixed approach of surveys and interviews was utilised. At the time of writing this paper 15 students and 10 staff have been formally surveyed and interviewed. Due to limitations regarding access to some industry contacts, only anecdotal industry responses have been collected so far.

Staff

A small sample of teachers was selected for interview, based upon the extent of their involvement in the project. All surveyed and interviewed staff mentioned the improved and valued communication and engagement with industry, students and other staff (including teaching and management). Comments including the different experiences and opportunities for building rapport with students in ways that had not been done before were prominent. For example some staff would have 'smoko' with the students on the building site instead of heading off to the staff room. This provided time and space to professionally reflect on their work, plan for future tasks and get to know each other as tradespeople on a work site. Staff enjoyed the interaction with students who were fully engaged, resourceful, keen to learn and showed interest in other students, the work and their teachers. All staff noted that the collaboration between staff significantly increased, with some noting that they enjoyed getting to know teachers from other disciplines and that they would continue to work on other projects together. Many of the trades' teachers have long established relationships with industry and staff commented that this project provided an opportunity to showcase the importance and appreciation of having industry involved in student learning and trades projects.

Students

Many students exhibited professional trades' skills and behaviours, showing initiative and enthusiasm in task completion. One teacher commented that the students took the job seriously without too much mucking around and they took pride in what they were doing. Feedback received to date from the students via survey with open ended questions indicates strong agreement that working on the Practice Firm project provided them with opportunities to use and improve their planning, organising and problem solving skills. In addition, some students commented that it was satisfying to work on a real project rather than something that was to be pulled apart at the end of the learning. They also mentioned the opportunity to develop their ability to work in teams, improve their communication and trade skills, and better understand the links between classroom learning and practical hands-on tasks.

Industry

Industry suppliers donated goods and/or materials free of cost or at cost in support of this project. Acknowledgement of their participation in the project included company plaques being displayed in the Practice Firm building and company logos on signage on the outside of the building. At the opening event, industry participants were acknowledged publicly and thanked for their contributions. Teaching staff positively reported that the project enabled numerous opportunities to genuinely engage with industry partners and consolidate relationships. Industry partners reported that they were pleased to have their products displayed and be able to provide the university staff and students with different types of products that due to high costs, they would not typically work with.

Challenges and successes

Billet (2009 p835) suggests that 'both practice and academic settings provide particular kinds of experiences and potential contributions to students' learning. Each of these settings affords particular potentials for the learning of occupational practice." The opportunity for a broad range of students from across different disciplines, being able to collaboratively experience a workplace project from beginning to completion, facing commercial realities and deadlines was very beneficial for all stakeholders.

As expected, coordinating and operationalizing such a complex project resulted in a range of challenging situations. Just like any other building project the weather, delivery of materials, and availability of staff and students when and where they were needed, all impacted on the project. Transporting students from their campuses to the transportable building site was difficult especially when working with students under 18 years of age, as car-pooling and parental permission was required.

As the Practice Firm project involved a range of disciplines working together in a workplace environment, many learning and assessment activities needed to be redesigned to ensure flexible sequencing and integrated experiences. This approach supports Yorke's (2010 p10) comment that "a commitment to the development of graduate attributes or employability implies, for many subject disciplines, a preparedness to rethink curriculum, pedagogy and assessment." In some of the trades courses, students predominantly learn and practice through simulated learning and assessment activities and have been doing so for many years in a similar fashion to their teachers' experience of Trades' school 25 years ago. The Practice Firm project required teaching staff to rethink what and how they teach and assess and how their students learn and experience a live project as compared to classroom and simulated workplace environments. For some staff, the requirement to redesign their curriculum was a significant challenge requiring professional development and support, a change of culture and an increased workload.
For some staff this was a welcome challenge, enabling them to do things differently and explore different avenues to engage with students. The modification of the trades' curriculum to meet the needs of live work coincided with the Skills Victoria policy of competency based completions for apprenticeships. Being involved in the Practice Firm project and seeing how students can forge ahead with their learning in an applied learning environment became a key motivator to completely redesign the apprenticeship curriculum within the Faculty.

Some students were consistently exhibiting challenging behaviours in the classroom and disrupting others. Once placed into a live work situation, these students engaged in the tasks and the learning, supported each other and according to one staff member showed respect for others and behaved in a professional tradesman-like manner. This change in behaviour where students engage more intently when involved in real work activities is commonly noted throughout the WIL literature (e.g. Billet 2009; Patrick et al 2009; Yorke 2010, Cooper, et al 2010).

Conclusion

Designing and constructing the Building Consultancy Practice Firm was a significant undertaking for the School of Construction Industries. This multi-disciplinary collaborative project provided numerous challenges and varied work-integrated learning experiences for students and staff, resulting in motivated and engaged teaching and learning. The next stage involves relocating the building to the new Technical and Trades complex where the facility will predominantly operate as a commercial venture with the Building, Surveying and Design students providing services to clients from the community. A comprehensive evaluation of the project will also be undertaken.

References

Billett, S. (2009): Realising the educational worth of integrating work experiences in higher education, Studies in Higher Education, 34:7, (pp 827-843) http://dx.doi.org/10.1080/03075070802706561

Cooper, L., Orrell, J. and Bowden, M. (2010). *Work Integrated Learning: A Guide to Effective Practice*. Routledge: Hoboken. (p31, 35)

McLennan, B., and Keating, S. (2008). *Work-Integrated Learning (WIL) in Australian Universities: The Challenges of Mainstreaming WIL* - ALTC NAGCAS National Symposium – June, Melbourne (p11)

Patrick, C-j., Peach, D., Pocknee, C., Webb, F., Fletcher, M., and Pretto, G. (2009, January). *The WIL Report: Work Integrated Learning, A National Scoping Study*. The Australian Learning and Teaching Council and the Australian Collaborative Education Network.

Pegg, A., Waldock, J., Hendy-Isacc, S. and Lawton, R. (2012). *Pedagogy for Employability*. The Higher Education Academy http://www.heacademy.ac.uk/resources/detail/employability/pedagogy_for_employability_update_2012

Skills Australia. (2010). *Australian Workforce Futures: A National Workforce Development Strategy*. Commonwealth of Australia: Canberra.

Victoria University. (2008). *Making VU 2016: A Statement of Purpose, Victoria University's Strategic Direction and Priorities, 2008-2016*. Victoria University: Melbourne.

Victoria University. (2012). Victoria University's Strategic Plan for 2012-2016: *Excellent, Engaged and Accessible*. Available from: http://www.vu.edu.au/about-vu/vus-vision/strategic-plan

Yorke, M. (2010). Employability: aligning the message, the medium and academic values. *Journal of Teaching and Learning for Graduate Employability*. 1:1, (pp 2-12). Available from: http://jtlge.curtin.edu.au/index.php/jtlge/article/view/7

Copyright © 2012 Leoni Russell and Lyn Hannah

The authors assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the authors.

Note, Leoni Russell now works at RMIT (Leoni.Russell@rmit.edu.au)

The need for alternate approaches to Cooperative Education Increasing responsiveness to varied industry needs

Angela Samuels
Industry Scholarships, University of Newcastle

Recent years have seen research publications investigating and debating models of cooperative education practice at Higher Education Institutions (HEI's). These publications showed that there is still uncertainty as to what is the appropriate response to industry needs. It reflected a singular view from the perspective of HEI's as opposed to one based on a responsive culture to industry and their emerging needs.

As a result, Higher Education Institutions may need to adopt a consultative approach and develop a response that is balanced by the constraints of working within a public Institution. The main objective of this research was to investigate whether the availability of different models of Cooperative Education Programmes would enhance the uptake from both industry and students of cooperative education programmes.

A blended research approach was followed through the use of both qualitative and quantitative techniques. Four focus group sessions solicited needs from industry that reflected different priorities for various industry partners. These needs were categorised and a survey distributed to 85 Industry Scholarship (IS) Sponsors (as at 2008-2010), this represented all of the current industry partners.
The survey measured the perceptions of Industry regarding HEIs construction of industry based scholarships and the benefit of being a partner in the experiential learning. The survey identified the following key points:-

- Structure and the models of operation
- Financial contribution and the return on investment proposition
- Flexibility of models to adapt to various industries
- Responsiveness to emerging trends and projected labour market shortages
- Consultative framework and level of stakeholder engagement

Results showed that different responses were required and that the flexibility of response improved the adoption of cooperative education practice by both industry and students. Discussion will be invited on HEIs response to industry needs and the steps needed to continue evolving to meet future industry needs.

Keywords: Industry partners, Cooperative Education, collaboration, consultation, flexible models, responsiveness

University of Newcastle (UoN) Industry Scholarships

The University of Newcastle Industry Scholarship program facilitates partnerships and connects industry with students in the form of an Industry scholarship. The Industry Scholarship program is a key strategy adopted by the University of Newcastle to produce the work ready graduates demanded by employers.

The World Association for Cooperative Education (WACE) defines Cooperative education as a formally recognised academic program integrating classroom learning and productive work experiences in a field related to a students' academic and career goals. Currently over 71 % of scholars on the Industry Scholarship program have opportunities to undertake industry placements that align directly with their area or study. Students are able to utilise their placement activities as evidence towards achieving competencies and the industry placement reports may be recognised as part of an assessable task.

The 5 underpinning principles for the establishment; or variation to; models adopted by UoN Industry Scholarships are based on values and principles associated with W.I.L and Cooperative Education.
The 5 features are:-

1. Relationships – Sponsors, Scholars and the University remain committed to maximising the relationship.
2. Selection – Sponsors are involved in the process of selection and Scholars have a choice in selecting their Sponsor (subject to availability).
3. Integration – academic studies and industry placements are aligned, with experience adding value to assessable tasks.
4. Professional development – the academic experience is enhanced by the industry placement, with additional opportunities for development to create leaders of the future.
5. Rewarding – financially and developmentally for scholars; professionally for Sponsors and enhancing the reputation of the University.

Industry Partnerships

Patrick (2009) argues that universities are under increasing pressure from government, industry, professions, and the community to respond to skills shortages by producing a work ready professionalised workforce with the requisite employability skills who can meet the needs of a rapidly changing economy. The Rudd and Gillard Labour governments "Education Revolution" continues a trend visible in enhancing the role of universities in generating graduates who are work ready. Given this level of interest and demand, it should come as no surprise that HEI's will need to find ways to be responsive to industry.
Industry partners are in business to either grow or sustain their business, to ensure their operations remain commercially competitive and financially viable. HEI's have an obligation to actively listen to their industry partners if they seek to secure financial support. HEI's will need to adapt to the changing needs of the business community if they are to continue seeking financial support in an increasingly competitive global market. The global financial market directly impacts on our industry partners and as it affects their capacity to fund or support education initiatives it is important to be cognisant of the extrinsic pressures faced by industry.

Identifying what motivates an industry partner to be involved is essential. The majority of Industry sponsors have identified their involvement is linked to their strategic workforce planning. A minority are involved with the program as part of a broader philanthropic community engagement strategy, with many local Council partners stating this as a primary objective in their strategic plan.

The nature of cooperative activity includes the ability to collaborate, to adapt and adjust to evolving conditions. Breen (2001) comments that that reciprocity between partners is important for cooperative education partnerships, with reciprocity relying on evolving adaptations and meeting mutual obligations between partners.

Quality and reputation building

To ensure continued positive rapport with Industry and reputation building within the broader business community, a cornerstone of the philosophy of Industry Scholarships is to adopt a consultative approach. Dobbelstein states that "Cooperative education may be seen as the close cooperation between higher education institutions and the world of work. The participation of industry is the key to the success of the cooperative education model". In this context, companies have a choice of institutions to select where they would best like to invest and engage in the cooperative agenda. Universities need to think about their competitive advantage so they are able to attract industry.

With increasing competition in this area, it is not enough to just fulfil the requirements because every University will do so. It is important to make the sponsor companies feel enthusiastic about the way they interact with UON and to ultimately exceed their expectations. In this context, the branding, positioning and processes employed by the University of Newcastle must meet or even exceed pre-conceived notions that industry have about engaging with universities.

A consultative framework

The Industry Scholarship program has evolved to a mature consultative model, with the ability to respond to industry partners in a more flexible manner. The evolution of the program has dictated that the program is now more robust and complex than in previous years. As of 2012 there have been 3 formal phases of consultation, with the implementation of suggestions for improvement resulting in significant improvements to the program.

Phase 1 2006- a 1 day, externally facilitated workshop. The purpose was to commence a process of consultation with key stakeholders and review the program. The participant group involved 22 external industry sponsors; 4 scholars, 2 Senior Executives and 3 staff. The outcome was a recommendation for the consultation and review process to continue every 2 years. There were a range of recommendations related to infrastructure and governance issues. These recommendations were adopted and in recognition of workload, a new Manager was appointed in 2007.

Phase 2 2008 – there was extensive consultation undertaken with 85 (100%) of Industry Sponsors. The outcome was that not only did the Industry Sponsors think the focus needed to remain on infrastructure, it needed to expand to include quality assurance in the areas of: - governance, policies and procedures; financial and legal administration; increasing positive outcomes for student experience; and improving sponsor relationship management.

Phase 3 2010 - A variety of methods were used to capture feedback. Advice was sent to over 250 stakeholders, which represented all Industry Sponsors, University stakeholders and Scholars. This was to advise that there would be a 6

month review and consultation phase. The advice provided an outline of the timeframes and methodology to be used for consultation. A critical success factor to engage with industry and maximise participation was to indicate that action would occur. Consultation was via small informal forums; telephone interviews; online surveys and an Executive steering committee for proposing recommended changes.

Key Findings of Phase 3

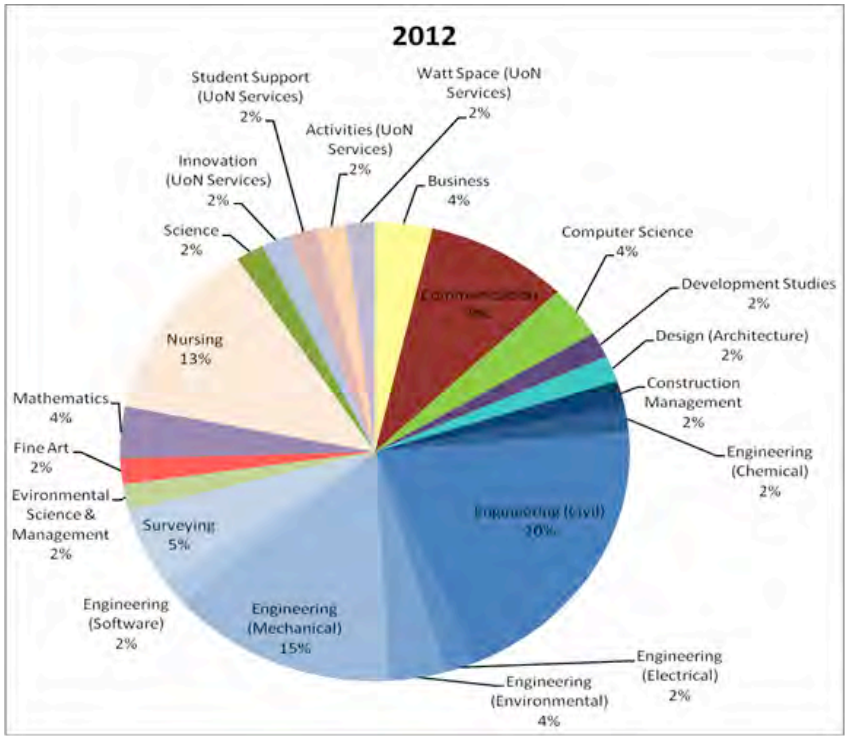
This phase was more inclusive of all Industry Scholarship stakeholders. Industry sponsors, Scholars and University staff involved with supporting the program were consulted; the ensuing main reforms have resulted in a high quality, flexible, responsive and innovative industry scholarship program.

Table 1: Key Improvements

Prior to 2008	**Changes commencing late 2010 , continuing into 2012**
Program known as UNISS	Name change to Industry Scholarships
One (1) model – "ÜNISS Foundation model"	Five (5) flexible models available
Target- 1st year undergrad FEBE students	Target – any year and most disciplines
Scholarships only in Engineering	Scholarships offered across any discipline
Full year placement (gap from study) mandated	Flexible models offer range of options
One intake per year	Three intakes per year
Industry placement completed in summer break	Industry placement structure is flexible
Majority of sponsors were repeat ''business"	Increased number of new industry sponsors
Average intake # 22	Increase in intake numbers ie; 2012 = 58
Sponsor agreements inconsistent; complex, not provided to all stakeholders	Sponsor agreements standardised, legally compliant and available to all stakeholders.
Numerous variations on pricing depending on year accepted into program, all based on Engineering scholarships	Consistent pricing models across engineering disciplines. Non-engineering pricing determined by industry labour market rates.

There is flexibility in the 5 models outlined below, with variations to placement duration and the financial contribution from sponsors varying depending on the industry and preferred model.
"Industry Alliance" is the preferred longer term model as sponsors seek to assist in the professional development of a scholar and establish a long term connection. This model can be 4 or 5 years and is available with or without a full Year placement period. Where applicable a scholar undertakes a Final Year project with the sponsor.
The ***IBIS*** model is similar to Industry Alliance in structure but support mechanisms and ratio of available mentors to scholars is higher.
" Industry Connect" assists small to medium size companies by offering them the opportunity to connect and engage with scholars for a period of less than one year. Often this scholarship model is used over the University vacation period.
"UNIGRAD" has been developed to assists sponsors make a stronger connection with students in their final one or two years of study. Many sponsors incorporate this model into their workforce planning strategy.
"T.A.P" (Talent Acquisition Program) is an innovative model developed and tailored to suit the emerging needs of industry, specifically those with labour market shortage in a number of key areas. Similar to a "cadetship" style program, students maintain full-time study and complete the equivalent of 1 or 2 days a week on placement with the sponsor.
In 2008 100% of scholars were studying in the Faculty of Engineering and Built Environment. In 2012 the diversity of the program reflects the success of responding to industry and providing multiple options. In 2012 there is approx. 50% of Industry scholarships offered external to Engineering (Diagram 1).

Diagram 1: IS Program Diversity



A case study:- Capturing emerging needs and responding to corporate citizenship

Corporate citizenship can be extended to mean the total impact of the company's activities on society. The role of companies in society has dramatically changed (Osburg, 2009) with new forms of cooperation emerging (Schrader, 2003).

One current challenge for HEI's is to respond to federal government initiatives and provide more concentrated engagement with students from diverse cultural and socio economic backgrounds. To provide a meaningful education experience for this group of students may require a more flexible approach, with curriculum and methodology of engagement needing rigorous review. The political and social agendas in our society significantly impact on our response not only to government but to Industry needs.

In 2010 there was a need identified to create a program in response to industry feedback regarding issues of engaging with the Indigenous community. Community in this instance refers not only to the broader community, but specifically to enhance opportunities for industry to build and increase the representation of Indigenous employees in their workforce. Sponsors who identified this as part of their corporate responsibility are embracing the Industrybased Indigenous Scholarship (IBIS)

Industry Sponsors adopting the IBIS model as part of their corporate strategy expressed a desire to create a pathway for Indigenous students to undertake tertiary studies and gain relevant industry experience.

"IBIS" – the Industry Based Indigenous Scholarship (IBIS) model is flexible and supportive. Collaborating with the Wollotuka Institute, this model offers real world opportunities for our UoN Aboriginal and Torres Strait Islander students.

Table 2: IBIS Model

Study Year	Study Program	Placement Period
1st year	Full-time	12 weeks/60 days
2nd year	Full-time	12 weeks/60 days
3rd year	Full-time	12 weeks/60 days

Conclusion

Industry scholarships will maintain a consultative framework to review the motivation or objectives of Industry Sponsors. It is important for continued success that HEI's find ways to engage with industry in a meaningful way, that adds value to their business.

The current strategic aim for the Industry Scholarships program is to remain competitive, responsive to Industry and achieve growth in both the diversity and quantity of scholarships on offer. A cornerstone of this strategy is to offer scholarship options which reflect the expectations and needs of relevant industries.

For Industry Scholarships to achieve its goal of diversification and growth it will need to establish its value within the broader community through developing a reputation of being trustworthy, accessible to business and responsive to industry needs.

www.newcastle.edu.au/industry_scholarships.

References

Boud, D., Solomon, N., & Symes, C. (2001). New practices for new times. In D.Boud @ N.Solomon (Eds.), Work-based learning: A new higher education? (pp. 18 – 33.) Buckingham, UK: Open University Press @ Society for Research into Higher Education.

Braunstein,L., & Loken, M. (2004). Benefits of cooperative education for employers. In R.K.Coll & C.Eames (Eds.), International handbook for cooperative education. Boston: World Association for cooperative Education.

Breen,H (2001), Cooperative education partnerships: an examination of reciprocal relationships between universities and tourism and hospitality organisations in providing professional development education for their employees' , Southern Cross University, Lismore, NSW

Dobbelstein, T. (2004) Analysing the world of works requirements as a foundation to fill companies with enthusiasm about cooperative education. Paper presented at the 13th World Association for Cooperative Education Conference, Rotterdam, the Netherlands.

Groenwald, T (2003). Growing talented people through Cooperative Education: A phenomenological exploration, APJCE 2003, 4(2), (pp49-61)

Osburg, T. (2009): Corporate responsibility 2009:Human Resources (pp.86-89)

Patrick, C., D., Pocknee, C,. Webb, F., Fletcher, M, & Pretto, G. (2009) The WIL Report: A National scoping study. Brisbane, Australia: Queensland University of Technology.

Rosenbaum, D.B. (2000). Concern about talent shortage leads industry into the classrooms. *Engineering News Record* , 254 (17), 44-51

Schrader, U. (2003). Corporate Citizenship: Die Unternehmung als guter Burger ? Berlin: Springer.

Weisz, M., & Smith, S. (2005). Critical Changes for successful co-operative education. In A. Brew @ C.Asmar (Eds), Higher Education in a Changing World: Research & Development in Higher Education .

Wojahn, P., Dyke, J., Riley, A., Hensel, E., & Brown, S. C. (2001) Blurring boundaries between technical communication and engineering: Challenges of a multidisciplinary client-based pedagogy. Technical Communication Quarterly 10 (2), 129 – 148.

Copyright © 2012 Author Angela Samuels

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Bringing it all Together: An overview of the delivery of key work-integrated learning (WIL) initiatives at Flinders University

Heather Smigiel
Centre for University Teaching, Flinders University
Ceri Macleod
Centre for University Teaching, Flinders University
Jody Hannah
Centre for University Teaching, Flinders University

Flinders University is dedicated to providing a valuable and consolidating WIL experience for its students. To achieve this, the University designed a strategy and set goals for the implementation and management of WIL activities. The first step was to undertake a comprehensive audit to determine its position at that time, then to develop set of 'reactive' initiatives to address issues that were highlighted during the audit process. The effectiveness of these initiatives is in the process of being evaluated, whilst at the same time we move into a more 'proactive' stage to bring it all together: to help define the future direction of WIL and maximise the 'meaningfulness' of these activities. The purpose of this paper is to examine the approaches being utilised by Flinders in embedding good practice across the University by developing systems of control, as part of a proactive approach to WIL development and implementation. It will provide a background to key activities and major initiatives in measuring the impact of WIL at Flinders, briefly evaluate their delivery, and consider future implications.

Keywords: embed, evaluation, meaningfulness, policy, strategy, WIL

Introduction

Flinders University has long recognised the importance of Work-Integrated Learning (WIL) as a "…tool for maximising student learning opportunities" (Smigiel and Macleod, 2010). Over recent years, existing WIL practices across the University have been reviewed and redeveloped, with the aim of maximising their effectiveness. In addition, new practices and policies have been developed. A combination of this 'proactive' and 'reactive' approach has subsequently been utilised by the University to identify existing good practice and to develop and deliver new practices, with the long term goal of improving the 'meaningfulness' and maintaining the momentum of successful WIL delivery at Flinders (Smigiel and Macleod, 2010). The question we now ask ourselves is - are we achieving this?

Background

The world of WIL is an ever-changing, dynamic environment. To ensure that WIL experiences offered to our students meet the changing requirements of this environment, we must be able to adapt to the needs of all stakeholders (i.e. students, university staff and external organisations). Beer (1981) recognises the need for a viable organisation to react within a complex external environment, and identifies the need for a system of 'control' as one of the vital components in achieving an effective organisational response. Other components identified by Beer: implementation; coordination; intelligence; and policy have been addressed by the University (Smigiel, Macleod 2010). However, the development of a system of control required further development.

The purpose of this paper is to examine the approach being utilised by Flinders in embedding good practice across the University by developing systems of control. It will provide a background to key activities/major initiatives in measuring the impact of WIL at Flinders, briefly evaluate their delivery, and future implications.

Key Activities

'Managing WIL' Workshops

Background
Flinders University offers a suite of staff development and support opportunities, including a comprehensive 'Managing Work-Integrated Learning' series of workshops, held biannually. These workshops are compulsory for all new staff involved in leading and organising WIL activities, but also provide new and relevant information for existing staff. The workshops introduce: the requirements of the University's WIL Policy; case studies of good practice; phases of WIL and assessment; career development; staff and student advisory and preparatory programs; and how to deal with

common issues such as marginally performing students in a WIL context. The workshops are developed and delivered by the Centre for University Teaching (CUT), with input from relevant WIL experts across the University.

Evaluation
The CUT, as the central provider of these staff development opportunities, has begun to evaluate their perceived meaningfulness through an analysis of attendee feedback collated over the past three years. Whilst workshop attendance and completion has remained relatively constant each year (averaging 16 completions annually), 2012 has brought a significant increase in demand for attendance (16 completions to date, with 21enrolled and 9 on a waiting list for the next 2012 workshop). This increase in demand reflects greater general awareness of WIL and its implementation requirements across the University. Demand is strong enough to consider increasing the number of workshop offerings per year.

Of the attendees that have completed the workshops since 2009, 75% of participants that responded rated both the impact (the extent that the course enabled them to better understand WIL) and content (usefulness of content in meeting their working needs) as Good or Excellent. It has been noted, however, that the feedback resulting from recent larger class sizes has been marginally lower than smaller classes, and leads us to question if there is a relationship between class size and effectiveness.

Implications
Demand for attendance at these workshops is likely to continue to increase in line with WIL policy implementation. Should we therefore consider delivering more bespoke workshops to cater for the differing needs of attendees (e.g. at Faculty-level or specifically targeted at academic or general staff, not both, as we currently do), or is a more general, all-encompassing means of delivery still the most appropriate? How can we be more innovative in the delivery of the course to reach staff unable to attend in person?

On-line learning modules: 'PrePlace'

Background
Preparing students prior to undertaking a WIL placement is the responsibility of the University and an important stepping stone in ensuring the placement is meaningful and considered a success by all parties. The CUT has developed an interactive online student preparatory resource entitled 'PrePlace' which revitalises and updates its 2003 predecessor. PrePlace was designed internally by a cross-University working group, to ensure the resource was appropriate and applicable to all students. The resulting resource is accessible from within the University's online learning system and contains three modules covering administrative procedures concerning their placement, Occupational Health and Safety responsibilities and more general topics including work-life balance, accepting and utilising feedback, and professional presentation and attitudes. PrePlace is currently available for staff involved in managing WIL to use as part of their student preparation prior to placement.

Evaluation
At the time of writing, PrePlace is in the process of being rolled out across the University. It is expected around 500 students will complete PrePlace in the next 12 months, from within the School of Computer Science, Engineering and Mathematics, the School of Education, the Flinders Business School and the School of Nursing. Formal feedback will be sought to evaluate the resource to ensure that it is, and remains, an effective tool for student preparation, and evaluation materials are being prepared accordingly. In the meantime, the fact that it is being applied across such a wide variety of disciplines provides a very strong indication of its potential success.

Next steps
Research will begin in the next few months to determine if other modules in the PrePlace format are justified, with ones for University-based WIL supervisors, workplace-based student supervisors and host organisations being considered for development.

WIL Policy

Background
In October 2010, Flinders launched a new WIL policy and associated guidelines, with a stated commitment to review its implementation after one year (Flinders University, 2010). The policy defined WIL at Flinders and identified the need to design, organise, supervise and assess these activities. It also recognised the need to promote good working relationships with host organisations and to develop appropriate administrative procedures, in addition to providing guidance on relevant topic design.

Evaluation
A University-wide review of WIL policy implementation was undertaken late 2011. This took the form of the submission of Faculty-based reports on compliance with the policy. This was a major information collation exercise, highlighting where the policy has been successfully implemented and where further information or support is required. It also highlighted examples of good practice and, conversely, areas where there appear to be problems with interpretation or implementation. Results are still in the process of being interpreted, but information collated has been useful in providing a broad picture of the implementation of WIL at Flinders. This review process has proven to be a successful form of control particularly in identifying areas within the University that require more hands-on support in implementing the WIL policy, mostly in those areas where WIL does not take the form of a traditional placement.

Implications
A policy review report is in the process of being developed by the CUT and the Office of the Deputy Vice Chancellor (Academic). Key areas of action include the need to: work closely with Schools across the University in their development of host organisation agreements to ensure compliance with the policy; consolidation of existing documentation; the preparation of University-wide template host agreements; and the development of 'how to' guides for creating and implementing new WIL programs. The final review report will contain further recommendations pertinent to maximising the effective implementation of the WIL policy.

Placement Management System: InPlace

Background
In 2010, the University's Student Systems team, with input from interested parties across Flinders, including the CUT, acquired a placement management system to be implemented and used across the University. The system selected has been operational since late 2010 and full roll-out to all interested Schools should be completed by the end of 2012.

Evaluation
In 2010, 2,457 placements were organised through the new placement management system, with 3,439 in 2011 and already 1,754 in the first half of 2012. As an early adopter of this technology, some growing pains were encountered but the software vendor is responsive to issues and suggestions and the software is increasingly meeting the needs of users across the University. An evaluation of the system against the initial goals is yet to be undertaken by the Student Systems department.

Next steps
Now that the placement management system has been implemented and populated with data about host organisations and which topics have a WIL component (at least of the traditional 'placement' style), we need to question how to use this data to better engage with stakeholders and to identify other ways of using the data to increase our knowledge on how WIL is being managed across the University (e.g. investigating areas where fewer WIL opportunities are being undertaken and taking steps to improve participation).

Conclusion

As reported in previous papers (Smigiel and Harris, 2007, Smigiel and Macleod, 2008 and Smigiel and Macleod, 2010), Flinders University has undergone a significant period of change during recent years, in terms of identifying and improving WIL practice across the University. We are now at a point where we need to evaluate our position and embed good practice. A number of key activities have been implemented and their impact is being, or will be, evaluated. One of the most significant developments during this time is the centralised focus that has been developed, primarily by the CUT, which coordinates and evaluates approaches to WIL delivery from a University perspective. The CUT therefore represents an overall system of 'control' in monitoring the meaningfulness of WIL, and adapting its approach accordingly. In an ever-changing, dynamic environment that is WIL, we need to be vigorous in our approach to its delivery to ensure we continue to meet the needs of stakeholders.

References

Beer, S 1981, The Brain of the Firm, 2nd ed., Wiley, Chichester

Flinders University (2010) Work-Integrated Learning Policy, Retrieved 9th September 2010 from http://www.flinders.edu.au/compserv/committees/SENATE/public/2010/2010SENATEpapers_Doc_AS_136_10.pdf

Smigiel, H and Harris, J (2007) Audit of Work-integrated Learning Programs at Flinders University, Flinders University

Smigiel, H and Macleod, C (2008) Linking Work and Learning, Pedagogical Implications, Proceedings of WACE/ACEN Asia Pacific Conference 2008, E-Proceedings pp 486-492

Smigiel, H. and Macleod, C. (2010) Maintaining the Momentum, Paper to be presented to 2010 ACEN Conference, Perth, WA, Australia, 29 September to 1 October

Copyright © 2012 Heather Smigiel, Ceri Macleod, Jody Hannah

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Enacting Service Learning across HE disciplines: An exploration of pedagogical principles

Judith Smith
Queensland University of Technology
Natasha Shaw
Queensland University of Technology

Abstract

The Community Service Learning Lab Project (the Lab) was established in response to issues raised by academic staff and community partners. It builds on existing service-learning practice and research to facilitate innovative project based multi-disciplinary service-learning opportunities within the curriculum across the institution. The paper articulates pedagogical principles that are emerging from research into this service-learning initiative. Through the Lab, academics, students and key community organisations have collaborated to identify, implement and evaluate interdisciplinary Service-learning projects that support student learning and the needs of our partner organisations. Each Lab project and partnership evolved with its own unique characteristics however a number of pedagogies, learning resources and assessment strategies were shared across all Lab projects. These approaches enacted the underlying principles of service learning; diversity, reciprocity and collaboration within the curriculum. A Participatory Action Research framework (PAR) informed the collaborative design of the curriculum. Through the PAR process participants have considered service learning strategies that best prepare students to work with community organisations and develop students' understanding of privilege and disadvantage, intercultural competence and professional capabilities. The paper concludes with a discussion of some of the key challenges and future implications of an institution-wide approach to service-learning.

Keywords: Service-learning, community-based projects, participatory action research, interdisciplinarity

Introduction

Service-learning is a well established pedagogy in North America and is of growing interest across higher education in Australia. The success of service-learning as a powerful strategy to teach and encourage engaged citizenship is well-documented and there is consistent evidence that participating in service-learning enhances students' 'work, career and future ready' skills, such as leadership, career decision-making, communication skills, teamwork and intercultural competency (Carrington & Selva, 2010; Harris, Jones, & Coutts, 2010; Kenworthy-U'ren, 2008; Milne, Gabb, & Leihy, 2008; Prentice & Robinson, 2010). Service-learning recognises and engages the whole person in learning, including their embodied and emotional responses and uses shared reflective strategies to help make sense of experiences. Personal and social transformations become intertwined in the learning process by engaging the head, hands and heart (Sipos, Battisti, & Grimm, 2008). As Meyers, (2010, p. 380) states – "it provides students with an opportunity to use their experience to discover who they are capable of being and what they are capable of doing".

How service-learning is enacted varies greatly across institutions and disciplines. However, what appears to unify the pedagogy is an underlying values-based framework. Butin (2003) articulates this framework as the four R's of service-learning: respect, reciprocity, relevance and reflection. Respect for members in the service-learning organisation; reciprocity, where the server interacts positively creating mutual outcomes; relevance where the service-learning pathway adds to academic learning and reflection that enables the participant to make pertinent meaning of the experience(Carrington, 2011).

The Community Service-Learning Lab

The Community Service Learning Lab (Lab) is a university-wide service learning initiative at one Australian University. Through the Lab, academics, students and key community organisations work together to develop and implement interdisciplinary service-learning projects that both support student learning and the needs of our community partners. Community partners invite students to inquire into real and complex issues facing their communities.

The projects are purposefully designed to allow for student input into the project focus, process and outcomes. This more open approach to projects came from student advice provided in the stakeholder roundtable discussions, which informed the design of Lab's curriculum and pedagogical approaches. In the spirit of collaborative inquiry the

community partners couched their issues as a broad framing questions rather than directives for outcomes. For example: instead of "make a website" the project brief would read "How can we best communicate around this issue?" The projects are designed so that each semester student teams contribute a component of an ongoing inquiry. At the end of the semester each student group reflects on their processes and outcomes and identifies areas for future investigation by student teams.

The Lab curriculum is shared by a number of service learning units across the University. The learning goals for the Lab and associated units have focussed on adding value to the established discipline-based curriculum. Learning goals for the Lab include:

- Identifying and applying engagement strategies which support students as emerging professionals to work sensitively and appropriately with diverse communities and individuals
- Building awareness of the complexity of issues associated with privilege and disadvantage and social injustice as it pertains to questions being explored with community partners
- Developing approaches to inquiry that values diverse perspectives and leads to mutually beneficial outcomes for stakeholders
- Exploring interdisciplinary ways of working when investigating real and complex issues facing communities

Disciplines involved in the Lab include law, justice, business, psychology, social work, creative industries and design disciplines such as performing arts, fashion, interior design and interactive design. Academics have collaborated with community partners in the development of the shared curriculum. This collaboration has enabled the design of the Lab to draw on a diverse range of discipline expertise, pedagogical approaches and professional practices. Academics and community partners co-facilitated shared service-learning events which engaged all student teams. Curriculum and assessment resources were also shared across units and projects. Additionally each project employed a range of specific strategies relevant to the nature of the student group and project focus. A Community Liaison role was created in the university Learning and Teaching Unit to facilitate project connections between community organisations and relevant discipline areas. This role was also responsible for promoting projects to students, managing applications and disseminating resources through community service-learning websites.

This paper articulates some of the pedagogical principles that are emerging through this university-wide service-learning initiative and reflects on some of the strategies that have been employed through the Lab to enact Butin's (2003) values-based framework of respect, reciprocity, relevance and reflection. The paper concludes with a discussion on key challenges and future implications of an institution-wide approach to service learning.

A collaborative inquiry approach

Principle 1: *The Community Service- learning Lab is underpinned by an inquiry approach to collaboration between stakeholders, leading to mutual beneficial outcomes for all stakeholders.*

Establishing the Lab required multilayered collaboration. Collaboration across discipline boundaries within the university, collaboration with the community partners and with and between the many layers of staff at those organisations, collaboration between academics, community partners and students, and finally students working together in interdisciplinary teams. Early discussion with the academic team and Lab advisory board explored a number of frameworks that could guide the development of the Lab and provide reciprocity of outcomes that were founded in mutual respect and understanding of each other's needs.

To support the collaboration Participatory Action Research (PAR) was selected as the inquiry framework for the two levels at which the Lab operates. Firstly the Lab as a whole which investigated the big picture questions around how stakeholders work together at a strategic level to support service-learning and secondly, the process of collaboration and inquiry for individual projects (Crane, Smith, & Shaw, 2011). The principles of collaboration and reciprocity underpin both service-learning pedagogy and PAR. Both acknowledge that there are a range of stakeholders: students, organisations in the community, academia, university administration, and the community at large and that all parties have the potential to learn from, and contribute to the experience (Bringle, Clayton, & Price, 2009). PAR also supports an inquiry project-based approach to service-learning. The pedagogy that emerged from the interdisciplinary curriculum team was informed not only by PAR but also discipline-based inquiry approaches such as design thinking.

A number of strategies were employed to support this collaborative inquiry approach. For the Lab as a whole this was achieved through interviews with community partners, curriculum team meetings and a roundtable event where students, community partners and academics brainstormed ideas around possible designs for the Lab and discussed their needs and expectations of the Lab. At the project level, a range of curriculum and assessment strategies were employed to enact this principle of collaborative inquiry. The shared Project Planning Day which was co-facilitated by academics

and community partners introduced the four R's values framework of service-learning. There was also structured time in the day to identify stakeholder's needs and values. Community partners share their values and ways of working including person centred practices and strength based philosophies that underpinned their work with community (O'Brien & O'Brien, 2000). Students and academic staff were also asked to reflect on and share some of their own values and reasons for engaging in the Lab. The Community Service- Learning PAR workbook and planning day presentation provided strategies for engaging, acting and reflecting; with critical points of connection identified within the cycles of inquiry. Additionally a proposal template was developed to assist student teams to clarify with the community partners the project scope of inquiry, key stakeholder engagement processes and proposed outcomes.

The three assessment tasks focussed students' attention on the processes of inquiry. Firstly, the project proposal required students to identify stakeholders and explicitly plan strategies for engaging these stakeholders throughout project. Secondly, as part of their reflective blog assessment students were also asked to consider the relevance of the PAR process to their discipline practice. Thirdly, in the final presentation assessment to community partners, students were asked to share insights into the collaborative inquiry process and strategies for engagement employed as well as project outcomes and future directions for the project. While there was a shared assessment framework and criteria there was room for each academic lead to adapt the task to suit their discipline focus. For example, in some projects the reflective tasks were quite open to interpretation and others were more directed to particular topics and informed by readings related to the topic.

An embedded student liaison role was also piloted for two of the projects at one organisation. A third year social work student who was undertaking their professional practicum within the organisation was given the responsibility of being the liaison between the student team and the organisation. This role served two purposes: firstly, the social work student could mentor the project team in respectful and appropriate ways to engage with community service agencies and secondly, it enhanced the capacity of the organisation to take on student projects in a resource poor environment. Initial feedback from students and partners about the value of this embedded role has been very positive.

Interdisciplinary approach to real world issues

Principle 2: *The Community Service- learning Lab is intentionally designed to enable students across the university to engage in interdisciplinary teams to solving complex and real issues facing communities*

Challenges facing our communities require new ways of thinking about problems at the boundaries and intersections between disciplines. To acknowledge the complexity of the issues facing our communities an interdisciplinary approach, grounded in a Participatory Action Research framework was developed. Both community partners and students embraced this interdisciplinary approach. The community partners recognised the benefit of interdisciplinary student teams and the range of knowledge and perspectives that this approach would bring to an exploration of their issue. For the students the interdisciplinary approach made them more conscious of their own discipline knowledge and skills and helped them develop a greater awareness of and respect for other perspectives. It required students to communicate their own discipline specific knowledge, skills and processes in ways that are accessible to others. It also required all participants to develop a level of intercultural competency that values diversity, promotes equity and strives for inclusion.

This interdisciplinary approach to service-learning challenged student thinking and optimised students' creative capacity to engage with others around issues and activities important to the community. However, the collaboration around the open project design in interdisciplinary teams while enhancing opportunities for creativity, can also foster uncertainty. Research into student experiences of service-learning acknowledges that at times, particularly in the initial stages, service-learning can be frustrating as students face ambiguity and uncertainty (Madsen & Turnbull, 2006). Uncertainty is not necessarily a negative and can in fact provide the impetus that can lead to new levels of understanding and exploration. Rather than reducing or removing the ambiguity, strategies were implemented to manage the level of student anxiety.

Strategies fell into three broad categories; academic support, shared curriculum resources and shared experience. Students had two key academic contacts throughout the project, a project lead and a discipline mentor. The project lead had a curatorial role in shaping the project brief and guiding student collaboration while the discipline mentor met with students from their particular discipline across all projects a number of times throughout the semester to advise on discipline related issues. An important aspect of these academic roles was to normalise student feelings of disquiet, to build trust in the process, contextualise issues arising in an interdisciplinary team environment. The academic staff also participated in specifically designed service-learning facilitators training, which aimed to enhance their skills to support and mentor the interdisciplinary student teams. Shared curriculum resources and online team learning modules provided students with key strategies for working in diverse interdisciplinary teams. As part of the Project Planning Day

academics also shared with students the challenges of working in the interdisciplinary curriculum team in developing the Lab; revealing some of our own head and heart issues associated with the uncertainty of exploring unfamiliar territory and that there were many of unknowns (Sipos, et al., 2008).

By taking on a more complex interdisciplinary project based approach to service-learning it was recognised that there is learning for all parties which, hopefully, result in an enriched form of reciprocity in which authority is shared and transcends self interest to create greater meaning and relevance (Enos & Morton, 2003; Mitchell, 2008). Students' final reflections on their project, an assessable component of their final presentation to peers, community and academics, strongly endorsed the value of working in interdisciplinary team. They valued the opportunity to explore issues from different perspectives; to identify and articulate the discipline knowledge and skills which they might contribute; and finally, to work across discipline boundaries to explore solutions to issues in ways that challenge their frameworks and ways of thinking and working.

Reflection as an enabler of transformative learning

Principle 3: *The Community Service- learning Lab recognises and engages with the whole student and their experiences; including their embodied and emotional responses. It uses shared reflective strategies to help students make sense of their experiences.*

Engaging in service-learning can be a transformative experience for a student that includes their embodied and emotional responses. It assists students make connections between the cognitive (head), psychomotor (hands) and affective (heart) domains of learning. This can facilitate profound changes in knowledge, skills and attitudes (Sipos, et al., 2008). The academic reflection which forms a core component of assessment provides the vehicle for students to make sense of their experience and examine both the historical precedents of the social problems addressed in their service placements and the impact of their personal action/inaction in maintaining and transforming those problems. This critical service-learning pedagogical approach allows students to connect their own lives to the lives of those with whom they work in their service experiences (Mitchell, 2008, p. 54).

The curriculum is intentionally designed to challenge students to critique justice and injustice, privilege and disadvantage and its impact on community. A workshop on recognising the "baggage" that we all carry and exploring how this influences the way we understand and interact with and "other" those around us was included in the Project Planning Day in week one of semester. However, the most powerful and valued strategy employed throughout the Lab projects has been guided reflection. Throughout the semester project groups were was provided with readings specifically related to social justice issues relevant to their project. These readings informed student reflective blogs. Other topics for reflection related to their role as future professionals and their potential to contribute to a more socially just society (D. Butin, 2010). The action/reflection dynamic of this critical service-learning pedagogy is enhanced by the Participatory Action Research (PAR) framework employed by the Lab, as it encourages contemplation of both personal and institutional contributions to social problems and measures that may lead to social change (Strand, Marullo, Cutforth, Stoecker, & Donohue, 2003).

Challenges and implications

Initial analysis of data collected from student assessment, focus groups, interviews with community partners, and evaluation of events from the first cycle of Community Service- Learning Lab projects indicates this initiative has lead to beneficial outcomes for community partners and students. Students valued the opportunity to apply their discipline skills and knowledge to real community issues that matter and in some cases spoke of how their experiences of the Lab have been transformational both personally and professionally. The community partners embraced the opportunity to explore their issues with young people and academics from different disciplines and reported they valued the fresh new perspectives and insights provided by the interdisciplinary approach to this collaboration.

This interdisciplinary inquiry-based approach to service-learning also brought with it a number of challenges which have implications for the design of the next phase of projects. With students and academics coming from a diverse range of disciplines experiences of and preferences for pedagogy and assessment approaches vary. While some disciplines naturally embrace creative problem solving, open-ended inquiry and loosely structured project briefs other disciplines are more comfortable with strongly scaffolded learning environments that have clearly defined outcomes. Finding an appropriate balance in the structuring and framing of the curriculum needs to continue to allow space for diverse discipline perspectives to be explored and where relevant be integrated into the service-learning curriculum.

A second challenge for the Lab is to provide further opportunities for students to deepen their knowledge and skills particularly as in areas that relate to the learning goals of the service-learning curriculum. For the next cycle of Lab

projects, in addition to the planning workshops, students will be encouraged to engage in a shared seminar series that further explores topics such as social justice, interdisciplinarity, project management and reflective practice.

The institutionalisation and sustainability of community service-learning are complex and challenging on a range of levels. Appropriate workload models and reward and recognition schemes that value the impact of this work are two significant areas of challenge for academics. Another issue is sustainability for the organisations that chose to partner with the University to continue to be involved as the number of students participating grows. Service-learning partnerships with community are typically dependent on the capacity of higher education institutions to provide academic guidance and support to student work, follow up on any issues and maintain communication (Rosing & Hofman, 2010, pp. 226,227). Strategies, such as social work students on placement in liaison roles, and a centralised university role that supports and facilitates the engagement between community, academia and students are two approaches that are planned to be integrated as core components of the Lab.

A key objective for today's educators is preparing the next generations for meeting challenges of the future. The Labs approach to service-learning embraces, active engagement, inquiry based learning, creativity and interdisciplinarity. This learning prepares graduates with skills enabling them to work in, guide and challenge a diverse and complex world. The three pedagogical principles developed as part of Community Service-learning Lab have informed the strategies that assist students meet these challenges. Our hope is that students embrace these engagement strategies and integrate them into their own emerging professional practice. As Henry and Breyfoyle (2006, p. 28) state: "When students problem-pose, they can unveil reality and search for more humane ways of living".

Acknowledgments

The QUT Community Service Learning Lab outcomes are the result of collaboration between community partners, students and academics across the Queensland University of Technology. The project has been supported through funding from a QUT Engagement Innovation Grant and the QUT Learning and Teaching Unit.

References

Bringle, R. G., Clayton, P. H., & Price, M. (2009). Partnerships in service learning and civic engagement. *Partnerships: A Journal of Service-Learning and Civic Engagement, 1*(1), 1-20.

Butin, D. (2010). *Service-Learning in Theory and Practice: The Future of Engagement in Higher Education*. New York Palgrave.

Butin, D. W. (2003). Of what use is it? Multiple conceptualizations of Service-learning in education. *Teachers College Record, , 105*(9), 1674-1692.

Carrington, S. (2011). Service-Learning Within Higher Education: Rhizomatic Interconnections Between University And The Real World. *Australian Journal of Teacher Education, 36*(6).

Carrington, S., & Selva, G. (2010). Critical social theory and transformative learning:evidence in pre-service teachers' service-learning reflection logs. *Higher Education Research & Development, 29*(1), 45-57.

Crane, P., Smith, J., & Shaw, N. (2011). CSLL PAR Workbook. Unpublished Workbook. Queensland University of Queensland.

Enos, S., & Morton, K. (2003). Developing a Theory and Practice of Campus-Community Partnerships. In B. J. Associates (Ed.), *Building Partnerships for Service-Learning* (pp. 20-41). San Francisco, CA: John Wiley & Sons.

Harris, L., Jones, M., & Coutts, S. (2010). Partnerships and learning communities in workintegrated learning: designing a community services student placement program. *Higher Education Research & Development, 29*(5), 547-559.

Henry, S. E., & Breyfogle, M. L. (2006). Toward a New Framework of "Server" and "Served":. *International Journal of Teaching and Learning in Higher Education: De(and Re)constructing Reciprocity in Service-learning Pedagogy, 18*(1), 27-35.

Kenworthy-U'ren, A. (2008). Service-learning: What is it and why should I use it?, *Abstract from Faculty of Business, Technology & Sustainable Development Research Seminar Series*. Bond University.

Madsen, S. R., & Turnbull, O. (2006). Academic service learning experiences of compensation and benefit coures students. *Journal of Management Education, 30*(5), 724-742.

Milne, L., Gabb, R., & Leihy, P. (2008). *Good Practice in Service Learning*. Melbourne: Postcompulsory Education Centre, Victoria University.

Mitchell, T. (2008). Traditional vs. Critical Service-Learning:Engaging the Literature to Differentiate Two Models. *Michigan Journal of Community Service Learning, Spring 2008*, 50-65.

O'Brien, C. L., & O'Brien, J. (2000). The origins of Person -Centres Planning - a community of Practice Perspective Available from http://thechp.syr.edu/PCP_History.pdf

Prentice, M., & Robinson, G. (2010). *Improving Student Learning Outcomes with Service Learning*.

Rosing, H., & Hofman, N. (2010). Notes From the Field: Service Learning and the Development of Multidisciplinary Community-Based Research Initiatives. *Journal of Community Practice, 18*(2-3), 213-232.

Sipos, Y., Battisti, B., & Grimm, K. (2008). Achieving transformative sustainability learning: engaging head, hands and heart. *International Journal of Sustainability in Higher Education, Vol. 9*(No. 1), 68-86.

Strand, K., Marullo, S., Cutforth, N., Stoecker, R., & Donohue, P. (2003). Principles of Best Practice for Community-Based Research. Michigan Journal of Community Service Learning(Spring), 5-15.

Copyright © 2012 Judith Smith, Natasha Shaw

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

PrePlace: an online preparatory resource for students undertaking Work-Integrated Learning (WIL) in the workplace.

Helen Stephenson[21]
Centre for University Teaching, Flinders University
Jody Hannah
Formerly, Centre for University Teaching, Flinders University

Preparing students prior to undertaking a Work-Integrated Learning (WIL) placement is the responsibility of the University and an important stepping stone in ensuring the placement is considered a success by all parties. To support staff and promote the preparation of students undertaking a placement at Flinders University, the Centre for University Teaching developed an interactive online student preparatory resource called PrePlace. Designed by a working group consisting of members from diverse areas of the University PrePlace contains three modules covering important aspects concerning work-integrated learning placements. These include Occupational Health and Safety responsibilities and more general topics such as work-life balance, accepting and utilising feedback, and professional presentation and attitudes. Delivered online, from within the University's learning online system, PrePlace is currently being utilised in Schools across the University. This paper details the rationale and processes undertaken in developing PrePlace, the subject matter incorporated into PrePlace, and outlines the aspirations of the working group to strategically manage (through student and staff evaluation) PrePlace's effectiveness; subsequently guiding its future development and continued relevance.

Keywords: online resource, WIL resource, student preparation, OHS, WIL policy, PrePlace

Introduction

PrePlace was designed to be a student-focused resource that could be utilised by staff across the University regardless of discipline, to cover key administrative procedures and preparatory information prior to a student undertaking a work-integrated learning (WIL) placement. Administrative procedures include fitness for and withdrawal from placement policies, insurance, etc. This paper provides an overview of the stages undertaken in developing PrePlace, the role of the working group and its acceptance and use by a diverse range of disciplines.

WHY? The context of PrePlace and for WHOM?

WIL has existed within universities for decades; it is an established practice in professionally accredited degrees such as social work, nursing, medicine, engineering and teaching (Emslie, 2011, p. 35). WIL is increasingly being incorporated into all undergraduate degrees in response to calls for universities to provide work-ready graduates. These calls can be found in Government recommendations and directives, demands from industry, student demand, professional accreditation requirements/industry standards and international trends (Cooper, Orrell, & Bowden, 2010; Emslie; Patrick et al., 2008). At Flinders University (2010d) this is demonstrated in 'the University's aim of providing Work-Integrated Learning …activities for students in all courses'.

Facilitating WIL placements entails numerous administrative requirements (i.e. risk appraisals, placement allocations) to be undertaken with significant workload implications for university staff. At Flinders University key requirements are contained within the Work-Integrated Learning Policy, Guidelines for the Design of Work-Integrated Learning Topics and Administrative Procedures for Student Work-Integrated Learning Placements (Flinders University, 2010a, 2010c, 2010d).

Designed by a dedicated Working Group consisting of academic and general staff across disciplines and services, PrePlace provides guidance to students prior to commencing their WIL placement. Incorporating recommendations arising from Flinders University WIL practitioners (Flinders University: Centre for University Teaching, 2009), PrePlace is a student-focused resource that university staff may elect to utilise as a means of conveying information on administrative policies, professional skills and attitudes.

[21] Centre for University Teaching, Flinders University, +61 8 8201 3828, helen.stephenson@flinders.edu.au.

WHAT? The content and rationale of PrePlace

PrePlace is designed to provide students with information leading to knowledge acquisition and the establishment of a firm foundation for participating in a successful WIL experience. Intended to be undertaken by students prior to commencing their WIL placement PrePlace utilises problem-solving tasks (videos and written case study scenarios) to assess its stated learning outcomes (see table 1). Two videos comprising advice from students and staff are incorporated within Module One (What advice would you give someone undertaking their first WIL placement?) and Module Three (A final word).

Table 1: PrePlace Structure

Module	Information	Estimated Time (min)
One	**Title: PrePlace Preparation** **Learning Outcomes - students will be able to:** identify requirements that demonstrate fitness for placement*; and identify specific conditions under which a student may be withdrawn *fitness for placement refers to mandatory requirements (eg. National Criminal History Checks) students must meet prior to undertaking placements. Content: Fitness for placement and withdrawal from placement	20 minutes
Two	Title: Occupational Health and Safety (OHS) **Learning Outcomes - students will be able to:** identify their role and responsibilities in OHS while on WIL placement and at University; identify OHS processes and equipment within a workplace; and determine the correct process for reporting an injury while on WIL placement. Content: Working safely; self-reliance; workplace violence; and workplace injuries.	30 minutes
Three	Title: Thriving on Placement **Learning Outcomes - students will be able to:** recognise a variety of issues that may occur while in a WIL placement; and identify appropriate strategies to address these WIL related issues. Content: Organisational culture; preparing for your placement; work/life balance; and receiving and dealing with feedback.	1 hour

Recognising that students may undertake PrePlace over numerous visits, a tracking system identifies progress with pages marked 'complete' when students have viewed them and assessment grades are met. Assessment feedback is provided immediately after submission of the quiz, clarifying the goals of the task and providing guidance on further steps and considerations. Where a student receives a grade lower than the required pass mark they are able to retake the assessment task until the passing grade is obtained.

HOW? The design and delivery of PrePlace

A series of reviews (Flinders University, 2007, 2010b) provided quantitative and qualitative data on the scope of WIL placements being undertaken at Flinders University and identified a range of associated resourcing issues. Investigating these issues through WIL practitioner forums (2009 – present) determined the need to both refresh the successful 2003 WIL Online Practicum Preparation Program (OPP) and Teacher's Guide, and develop and implement specific WIL policy and guidelines. 'Extensive discussion' (Flinders University: Centre for University Teaching, 2009) regarding the development of the WIL policy ensued (early 2009 – mid 2010); this discussion informed a simultaneous review of the WIL OPP. In addition, focused WIL OPP forums and consultation with the Centre for Educational Information Communication Technology (CEdICT) identified that the OPP should:

utilise current media technologies;
be accessible to students through online delivery;

- be multi-disciplinary in its approach;
- be able to be completed within three hours (dependent on the number of assessment attempts required); and
- incorporate elements of the Administrative Procedures for Student WIL Placements (Flinders University, 2010a).

To promote the likelihood that the revised OPP (now known as PrePlace) would be utilised within Flinders, it was important to ensure that it not only meet the needs of students but also the needs of WIL practitioners within the University. Ultimately, these WIL practitioners would determine whether PrePlace was embedded within their WIL topics and consequently utilised by students. Recognising that a previous attempt had stalled due to competing discipline expectations it was determined that a small but dynamic Working Group be formed. Formed in September 2010 this Working Group comprised a representative from each of the University's four Faculties (three academics, one general) and a Project Leader from the Centre for University Teaching.

The Working Group met approximately every two weeks for an hour and a half throughout 2010, consulting with experts in specific areas on an as-needs basis. By the end of September a structure for PrePlace (incorporating the needs identified above) had been formed. PrePlace would be designed and delivered as follows:

- located within Flinders Learning Online (FLO);
- modular-based with learning outcomes and automated assessment;
- automated assessments would be predominately based on case study scenarios;
- minimum passing grades would be allocated to assessment tasks, however unlimited attempts permitted;
- automated assessment feedback would incorporate rationale, further information and - in the case of incorrect responses; directives assisting future attempts; and
- the limited budget (approximately $20,000) would be allocated to the production of a series of videos supporting key information.

By the end of 2010 the initial Working Group of five had indeed been dynamic having developed the first module, the production of five videos and an outline and approach to module two. In 2011 three of the original four Faculty members of the Working Group had withdrawn (one retired, one commenced a new appointment and one withdrew due to workload demands). New members were sought and the Working Group reinvented.

The 2011 Working Group comprised seven members including the original leader, academic staff from three of four Faculties and representatives from the International Student Services Unit, Occupational Health and Safety, and Health, Counselling and Disability Services. Meeting frequency was reduced and workloads reallocated, however the structure determined in 2010 remained with all but one exception; modules three and four would be amalgamated. The Working Group's changed and increased membership, initially slowing progress, ultimately benefited PrePlace's development as member's interactions within the University's community raised awareness; promoting its implementation across the University.

In October 2011, FLO transitioned from WebCT to a Moodle platform. This enhanced technical capabilities, but also required reformatting of PrePlace content and assessment. A trial undertaken by WIL practitioners in November 2011 identified a number of concerns regarding navigation between pages and tasks, additional content inclusions (i.e. workplace violence) and expanded task feedback for the Working Group to consider. These concerns were addressed prior to PrePlace's release in late February 2012.

PrePlace is accessible to students via a link listed in either their topic's FLO site or their course/topic handbook. Students are able to view their grades while Staff have access to the entire grade-book to determine completion status.

WHERE are we at now?

PrePlace demonstrations continue to be undertaken across the University at Faculty and School level. New staff, with WIL practitioner responsibilities, are advised of PrePlace when attending the University's mandatory Work-Integrated Learning Program (a compulsory program for all new staff involved in leading and organising WIL activities). After a four month break, the Working Group has resumed its meetings. A survey has been designed and ethics approval sought to enable qualitative and quantitative data collection from student and staff perspectives. The survey aims to identify improvements and their priorities, informing strategic planning and resource allocation. This will enable PrePlace's continued refinement and relevance. In addition, further case study scenarios are being designed to enable randomisation of assessment tasks for each learning outcome, and an index created.

PrePlace is currently being undertaken by students within the School of Computer Science, Engineering and Mathematics; School of Education, Bachelor of Education (Early Childhood and Disability Studies); Flinders Business School, School of Nursing and Tourism Department. Preliminary feedback, via verbal enquiries and unsolicited email, endorses PrePlace content.

Conclusion

PrePlace is a direct result of the efforts of a dedicated Working Group that seeks, listens and responds to feedback from staff and students. It ensures many of the direct student related administrative procedures, such as occupational health

and safety, are consistently conveyed to students. PrePlace provides staff with a record of student completion, referencing the delivery of this information and evidence that it has been understood via the completed quiz results contained within the grade book. The Working Group continues to develop PrePlace and monitor and adapt it in response to feedback from students and staff, ensuring PrePlace remains relevant.

References

Cooper, L., Orrell, J., & Bowden, M. (2010). *Work Integrated Learning : A Guide to Effective Practice*. Hoboken, New York: Hoboken Taylor & Francis.

Emslie, Michael. (2011). Where's WIL? Including work-integrated learning in descriptions of what it is that academics do. *Journal of Cooperative Education and Internships, 45*(01), 34 - 44.

Flinders University. (2007). Audit of Work Integrated Learning Programs at Flinders University (Staff Development and Training Unit, Trans.) (pp. 86). Adelaide: Flinders University.

Flinders University. (2010a). Administrative procedures for student work-integrated learning placements. Retrieved from http://www.flinders.edu.au/ppmanual/teaching-course-management/admin-proceed-for-student-wil-placements.cfm

Flinders University (2010b, 20 October 2010). [Course and curriculum restructure and renewal].

Flinders University. (2010c). Guidelines for the design and delivery of work-integrated learning topics. Retrieved from http://www.flinders.edu.au/ppmanual/teaching-course-management/guidelines-design-work-integrated-learning.cfm

Flinders University. (2010d). Work-Integrated Learning Policy. Retrieved from http://www.flinders.edu.au/ppmanual/policySecretariat/workintegratelearn.html

Flinders University: Centre for University Teaching (2009). [Task force on a work-integrated learning online package 15.12.2009 obiter dicta].

Patrick, C.-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). The WIL (Work Integrated Learning) report: A national scoping study. Brisbane: Queensland University of Technology.

Copyright © 2012 Helen Stephenson, Jody Hannah

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Researching the potential of the 3D virtual learning environment to complement work integrated learning in higher education

Frederick Stokes-Thompson
Learning and Teaching Unit, University of South Australia
Denise Wood
School of Communication, International Studies and Languages, University of South Australia
Sheila Scutter
School of Medicine and Dentistry, James Cook University
Troy Dobinson
Student Support Services, Queensland University of Technology

Work integrated learning (WIL) is important when positioning students for employment (Patrick et al, 2008). This paper reports on research into the potential of the three dimensional virtual learning environment (3DVLE) to assist students identify and articulate their employability skills. Using a mixed methods approach (Creswell, 2009), feedback was received from 202 students, 10 teaching staff and 12 employers representing the defence, pharmaceutical, utilities, age care, education, engineering and IT industries on three interactive learning scenarios under construction within the University of South Australia's virtual campus on OpenSimulator (OpenSim); an open source multi-platform, multi-user 3D application server. Each scenario highlights one of three key employability skills (AAGE, 2011): communication, team work, and problem solving. Student input will contribute to the design, look and feel of the 3DVLE, while the insights of teaching staff will influence the pedagogical approach. Employer feedback will help fine-tune scenario content and format to better reflect the workplace. The 3DVLE approach to WIL gained acceptance from each of these stakeholder groups. This paper argues that 3DVLEs, if shown to be effective, have the capacity to become an important WIL tool for preparing both campus-based and distance education students for real world placements and future employment.

Keywords: work integrated learning, 3D virtual learning environment, employability skills.

Introduction

Research suggests that_Australian higher education (HE) students are of the view that universities should be responsible for facilitating the skills they need to develop their careers (Urbis, 2011). It is argued that higher education students are also seeking an increase in student-industry contact through more work integrated learning (WIL). WIL, "an umbrella term used for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum" (Patrick et al, 2008, p 9), reinforces students' growing professional knowledge and practical skills and develops their work-relevant attributes or employability skills (Curtis & McKenzie, 2001).

An employee's employability skills (e.g. written and verbal communication, team work, problems solving, self-management) enable him or her to contribute effectively to the interpersonal aspects and productive outcomes of the workplace (ANTA, 2004). The three most highly valued employability skills reported by Australian employers are communication, team work and problem solving (AAGE, 2011). This contrasts with a survey of Australian universities students in 2007, in which students rated the extent to which they had developed these skills during their studies as 81.7% (communication), 65.9% (teamwork) and 54.2% (problem solving) respectively (Graduate Careers Australia, 2007). Increasing HE student numbers (Access Economics, 2008; Mather, 2012) will lead to increasing demand for the work placement form of WIL, especially in the engineering, teaching and health care disciplines. As placement opportunities are finite and limited, universities will need to provide similar but alternative ways for student-employer interaction.

3D virtual learning environments (3DVLE) are computer software-based technical systems or "worlds", for example *Second Life*, which allow synchronous interaction among participants via the utilisation of "visually depicted projective identities: avatars" (Franklin, 2008, p.3). Such environments have the potential to address the identified need for increased cost-effective WIL opportunities (Kluge & Riley, 2008; Gamage, Tretiakov & Crump, 2009). Use of the 3DVLE is not new in Australian HE institutions (see for example Gregory et al, 2011). However despite an extensive search of databases and review of the literature there are no examples of universities using the 3DVLE for employability skills development.

This paper reports on research investigating the use of 3DVLE based scenarios to provide students with practice in the development of three employability skills; team work, communication and problem solving. Results of this research will inform future trials of the 3DVLE in curriculum.

Methodology

A careers atrium and three employability skill scenarios have been under development within an existing virtual University of South Australia (UniSA) campus on a 3DVLE platform in OpenSim. The first scenario, an interview situation, requires a student-driven avatar (SDA) to respond to questions from a chatbot interviewer (a chatbot is a computer program designed to simulate an intelligent conversation with human users). The second scenario, a staff meeting, requires the SDA to interact with a group of chatbots discussing a workplace issue as a team (Belbin, 2010). The third scenario, a staff meeting, requires the SDA to work with chatbots to resolve a workplace problem. Chatbots, or software agents (Holmes, 2007) are used in preference to a person driven avatar to enable students to access the scenarios at any time and to reinforce the sense of anonymity (Dickey, 2005) avatars provide. The final design and implementation of the scenarios will be informed by input from three primary stakeholders – students, teaching staff and employers using an action research approach (Berg, 2004). Feedback from students is particularly important as they will be the end user of the activity and fulfills the need for potential users to be "engaged within the whole process of development and testing the product" (Starĉiĉ, 2008, p 787).

Classes of student participants, along with any attending academic teaching staff at the time, were invited to take part in the study at the end of several in-class career related presentations by the primary researcher. This is the identical approach taken in an earlier, smaller study (Stokes-Thompson, Wood & Scutter, 2011). Employer participants, recruited during UniSA's 2012 Careers Expo, were taken in groups of two or three to a small room off the main exhibitors' area and shown a video of the proposed employability skills scenarios.

All participants were shown the same early stage, 4 minute, silent, electronic recording of the researcher's avatar touring the careers atrium and briefly partaking in each of the three scenarios. The researcher spoke to the recording, pointing out the main features of the atrium and the structure and purpose of each scenario. At the end of the presentation student participants were asked to complete and hand up a feedback sheet. Staff and employer participants were also asked to complete the feedback sheet but only after they had an opportunity to discuss what they just seen and heard. Points raised in discussions were noted by the researcher.

Stakeholder opinions were sought on the appropriateness of the 3DVLE approach to highlight and promote employability skills. Participant feedback was gained via responses to a series of Likert-Scale and open-ended questions (Gamage et al, 2009) concerning: the appropriateness of the 3DVLE for the delivery of career material; features participants liked and disliked about the 3DVLE as proposed; and a request for stakeholder suggestions for improvement. Student and staff demographic data (age, gender, gaming technology experience) were also collected (Stokes-Thompson et al 2011). For employers, the demographic questions were replaced with a request to indicate the industry being represented. They were asked for suggestions regarding questions they would like to see asked in the interview, and topics that could be covered in the team and problem solving scenarios.

Results

The current research gained input from 152 students, 6 academic staff and 12 employers. Total feedback on the three scenarios to date has been received from 202 students (aged 18 to 60 years; 50% male, 50% female), 10 teaching staff (aged 24 to 59 years; 20% male, 80% female) and 12 employers representing the defence, pharmaceutical, utilities, age care, education, engineering and IT industries. Combined feedback from this and the earlier study are collated and summarised in the following table.

Table 1: Summary of student and teaching staff feedback on the 3DVLE careers atrium and scenarios proposal.

Participants	Appropriate?	Comments	Likes?	Dislikes?	Improvements?
Students (215) Response: 202 (94%) Ages: 18 – 60 years Gender: 50% M, 50% F Virtual Reality experience: 121 (60%) Disciplines: - computer science - midwifery & nursing - education - podiatry - pharmacy - social work - physiotherapy - management	most appropriate 53 (26.2%) appropriate 110 (54.5%) not sure 32 (15.8%) not appropriate 7 (3.5%)	Positive – interactive; suitable for today's learner, ease and accessibility of information; novelty; encouraged people to access resources; ability to explore information at own pace. Negative – lacked detail; needed refinement.	Practise at interviews; choose avatar's outfit; online saved time and effort; fun; immediate feedback; interactive; alternative to reading; relevance to career and interviewing.	Animation "laggy"; "archaic"; lame graphics; computer interaction stifles spontaneity; detail needed improvement.	Needed more people in environment; ability to interact, communicate with others; needs to be accessible by lower-end computers; better colour, graphics, animation; more features; non-gamers may find it difficult to navigate.
Staff (10) Response: 10 (100%) Ages: 24 – 59 years Gender: 20% M, 80% F Virtual Reality experience: 3 (33.3%) Disciplines: - learning & teaching - management - social work	most appropriate 5 (50%) appropriate 1 (10%) not sure 4 (40%) not appropriate 0/ (0%)	Positive - very interesting; potentially useful; engaging for users of technology; Negative - pre and post measure of learning needed.	Access to readily downloadable resources; role play better for learning; fun; engaging; novel.	Needs to be accompanied by traditional learning approaches; students may not all be interested in immersive technologies; scaffolding to be included; may widen the gap between the have and have-nots.	Needs game or reward elements; ensure ease of navigation; be supportive of participation; need to consult game developers/ youth who play online games.

Employers (20) Response: 12 (60%) Gender: 17% M, 83% F Industries: - defence - pharmaceutical - utilities - age care - education - engineering - information technology	most appropriate 8 (75%) appropriate 4 (25%) not sure 0 (0%) not appropriate 0 (0%)	Positive - students can assess their written and verbal communications skills; the 3DVLE would engage students who do not seek face-to-face help; it can be tailored for a specific organisation /company; Negative: none	Is easily accessible; it provided good interview skills practice; it provided an opportunity for students to gain a non-academic understanding of industry; employers can upload information about their organisation.	The 3DVLE may not resonate with some students; the interview scenario did not have a panel of interviewers; the system seemed slow and not 100% user friendly; there was a lot of time spent walking to the scenarios.	Guidance be given to students with limited IT or English communication skills; incorporation of real organisational scenarios and settings; providing students with choices regarding body language and access to psychometric assessment; assessment centre practise; voice interaction; graduate employee reviews of their companies; employer use of the environment as part of their interview/recruit-ment process.

In response to the question seeking employer suggestions for interview questions and/or meeting topics, responses included:

- Interview questions – topics associated with time management; knowledge of organisation or industry; what drew them to the position; why they wanted to be an (engineer, accountant, etc.); skills and abilities they bring.
- Team work topics – how they are a team player; safety in the field; examples of a good team; influencing others; dealing with competing opinions.
- Problem solving topics – resolution of a customer complaint; strategies to overcoming problems; what would they do differently next time; handling competing priorities; things not going to plan; example of creative thinking.

Employer Focus Groups responses

Use of the 3DVLE and the scenario concept was well received by employers with some commenting it was "excellent". Discussion centred on the potential of the 3DVLE for wider employability skills development, linking the 3DVLE to employer information and resources, and how students do need to be better prepared for interview. Some employers saw it as important to introduce students to the staff meeting environment; one suggesting minute-taking practice.

Discussion

Overall, feedback on the use of the 3DVLE was positive, with 80% of students, 60% of teaching staff and 100% of employers indicated that the use of the 3DVLE was either appropriate or most appropriate. This contrasts with 92% of students and 25% of staff in the smaller, 2011 study. As anticipated, feedback from students related to the look and feel of the 3DVLE, staff input about improving the pedagogy and employer suggestions relating to workplace authenticity. Pedagogical changes as suggested by the academic respondents will be incorporated into the final design of the scenarios as will the inclusion of a range of elements which will provide more workplace authenticity. Interestingly, employer input also reflected a concern for students' interests. The number of 'likes' of all stakeholders were greater than the 'dislikes', with many suggestions for improvement. Stakeholder feedback also emphasised the motivational and interactive aspects of using the approach; a finding which is consistent with results obtained by others (Sweigart et

al, 2010; Tanti & Kennedy-Clark, 2010). Similarly, student comments of needing to interact and collaborate reflect Tanti & Kennedy-Clark's students' call of needing "more than just 'fast knowledge' " (p 966).

Several limitations of this study are apparent. It might have been better if the questionnaire had been given to the staff and employer groups before the focus group sessions. They may have responded differently. Employer and staff focus group sizes were small. Larger group sizes may have generated increased discussion thereby varied feedback and suggestions. Staff participants represented only three program groups perhaps skewing feedback results. Collection of feedback data from stakeholders is continuing, so over time with increased participation, the findings should provide a more balanced perspective.

Conclusions

Stakeholders enjoyed being involved in the project and provided valuable and actionable feedback. As a result, the design of the 3DVLE will be improved to provide students with an authentic, purpose built, user- centred, innovative way to engage them in activities designed to develop their work related attributes, and supplement traditional WIL approaches. The next stage of the research involves trialing the scenarios within the curriculum. This will involve one or two classes of students using the scenarios as part of their formal learning associated with communication, team work and/or problem solving. Feedback from these trials will inform the final stage of the project, which will involve comparing the use of the 3DVLE with traditional teaching methods (lectures and reading materials) to determine the effectiveness of the 3DVLE in assisting students to identify and develop their employability skills.

This paper reports on research into the development a 3DVLE designed to facilitate the ability of higher education students to identify and articulate three employability skills. Despite the small sample sizes the initial findings indicate that there is general stakeholder acceptance of use of the 3DVLE as an approach to teaching, learning and WIL. If the 3DVLE, as proposed, ultimately shows to be of benefit to students, it will added to the range of UniSA's WIL approaches from which students can select in order to meet their changing learning and work related needs, wants and expectations.

References

AAGE (2011). *The AAGE Employer Survey 2011: Survey Report*. London: High Flyers Research Ltd.

Access Economics (2008). *Future demand for a higher education*. Report by Access Economics Pty Limited for the Department of Education, Employment and Workplace Relations. http://www.deewr.gov.au/HigherEducation/Review/Documents/AccessEconomics.pdf

ANTA (2004). *Development of a Strategy to Support the Universal Recognition and Recording of Employability Skills: A Skills Portfolio Approach*. Canberra: Department of Education, Science and Training (DEST). Viewed 15th May 2010 at http://www.deewr.gov.au/Schooling/CareersandTransitions/EmployabilitySkills/Documents/FinalReportAllenConsulting.pdf

Belbin, R.M. (2010). *Team Roles at Work* (2nd ed). Oxford: Butterworth-Heinemann.

Berg, B.L (2004). *Qualitative research methods for the social sciences* (5th ed.). Boston: Pearson Education.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: SAGE Publications.

Curtis, D. and McKenzie, P. (2001). *Employability skills for Australian industry: literature review and framework development*. Report to the Business Council of Australia. Australian Council for Educational Research (ACER).

Dickey, M. D. (2005). Three-dimensional virtual worlds and distance learning: two case studies of Active Worlds as a medium for distance learning. British Journal of Educational Technology, 36, 3, 439–451.

Franklin, J.L. 2008 Dimensions of sound in virtual online immersive environments: a theoretical exploration. Dissertation for the degree of doctor of philosophy in the humanities, major in aesthetic studies, University of Texas, Dallas. Viewed 14th April 2010 at http://proquest.umi.com/pqdweb?vinst=PROD&fmt=14&startpage=-1&clientid=14273&vname=PQD&RQT=309&did=1654490281&scaling=FULL&vtype=PQD&rqt=309&TS=1271208144&clientId=14273

Gamage, V., Tretiakov, A. & Crump, B. (2009). Educators' perceptions about using MUVE for teaching. In Atkinson, R. J. & McBeath, C. (Eds) (2009). *Same places, different spaces. Proceedings ascilite Auckland 2009* (pp. 324-326). 26th Annual ascilite International Conference, Auckland, 6-9 December 2009 http://www.ascilite.org.au/conferences/aukland09/procs/gamage-poster.pdf

Graduate Careers Australia. (2007). Snapshot: University & Beyond 2007. Melbourne: Graduate Careers Australia.

Gregory, B., Gregory, S., Wood, D., Masters, Y., Hillier, M., Stokes-Thompson, F., Bogdanovych, A., Butler, D., Hay, L., Jegathesan, J. J., Flintoff, K., Schutt, S., Linegar, D., Alderton, R., Cram, A., Stupans, I., McKeown-Orwin, L., Meredith, G., McCormick, D., Collins, F., Grenfell, J., Zagami, J., Ellis, A., Jacka, L., Campbell, J., Larson, I., Fluck, A., Thomas, A., Farley, H., Muldoon, N. I., Abbas, A., Sinnappan, S., Neville, K., Burnett, I., Aitken, A., Simoff, S., Scutter, S., Wang, X., Souter, K., Ellis, A., Salomon, M., Wadley, G., Jacobson, M. J., Newstead, A., Hayes, G., Grant, S., & Yusupova, A. (in press). How are Australian higher education institutions contributing to change through innovative teaching and learning in virtual worlds? In G. Williams, N. Brown, M. Pittard, & B. Cleland (Eds), *Changing demands, changing directions. Proceedings ascilite Hobart 2011* (pp.475-490). Hobart, Australia: University of Tasmania.

Holmes, J. (2007). Designing agents to support learning by explaining. Computers and Education, 48, 523–525.

Kluge, S., & Riley, L. (2008). Teaching in 3D-virtual worlds: Opportunities and challenges. *Issues in Informing Science and Information Technology*, 5(1), 127-135.

Mather, J. (2012). Universities make more offers as caps scrapped. *Financial Review.* Published 18 Jan 2012, posted on http://afr.com/p/national/universities_make_more_offers_as_5eWBRjFEiE8KR3hVlsCquO

Patrick, C-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL [Work Integrated Learning] report: A national scoping study [Australian Learning and Teaching Council (ALTC) Final report]*. Brisbane: Queensland University of Technology. Available online at: www.altc.edu.au and www.acen.edu.au

Starĉiĉ, A.I. (2008). Developing virtual simulation game for authentic learning: realizing partnership between university and industry. *WSEAS Transactions on Communications, 7(7), 786 – 795.*

Stokes-Thompson, F. Wood, D. and Scutter, S. (2011). Facilitating the ability of graduates to articulate their employability skills through the use of a 3D virtual learning environment. In G. Williams, N. Brown, M. Pittard, & B. Cleland (Eds), *Changing demands, changing directions. Proceedings ascilite Hobart 2011* (pp.1190-1200). Hobart, Australia: University of Tasmania.

Sweigart, L., Hodson-Carlton, K., Campbell, Brandon & Lutz, D.R. (2010). Second life environment: a venue for interview skill development. *Computers, Informatics, Nursing,* 35, 258-263.

Tanti, M. & Kennedy-Clark, S. (2010). MUVEing slowly: applying slow pedagogy to a scenario-based virtual environment. In C.H. Steel, M.J. Keppell, P. Gerbic & S. Housego (Eds.), *Curriculum, technology & transformation for an unknown future. Proceedings ascilite Sydney 2010*, (pp. 963-967). Viewed 7th June 2011 at http://www.ascilite.org.au/conferences/sydney10/procs/Tanti-concise.pdf

Urbis (2011). *National career development strategy (NCDS) research project. Element 2: Quantitative research*. Canberra: Department of Education, Employment and Workplace Relations (DEEWR) Viewed 3rd May 2012 at http://www.deewr.gov.au/Schooling/CareersandTransitions/CareerDevelopment/Pages/default.aspx

Copyright © 2012 Frederick Stokes-Thompson, Denise Wood, Sheila Scutter, Troy Dobinson

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Development of processes and assessment to facilitate a broad multidisciplinary Work Integrated Learning package

Karen Sutherland
Monash University
Mark Symmons
Monash University

Work Integrated Learning (WIL) units are often discipline specific and constructed for majors or degrees with a strong vocational orientation. The current paper describes a new undergraduate unit with its genesis in an effective and very successful public relations internship. The original unit enjoyed strong support from industry partners and was instrumental in many graduates securing employment upon or before graduation. The school owning the public relations major also offers majors and degrees in other communications and social sciences disciplines, some vocational and some not. The school sought to capture the eagerness of students to engage in workplace participation, but against an institutional imperative to consolidate teaching activities, creating internships or industry placements for each discipline was out of the question. The principal challenge was to create sufficient genericism without diluting the success enjoyed by the PR internship program or detracting from the need for effective WIL outcomes. The result was a set of processes and assessments and management practises that could be efficiently and readily adopted by any participating discipline. Thus the unit could run every semester and separate disciplines could opt in or out depending upon demand. Efficiencies were to be optimised while still delivering the outcomes desired by students, industry partners, and the academics involved.

Keywords: Work integrated learning, WIL, internship, placement, curriculum, assessment

Background

Work Integrated Learning (WIL) has been defined by Patrick, Peach and Pocknee (2009:iv) as "an umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum." The prevalence of WIL units in formal education is increasing internationally, with European countries, the United States and Australia paying close attention to providing students with opportunities to meld theoretical knowledge with practice. (Costly, 2006). In the Higher Education sector, improved graduate employability remains a key objective behind the inclusion of WIL unit in degree programs. McIlveen et al (2008:14) define graduate employability as the "relationship between present and future industry and community demands for specific labour (as knowledge and skills), and concomitantly, the labour an individual has to offer. With graduate employability a commonly promoted buyer benefit used by Higher Education institutions in the marketing of their course offerings, tertiary institutions are under increasing pressure to provide ample opportunities to deliver on such promises.

WIL units are often discipline specific and constructed for majors or degrees with a strong vocational orientation. One highly successful program within the School is the public relations internship unit where, on average in 2011, one third of students have been offered employment from their placement providers before graduation. Additionally, there were a number of different WIL-type units existing within the same school (many very similar), leading to duplication in terms of administrative resources. Further, some disciplines did not have the justification or resources to develop their own internship but wished to offer WIL to their students. A recent online survey of 68 students within the school showed that 74.6%(50) would undertake a WIL unit in their discipline if one was available and that 95.6% found WIL to be extremely important (66.2%, 45) or reasonably important (29.4%, 20).

A broad multidisciplinary Work Integrated Learning package

The school sought to leverage the eagerness of students to engage in workplace participation while they were still completing their degrees, but against a backdrop of reducing and consolidating teaching activities creating internships or industry placements for each discipline was not economically viable. The principal challenge was to create sufficient genericism without diluting the success enjoyed by the existing Public Relations internship program or detracting from the need for effective WIL outcomes. Therefore, the development of a broad multidisciplinary WIL package may prove to meet both objectives. A feature of the approach is a generic shell in terms of its theoretical and pedagogical framework, so that a range of disciplines (despite their vast differences) would be able to function effectively, yet autonomously within the shell. This required a curriculum review of all participating disciplines in terms of their current WIL units or how one would fit into their current courses and close consultation with Discipline Heads in order to maintain the balance between genercism and the distinctiveness of each academic field.

The development process

The first step was to gauge interest within the School as to which discipline heads could identify the benefits of a broad multidisciplinary WIL package for their discipline. Emails and face-to-face meetings helped to ascertain that out of 11 disciplines within the School, six disciplines were enthusiastic to be involved in the development of the unit. With the disciplines confirmed, an audit was undertaken on the participating disciplines to answer the following questions:

- Did the discipline already have a WIL unit?
- If so, how was it structured in terms of entry requirements, perquisites, how students were placed, placement hours, contact hours and assessments.
- Could the current unit be disestablished and be absorbed into the broad multidisciplinary WIL package without compromising course accreditation with industry organisations such as the Public Relations Institute of Australia?

Three out of the six disciplines (Public Relations, Social Welfare and Journalism) had existing WIL units and each varied in the conditions that they were questioned about above. Representatives from each discipline communicated regularly via email and teleconference to discuss the similarities and differences between the units in terms of their effectiveness in meeting their objectives of improving graduate employability and efficient use of resources.

While there were differences between existing units, a number of similarities were discovered, especially in terms of the administrative process in terms of managing students undergoing internships or practical placements.

Employer agreement paperwork is one example. It is a requirement of the University that the placement provider, the student and the unit coordinator sign an agreement that lists the legal requirements of all parties involved in the placement process. However, the University does not offer a standardised form and as a result, each discipline within the School has created their own. Such duplicatory processes will be streamlined in order to save time and resources.

To further accommodate the differing requirements for each discipline, broad ranging and non-specific terms were to be utilised in the unit description. For example:

Contact and placement hours

Students are required to attend two hours of generic internship seminar/discussion plus two hours of discipline-specific seminar/discussion at the start and end of the semester to deal with expectations (of and from students), assessment, procedures, policies, etc. The remainder of the time (approximately 12 hours per week across 10 weeks) will be spent on assessment tasks, participation in online discussion, assembling a portfolio, and engaging in internship activity, consisting of a further 70 to 160 hours of internship in a relevant workplace approved by the discipline supervisor.

Providing a broad scope provides leeway for a range of disciplines to take advantage of a WIL opportunity for their students that they may not have had previously. Whilst one Unit Coordinator will manage the administrative processes for the school, each discipline would supply a supervisor to deal with their discipline's students throughout the WIL process. This would reduce the need and the costs involved with having a unit coordinator for each discipline.
A similar process was involved with developing the assessment tasks for this unit.

Assessment development

The group discussed at length what assessment tasks would be most appropriate in meeting our objectives of improving graduate employability and increasing efficiency within the School. The three units had some tasks that were similar for example, a reflective diary written by the student detailing their learning and development throughout the placement. Therefore by gleaning the elements from the most effective assessment tasks from each existing WIL unit and taking full consideration of the requirements of the disciplines new to WIL the following tasks were approved:

Learning contract 450 words, 10%
Portfolio 2000 words equivalent, 45%
Employer evaluation Hurdle, pass/fail
Reflection piece 2000 words, 45%

Again, the titles of these tasks encapsulate the objectives of those from the existing WIL units, yet are broad enough for each discipline supervisor to customise them for their own students. Similarly, while the unit guide for this unit would contain the generic information, an insert developed by each discipline supervisor will be developed to further explain the interpretation of the unit for their relevant discipline.

Discussion and further research

The Faculty of Arts recently approved the proposal for this unit to commence at the beginning of the 2013 academic year. From that time the experiences of students and staff associated with the unit will be tracked to determine its effectiveness in meeting its objectives. If it is successful, it could pave the way for other disciplines, which are normally not associated with WIL, to offer students a work placement experience. Furthermore, it could also begin the discussion around what similar units from differing disciplines being redeveloped in the same way.

References

Costley C (2006), Work-based learning: assessment and evaluation in higher education, *Assessment & Evaluation in Higher Education, 32:1, 1-9*

McIlveen P, Brooks S, Lichtenburg A, Smith M, Torjul P and Tyler J (2008), *Career Development Learning & Work-integrated Learning in Australian Higher Education: A Discussion Paper*, viewed: 25.03.12: http://eprints.usq.edu.au/4255/

Patrick C, Peach D and Pocknee C, (2009), The WIL Report – *Work Integrated Learning, A National Scoping Study,* viewed: 22.08.12: http://eprints.qut.edu.au/44065/1/WIL-Report-grants-project-jan09.pdf

Copyright © 2012 Karen Sutherland, Mark Symmons

The authors assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the authors.

Using a Work Integrated Learning (WIL) model for preparing Skilled Migrants for Australian Employment

Freny Tayebjee[22]
Careers and Cooperative Education, University of Western Sydney
Srivalli Nagarajan
Professional and Community Programs, UWS College

This paper describes experiences and reports on findings from a recent Work Integrated Learning (WIL) pilot project - Skillmax Plus. The program was funded by NSW Adult Migrant English Service (AMES) and offered through University of Western Sydney College (UWSC) in collaboration with Careers & Cooperative Education, University of Western Sydney (UWS). It used a WIL model that comprised course work followed by work placement. The participants were skilled migrants seeking employment in their chosen profession. The course work component focused on the development of greater awareness of Australian workplace culture and job seeking skills. The work experience component provided the real world experience. Such programs and initiatives have specific implications for skilled migrant employment and general implications for the whole Australian skilled migration program which aims to address skill shortages.

Keywords: Skilled Migrants, Long term unemployed, work integrated learning and skill shortages

Background

Overseas born migrants form a critical cohort of the Australian workforce. This cohort accounts for 57% of Australia's annual population growth (ABS, 2012a**)** and importantly 76% (ABS, 2012b**)** of all overseas born migrants are of working age (15-64 years). Migrants usually come to Australia under the skilled migration (67% of the total Migration Program) or the family reunion program (32%) (DIAC,2012). The criteria for applying for skilled migration to Australia are modified regularly, but addressing skills shortages in specific areas has always been a high priority for the Australian government. In fact migration is regarded as one of the most effective means of addressing skills shortages in Australia (DIAC, 2012; ABS, 2012e). However, the reality is that many well qualified migrants with years of relevant experience are unable to get an appropriate job in their field.

The Labour Force participation rate of recent migrants is reassuringly high (over 74% in 2010 compared to Australian born which is 69%) (ABS, 2012c). However, it is when this figure is unpacked that the more interesting information is revealed: such as the unemployment rate which is 6.3% as compared to 3.2% of Australian born unemployed and more importantly that only 53% were employed in the occupation nominated in their visa (ABS, 2012d).

One can assume that migrants in general may not have the support of family or resources and consequently need to get a job as soon as possible, hence the high Labour Force participation rate – but they may be forced to take up jobs in areas outside their chosen profession – hence the large number of engineers, architects and teachers driving taxis in Sydney and Melbourne! Notwithstanding the great waste in human resource and potential social capital, such skilled migrants also face the inevitable "human" consequences of frustration, family breakdown and clinical depression (Kennedy and McDonald, 2006).

Chang (2003) reported on a study of skilled and unskilled migrant groups in Australia on the effects of these groups on the national unemployment rates. The results suggest that the general perception that skilled migrants were 'job robbers' was incorrect. According to the study, skilled migrants are not "job robbers" as their work contribution leads to growth in the economy creating more jobs. On the other hand, unskilled migrants compete with Australians for unskilled work which contributes to fewer opportunities for Australians. This is another reason why it is important that skilled migrants are employed in skilled jobs.

It should be noted that international students can migrate under the skilled migration program if they have successfully completed at least two years of education with an Australian education provider. Preparation of such students during their study before they are granted skilled migrant visas is critical. In their review of the Australian higher education final report to the Australian Government, Bradley et al. (2008) state that "a holistic approach needs to be taken to "better supporting students (both domestic and international) to improve their experience on campus and ensure their work readiness in the global environment".

[22] Careers and Cooperative Education, University of Western Sydney,+ 61 2 4736 2376, f.tayebjee@uws.edu.au

Bradley et al. (2008) further recommend that when preparing overseas migrants (who initially come to Australia as international students) "governments and higher education providers need to place a much greater emphasis on the preparation of international students for the world of work and particularly for working in Australia. This should include a greater focus on English language proficiency that goes beyond the language competence required for the course and adequately prepares students for the working environment. Providers should give serious consideration to the development of work-placement programs to assist international students to become work ready in the Australian context."

Support for Skilled Migrants in NSW

The Australian government has a number of support programs for migrants (skilled or family reunion migrants) to assist them to settle and find suitable employment. In NSW, AMES offers a range of courses for migrants, refugees and humanitarian entrants (AMES, 2012). One of the main objectives of these courses is to provide assistance to all migrants to learn and develop their English language skills, job seeking and workplace skills for successful settlement in Australia. Some of the courses they offer for skilled migrants are English For Employment (EFE), Skillmax and Public Sector Online - Skillmax. While the EFE course covers all the job-seeking skills and topics that are also covered in a Skillmax course, it also covers more English language skills including awareness of workplace culture and English language pronunciation. As the name suggests the Public Sector Online course is delivered online and assists participants to develop their language skills so that they can improve their career opportunities in the public sector. AMES also has a comprehensive website and databases on resources for migrants such as information on the labour market, recruitment practices in Australia, work place rights and responsibilities and employment expos and events.

About Skillmax Plus Program

UWSC is one of the providers approved by NSW AMES for offering Skillmax programs since 2010. UWSC staff noted that although many of the Skillmax students who completed the course seemed to have the majority of ingredients for success (such as discipline specific skills, relevant industry experience, satisfactory completion of the course and acceptable English language skills) they still experienced difficulty in securing suitable jobs, primarily due to lack of local work experience. In 2011, a proposal was put forward by UWSC to AMES to offer additional language and work placement support for skilled migrants as an enhancement to the Skillmax course. A decision was made to collaborate with the UWS Careers & Cooperative Education (CCE) unit to extend the course and include professional work experience. The new course was called Skillmax Plus. After receiving approval from NSW AMES the course was piloted in September 2011.

UWSC delivered the Skillmax Plus course or the theory component. Three guest speakers from industry presented their perspectives on employer expectations and provided job seeking tips. A half-day workshop on pronunciation skills was also conducted. During the course, staff from CCE unit which runs a very successful internship program for UWS students took responsibility for placing Skillmax Plus students with suitable employers for their internships. The Skillmax Plus cohort involved reverse marketing – instead of finding the best student for a job opportunity, CCE staff had to find the best employer for each student. Despite having contacts in a large number of organisations, the unit found it extremely difficult to get employers to commit to taking on a mature age student to work, albeit for no pay. There was the added constraint, as specified by AMES the funding body, that the four weeks of work experience had to be completed within a seven week period. Employers not only had to agree to host the student, they had to agree to do it almost immediately – which made it very hard.

CCE staff decided on a new modus operandi: to get the students to put their job seeking skills into practice and play a lead role in their work experience quest. Students were asked to research and identify two "dream jobs" in Sydney. They had to research the organisation in-depth and take into consideration factors such as the ethos of the organisation, the location (ease and cost of commuting – a critical factor for many migrants who do not own a car and are not eligible for any travel concessions), the disciplines from which that organisation generally recruits and whether a job with that organisation would enhance their career. In addition students had to identify the name and contact details of a specific person in that organisation in whose area they would like to work and the position they would realistically like to work in. Students were advised that it was not necessary for the organisation to be currently recruiting for someone with their particular skills. In fact if the organisation was recruiting it could reduce the student's chances of gaining work experience as it would be construed as interference with the objectivity of the hiring process.

The students were asked to prepare a resume and cover letter targeting the job and organisation identified by them. This process forced students to apply a range of skills which they had learnt in the course. They also received the support of

the UWSC trainer who was able to assist, advise and enhance their resumes and letters of application – which understandably went through a number of iterations.

Importantly, the students were instructed that on no account were they to contact anyone in the organisation about their "dream job". It was the role of CCE staff to act as the liaison between the student and the organisation and to contact the targeted person. CCE staff explained to the potential employer that UWS was arranging work experience for migrants who have the education and skills and that the students regard working with them to be their "dream job" and requested that the student be hosted for four weeks. The reactions of most employers were initial surprise, followed by feeling flattered and then cautious interest in the program. In general there was a very positive response with several employers recalling their own experience as a migrant or that of a colleague.

The student's application letter and a resume were emailed to the employer and followed up with a phone call. Whilst several employers explained why they could not participate (too close to Christmas and the holiday season, no suitable space for student, no one to supervise the student, in the midst of recruiting for that or similar position) most made a real effort to accommodate the student.

The CCE team was delighted when finally four out of the 13 students were placed in their dream job. The remainder were placed through contacts both professional and personal. The most helpful contact was UWS itself, which is one of the largest employers in Greater Western Sydney, and hosted five students. Students were supported during their work experience with regular phone calls, a facebook site where students and the CCE team regularly posted messages and a few site visits. Student feedback was very positive with students, with one exception, indicating it was a very valuable experience. One student considered the placement to be at a much lower level than his ability warranted and said the work was boring and unsuited to his skills.

At the end of the work experience there was a celebration for students and their industry partners. An industry partner and a student reported on their experiences. One student and one industry partner received Outstanding Awards based on nominations received.

More importantly, four students were retained for ongoing work by their employers (to date they are still employed). Two students after completing their placements decided to enrol in post graduate courses, one for a Masters in Hydrology – the area in which she worked – and one for a PhD with her UWS supervisor for the work experience. The rest of the students gained employment in their chosen professions.

What was especially pleasing was the turnaround in attitude of a couple of students. One student in particular who had worked at senior levels in several countries had become bitter and cynical after being unemployed for over a year and frequently expressed his frustration to staff. After his "dream job" was arranged his attitude changed completely, becoming a mentor for other students and supportive of the Skillmax Plus course.

WIL Methodology

The success of the Skillmax Plus program is attributed to the underpinning WIL methodology used in the design, delivery and assessment of the program. According to Patrick et al. (2009), WIL includes a "range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum". The WIL model used in Skillmax Plus (Figure 1) comprised a five weeks course that assisted participants with developing a career portfolio including a resume and cover letter suitable for Australian employers. Career management skills and workplace language, customs and culture were also covered during the course. Both the course work and work experience provided students with multiple opportunities to reflect upon their experiences and understand their own progress from the start to the end of their Skillmax Plus journey. By its design, the WIL model used in the Skillmax Plus course enabled transformative learning, situated learning (Lave and Wenger, 1991) and reflective learning to occur, ensuring students developed both career management and self management skills that are applicable to Australian employment.

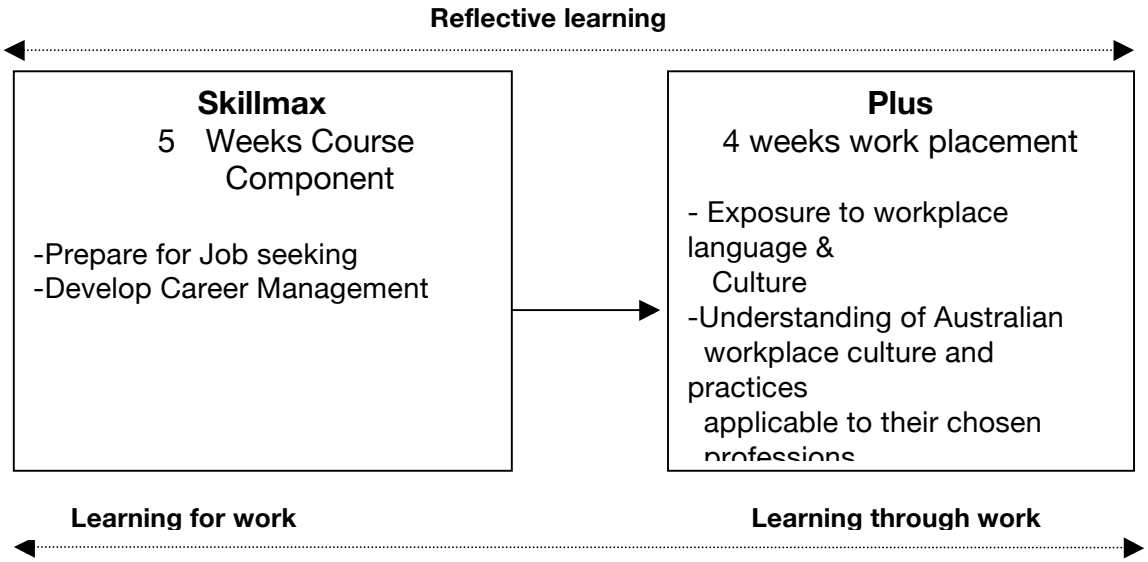


Figure 1: WIL Methodology for Skillmax Plus Program

Study Implications and Conclusions

There are implications arising from running the Skillmax Plus program, which are discussed below.

Personal implications: The skilled migrants who participated in the program indicated that they experienced increased self-confidence and high motivation. Some students who were depressed at the beginning of the course due to repeated episodes of failure at securing employment were grateful for the support provided during the program. Hence, programs such as Skillmax Plus have implications for the morale of skilled migrants and their successful settlement in Australia.

Professional implications: Skillmax Plus developed skilled migrants' awareness of the expectations of Australian employers and the Australian workplace culture. This has implications for employer acceptance of skilled migrants and the Government's initiatives for addressing skill shortages. Anecdotal evidence suggests that Australian employers hesitate to hire skilled migrants because of the fear of how they might (or might not) fit into their workplaces and roles. By taking skilled migrants who have been through preparatory programs such as Skillmax Plus that element of uncertainty is reduced.

Reputational implications: A mismatch in alignment of employer expectations of skilled migrants and government initiatives to allow skilled migration to address skill shortages has potential implications for Australia's reputation as a destination for future skilled migration. In their discussion about the relevance of internationalisation of the Australian Education to Skilled Migration, Bradley et al.(2008) state that "adopting a more coordinated approach across governments to better align policies supporting industry development, regulation and quality assurance and facilitating skilled migration is necessary as part of the internationalisation."

Conclusion

Feedback from the Skillmax Plus program indicated that skilled migrants found the program extremely valuable for developing their understanding of job seeking in Australia and gaining local experience. Many of the skilled migrants who participated in the Skillmax Plus program stated that they were unaware of such support programs for skilled migrant job seekers prior to their arrival in Australia.

Based on the Skillmax Plus program and research it is recommended: that all skilled migrants be informed about the existence of employment support programs prior to arrival in Australia, highlighting that such preparatory programs will increase their chance of gaining appropriate employment; secondly that participation in these courses be made mandatory (or at least strongly recommended) when granting skilled migrant visas; and thirdly that a national portal be created (similar to an approved national register or database) that lists all skilled migrants who have successfully

completed programs such as Skillmax or Skillmax Plus. Making such databases available for employers will increase the number of employers who are willing to take on migrant workers and mitigate their fears about whether migrant workers will fit into Australian workplaces.

References

ABS 2012a, *3412.0 - Migration, Australia, 2009-10, Migration in Context,* Australian Bureau of Statistics, viewed 21st May 2012 http://www.abs.gov.au/ausstats/abs@.nsf/Products/EE73D7457672E486CA2578B00011957F?opendocument

ABS 2012b, *3412.0 - Migration, Australia, 2009-10, Australia's Diverse Population,* Australian Bureau of Statistics, viewed 25th May 2012 http://www.abs.gov.au/ausstats/abs@.nsf/Products/0D5A016809789E35CA2578B0001195B1?opendocument

ABS 2012c, *3416.0 –Perspectives on Migrants, 2011,* Australian Bureau of Statistics, viewed 25th May 2012 http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/3416.0Main%20Features22011?opendocument&tabname=Summary&prodno=3416.0&issue=2011&num=&view=

ABS 2012d, *6250.0 –Characteristics of Recent Migrants, Australia, Nov 2010,* Australian Bureau of Statistics, viewed 25th May 2012 http://www.abs.gov.au/ausstats/abs@.nsf/Products/6250.0~Nov+2010~Main+Features~Employment?OpenDocument

ABS 2012e, *3416.0 –Perspectives on Migrants, 2009,* Australian Bureau of Statistics, viewed 29th May 2012 http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/3416.0Main%20Features22009?opendocument&tabname=Summary&prodno=3416.0&issue=2009&num=&view=

AMES 2012, *Programs for Migrants, Refugees and Humanitarian Entrants*, NSW Adult Migrant English Service (NSW AMES) viewed 20th May 2012 http://www.ames.edu.au/content/coursemigrants.aspx

Bradley, D., Noonan, P., Nugent, H. & Scales, B. 2008, *Review of Australian Higher Education: Final Report*, Australian Government, viewed 1 September 2010 http://www.deewr.gov.au/HigherEducation/Review/Pages/default.aspx

Chang, H-C. 2003, *Do immigrants rob jobs? A case study of Australia*, Department of Economics, The University of Melbourne, Research Paper No. 883, November 2003, Melbourne, Australia http://www.economics.unimelb.edu.au/downloads/wpapers-03/883.pdf

DIAC 2012, *Australian Immigration Fact Sheet 24 – Overview of Skilled Migration to Australia,* Department of Immigration and Citizenship viewed 25th May 2012 http://www.immi.gov.au/media/fact-sheets/24overview_skilled.htm

Goldsmith,S., and Lynne, V. 2011, *Skilled Migrants – from desirable to invisible*, The Conversation– Debate and Ideas Newsletter viewed 22nd May 2012 http://theconversation.edu.au/skilled-migrants-from-desirable-to-invisible-1233

Kennedy, S and McDonald, J.T. 2006, Immigrant Mental Health and Unemployment, *Economic Record*, 82(259), 445-449

Lave, J. & Wenger, E. 1991, *Situated Learning: legitimate peripheral participation*, Cambridge University Press, Cambridge.

Patrick, C., Peach, D., Pocknee, C., Webb, F., Fletcher, M. & Pretto, G. 2009, *The WIL [Work Integrated Learning] report: A national scoping study; Australian Learning and Teaching Council (ALTC) Final report]*, Australian Learning and Teaching Council.

Copyright © 2012 Freny Tayebjee, Srivalli Nagarajan

The authors assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the authors.

What do children say about school social workers?

Doris Testa
School of Social Work, Victoria University, Melbourne

Abstract

This research reports on primary school children's experiences of programs facilitated by social work students. This is the first documented research on how Victorian primary school children experience social work students undertaking field education. Data indicated that the student social workers' contribution in a particular model of health promotion enhanced the social, emotional, and personal wellbeing of primary school aged children aged between six and eleven. They facilitated social inclusion programs and access to resources otherwise denied children located in economic social and political disadvantaged circumstances.

Keywords: children, research, schools, social workers, field placement

Introduction

The Australian Association of Social Work (AASW), the registering body for Australian social workers, is clear about the centrality of field practicum. Instructing universities to give the field practicum 'full academic' status, the AASW stipulates that students must undertake seven hundred and eighty hours of field placement in two different social work settings over two academic years (AASW, 2008). Field practicums potentially validate the student's choice to pursue a social work career or become the catalyst for the student's decision to abandon the career choice altogether (Beddoe and Maidment, 2009).

This article, the only Victorian school social work research that includes data collected from primary school aged children, school staff, parent community, social work students, and field education coordinators, documents students' views on the success or otherwise of the field practicum. This is particularly important since it addresses the right of children to make their needs explicit and heard (WHO 2000,2003.
While results of the broader research are explored elsewhere, by reporting what primary school students have said about the involvement of social work students in wellbeing being programs, we can see how the field practicum helped offset, or not, the circumstances that distract students from engagement and inclusion in schools.

The St Paul's Model (The Model)

St Paul's School is located in the low socio economic Western suburbs of Melbourne and populated by children and families from culturally and linguistically diverse backgrounds. The aggregated school population over twelve years was 453 representing 308 families. While principal of the school, I, dually qualified in education and social work, designed, and facilitated the Model. The Model developed organically over a twelve-year period, 1994 to 2005, was designed to offset the social, emotional, economic and structural factors that impede primary school aged students ability to attend to teaching and learning programs.

Third or fourth year social work students undertaking their filed practicum, were responsible for delivering a number of programs that targeted the spectrum of interventions (i.e., prevention, early intervention, intervention and restoring resilience) identified in health promotion literature as key foci areas for health promotion (Health Promoting Schools Unit 2004). These students were from six Victorian universities (i.e., RMIT, Latrobe, Monash, Deakin, Victoria University and the University of Melbourne). Table 1 below lists the programs that involved social work students.

Table 1: Model Components by year introduced

Model component and description	Program start
Lunch Program	1994
Classroom Program	1994
Breakfast Club	1994
Camp Program	1995
Research: 'Vietnamese Participation in St Paul's School'	1996
Submission writing for material aid, crisis support, community development	1996
SEASONS:	1997
Research: Bullying audit	1999
Transition Program: induction programs of year prep, year six and parents to new school	2000
Swimming Program	2000
Welfare committee referrals interdisciplinary committee	2001
Research: Parent/carer experiences of the enrolment processes	2001
School Focused Youth Service committee representation:	2002
Playground Program (social skills program	2003
Homework Club	2004
After School Hours Care Program policy and program development	2004
Community Development – Artist in Residence Program and Jubilee celebrations	2005
Research: Breakfast Club report	2005
Research: Bullying audit	2005

Source: Research data

Prior to placement students had successfully completed direct practice units of study. While on placement the social work field education practicum emphasised the three characteristics of professionalism: theory, practice and research (Beddoe & Maidment, 2009) and was purposefully structured to guide the social work student through the process of integrating theory and practice. The placement began with a two-week period of orientation to the schools' staff, programs, policies and practices which focused students on the goals, values and ethics shared by teachers and social workers, the interdependence of students wellbeing and student wellbeing and classroom observations and meetings with staff members. In week three students developed their learning goals. These learning goals drew on the AASW (2006) '*Practice standards for social workers in schools'* and formed the basis of the Universities' student competency and skills assessment.

During the orientation phase, students had daily contact with the supervisor. Together the student and supervisor discussed the significant points of overlap and difference between teaching and social work skills and knowledge. Following the orientation phase of the placement, social work students, in collaboration with the social work supervisor, were allocated responsibility for particular program areas. Weekly individual and/or group supervision, central to the learning experience, provided a forum for the learning review to ensure that social work students had the educative, supportive and administrative functions of supervision (Beddoe & Maidment, 2009).

Throughout their placement, social work students used reflective journals, case notes, group presentations to the teaching staff, peer presentations, and daily updated e-folios as the main teaching and learning tools. Between formal supervision sessions, social work students were required to keep an e-portfolio containing critical reflections, case notes and program, project and policy development notes. The supervisor had daily access to these online files and gave daily feedback, suggesting future actions or readings and noting topics for supervision. Additionally social work students were clear that they could have supervision on an 'as needed' bases, formal and/or informal.

Methods

In accordance with Chapter 4.2: Children and Young People of the National Statement on Ethical Conduct in Human Research (National and Medical Research Council 2007), consent for the participation of the primary aged students was obtained from a parent or guardian as well as the young person. To ensure that my historical links would not

contaminate the research and negatively impact on the validity and trustworthiness of the research, an external 'experts' i.e. two experienced social workers and one teacher, monitored each research stage. Bimonthly meetings were held to review data, data analysis, provide feedback, challenge my assumptions and conclusions, and suggest future analysis considerations. The recruitment of participants and the facilitation of the focus group were delegated to the school based student wellbeing coordinator. Such an approach addressed the internal validity of the data while also returning data on the Model's transferability to other school settings thus addressing the external validity of the data.

Data gathered and presented in this article informed the following research question:

1. Are the formal and collaborative professional arrangements employed in the St Paul's Model effective in addressing and promoting student wellbeing?

A mixed methods approach to data analysis (Creswell, 2005), was employed. Primary students attended one focus group and completed a simple survey. Focus group notes and surveys were collected at the conclusion of the sessions and provided qualitative and quantitative data for analysis. This data was analysed through a process of reading through for familiarity, followed by a collation and categorisation process in order to address the research questions.

Participants

Participants were bounded by *place,* that is, St Paul's school students, school teachers, Parent Partnership Team members, Victoria University social work students and Field Education Coordinators; *time,* that is, 1994 to 2005, the time that that social work supervisor/principal was employed at the school; and *experience,* that is, participants who had been involved in or who had knowledge of the St Paul's Model from 1994 to 2005 (Corbin 2005). Table 2 indicates the number of research participants.

Table 2: Research Participants by number and cohort (N=72)

Teachers	Primary school students	Parents/ carers	Social work students	Field Education coordinators
20	20	10	18	4

Source: Research data

The following sections report on the data collected from the primary school students.

Results and discussion

Primary school students provided qualitative and quantitative data on the Breakfast Club, Homework Club, SEASONS: Grief and Loss Program, Classroom Program, Playground Program and the Anti Bullying Program. The following sections discuss the data.

Breakfast Club

The Breakfast Club was open to any student. Funding for the Breakfast Club was sourced by the social work students and thus the cost to those attending was nominal (fifty cents per family or free if families were unable to contribute).

Table 3: Knowledge of Breakfast Club (N=20*)*

"I heard of the Breakfast Club from"	
A teacher	7
A friend	10
Social work students	3

Source: Student survey

As Table 3 indicates the students were the best advocate of the Breakfast club, followed by the teachers and social workers with students highlighting the role the club played in addressing their ability to attend to teaching and learning: "I could think more." (Student 5)

"Except sometimes you're late for school and you can't come to Breakfast Club or you're late and then you go to class … the teachers aren't worried if you're late and you're at Breakfast Club." (Student G)

One student also commented that the Breakfast Club influenced his attitudes toward the health benefits of having breakfast:
"I learnt that Breakfast Club is important – it keeps you thinking." (Student N)
Other students recognised the how the Breakfast Club responded to family cultural or structural circumstances:
"I like eating toast, because you don't get it at home, sometimes." (Student N)

"Your mum and dad go to work early so I don't get breakfast." (Student H)
Responses also indicated the contribution the Breakfast Club made to a positive school ethos:
"It was good; I made friends." (Student 3)

"Sometimes you were scared but after Breakfast Club it was OK." (Student S2)

"It's important because you talk to [the social work students] about things." (Student D2)

"[The] Breakfast Club makes me feel safe." (Student 4)
As indicated in Table 4 below, survey results confirmed the positive view of the Breakfast Club.

Table 4: Students' ranking of Breakfast Club (N=20)

"I liked the Breakfast Program"	Total
Really, really agree	12
Really agree	8

Source: Student survey

Social workers were also responsible for the facilitation of the Homework Club.

Homework Club

Operating two days a week between the hours of 3 and 4 pm in the school library, along with providing access to technology, the Homework Club aimed to develop positive study habits in senior students and prepare them for the transition to secondary school. As shown in Table 5, data indicated that students highly valued their participation in the Homework Club.

Table 5: Student ranking of the Homework Club (N=7)

"I liked the Homework Program"	Total
Really, really agree	6
Really agree	1

Source: Student survey

Students promoted the Homework Club as giving them access to resources not otherwise available to them:
"I worked in the library, I could use the internet. We don't have the internet at home." (S)
Students also viewed the Homework Club as bridging the cultural capital gap created by new curriculum content, families' alienation from the school curriculum and their parents' inability to understand Australian language schooling processes, level of schooling and their unfamiliarity with the English. . For these students, the Homework Club provided the academic and linguistic support they needed to complete their homework, negotiate schooling tasks and opportunity and space to work towards the standards and measures set by federal and state education policies:
"I have to do my homework at home – my mum doesn't speak English. I could ask people at [the] Homework Club to help me." (Student 2)

> I like [the] Homework Club because I could learn more because I could get help with my homework. I can't get that at home." (Student E)

Some students also participated in the SEASONS program.

SEASON Program: program for grief and loss

The SEASONS program is a program run for children who have, or are currently experiencing loss and grief. Students self referred or were referred by teachers or parents/carer's to the twelve session, weekly run group program.

Focus group data indicated that the SEASONS program was valued by students as being both effective and necessary in addressing wellbeing issues that may otherwise interfere with the students' emotional availability to teaching and learning programs. Students stressed the importance of the program in developing their emotional competencies and building their resilience:
"I think SEASONS is great because we talk about feelings." (Student B)

"Being part of SEASONS is great because you get to express your feelings, talk about problems and family." (Student M)
And saw the program as linking them with other students who had experienced feelings of loss and grief:
"I learnt that other kids think the same as you and that they have things happen the same as you." (Student E)
Students also participated in the Classroom program.

Classroom Program

In the Classroom Program social work students worked with identified students whose behaviour was not significantly problematic but who needed to improve their classroom participation skills such as listening to directions and completing assignments. As indicated in Table 6, students who participated in the Classroom Program, strongly endorsed the program and the social work students' involvement in this program.

Table 6: Students' ranking of the effectiveness of the Classroom Program (N=20)

"Social work made my time in the classroom easier"	Total
Really, really agree	8
Really agree	12

Source: Student survey

Students stressed that the Classroom program developed helpful relationships between the social work students and themselves and that this relationship had an impact on their engagement with teaching and learning programs:
"Working in the classroom [the social work students] helped my work." (Student D)

"It was easier to understand my work with someone helping me; sometimes the teacher hasn't got time." (Student A)
Students also had a chance to participate in the Playground Program.

Playground Program

The Playground Program was focussed on creating a safe school environment and in assisting students to develop the necessary social skills that are required to participate in safe, friendly and sociable playground activities e.g., manage conflict, engender a sense of belonging. As with other programs students could self refer or be referred to the program by teachers and/or parents. Table 7 illustrates the high level of student satisfaction with the Playground Program.

Table 7: Students' ranking of Playground Program effectiveness (N=20)

The social work students 'made my time in the playground easier'	Total
Really, really agree	15
Really agree	5

Source: Student survey

Data revealed that the Playground Program had a positive impact on playground interactions and had been successful in teaching them social skills. The students perceived the strength of this program as advancing their social skills and assisting their networking and social capital bridging and building skills:
"[It] helped me with my problems and helped me make friends." (Student S)

"[It] was good because sometimes when I didn't know stuff, the social workers helped me to work it out and I didn't have anyone to play with at playtime." (Student 4)
Regarding the techniques used to teach social skills, one student commented on the importance of being specifically taught pro social skills:

"[the social workers] helped me to work it out so that I could play; they made me practice some things … like how to play and how to ask to play games." (Student 1)

The research activity of social work students contributed to maintaining and developing a safe school environment. Social work students were responsible for conducting research into the effectiveness of school attempts to create a safe environment.. Social work students were responsible for carrying out annual audits to ensure that the a welcoming, safe and inclusive school ethos was maintained and continually developed. These audits included research into the overall safety of the school environment and ethos marked by the values of respect, welcome, safety and mutual respect.
From a critical perspective, giving individual students the opportunity to voice their concerns and express victimisation empowered them as individuals, skilled them on how to take action, validated their belief that they could take action on their own behalf and confirmed that people in authority would take their concerns seriously.
Finally, as indicated in Table 8, when students were asked if they would recommend the programs that were facilitated by the social worker's, they overwhelmingly in agreed that they would recommend the program.

Table 8: Students' ranking of social work involvement (N=20)

I would tell my friends to go to programs run by the social work students	Total
Really, really agree	13
Really agree	7

Source: Research data

To conclude, the data indicates that the students, when provided an opportunity, were able to articulate how the field practicum contributed positively to their school experience. Moreover students were able to express how field practicum gave them access to resources otherwise denied them because of their economic and social circumstances. This research affirms the importance of listening to students' voices while also affirming the field practicum as a positive inclusion in school wellbeing models.

References

AASW. (2006). *Practice standards for social workers in schools*. Melbourne: Australian Association of Social Workers.
AASW, (2008). *Australian social work accreditation standard.* Canberra: Australian Association of Social Workers Apple, M. (2000). Can critical pedagogies interrupt rightist policies? *Educational Theory, 50*(2), 229-254.
Beddoe, L., & Maidment, J. (2009). *Mapping knowledge for social work practice: Critical Intersections* (1st ed.). South Melbourne: Cengage Learning.
Corbin, J. (2005). Increasing opportunities for school social work practice resulting from comprehensive school reform. *Children & Schools, 27*(4), 239-246.
Creswell, J. (1994). *Research design: qualitative and quantitative approaches*. California: Sage Publications.
Department of Early Childhood Education and Development. (2011). *Summary statistics Victorian schools July 2011*, retrieved December 7, 2011, http://www.eduweb.vic.gov.au/edulibrary/public/publ/research/publ/brochure2011jul.pdf.
National and Medical Research Council, 2007 NMRC, Canberra, Australia
WHO. (2000). *Local action: Creating health promoting schools*. Geneva: World Health Organisation.
WHO. (2003). *World Health Report 2003: Shaping the future*. Geneva: World Health Organisation.
WHO 2004, *Promoting Mental Health, Concepts, Emerging Practice and Evidence*, World Health Organisation, France.

Copyright © 2012 Doris Testa

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

What Makes Staff (and Universities) Ready, WIL-ing and Able?

Kathryn von Treuer
School of Psychology, Deakin University
Sophie Keele
School of Psychology, Deakin University
Vanessa Sturre
School of Psychology, Deakin University

Abstract

University Work Integrated Learning (WIL) initiatives, need to provide sustainable, high quality programs that meet the needs of teachers, students and industry partners. To do so, staff require both appropriate skill sets, and optimal enabling and organizational structures. A total of 34 academics participated in the study. The first aim was to determine whether there are differences in the competencies between academics who co-ordinate work placements programs and those who conduct less than 10% of WIL in the classroom. The competency analysis revealed that skill and behavioural requirements of work placement co-ordinators differ from those of the traditional/general academic. This finding may have implications for recruitment and career structure of work placement co-ordinators and WIL practitioners. We then determined the needs are of academics who engage in WIL activities. Academics who engage with more than 20% of WIL activity in the classroom (including work placement co-ordinators) participated in a semi-structured interview. The analyses revealed three categories as critical for WIL sustainability which were: recognition, resources, and stakeholder engagement. While the perception of WIL practices is generally a positive one, areas of improvement to assist staff to perform WIL approaches optimally are highlighted.

Keywords: Work placement co-ordinators; Work integrated Learning; Competency

Introduction

Universities need to incorporate greater opportunities for students to integrate their classroom-learned knowledge with the future work skills. One way this can be achieved is through Work Integrated Learning (WIL). WIL is often described as the interplay between formal learning and workplace experiences and commonly includes activities such as work placements, internships, and classroom based activities such as experiential learning activities, case studies and industry speakers. If coordinated effectively, WIL holds enormous potential for producing work-ready graduates. Increased competition among universities ensures that it is important that WIL programs are effectively planned and coordinated and many universities are beginning to do so (McLennan & Keating, 2008). Appropriately qualified and experienced academics are needed to conduct WIL. They need to be able to cope with challenges, such as sourcing appropriate WIL opportunities, supervising and supporting students, managing high workloads with limited resources, communicating with a range of individuals, integrating coursework with workplace learning, and managing the often varied expectations of diverse stakeholders (Brown, 2010).

Previous researchers have postulated that there may be several distinct skills required by academics who engage with WIL (including academics who are work placement co-ordinators) but no study has empirically determined this. Cooper and Orrell (1999) suggested that WIL teachers require high level organisational skills, knowledge of industrial policies, legal and ethical standards, knowledge of conditions for optimal experiential learning, knowledge of work practices and of a specific discipline, strong interpersonal communication and conflict resolution skills, credibility outside the university and advanced communication and negotiation skills. Also, WIL teachers required knowledge and skills related to management, ethics as well as entrepreneurialism. Teachers of WIL may also require change management skills and leadership capabilities (Jones, Ladyshewsky, Oliver & Flavell, 2008). WIL staff with entrepreneurial ability may create positive outcomes for the university and industry through their skills in creating and maintaining strong relationships with industry representatives (Cooper & Orrell, 1999). Entrepreneurial skills such as identifying and leveraging opportunity, seem necessary therefore for effective performance in a WIL role. As such, WIL staff should be supported in developing entrepreneurial skills to assist in the provision of successful WIL programs. While these ideas and differences are theoretically proposed, there has been no empirical evidence offered that this is the case.

The aim of this research was to explore whether there were any substantive differences in skills and abilities between academics who co-ordinate/supervise work placements and general academics who practise less than 10% of WIL. It was hypothesised that the competencies required for work placement co-ordination would differ to general academics

who engage with less than 10% of WIL in the classroom. A further aim was to determine the specific needs of academics who practice WIL.

Methodology

Participants

We studied 34 participants from Deakin University. Two groups were studied. The first group, the 'WIL group' (total n=26) comprised two sub-groups: lecturers who conduct a high proportion of WIL in the classroom and lecturers who supervise/co-ordinate work placements. A further 8 lecturers whose curriculum includes less than 10 per cent of WIL constituted the 'control group'. The Faculties of Health, Business and Law, Arts and Education, and Science and Technology were represented from both undergraduate and post graduate teaching groups.

Materials

The Saville Consulting Wave Performance Culture Framework (Saville Consulting, 2008) was used to determine the desired competencies of the WIL placement coordinators. This framework is made up of a series of cards organised under three broad segments: Global, Ability and Behaviour. Each segment is organised hierarchically, starting with the components that make up the higher level clusters and then breaking down into sections, dimensions and finally facets at the most detailed level (see Figure 1 for Behavioural Segment). The competency analysis utilises a set of selected cards (on the basis of relevance) to determine the competencies required to effectively perform in the role of placement coordinator, as well as highlight areas of potential development. For the purposes of this study, the clusters, sections, dimensions and facets relating to the overarching headings of Global and Behaviour were utilised exclusively as the descriptors of behaviour and effectiveness within these segments were considered most relevant to WIL personnel. Each card contains several descriptors of behaviour and the participant is asked "which of these descriptors are most important to the job you do?" The researcher systematically exposes the participant to a number of cards and drills down to the most important behaviours that they perceive they need, in order to conduct their work.

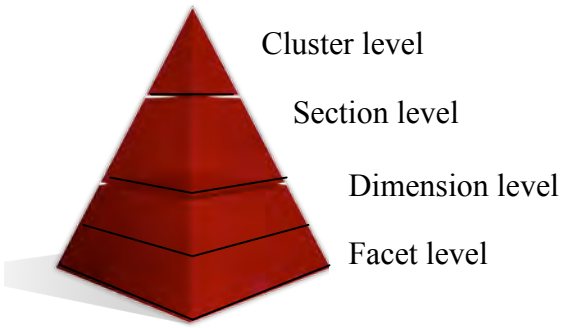


Figure 1: Structure of the Behavioural Segment from Saville Consulting Wave Performance Culture Framework.

A semi-structured interview (26 items) explored barriers and facilitators to WIL at both an organisational and supervisory level. Demographic information was also collected. A sample item included: what organisational structures best develop and reinforce these competencies such that quality of a WIL program is sustained?

Procedure

Participants were recruited via email and included the plain language statement and consent forms. Interviews were approximately 30 minutes duration, and were recorded and transcribed. Transcripts were qualitatively analysed using NVivo 9 to identify central categories and themes. Those interviewees who were placement coordinators were also invited to participate in a competency analysis to inform the competency profile/framework. A second sample of academics involved in less than 10% of WIL, participated in the competency analysis and as mentioned was the control group.

Results

Competency Analysis Findings

The competency analysis for the placement coordinators and the control group is presented at the dimensional level, see figure 2. Whilst many behaviour dimensions were examined, the dimension level results from the overarching clusters of 'Influencing People' and 'Delivering Results' will be presented, as these clusters displayed more variation than other clusters.

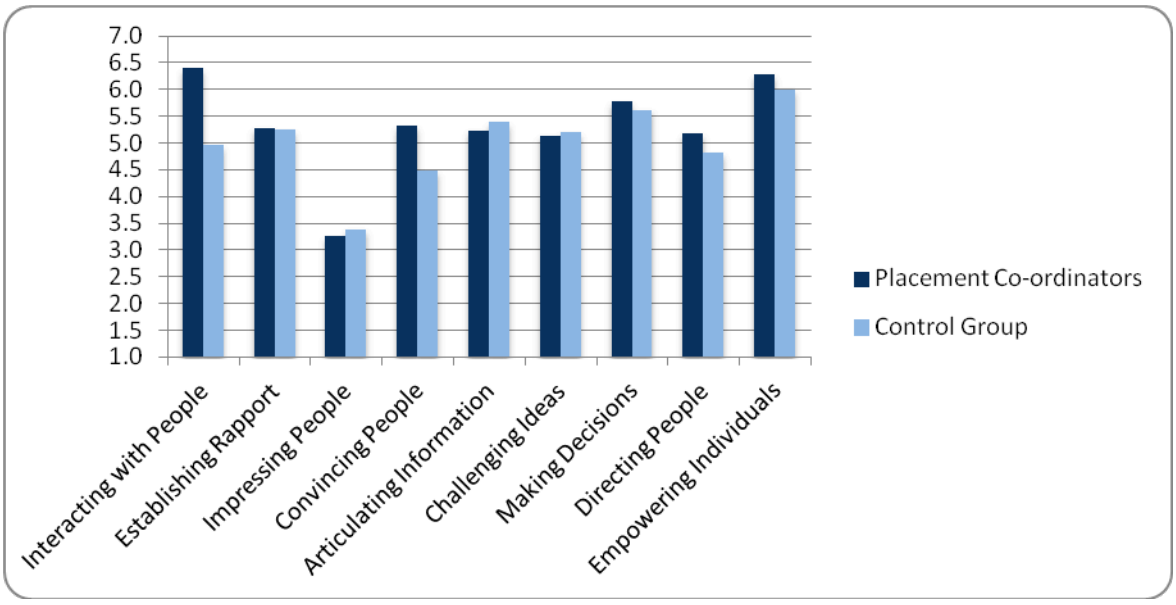


Figure 2: Dimension level comparison between the placement co-ordinators and the control group from 'Influencing People'.

Variation between both groups and between dimensions is evident. The greatest difference between the groups relates to the dimension of 'Interacting with People'. Placement-co-ordinators spend much of their time proactively developing and maintaining relationships with agencies/organisations. This skill may be considered part of the entrepreneurial orientation. The dimension of 'Convincing People' also shows variation between groups. These differences reflect variation that one might intuitively expect.

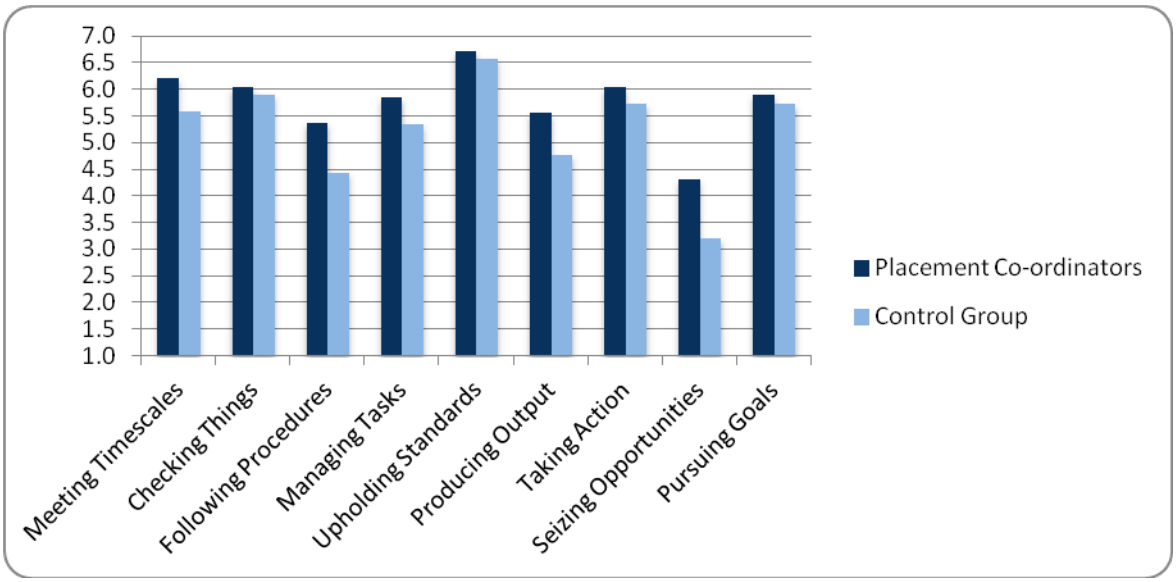


Figure 3: Comparison of placement co-ordinators and control group from 'Delivering Results'.

The facet of 'Seizing Opportunities' shows the largest difference between groups. Along with the behaviours of interacting with people and convincing others, it contributes to the entrepreneurial nature of placement co-ordinators. The variable of 'Following Procedures' also suggests a difference between groups. This is likely to relate to the need to encourage students and industry representatives to adhere to strict guidelines and procedures which would be desirable.

The Needs Analysis

The content analysis of the interview data revealed three categories, being: Recognition, Resources and Stakeholder Management and Support. Each of the categories is discussed below with verbatim quotes in italics.

1. Recognition

Participants perceived a lack of recognition among other academic staff not involved in WIL. Participants believed WIL does not fit the normal academic model. In addition, they felt a lack of clarity and awareness as to what wil encompasses and to its priority.

'Most of the people around here are researchers, and you'd ask them what WIL is, and they'd say, 'A boy's name'.

'Just what is WIL and what should the outcomes of WIL be because I don't think they're clarified enough as yet for academics to make useful learning outcomes attached to those'.

In addition, some perceived that working in a WIL role has a negative impact on their academic career:

'For an academic, you're recognised for your contributions through your publications, your grants. In placements or in WIL, there's nothing.'

Only some staff stated that they received feedback concerning their WIL performance, and participants stated that formal feedback related to their contribution to WIL was minimal. However, feedback from students is common and provides them with an indication of their performance:

'Students evaluate you in that sense, and if you're not doing a good job, your students are your critics. But a formal evaluation, getting recognised, there is no such thing.'

2. Resources

The key skills and knowledge that participants thought contributed to their ability to work effectively were: 1. having previously worked in industry, 2. having established contacts, 3. being a good communicator, 4. being passionate about the work and 5. being organised:

'I think me having existing contacts really helps, my knowledge of the industry, having worked in the industry before coming into university really does help.'

'I think I've got people skills, and I think that's not only with partners but it's with the students as well.'

The results suggested that participants enjoy opportunities to meet with other WIL staff, as this encourages the sharing of ideas:

'We have a group of academics and admin staff across from all the schools that we meet with every trimester, once a trimester and that has really helped to exchange information between staff.'

Participants felt that the Division of Student Life (DSL) and Job Shop (career development services at Deakin University) were great services:

'Division of Student Life, they've been very good. They have provided a lot of support with development questions, coming along and doing sessions for interview skills and resume development.'

Despite the positive resources available, the majority of participants stated that WIL is under-resourced. There is also a lack of funding to be able to offer incentives to industry to create placements. Furthermore, participants felt that resources should better match the growing numbers of students accepted into courses:

'I think there is a lack of understanding and awareness of how resource intensive WIL is.'

'Our colleagues who aren't engaged in WIL at all don't understand, and so we're constantly fighting a battle about decision making and control about what happens about our units and the resources we require and the impacts this has on our workloads.'

Some participants perceived a lack of equity in the resources allocated to WIL programs across the university, with larger programs, or courses in which WIL is a requirement for accreditation, receiving greater resources.

3. Stakeholder Engagement and Support

Participants stated that WIL requires the establishment and maintenance of strong relationships with industry. This is particularly important to participants given that a lack of placement opportunities is becoming a major challenge:

'What I see as my part in terms of WIL, my role in terms of WIL, is to facilitate those relationships, maintain those and strengthen those.'

'WIL is all about industry engagement.'

Generally, participants felt that they have good team support and relationships with other staff, being beneficial for their WIL roles. However, others noted that greater collaboration would be helpful:

'It's helpful that I work in an office which is very collegial and we all support one another.'

'I think that we really need more of a collaborative approach to WIL.'

The engagement and support provided to students through staff involvement in WIL is regarded as highly enjoyable and one reason why many work in WIL:
'Now in WIL, we get to know our students very closely, and that's fantastic.'
'I'm in this because I love working with the students . . . . I get all my enjoyment out of that.'
Most participants perceive themselves as offering leadership to some degree, irrespective of formal positions of leadership. This is largely through their interaction with industry, students and other staff, and through their initiative in establishing and operating different aspects of WIL programs. Interestingly, participants mentioned that their form of leadership was more shared and team-oriented than hierarchical and traditional.
'I think I show leadership by thinking of strategies, ways to make it better. It's definitely a leadership role, definitely a leadership role. You have to coordinate, you have to motivate, you have to strategise, you have to follow-up.'
'My leadership style is not to be overtly running and directing things. It is about making sure that we've got a team involved at all different levels, in different ways and building on people's strengths and sharing the responsibility.'
Generally, participants felt that they are well supported by local management, but most felt that they would benefit from greater organisational support, mainly in the form of resource allocation . In addition, some staff noted that there would be benefits in having a WIL expert(s), positioned at faculty or university level to offer guidance and knowledge:
'From a leadership and support point of view, I have absolutely no complaints at all, I've received fantastic support.'
'At an organisational level, there's very little support.'
Taken together, the interview data and competency analysis suggest that placement co-ordinators operate differently from other academics and as such require unique resources and support.

Discussion

Both the results from the competency analyses and the needs analyses have informed an appropriate structure to support WIL.

Competency Analyses

The hypothesis was supported, with differences being demonstrated between the two types of lecturers. Entrepreneurialism was a defining difference between the two groups. More specifically, seizing opportunities displayed the largest between-group difference. Along with the behaviours of interacting with people and convincing others, seizing opportunities contributes to the entrepreneurial nature found among placement co-ordinators. This finding is consistent with the desirable behaviours proposed by Cooper and Orrell (1999) who noted that WIL staff who have an entrepreneurial orientation produce positive outcomes.

Needs analysis

The needs analysis provided insight into the experience of staff working within WIL at Deakin University. As suggested previously, the university needs to offer these staff the systems, processes and structures that optimise their capacity to conduct WIL. Three key themes arose from the analysis of interviews conducted with WIL staff and key stakeholders. Participants perceived WIL to be undervalued, lacking clear priority within the university and extremely resource intensive. In addition, the results showed the importance of engaging with industry, students and staff, as well as being equipped with particular skills and knowledge, such as having organisational contacts. Staff perceived that they strongly contribute to WIL, but there is inadequate provision of formal recognition.

Future research

Given our qualitative rather than quantitative data, and small sample size, the results must be accepted with some degree of caution. Notwithstanding, there do appear to be substantive differences between the competencies of placement coordinators and the control group, which manifest as differences in both the pattern and amplitude of responses.

Conclusion

While the findings of this project suggest that the experience of WIL focused staff is generally a positive one, they also highlight areas in which improvement could be sought to assist staff in performing optimally to lead effective WIL programs. Furthermore, the findings from the competency analysis suggest that new position descriptions and job competencies which are distinct from the traditional academic role could be developed for placement co-ordinators.

This would ensure that staff selected for such roles are equipped with the appropriate skills and knowledge to perform effectively and that the university can restructure the placement co-ordinator role into one with recognition and its own career structure. This is important to ensure it is facilitating the best possible outcomes of WIL given that's where the future is heading.

References

Brown, N. (2010). WIL[ling] to share: an institutional conversation to guide policy and practice in work-integrated learning. *Higher Education Research & Development*, *29*(5), 507–518.

Cooper, L. & Orrell, J. (1999). The practicum: The domestic work of university teaching. *HERDSA News*, *21*(2), 6–9.

Jones, S., Ladyshewsky, R., Oliver, B. & Flavell, H. (2008). *Leading courses: Academic leadership for course coordinators*. Retrieved 1 March 2011, from http://academicleadership.curtin.edu.au/course_coordinator/index.cfm.

Knight, G. A. (1997). Cross-cultural reliability and validity of a scale to measure firm entrepreneurial orientation. *Journal of Business Venturing, 12*, 213–225.

Levin, E., Pocknee, C. & Pretto, G. (2010). The challenges in establishing an internship program: Policy, expectations and workloads. In *International Conference on Work Integrated Learning: University-Industry Collaboration for Real Life Education*, Hong Kong (pp. 1–14).

McLennan, B. & Keating, S. (2008, June). *Work-integrated learning (WIL) in Australian universities: The challenges of mainstreaming WIL*. Paper presented at the ALTC NAGCAS National Symposium, Melbourne.

Saville Consulting. (2008). The Saville Consulting Wave Performance Culture Framework.

Copyright © 2012 Kathryn von Treuer, Sophie Keele. Vanessa Sturre

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

The Process of Designing and Analysing a Qualitative Study into Multiple Work Integrated Learning Experiences

Lisa Ward, Tina McAdie, Alison Bravington, Nigel King
University of Huddersfield

Abstract

Universities are forever looking for the perfect Work Integrated Learning (WIL) model: the one that gives students the best chance of a graduate job, fits in the ever changing needs of a diverse student population and can be delivered with minimum administrative overheads to the institution. Researchers at the University of Huddersfield have been exploring psychological factors related to WIL as part in a worldwide study led by Drysdale (Drysdale *et al.*, 2010). The initial analysis of our UK quantitative data set indicated that the number of different WIL experiences a student undertook significantly increased self-reported measures of hope, agency and goal-orientation. The aim of this qualitative study is to explore a variety of student placement experiences in more depth to tease apart experiential aspects of their placements and how these relate to the constructs identified as significant in the previous study. This obviously has strategic implications for the way we deliver WIL both at our institution and across the sector.

The use of qualitative techniques aims to move the focus on to the experiential aspects of students' work placements through focus groups and individual semi-structured interviews. The interviews will potentially use a reflective tool to facilitate dialogue about the abstract concepts measured in the survey. This study will investigate how students relate their work placement experiences to softer skill development identified by our survey research, and how these skills are built up across multiple placements. Was it a case of 'The more, the merrier'?

This paper will describe the methodological challenges faced in the design and analysis of our research, including how to facilitate in-depth reflection on work placements, and how to anchor broad concepts such as 'hope' and 'agency' to specific experiences encountered in the working environment.

The identification of an effective method of reflection and analysis of the experiential details of work placements will allow the student voice to be heard, and illuminate important aspects of their experiences. This could then be used to facilitate teaching and learning in this area.

Keywords: work integrated learning, placement, internship, qualitative

Searching for the perfect model

The search for the perfect model of Work Integrated Learning (WIL) should be sensitive to a range of factors. How can models of WIL dovetail with the ever-changing needs of a diverse range of students? What gives students the best chance of subsequent employment? What features of WIL allow models to be delivered with minimum administrative overheads? An examination of these issues needs to be grounded in a firm evidence base, and this can only be successful if students' on-the-ground experiences in practice are taken into account.

A worldwide study led by Drysdale has been exploring the psychological factors related to work integrated learning (Drysdale *et al.*, 2011). A survey undertaken by researchers at the University of Huddersfield formed part of the international project, and initial analysis suggested that the more work-related experiences a student had, the more hope, agency and intrinsic goal-orientation they reported (Purdie *et al.*, 2011). At Huddersfield, funding was secured for a follow-up qualitative study to explore student placement experiences in more depth. The study is taking an overarching view of work integrated learning across multiple academic schools and WIL models. The study measured the actual number and duration of each student's WIL experiences, with some being as little as a few days, to many months. The comparison was between the effects of one WIL experience and multiple (or many) WIL experiences. Initial analysis from our qualitative study suggests the importance of student's ability to compare different placement settings helps to facilitate their learning. The study hopes to tease out the experiential details of learning on placement, and from this we hope to draw strategic implications for the way that WIL is delivered in our own institution, and across the sector.

Traditional models of work integrated learning

At the University of Huddersfield our strategy map (University of Huddersfield, 2008a) has a core aim of producing 'enterprising and employable students'. This is further supported by our Teaching and Learning Strategy (University of Huddersfield, 2008b) which states, 'all courses to have work related elements'. Our strapline is 'Inspiring tomorrow's professionals' and links to the professions are very strong. In the UK the predominant model of WIL has been the sandwich degree, where periods of work experience are 'sandwiched' inside academic studies, the most common form being a third year in industry or commerce within a four year degree. This model works well in business, engineering, science, IT and art and design and as a university we offer this model of WIL. In many cases the student effectively works as an employee for a year. Usually a final report is required by the university and occasionally this is an accredited part of the degree route. Often this work is supported by placement offices, which in many ways work like recruitment agencies, advertising vacancies and asking students to apply. Many courses offer alternatives to the traditional sandwich course in the form of short placements and also what is known as service learning for example volunteering for a service organisation (Patrick, Peach, Pocknee, Webb, Fletcher & Pretto, 2008).

Following the Browne review (Browne, 2010), taught undergraduate fees are rising dramatically to around £9000 (approximately $14,000 US) per year from 2012 onwards. However whilst most institutions have set their fees for taught courses, the fees for a sandwich (third) year of work experience, which will not take place under this new regime until 2014, are widely unknown. The Wilson Review of Business and Industry Collaboration (Wilson, 2012) suggests that these work placements are so fundamental to the student experience and future economic growth that they should be set no higher than £1000 a year.

Models for WIL in professional placements are quite different to this. Many professions require studying a professional body accredited course at a UK university – for example this occurs in a range of professions including nursing, social work and teaching. Each professional body has its own approach which is strictly enforced across the sector. Placement experiences are tightly linked to the outcomes, skills and competencies expected of the trainee professional. Normally a workplace mentor supports the student. Students on these courses tend to have less choice about placement. The work of the staff in the placement offices is to facilitate the matching of an individual student's learning outcomes with the available placements. This will also be based upon the skills and competencies that the individual needs to develop. Access is to a range of equivalent experiences. This does not mean that all experiences are similar, though their learning outcomes can be.

The above two models predominate at the University of Huddersfield and across the UK. However there are other types of placements. For example on courses such as Youth and Community Studies, placements can be continual throughout the course, so every week students may both go to work and attend University. On courses such as History and Politics, students may undertake a six week placement to gain an insight into the world of work, which may not be inside a 'traditional' business. There may be some similarity between these approaches and that of service learning as discussed in the Australian Scoping Study for WIL (Patrick et al., 2008). In fact Service-learning may also provide a platform for examining options that students have in pursuing multiple WIL.

The development of skills for employability

The research team's previous findings (Purdie *et al.*, 2011) suggest that students who experience placements have significantly higher hope, confidence in attaining their goals and lower test anxiety than their non-placement peers, consistent with extant evidence (Allen & van der Velden, 2002; Crebert *et al*., 2002; Cuzzi *et al.*, 1996). The research team discovered that the more work related experiences a student had seemed to have a cumulative effect on several psychological factors. In particular more hope, intrinsic goal orientation, confidence in attaining their goals and academic self-efficacy were reported. The survey looked at both distinct placement experiences and multiple work related activities such as voluntary work, experiential learning and internships. The multiple work- related activities appeared to influence a greater range of psychological factors, including positive self concept and self esteem. This is in contrast to previous evidence to suggest there are no significant differences in self-efficacy between students who pursue sandwich placements and those who pursue multiple placements (Cuzzi *et al.*, 1996).The research team therefore wanted to explore whether our findings could be substantiated by further in-depth qualitative research. They therefore gained funding to explore work experience and the development of softer skills which could include communication, team management, delegating, appraising, presenting and motivating.

The qualitative project

Many existing qualitative studies of student work experience are discipline-specific, focusing on fields such as nursing (McKenna *et al.*, 2010), occupational therapy (Fieldhouse & Fedden, 2009), applied science (Coll *et al.*, 2001) and information technology (Holt *et al.*, 2004). One important focus for the Huddersfield qualitative project was to maintain an overview of the features of WIL across a variety of diverse degree programmes, rather than focusing on role-specific elements of placements. This set some specific challenges in terms of the research design, with implications across three stages of the project: recruitment, interviewing and analysis.

Keeping the project's aims in mind

The project aims to investigate broad aspects of learning and personal development, and the students' sense of progression across work placements, rather than comparing task-specific aspects of job roles. Recruitment of participants across a range of subject areas is crucial to forming insights into issues common across disciplines. Recruitment, which is still in progress, is focusing on students from a range of backgrounds – from arts and humanities, business, education and engineering to information technology and applied sciences.

To retain a focus on the broad, cross-disciplinary aspects of work integrated learning, the research team initially considered running a focus group (Kandola, 2012). The idea of a focus group was to obtain the views of students across a range of courses at the same time, so they could compare and contrast their experiences with one another. The researcher would be able to identify a range of common issues in preparation for the individual interviews. However when the project started it was clear that the objectives the project team had set themselves and the short contract of the research assistant were incompatible. Given that organising and running focus groups can be complex and time consuming the decision was made instead to utilise individual interviews to pilot our research.

The first interview was undertaken using Kelly's repertory grid technique (Fransella, 2005). This method has its roots in personal construct psychology (PCP) (Kelly, 1955), and is an approach which investigates how individuals make sense of their world and their identity. The participant was asked to think about the work characteristics of colleagues on placements, and to think about his/her own characteristics in terms of his/her work role at different points along his/her placement journey. Comparative talk about the characteristics of the self and others in the work environment did elicit fundamental perceptions about what made people employable, and easy or difficult to work with, but few links were made between these characteristics and specific experiential episodes on work placements, and the technique drew little talk about the relational aspects of working with others.

Reflecting upon the limitations of the repertory grid for this project, another PCP technique focusing on aspects of personal development – the Salmon Line (King & Horrocks, 2010) – was considered. This technique uses a single line drawn between two concepts to facilitate reflection on how progression occurs from one concept to another. A different tool was developed based on the same premise, but explicitly capturing the temporal aspects of learning from multiple placements: a line labelled 'Before placements' and 'After placements'. In a second pilot interview, another participant was asked to denote work placements underneath the line and key moments in learning and personal development above the line at the points in the placement journey at which they occurred. This proved to be successful in eliciting data addressing the projects aims. The project team agreed that this approach should be trialed in our research.

A series of individual interviews from a range of subject areas and WIL models are in the process of being conducted. The initial project interview yielded promising data on concepts such as teamwork, student identity, the facilitation of personal development through sensitive management by employers, and the student's criteria for evaluating placement experiences. A preliminary analysis of our findings shows many interesting examples of the skills that develop over multiple placements such as adapting to different types of team environments and understanding the organisational culture in context.

Focusing on the bigger picture

Semi-structured interviews can yield a large volume of textual data, and the principles of thematic analysis are based on looking for patterns within the data. Analysis can go beyond describing a set of data by interpreting the themes or patterns which arise in connection with specific research questions (Braun & Clarke, 2006). Our qualitative analysis will focus on investigating student experiences of multiple work integrated learning opportunities, and their influence on learning, personal development, and preparation for work.

An in-depth thematic analysis of the interviews will be carried out based on the principles of template analysis (King, 2012). Template analysis is a technique which can accommodate an *a priori* focus on specific aspects of the research

agenda – in this case, on the overarching issues connected with learning and personal development which are shared by students across diverse subject areas. Template analysis involves the development of a coding structure (a template) from initial interview transcripts which is then applied to subsequent interview data and modified as new themes or subtleties in the data come to light. The initial template will be constructed with a main focus on overall issues, rather than the task-based concepts connected with specific job roles, and this resulting focus will be taken forward in the analysis of subsequent data. The technique is flexible enough to allow for the inclusion of issues related to job roles where they may have a bearing on several issues at a later stage: details can be coded as low level themes in a coding hierarchy, and can be subsumed under higher level themes as the analysis progresses. An added benefit of this technique in team-based research is the possibility of sharing analytic findings at an early stage, when the initial template has been constructed, and keeping the team updated with information each time the coding structure is revised.

Implications for the facilitation of teaching and learning

The purpose of our research is to explore how WIL, and in particular multiple WIL placements, impact upon the student learning experience. In particular we are interested in how soft skills develop over placements. However what we hope to achieve is a deeper understanding of how learning and preparation for work occurs throughout WIL. Our findings are not about advocating changes to current WIL models, as the principles and practicalities have been developed over many years. However we hope that our findings will challenge Teaching and Learning practitioners to consider our research when planning WIL delivery. For example should our findings advocate multiple WIL, this challenges us to find ways to blend the best WIL models for our existing students. These could include encouraging sandwich degree students to gain relevant part-time jobs or internships as part of their course, which would have many of the benefits of multiple WIL without the overhead costs.

Conclusion

The purpose of our research is to relate work experience to the development of softer skills, by facilitating dialogue and reflection about the psychological concepts identified from our quantitative study. This paper has explored the process of designing and analysing a qualitative study into multiple WIL experiences. It has explored our pilot work with personal construct psychology techniques and the modifications developed from our trials. An outline of the template analysis planned has also been covered. Our research is now underway and our techniques are developing further. Further reflection on our methods will take place once our study is completed.

References

Allen, J. & van der Velden, A. (2007). Transitions From Higher Education to Work. *Higher Education Dynamics*, 17, 55-78.

Browne, J. (2010). Securing a Sustainable Future for Higher Education. An independent review of higher education funding and student finance. Retrieved 14th February, 2011. From http://www.bis.gov.uk/assets/biscore/corporate/docs/s/10-1208-securing-sustainablehigher-education-browne-report.pdf

Coll, R.K., Zegwaard, K. and Lay, M. (2001) The influence of cooperative education on student perceptions of their ability in practical science, *Journal of Cooperative Education*, 36(3), pp58-72.

Crebert, G., Bates, M., Bell, B., Patrick, C.□J., & Cragnolini, V. (2002). Developing generic skills at university, during work placement and in employment: graduates; perceptions. *Higher Education Research and Development, 23*(2), 147□165.

Cuzzi L, Holden G, Rutter S, Rosenberg G, Chernack P. (1996). A pilot study of fieldwork rotations vs. year long placements for social work students in a public hospital. *Social Work in Health Care, 24* (1-2), 73-91.

Drysdale, M., Dressler, S., Johansson, K., Zaitseva, E., Chiupka, C., Clifford, E., Darwent, S., Nehls, E., Pacheco, A., Skaresund, R., Svensson, L. and Waller, G. (2011) Academic Attitudes and Behaviours of Work Integrated Learning and Non Work Integrated Learning Students from Four Countries, 17th World Conference on Cooperative and Work Integrated Education, USA: Philadelphia.

Fieldhouse, J. and Fedden, T. (2009) Exploring the learning process on a role-emerging practice placement: a qualitative study, *British Journal of Occupational Therapy*, 72(7), pp302-7.

Fransella, F. (2005) *The Essential Practitioner's Handbook of Personal Construct Psychology*, London: John Wiley & Sons.

Holt, D., Mackay, D. and Smith, R. (2004) Developing professional expertise in the knowledge economy: integrating industry-based learning with the academic curriculum in the field of information technology, *Asia-Pacific Journal of Cooperative Education*, 5(2), pp1-11.

Kandola, B. (2012) Focus Groups, in Symon, G. and Cassell, C. (2012) *Qualitative Organisational Research: Core methods and current challenges*, London: Sage Publications, pp258-74.

Kelly, G. (1955) *A Theory of Personality: The psychology of personal constructs*, New York: Norton.

King, N. (2012) Doing template analysis, in Symon, G. and Cassell, C. (2012) *Qualitative Organisational Research: Core methods and current challenges*, London: Sage Publications, pp426-50.

King, N. and Horrocks, C. (2010) *Interviews in Qualitative Research*, London: Sage Publications.

McKenna, L., McCall, L. and Wray, N. (2010) Clinical placements and nursing students' career planning: A qualitative exploration, *International Journal of Nursing Practice*, 16, pp176-82.

Patrick, C-j., Peach, D., Pocknee, C., Webb, F., Fletcher, M., Pretto, G. (2008). The WIL [Work Integrated Learning] report: A national scoping study [Australian Learning and Teaching Council (ALTC) Final report]. Brisbane: Queensland University of Technology. Retrieved 23 August, 2012 http://www.acen.edu.au/resources/docs/WIL-Report-grants-project-jan09.pdf

Purdie, F., McAdie, T., King, N. and Ward, L. (2011) In the right placement at the right time? An investigation of the psychological outcomes of placement learning, *International Conference on Education and Educational Psychology 2011: Procedia – Social and Behavioural Sciences*, 29, pp717-24.University of Huddersfield (2008a), Strategy Map, Retrieved 23 May, 2012 http://www.hud.ac.uk/services/vco/strategymap/

University of Huddersfield. (2008b). Teaching and Learning Strategy. Retrieved 23 May, 2012 from http://www.hud.ac.uk/media/universityofhuddersfield/content/tlinstitute/documents/tl_strategy.pdf Retrieved 23 May 2012 http://www.wilsonreview.co.uk/

Copyright © 2012 Lisa Ward, Tina McAdie, Alison Bravington, Nigel King

The author assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author.

Work Integrated Learning for Tertiary Hospitality Education

Karina Michelle Wardle
School of Business, University of Western Sydney

Abstract

Contemporary discussions of graduate employability bemoan the lack of general job skills and practical industry-specific competence amongst Hospitality graduates. This paper examines the theoretical contribution of Work Integrated Learning (WIL) within the context of service industries. The objective is to demonstrate the practical implications of WIL to enhancement of Hospitality graduate attributes and employability. This study uses a deductive approach with both qualitative and quantitative methodologies to collect primary research. The initial stage commenced with quantitative surveys of the three sample groups: hospitality graduates, educators and employers/managers. Snowball and networking techniques were employed to reach the respondents with an online survey. A response rate of 26% was achieved and SPSS was used to analyse the data. The second qualitative phase of the research using focus groups will further inform the study and provide data and methodological triangulation. Preliminary analysis of the data supports the hypothesis that benefits of WIL are transferable to hospitality, however, more attention to the development and execution of WIL is necessary for stakeholders to realise these benefits and to deliver "employable" graduates. With a focus on integrating practical, relevant and reflective industry experience within tertiary curriculum, WIL has the potential to create job ready "employable" Hospitality graduates.

Keywords: Work integrated learning, engaged learning, practice based learning

Background and Context of Study

Contemporary discussions of graduate employability bemoan the lack of general job skills and practical industry-specific competence amongst Hospitality graduates. Seminal studies conducted by AC Neilsen (2000) and the Australian Chamber of Commerce and Industry and the Business Council of Australia (2002) heightened attention about employer dissatisfaction with Australian tertiary graduates, affirming graduate skill deficiencies correlated to a lack of practice or work experience. Alarming figures of 76.5 percent of the sample TAFE and University graduate population were deemed unsuitable for employment with 94 percent of Hospitality graduates deemed unsuitable (AC Neilsen 2000, p33-34). Anecdotal evidence and current researchers show little has changed (BIHECC 2007; Bridgestock 2009; DEEWR 2009; Green and Zhu 2010; Hager and Holland 2006; Hill and Walsh 2010; Kim 2008).

The dissatisfaction with graduate employability should lead curriculum and pedagogical change however, educators still lag in understanding and creating this context for students. Within Hospitality studies, there is also a trend to reduce specialisation of Hospitality University education in favour of providing generic/standardised mass business management and services courses. The melding of Hospitality as yet another management construct is a step in the wrong direction as further simplification will only serve to amplify failure to impart specific technical and competency skills required for employability. The prevalence of postgraduate programs, cadetships and internships extending the basic orientation and induction to Hospitality businesses also suggest requirements of employers to "educate" graduates before they are employable within a management capacity.

Failure of tertiary education to deliver graduates that meet industry expectations has resulted in graduate underemployment. Exploratory studies suggest implications of this phenomenon include: decline in productivity, dissatisfaction with career, absenteeism, high turn-over rates and reduced earnings potential (Green and Zhu 2010; Maynard, Joseph and Maynard 2006; Nabi 2003; Smetherham 2005). With Australia's skills shortage compounded by low unemployment rates, an aging population, increasing population diversity, and workforce casualisation this is of grave concern (Guthris 2010; Lindstaedt et al 2008; McLennan and Keating 2008).

Over recent decades there has been recognition of the Hospitality and Tourism industry as a significant economic contributor with Direct Tourism Gross Domestic Product (GDP) calculated as $34,595m for 2010-2011 and employing 513,700 people (Australian Bureau of Statistics 2012). Despite this demand the Hospitality education product is still in its' infancy and education levels of managers particularly those with long tenure and high up in the management echelon, are also relatively low (Ladkin 2002 cited in Kim 2008). This preference for practical work experience mirrors the career paths of most senior managers who would have worked their way up from front line positions. Persisting expectations that graduates too must work their way up from front line positions before reaching management is contrary to the purpose of a university degree. If University Hospitality Management Degrees orientated themselves to theoretical proficiency for leadership and management competency whilst providing sufficient exposure/work experience to graduates they should be able to enter the industry as middle management rather than a 'grunt'. The

prevalence of the 'low skills' profile and narrow views of the types of role and sectors under the umbrella of Hospitality contributes to the devaluing of formal qualifications. A simplistic view is that skills can be acquired 'on the job' (Baum 2002; O'Mahony and Sillitoe 2001). A ripple effect of this devaluation of degree qualifications has resulted in leakage where hospitality graduates tend to switch to other fields where their management skills are recognised.

Case for WIL

Work Integrated Learning (WIL) is emerging within the auspices of Experiential Learning (EL) theory to bridge the gap between theory and practice and thus redress the gap in graduate employability skills. The essence of this concept is to focus on experience, integrating practical, relevant and reflective industry experience within tertiary curriculums to bring about learning and job-ready graduates. This is in stark contrast to conservative learning theories that espouse pure book learning empty of application and practice. The personal, social and career benefits for WIL are also well documented for students/graduates, employers, government, educators and the wider community (Bates 2005; Cox and King 2006; Hager and Holland 2006; Lamancusa et al 2008; Raelin 2008; Ricks and Williams 2005). Qualifications offering WIL are perceived as advantageous as students typically have limited work experience prior to commencing tertiary studies (Bates 2005). The prolific literature base on learning and education presents mounting evidence in support of WIL, though research on effective design and integration is currently preliminary and generalised towards traditional disciplines such as Teaching, Medicine and Engineering (Bates 2005, BIHECC 2007, Cashman and Seifer 2008, Richardson 2009, Ricks and Williams 2005). It is hypothesised that these benefits using WIL are transferable to Hospitality.

Methodology

The investigation focuses specifically on the Hospitality sector within NSW tertiary institutions (TAFE/University/College) to determine the transferability of benefits experienced from application of WIL in traditional disciplines such as engineering to the specific characteristics of service industries. It was hypothesised that employees who have had experience of WIL in their tertiary studies are more attractive as employees than those who have only completed a theoretical degree where WIL is not implemented. Furthermore, it was hypothesised that extensive and varied contexts of engagement with WIL initiatives will enhance the perceived employability and performance of graduate employees. The other hypothesis featured in this study is that employees who have had authentic experiences during WIL are better prepared than those who have only experienced simulations or other contrived EL techniques, eg case studies, hypothetical projects and computer simulations.

This study uses both qualitative and quantitative methodologies to collect primary data. The initial stage commenced with an online quantitative survey instrument designed using 'Surveymonkey'. The framework was constructed based on existing survey designs employed by Patrick et al (2008), ACER (2010) and Kim (2008) with adaptation to the specific research questions pursued by this study. Using established and proven constructs ensures the research instruments for this study are more psychometrically sound than a 'one shot model' and provide comparable results enhancing generalisability, reliability and validity. Snowball and networking techniques were employed to reach the three sample groups: recent hospitality graduates (within five years of graduation), educators from TAFE, University and other Colleges, and employers/managers from free standing hospitality businesses, hospitality in leisure venues, hospitality in travel venues and subsidised hospitality (Slattery 2002). After screening of the surveys 156 were complete and usable (55 graduates, 72 employers and 29 tertiary educators). A response rate of 26% was achieved. SPSS was used to analyse the data. The second qualitative phase of the research using focus groups will further inform the study and provide data and methodological triangulation.

Results

Preliminary analysis of the data demonstrates a strong representation of positive results from each of the sample groups for the career, social and personal benefits of WIL for each stakeholder by respondents with and without WIL experience. The 'Opportunity to re-evaluate expectations of industry and job prospects' and 'Clarify requirements and preparedness of workforce entry' featured highly compared with 'Increased interstate and national mobility within the workforce' and 'Progressing quickly through the ranks at your workplace or industry' scoring the lowest ranked benefit by the sample. Respondents in general did not believe that WIL in a tertiary hospitality education would allow quicker progression within the industry. This points to two trains of thought for exploration in the focus groups namely: lack of appreciation/value of hospitality qualifications and weaknesses/limitations of current WIL offerings.

The Graduate population completed Hospitality qualifications from TAFE, University and a range of other providers. Prior to commencing tertiary studies 64% worked in the industry, indicating a need to pursue tertiary qualifications to progress in the industry, with 93% working in the industry during tertiary studies. When asked their intentions to follow

a career in hospitality after graduation 67% of respondents advised that they 'Definitely' or 'Probably' would follow a Hospitality career, only 16% were uncertain and the remainder were unlikely or had no intentions. Only 56% of the graduate respondents worked in a full time capacity with 25% earning below $30,000 and a further 50% earning between $30,001 and $45,000. Importantly, 75% of respondents fell into the category that the employment they secured after graduation was not a graduate level position or are still looking for employment, supporting the views discussed within the literature review of the prevalence of graduate underemployment.

Of the 62% of graduates with WIL experience 15% rated their experiences as 'Excellent' and 41% as 'Above Average'. 'The supervision and support you received from your tertiary institution' and 'Actual WIL experiences met your expectations' were identified as areas of concern. Interestingly 33% of these graduates advised having a prior relationship with their current employer through WIL activities.

Table 1: Graduate Satisfaction with WIL Experience

Rate WIL Experience	Excellent	Above Average	Average	Below Average	Extremely Poor	N/A
The supervision and support you received from your tertiary institution	6	10	11	4	2	22
The quality of contract with tertiary supervisors	5	10	13	4	1	22
The quantity of contact with tertiary supervisors	3	11	14	3	2	22
The supervision and support you received during WIL from your host employer organisation	7	18	6	2	0	22
Effectiveness of how these WIL initiatives were managed	4	9	18	1	1	22
Relevance of the WIL experience to coursework	9	17	5	1	1	22
Integration of WIL initiatives within course curriculum	3	16	8	4	2	22
Actual WIL experiences met your expectations	4	14	9	6	0	22
Your overall WIL experience	5	18	6	5	0	21
Total (n=55)	**46**	**123**	**90**	**30**	**9**	**197**

Employers from a cross section of small, medium and large hospitality organisations completed the survey representing a diversity of industry sectors. Length of time respondents have worked in the Hospitality industry ranged from 2.5 to 46 years. When asked about graduate recruitment 61% advised that their businesses have at some stage employed hospitality graduates however only 40% currently employ graduates and 50% did not know whether these graduates had WIL experience.

Of the 39% of Employers with WIL experience, 13% rated experiences as 'Excellent', 27% as 'Above Average' and alarmingly 7% were rated 'Extremely Poor'. 'The quality of contract with Tertiary staff' and 'The quantity of contact with Tertiary staff' were identified as areas of concern. The highest scoring area was 'The supervision and support you received during WIL from your employer'. A cross-tabulation of past and current participation in WIL revealing that 10% of Employers have in the past participated in WIL programs and currently do not, compared to only 3% now participating when they have not in the past.

Table 2: Employer Satisfaction with WIL Experience

Rate WIL Experience	Excellent	Above Average	Average	Below Average	Extremely Poor	N/A
The support you received from your tertiary institution	1	6	17	2	2	44
The quality of contract with Tertiary staff	1	6	14	5	2	44
The quantity of contact with Tertiary staff	1	8	12	5	2	44
The supervision and support you received during WIL from your employer	3	7	13	4	1	44
Preparedness of students sent to you for WIL placement	1	8	14	3	2	44
Effectiveness of how these WIL initiatives were managed	1	7	17	2	1	44
Actual WIL experiences met your expectations	1	9	15	1	2	44
Your overall WIL experience	1	9	15	1	2	44

Total (n=72)	10	60	117	23	14	352

The educator population consisted of academics, lecturers, head teachers, trainers, assessors and institution directors with 41% from University, 31% TAFE and the remainder other providers. Years of Hospitality industry experience ranged from none to 15+ years and 72% of the population advised they were involved in the design, execution and/or evaluation of WIL initiatives.

Of the 72% of Educators with WIL experience, 5% rated experiences as 'Excellent' and 50% as 'Above Average'. There was very little difference between the highest and lowest scoring factors although, of the 5% of total responses rated at 'Below Average' three areas; 'The quantity of contact with students during WIL activities', 'Integration of WIL initiatives within course curriculum' and 'Effectiveness of how these WIL initiatives were managed' were identified as areas of concern.

Table 3: Educator Satisfaction with WIL Experience

Rate WIL Experience	Excellent	Above Average	Average	Below Average	Extremely Poor	N/A
The support you received from your tertiary institution	1	9	10	0	0	9
The quality of contract students during WIL activities	1	11	7	1	0	9
The quantity of contact with students during WIL activities	1	9	8	2	0	9
The supervision and support you received during WIL from host employer organisations	0	6	14	0	0	9
Effectiveness of how these WIL initiatives were managed	0	9	9	2	0	9
Relevance of the WIL experience to coursework	4	14	1	1	0	9
Integration of WIL initiatives within course curriculum	3	11	4	2	0	9
Actual WIL experiences met your expectations	0	11	8	1	0	9
Your overall WIL experience	0	14	6	0	0	9
Total (n=29)	**10**	**94**	**67**	**10**	**0**	**81**

Despite the overwhelmingly positive support for WIL the survey results demonstrate that many WIL programs participated in by respondents were poorly designed and executed contributing to negative perspectives of pursuing a career in the Hospitality industry. Challenges to WIL participation were identified as 'Managing several commitments i.e. Family, study, work etc while on work placement' with limited resources/support for each sample group. All sample groups believed payment influences student eagerness and acceptance to participate in WIL (80% graduates, 65% employers, 86% educators) however, the reality demonstrated a significant gap with only 36% of graduate respondents experiencing paid WIL with a further 21% having some WIL on a paid basis and with educators acknowledging 10% of WIL programs offered were in a paid capacity while a further 81% had some WIL participation on a paid basis. A noticeable trend in the data was that many WIL programs in the curriculum were of a voluntary nature (50% of Graduates and 53% of educators identified WIL as 'Voluntary' or 'N/A' in their qualifications) and the modal of total hours spent on WIL was 'none' by all samples thus for these respondents represented no opportunity to gain employability skills.

Conclusion

With a focus on integrating practical, relevant and reflective industry experience within tertiary curriculum, WIL has the potential to create job ready "employable" Hospitality graduates. The preliminary results of the research demonstrate WIL provides great career, personal and social benefits for stakeholders at a conceptual level, a perspective well supported in the generic literature, however in reality the primitive development stage of WIL initiatives has limited the benefits experienced in practice. The constricted effectiveness of WIL is evidenced by the limited resources, training of staff and limited collaboration with stakeholders. These findings support the urgent necessity to stop the dilution of Hospitality courses, and reallocate resources required to develop meaningful and high quality Hospitality qualifications. If university policy makers led the way with a combination of measures including collaborative curriculum development and better marketing of their graduates this would result in rounded, grounded and employable graduates. The formation of national competency and accreditation frameworks for the Hospitality industry, observed in industries such as Medicine, Engineering and Teaching, would provide opportunities for stakeholder collaboration to design appropriate curriculums within the various forms of tertiary institutions to set the acceptable standard.

References

Australian Bureau of Statistics (2012). *5249.0 - Australian National Accounts: Tourism Satellite Account, 2010-11 – Key Figures and Analysis of Results*, Retrieved April 23rd 2012 from http://www.abs.gov.au/AusStats/ABS@.nsf/MF/5249.0

Australian Chamber of Commerce and Industry and the Business Council of Australia. (2002). *Employability Skills for the Future*. Canberra, Department of Education, Science and Training

AC Neilsen. (2000). *Employer Satisfaction with Graduate Skills: Research Report*. Educations and Investigations Programme, Higher Education Division, Canberra

Bates, L. (2005). *Building a bridge between university and employment: Work-integrated learning*. Queensland Parliamentary Library, Research Brief No. 2005/08

Baum, T. (2002). Skills and Training for the Hospitality Sector: a review of issues. *Journal of Vocational Education and Training,* 54(30), 343-263.

BIHECC (2007). Commonwealth of Australia, *Graduate Employability Skills: Prepared for the Business, Industry and Higher Education Collaboration Council*. August, Precision Consultancy

Bridgestock, R. (2009). The graduate attributes we've overlooked: enhancing graduate employability through career management skills. *Higher Education Research & Development,* 28(1), 31–44

Cashman, S.B. and Seifer, S.D. (2008). Service-Learning: An Integral Part of Undergraduate Public Health. *American Journal of Preventive Medicine*, 35(3), 273-278

Cox, S. and King, D. (2006). Skills sets: an approach to embed employability in course design. *Education + Training*, 48(4), 262-274

DEEWR (2009). Commonwealth of Australian, Department of Education, Employment and Workplace Relations. Baird Review releases issues paper. Retrieved August 24th 2010 from http://www.deewr.gov.au/ministers/gillard/media/releases/pages/article_090923_110553.aspx

Green, F. and Zhu, Y. (2010). Overqualification, job dissatisfaction, and increasing dispersion in the returns to graduate education. *Oxford Economic Papers*, 62(4), 740-763.

Guthrie, H. (2010). *Professional development in the vocational education and training workforce*, National Centre for Vocational Education Research, Occasional Paper, Retrieved September 2nd 2010 from http://www.pc.gov.au/__data/assets/pdf_file/0016/100960/sub051-attachment.pdf

Hager, P. and Holland, S. (Eds). (2006). *Graduate Attributes, Learning and Employability.* Springer

Hill, G.W. and Walsh, S.P. (2010). Graduate Research Capabilities: A New Agenda For Research Supervisors. *Australian Journal Of Career Development,* 19(3), 78-80

Kim, J.H. (2008). *Career expectations and requirements of undergraduate Hospitality students and the Hospitality industry: An analysis of differences.* Unpublished master's thesis, AUT University, Auckland, New Zealand

Lamancusa, J.S., Zayas, J.L., Soyster, A.L., Morell, L. and Jorgensen, J. (2008 January). The Learning Factory: Industry-Partnered Active Learning. Industry Partnered Active Learning - The Learning Factory. *Journal of Engineering Education,* 97(1), 5-11

Lindstaedt, S.N., Scheir, P, Lokaiczyk, R., Kump, B., Beham, G. and Pammer, V. (2008). Applying "Scruffy" Methods to Enable Work-Integrated Learning. *The European Journal for the Informatics Professional*, 9(3), 44-50

Maynard, D.C., Joseph, T.A. and Maynard, A.M. (2006). Underemployment, job attitudes, and turnover intentions. *Journal of Organizational Behaviour*, 27(4), 509–536

McLennan, B. and Keating, S. (2008 June). *Work-Integrated learning (WIL) In Australian Universities: The Challenges of Mainstreaming WIL.* Paper presented at the ALTC NAGCAS National Symposium, Melbourne

Nabi, G.R. (2003). Graduate employment and underemployment: opportunity for skill use and career experiences amongst recent business graduate. *Education + Training*, 45(7), 371-382

O'Mahony, G.B. and Sillitoe, J.F. (2001). Identifying the perceived barriers to participation in tertiary education among hospitality employees. *International Journal of Contemporary Hospitality Management*, 13(1), 21-29

Raelin, J.A. (2008). *Work-Based Learning: Bridging Knowledge and Action In The Workplace*. New and Revised Edition, Jossey-Bass, John WILey and Sons, San Francisco

Richardson, S.A. (2009). *Used and unappreciated: Exploring the role work experience plays in shaping undergraduate tourism and hospitality student's attitude towards a career in the industry*. Unpublished doctoral dissertation, Griffith University, Queensland, Australia

Ricks, Jr J.M. and Williams, J.A. (2005). Strategic Corporate Philanthropy: Addressing Frontline Talent Needs Through an Educational Giving Program. *Journal of Business Ethics*, 60, 147-157

Slattery, P. (2002). Finding the hospitality industry. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 1(1), 19-28

Smetherham, C. (2005 March). *Briefing Paper 3: A Review of the Literature on Graduate Employment, Underemployment and Unemployment*. Report for the Independent Study into the Devolution of the Student Support System and Tuition Fee Regime.

Copyright © 2012 Karina Wardle

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Accessible and Everyday OHS: enhancing employability and increasing awareness

Carolyn Woodley, Sue Marshall, Melanie Perkins
Sir Zelman Cowen Centre, Victoria University

A team of legal educators at Victoria University (VU) in Melbourne regards Occupational Health and Safety (OHS) as a vital practical and conceptual literacy that enhances both students' employability and safety. A recent project provided the chance to develop general OHS curriculum for use at various stages of the student experience including during Orientation, in class-based curriculum and throughout students' work placements. The assessment was designed to enable students to meet the requirements of the competency Contribute to Workplace Safety, a minimum standard for OHS from the Public Service Training Package.

The OHS curriculum uses everyday situations and objects that students and workers in a knowledge economy might encounter habitually. As well as the more dramatic tripping, slipping, falling and other physical injuries, this curriculum uses everyday topics such as pens, computers, chairs, stress, teamwork, the internet and headphones and aims to shift students' perspectives about what constitutes OHS, heighten their awareness of risk and develop their capacity to mitigate risk. The aim is not to develop a technical proficiency that would mitigate risk in a particular profession or location but to achieve a conceptual shift about health and safety, what constitutes risk and who is responsible.
The focus of this paper is based on the work of the project team and will examine the design of engaging and accessible OHS curriculum, where OHS activities might be embedded into an undergraduate degree, who might be involved in OHS curriculum and, finally, what OHS assessment should be undertaken prior to and during a work placement.

Keywords: Occupational Health and Safety (OHS), employability, curriculum.

OHS Curriculum: who's responsible?

The Health and Safety of students is not the exclusive domain of specialists in Occupational Health and Safety (OHS) units. OHS cannot be relegated to a page of information in the student diary, a website of OHS policies or an information session during Orientation week: it is far too important, pervasive and diverse for any or all of those sorts of treatments. In this paper, we argue that it is the responsibility of educators at every level in every degree to equip students with general OHS knowledge and awareness to safely operate at work, at university, on the way to university and while undertaking university-related activities off campus. While some discipline areas should, indeed must, rely on the expertise of specialists – such as nursing, chemistry, engineering or psychology – for many students who are already knowledge workers or who are likely to be, OHS is "everyday", common sense, all too familiar and all too easily ignored. For most workers, OHS does not concern dangerous machinery and hazardous chemicals. It is, perhaps, less visible and has less gruesome outcomes than the images that dominate Victoria's Work Safe campaign featuring intensely physical workplace accidents. Such incidents are real and cause great distress but OHS is broader than accidents on building sites, industrial kitchens and factories. Other OHS-related incidents, including stress, bullying and depression combine with more physical accidents to cost the Australian economy an estimated $57.9 billion (O'Neill, 2009) annually. Clearly, OHS matters.

The event of students undertaking work placement seems to galvanize educational institutions into some OHS activity. Many educators are aware of the potential risks faced by students in the workplace and universities need to meet OHS responsibilities. Victorian University (VU) in Melbourne has industry engagement at the heart of its curriculum. Its Learning in the Workplace and Community (LiWC) Policy requires industry engagement in every degree. Yet, OHS at VU is a rather piecemeal affair. Business and Arts students – despite the same pressure to develop their employability skills as their Engineering, Health Sciences and Chemistry counterparts – get little in the way of OHS training or awareness. And those Engineering, Health Sciences and Chemistry counterparts get little in the way of OHS that is not discipline-specific or focused on technicist, specialist concerns.

VU's general response for the need to provide OHS information to students on placement is on a website. The site mentions the Occupational Health and Safety Act 2004 noting that "All workplaces are required by law to provide a workplace environment that is safe and without risks to health" (VU, 2010). Students are advised to "take reasonable care for their own safety and the safety of others; and comply with any OHS policies, procedures, practices and directions of the host organisation" (VU, 2010). The site stresses the need to ensure that host organisations have an OHS policy and procedures, that the student will receive induction to OHS at the workplace and that the workplace is monitored to ensure OHS requirements are being maintained. The idea that "If students believe their workplace to be

unsafe…they should approach their workplace supervisor in the first instance…" (VU, 2010) sounds reasonable enough. But what situations might be unsafe or place students at risk? What do students know of psycho-social risks? How might their student-status make them vulnerable? (Tully, Kropf & Price, 1993). How prepared are students to identity or mitigate OHS risks?

Threats to students' health and safety in the workplace are very real and emanate from people, situations, the environment and objects. Obviously particular professions and industries present particular risks and hazards. Professions such as social work and teaching, for example, have had consistent reports of workers (and students on placement) suffering verbal and physical violence and fear (Tully, Kropf & Price, 1993). Although the banking industry suffers less violent crime than in previous decades (Bunn & Guthrie, 2009), the threat of violence for workers in that sector remains considerable. Health care professionals, community services workers and people working in the law enforcement sector are all at risk - working in isolation, visiting people at home, dealing with people who may be drug affected (Mayhew, 2000). A spate of publicised assaults on taxi drivers (2010-2011) served to remind the public that taxi driving, a common occupation of international students, is "one of the most hazardous occupations because of the risks involved" (Mayhew, 2000; Machin & DeSouza, 2004). Taxi drivers in Australia suffer "28 times the rate of non-sexual assault and 67 times the rate of robbery compared to the community at large" (Machin & DeSouza, 2004). Quite simply, accidents, incidents and occupational violence are problems "with significant legal, economic, and emotional consequences" (Mayhew, 2000). The employability skills discussion should make OHS a more visible theme if governments, universities and businesses want to equip and empower students to be active, productive and safe workers of the future.

Emslie (2010) argues that universities, governments and employers need to have a more systematic and pro-active role in "strengthening efforts to manage risk in work placements and adequately prepare students" (39). It is clear that universities have a duty of care to prepare students about OHS for placement. However, not all students undertake work placement and many students are already at work. There is a general need for an inclusive program of broad OHS awareness for all students.

OHS: safe students and work readiness for all VU graduates

Legal educators at the Sir Zelman Cowen Centre for continuing legal education at VU identify eight key legal literacies23 that all workers in any role in any Australian work place should have. Legal literacies should be prominent in discussions of employability and work readiness. Of the legal literacies, OHS demands immediate attention in the curriculum. A Teaching and Learning Grant in 2010 provided the opportunity for a team of legal educators to develop general OHS curriculum for all students: Occupational Health and Safety: Safe students and an essential element of work readiness for all VU graduates. The project emphasises that an awareness of OHS risks and legislation is vital to all students – whether they are on work placement or whether they are graduates. General OHS awareness is also relevant to students in their part-time work as casual employees are often overlooked in OHS induction and training (Worksafe, 2006). The significant challenge for curriculum developers in the project was that, while everyone seems to agree that OHS curriculum is important, that it should be embedded in a whole-of-course approach and that the content should be generic rather than technical (Pisaniello et al, 2010), it is not easy to decide what should be included. This OHS curriculum needed to be suitable for every VU student in every discipline so the purpose of the project was not to recreate all of the specialist OHS material relevant to particular professions or disciplines – chemistry students working in labs with chemicals have OHS procedures embedded into every activity, engineering students working with soldering irons have been taught to participate in that activity safely and nursing students know how to identify and deal with biohazards. All of these areas are discipline-specific and so not suited to a general audience or, necessarily, to students as students or students who work part time.

OHS Curriculum Content

OHS can be highly specialised and yet OHS is also, as a general competency, extremely broad. There are OHS elements inherent in every situation encompassing environmental, social, psychological and physical elements. Even an OHS curriculum focused on generic student and knowledge worker situations presents a broad array of topics – and not everything can be 'covered'. So, inspired by the oxymoronic maxim, "Cover less, uncover more", curriculum developers worked to develop activities that would shift students' perception rather than 'cover' content. There is, as the Australian Learning and Teaching Council (ALTC) report *Safeguarding Australians* emphasises, a lack of an agreed core body of knowledge for OHS and "the challenge is to secure a cogent blend of knowledge and skills from the

[23] The eight legal literacies that should contribute to students' employability and overall safety include: Occupational Health and Safety (OHS); Duty of care; Equal Opportunity; Discrimination; Privacy; Conflict of Interest; Legislative and Policy Regulatory Frameworks and Codes of Conduct.

disparate disciplines" (Toft et al, 2010: 3). This project, however, did not blend various disciplinary OHS knowledge and skills: it aimed to focus on the common characteristics and behaviours of students as students, as graduates needing to address OHS criteria in the recruitment process and as future workers needing to have a general sense of their legal rights and responsibilities in the workplace.

OHS: Safe students and an essential element of work readiness for all VU graduates created a range of online resources to develop students' understanding of mandatory legal requirements for employers, workers and workplaces and to raise awareness of OHS. The project assumes that an understanding of OHS is essential for all students to both ensure that they contribute to their own and others' safety and as an employability skill. A competency from Vocational Education – *Contribute to Workplace Safety* – provides the basis for the resources that aim to ensure that VU graduates can contribute to workplace safety, even if that workplace is the university. This competency was selected as it is a minimum level requirement for the Australian public service and comes from the Public Sector Training Package.

Curriculum Design

Ironically, by focusing on the real, actual and the everyday, the OHS curriculum created in this project develops students' more abstract problem solving skills to mitigating OHS risk while beginning with what they already know, use or do. This approach is underpinned by constructivist learning theory which encourages students to create their own knowledge. The curriculum uses what students already know as a starting point from which to build OHS-specific understanding (Biggs, 2003). Beyond developing an awareness of the OHS Act and some of its implications (for example, ensuring that students understand that employers are responsible for their safety only insofar as it is "reasonably practicable" or that employees are also responsible for complying with safety requirements and taking precautionary measures to avoid risks), there is no content as such. Rather, the curriculum aims to create awareness or a shift in perception through the centuries old idea of making the familiar strange (Chandler, 2001). Various education and psycho-social theories underpin this approach to curriculum development (Wagoner, 2008).

A more histrionic approach to teaching OHS seems to be a focus on accidents and horror stories – and certainly there are enough statistics about OHS costs, accidents and incidents to shock most people. But the high costs to workplaces, individuals and communities (O'Neill, 2009) can be abstract to students. One approach sometimes adopted in training is to try to personalise OHS incidents with "what if?" scenarios – what if that were you, what if that happened to your mother, sister, father – and this approach can work well in class-based discussions. For the online resources, however, a different approach was adopted that sought to make the familiar unfamiliar (Wagoner, 2008). Common, everyday objects such as headphones, chairs, laptops and pens are introduced and then students' usual sense of what these objects mean is disrupted. Each image or word or object is typically "anchored" (Barthes, 1964) in the social discourse in a way that helps readers to 'read' the text. So a chair in a classroom is not likely to be interpreted in a way that associates it with danger and an image of headphones will most likely connote ideas of music. Unless there was something obviously wrong with it, a chair would just be regarded as furniture in an educational setting – it is normalised or conventionalised in that setting (Wagoner, 2008). Similarly, an image of headphones will be "routinized" (Hawkes, 1977 in Wagoner, 2008) so that they will not be perceived as remotely hazardous. By re-anchoring everyday objects in the discourse of OHS whereby danger or risk become the super-ordinate meaning, objects come to have other meanings associated with risk or hazards. Because chairs do not automatically connote danger, there is room for creativity to achieve this shift in perception: "we take a thing out of its conventional setting and explanation and represent it in a new incongruity context (making the familiar unfamiliar)" (Wagoner, 2008: 469). Wagoner (2008) uses Burke's idea of "perspective of incongruity" and creates a new perspective through the incongruity of associating chairs, pens, laptops or headphones with falling, choking deaths, toasted skin syndrome or hearing loss. By making an unconventional link between a non-threatening object and danger and, in effect, re-categorising objects, students step outside conventional signifying system and generate new meanings. The association of pens and writing is replaced by pens and choking. A laptop on a lap is not normalised: rather, it becomes a dangerous image associated with toasted skin syndrome or infertility.

Curriculum Delivery

The curriculum is completely online and modularised although students are encouraged to complete some activities in real spaces – including work spaces. Students can complete the modules as a separate unit but the preferred mode of delivery would see the various activities and sections embedded in a whole-of-course approach and completed by students at appropriate stages in their degree. The module Safe Students could be done both as part of Orientation activities and throughout a first semester; the various activities in a WIL (work-integrated learning) module that focuses on WIL activities – such as team work, interviewing people in a workplace, working alone or working remotely – could be optional and only completed if assessment tasks require students to undertake those activities; the module on the

OHS Act would be appropriate for students in part-time work, students going on placement or students about to graduate. The module How to address OHS questions at interview would also be useful for all cohorts. The Safe Students module especially uses everyday objects as sites for learning. By using everyday situations and artefacts such as teamwork, computers, chairs and headphones as discussion points, it is possible to shift students' perspectives about what constitutes OHS, heighten their awareness of risk and develop their capacity to mitigate risk. The aim is not to develop in students a technical proficiency that would mitigate risk in a particular profession but to achieve a conceptual change and to increase their legal literacy in respect to OHS.

Conclusion

The question of who is responsible for developing students' OHS knowledge (Bates et al., 2007) will continue until someone claims responsibility for this vital educational, ethical and legal area. OHS is relevant to all workers, to students in part-time work or on placement and to students 'at work' at university. The need for OHS savvy workers is clear from reports on the national cost of work-related injuries (O'Neill, 2009). While there are recommendations for OHS to be embedded in high school curriculum (Pisaniello et al., 2010), they remain recommendations. With the rhetorical push combined with funding incentives for universities to develop graduates' employability skills and enhance employability (Woodley & Marshall, 2012), it would seem that the OHS curriculum sits very comfortably in the undergraduate degree.

References

Bates, A., Bates, M., & Bates, L. (2007). Preparing students for the professional workplace: Who has responsibility for what? *Asia-Pacific Journal of Cooperative Education*. *8*(2): 121-129.

Barthes, R. (1964) Rhetoric of the Image in *The Responsibility of Forms: Critical Essays on Music, Art and Representation.* Transl. Richard Howard, 1985. Berkeley: University of California.

Biggs, J. (2003) *Teaching for Quality Learning at University: what the student does*. OUP: Maidenhead.

Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008) *Review of Australian Higher Education*. www.deewr.gov.au/HigherEducation/Review/Pages/ReviewofAustralian HigherEducationReport.aspx

Bunn, A & Guthrie, R. (2009). Occupational Health & Safety in the Banking Industry. *Legal Issues in Business*. (11), 2009: 80-90.

Chandler, D. (2001). *Semiotics for Beginners*. www.aber.ac.uk/media/Documents/S4B/sem11.html Department of Education & Science (DEST) (2002). *Employability Skills for the Future*. www.dest.gov.au/archive/ty/publications/employability_skills/ final_report.pdf

Emslie, M. (2010) Out of the too hard basket: Promoting student's safety in cooperative education. *Asia-Pacific Journal of Cooperative Education*. 11(2): 39-46.

Gordon, W. J. J. (1961) *Synectics: the development of creative capacity*. New York: Harper & Row.

Hunter, L. (1992) *Reading the Legal World: Literacy & Justice in Canada*. The Canadian Bar Association, Edmonton.

Machin, M.A & De Souza, J. M. D. (2004) Predicting health outcomes & safety behaviour in taxi drivers. *Transportation Research Part F 7*: 257–270.

O'Neill, S. (2009). Best Practice OHS Reporting. *Safety In Action Conference*. Sydney 27-29 October, www.onlineohs.com.au/News/SIA_best_practice.pdf

Pisaniello, D. Stewart, S., Jahan, N., Pisaniello, S., & Winefield, H. (2010) *Improving the Evidence Base for Effective OHS Education in Secondary Schools*. SafeWork SA, Adelaide. www.adelaide.edu.au/oeh/research/ohseducation.pdf

Toft, Y., Capra, M., Moodie-Bain, D., Kift, R., Pryor, P., Eddington, I., & Joubert, D. (2010) S*afeguarding Australians: mapping the strengths & challenges towards sustainable improvements in OHS education & practice*. Australian Learning & Teaching Council: Strawberry Hills, NSW. www.sia.org.au/sigs/education/educationprojects/education-projects-safeguarding

Tully, C.T., Kropf, N.P., & Price, J.L. (1993) Is field a hard hat area? A study of violence in field placements. *Journal of Social Work Education*. 29(2): 191-199.

Victoria University (VU) (2010) Managing LiWC Activities. http://tls.vu.edu.au/vucollege/LiWC/managinglearning.html#ohs

Wagoner, B. (2008) Commentary: making the familiar unfamiliar. *Culture and Psychology* (14) 4: 467-474.

Woodley, C. & Marshall, S. (2012) Occupational Health & Safety: a key legal literacy for learningin & about the workplace. Paper submitted World Association of Cooperative Education (WACE) Conference, *Where East Meets West & Theory Meets Practice*, Istanbul, June 20-22, 2012.

Worksafe. (2006). Casual Workers – Managing their health and safety. www.worksafe.vic.gov.au/wps/wcm/connect/wsinternet/worksafe/home/forms+and+publications/guidance+notes/import_casual+workers+-+managing+their+health+and+safety

Copyright © 2012 Carolyn Woodley, Sue Marshall, Melanie Perkins

The author(s) assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author(s).

Appendix: Community-Based-Learning Questions

1. Why is CBL important to Christchurch now?
2. What are the barriers to developing CBL at UC?
3. What are the assets to developing CBL at UC?
4. What are the advantages of developing CBL at UC?
5. What will happen if UC doesn't develop CBL?
6. What do you think of the critique that UC is using the disaster to profit?
7. What did the earthquake do?

A review of the Asia-Pacific Journal of Cooperative Education

Karsten E. Zegwaard[24]
Editor-in-Chief, Asia-Pacific Journal of Cooperative Education
Cooperative Education Unit, Faculty of Science and Engineering, University of Waikato

The Asia-Pacific Journal of Cooperative Education (APJCE) was founded in 1999, with the first volume published in 2000. The journal has adhered to the philosophy of creating freely and readily accessible information, and opted to be a free, fully online, open access journal. Over the last 12 years, the journal has grown and has become well-established in the cooperative (co-op) and work-integrated learning (WIL) community. The annual number of publications has increased and particularly the number of submissions has shown strong growth, especially in the last three years. APJCE articles are increasingly cited in other journals and significant book publications, and its author-base and user-base has increasingly become more international. This article will provide an analysis of the growth of APJCE, discuss the performance of the journal in the context of co-op/WIL literature internationally, and discuss some recent developments for the journal.

Keywords: publishing, literature, refereeing, citations, journal performance.

Introduction

The Asia-Pacific Journal of Cooperative Education (APJCE) was founded in 1999 by Prof. Richard Coll and hosted by the University of Waikato, with the first volume published in 2000. The founding of the journal was driven by several prominent factors at the time. At the end of the 1990's cooperative education (co-op) and work-integrated learning (WIL) research seemed to be ebbing and waning, with little new research appearing in the literature. However, overviews of the regional and international conferences suggested that much research, albeit mostly program evaluation type research, appeared to be occurring. Furthermore, despite co-op research having historically a strong presence in the US and to some extent Europe, co-op research in the Asia-Pacific region was limited (mostly restricted to New Zealand and Australia), which contrasts to the strong growth of co-op programmes in the Asian countries. This suggested that research activity in this region was perhaps in its infancy, with practitioners engaged in co-op research having little experience in publishing their research in journals. Thus, APJCE set out with the intention of creating a developmental journal to encourage up-and-coming researchers to publish works often presented as conference papers but had struggled to advance this written work to become a published journal article or found the reviewing process discouraging. The journal took a hands-on, constructive approach to reviewing to better enable up-and-coming researchers to successfully publish their work, and not appear to be overly discouraging or critical.

Development and growth of Asia-Pacific Journal of Cooperative Education

Initially APJCE sought five forms of manuscripts; research, topical issues or discussion papers, best practice, book reviews, and correspondence from the community. There have been no correspondence publications since 2003 and, as the journal has advanced, it is not something the journal now seeks. The prevalent forms of manuscript submitted have been topical issues/discussion papers and research paper submissions. There have been several book reviews published, however, will likely remain limited to two or three a year. Best practice papers were sought, as this tends to be where new researchers begin publishing, however is now discouraged unless it explores a particularly unique or unusual setting. Often best practice papers are encouraged to redirect the manuscript focus from the context (e.g., placement programme) to a particular unique or challenging aspect of the programme.

Generally, the state of the co-op/WIL literature worldwide has improved over the last 15 years. Bartkus and Stull (2004) described the co-op/WIL literature in 1997 as 'sketchy, limited, and uncertain', with a predominate focus on best practice. However, in 2011, Bartkus and Higgs pointed out that the literature has since strengthened (Bartkus & Higgs, 2011). The strengthening of the literature reflects the greater research activity that occurred over that period, particularly by Australian researchers, subsequently reflected in the growth experienced by APJCE. Of significance, an overview of the international co-op/WIL research community shows that it has grown to a level that it can now sustain two central journals, the APJCE and the *Journal of Cooperative Education and Internships* (JCEI), which is an indication of the maturation of co-op/WIL over the last 15 years (Zegwaard & Coll, 2011). A further indication of the

[24] K.E. Zegwaard, Cooperative Education Unit, Faculty of Science and Engineering, University of Waikato, +64 7 838 4892, k.zegwaard@waikato.ac.nz.

maturation of the co-op/WIL literature is the increasingly co-op/WIL orientated literature is being cited in discipline-specific educational journals other than APJCE and JCEI (Bartkus, 2007; Coll & Kalnins, 2009).

This strengthening of the co-op /WIL literature is reflected by the growth APJCE. At the beginning of 2010, the APJCE publication rate was at a volume that a copy editor was employed to undertake the tasks of preparing the manuscripts for publication and interacting with authors to clarify details. The original APJCE website was significantly updated and restructured to allow for better functionality and accessibility of what has grown to be a significant collection of articles (as of May, 2012, containing ~150 articles). The editorial board has expanded to reflect the increasing submission rate and now consists of 31 members from a variety of countries.

In 2010, APJCE was ranked by the Australian Research Council (ARC) as a B journal, which was particularly favourable in comparison to comparable journals. Since then, the journal has considerably advanced. Large international databases of eligible academic and scholarly journals such as Scopus, by Elsevier, and ERIC (Education Resources Information Center) are currently reviewing eligibility of APJCE for inclusion. Inclusion in these sorts of databases will grant APJCE a higher profile and likely increase the number of citations its articles receives. Recently APJCE was added to the Cabell's Directories, administrated by Cabell Publishing Inc.

Reviewing process

APJCE follows the editorial guidelines laid out by the International Committee of Publication Ethics (COPE). The journal undertakes a double blind peer review process, with all manuscripts reviewed by at least two members of the editorial board. Before the submitted manuscript is sent to members of the editorial board, the Editor-in-Chief conducts a review of the manuscript, usually to determine the relevance of content to the APJCE audience.

Manuscripts sent out for review are typically returned to the author with comments within two months. After amendments have been made and returned, an analysis is undertaken to determine if the editorial board's comments have been reasonably addressed or responded to, and if so, the manuscript is passed on to the copy editor for preparation for publication. Publication of articles occurs as articles become available after preparation. With APJCE being a fully online journal, articles can be published as a rolling publication rather than when a full issue is available.

Journal statistics

APJCE maintains a database of all submitted manuscripts for tracking and statistical purposes, and along with data from Google Scholar (which provides citation statistics) and Google Analytics (which provides APJCE website visits, download statistics, users country of origin) a valuable insight of the journal performance can be obtained

.

Submission, rejection, and publication rates

From somewhat modest beginnings, the number of publications per year grew in two stages, from 2000 to 2002, and particularly from 2006 to present (Figure 1a), with an increasingly wider international source of authors. The dip in 2005 reflects a decrease in the number of submissions in the previous year (Figure 1b). The increase in publication rate in 2009 was mostly in response to the special edition around the WACE Manly, Australia, conference, whilst the increased submission rate in the 2010, was in response to the special edition based on the theme of the 2010 ACEN conference and the 2010 release of the ARC rankings.

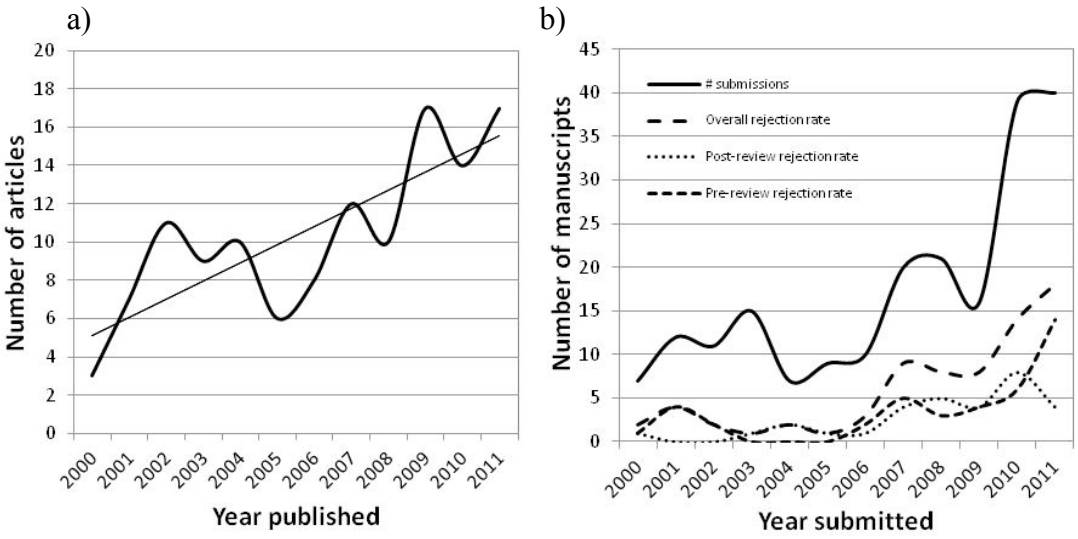


Figure 1. Where a) is the number of publications per year; and b) is the number of submissions and corresponding rejection rate, where 'rejected' means manuscripts with review outcome of 'rejected' and 'major revision with resubmission' which subsequently are not resubmitted.

Not all journals openly communicate their rejection rates, and appear to measure 'rejection' differently, rates of 40-50% appear common, with journals claiming to have a high impact factor reporting rejection rates well over 70% (Aarssen et al., 2008). APJCE uses a constructive approach to reviewing, with the aim of having as many manuscripts published as possible, on the proviso these are ultimately publishable manuscripts, thus does not see a high rejection rate as a measure of quality.

An outright rejection of the manuscript after review is unusual, however, some manuscripts require 'major revision with resubmission' (essentially a 'fatal review'). Some authors, with support, do carryout this major revision and resubmit, and ultimately produce a publishable manuscript. For the purposes of reporting APJCE overall rejection rate in this article, the rejection rate is the sum of the number of manuscripts that are; 1) rejected prior to review, 2) rejected after review, 3) and a review outcome of 'major revision with resubmission' which subsequently are not resubmitted. The overall rejection rate for APJCE is ~30%, which recently tends to be slightly increasing largely in response to a growing number of manuscripts rejected before editorial board review, nearly always on grounds of relevance (Figure 1b).

APJCE authors and website usage

The initial intention of APJCE was to focus on the Asia-Pacific region. There were already established bodies of researchers in New Zealand and Australia, which is reflective of the current make up of the editorial board, there was little published research activity from Asia. There are articles published in APJCE authored by researchers from Asia (e.g., Japan, China, Hong Kong, Taiwan, Thailand), however, when analysing the country of origin for all APJCE authors (Figure 2a), the number of authors from Asia are comparatively few. Instead a greater number of authors based beyond the Asia-Pacific region have published in APJCE, particularly from Africa (mostly South Africa) and Europe (mostly the UK and Germany). Most APJCE authors are based in New Zealand and, particularly since 2009, Australia, which is reflective of the recent growth of WIL in Australia.

For the period between July, 2011 (when Google Analytics data collection commenced) and March, 2012, the APJCE website received 6,538 individual visits creating 11,798 downloads[25]. The users that most often accessed the APJCE website were from the regions of Asia and the Pacific (the later consisting almost entirely of New Zealand and Australia), reflecting APJCE original Asia-Pacific focus, a further 42% were from outside the Asia-Pacific region (Figure 2b). In contrast to the limited number of APJCE authors from Asia (Figure 2a), the number of website users from Asia are vastly higher. This may indicate, despite the anticipated increase in articles from Asia not materialising, that APJCE is instead fulfilling a significant need for (free) literature resources in this region, and suggests perhaps co-op/WIL in this region may still be at developmental stages with few research active groups supporting co-op/WIL programs. Similarly, the low number of authors from the Americas (North, Central, and South America) contrasts to the amount of website usage from this region (mostly from the US and Canada). Unlike in Asia, Co-op/WIL has had a

[25] Data covering the period of 10th of July (date of new website initiation) to 19th of March, 2012

long and well-established history in North America, and the contrast between the two data sets may reflect that either researchers are publishing in other journals (e.g., JCEI) or that co-op/WIL is at a stage of maturity in this region where limited amount of research activity tends to occur. Whatever the reason for this difference, this region nevertheless appears to have an appreciable want for co-op/WIL literature.

a) APJCE authors b) APJCE users

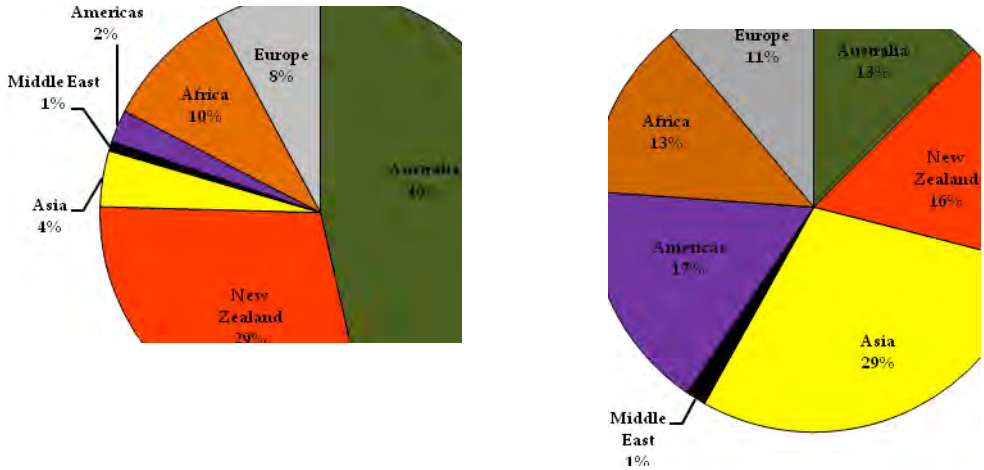


Figure 2. Where a) is the country of origin of all APJCE *authors*, where *n* = 296 and is the sum of the number authors listed on each article (from volume 1 to volume 12, issue 2); and b) is the country of origin of all APJCE website *users* from 10th of July 2011 till 19th of March, 2012, where *n* = 6,538.

When analysing the website usage per country, significant volume was from six countries; New Zealand (16%), Australia (13%), the US (9%), the UK (6%), Canada (5%), and the Philippines (4%) – website usage from other Asian countries was evenly spread across a large number of countries. The top five of these countries are traditionally recognised as the 'powerhouses' in co-op/WIL research. Of particular note, the three of these countries are outside the Asia-Pacific region, indicating that APJCE has over time morphed into an international journal.

Nearly half of APJCE website users arrived using search engines. Analyses on key search words used by these individuals includes (in descending order) were; the journal title (expressed in a variety of combinations), APJCE, graduate competencies, achievement and work placements, Karsten APJCE, and then sentence compounds mostly using 'cooperative education' and 'work-integrated leaning' with modifiers such as; 'importance' 'reflection', impact', 'assessment', 'benefits,' and 'employers views'.

Citations of APJCE articles

One measure of acceptance of any journal is the number of citations of its articles receives, in particularly citations in other journals. Often citations tend to be within articles published in the same journal or self-citations in other journals, however, increasingly APJCE articles are observed being cited (which are not self-citations) in other journals (e.g., in *Research in Science and Technology*, *Science Education International*, *African Journal of Business Management*, *The Qualitative Report*, *Asia Pacific Education Review*, *The Journal of International Agricultural Education*, *Industry and Higher Education*, and *Journal of Planning Education and Research*).
The total number of citations of APJCE articles according to Google Scholar are also increasing, with the work by Rainsbury, Burchell, Hodges, and Lay (2002) being the most commonly cited APJCE article (Table 1). The method Google Scholar uses for counting citations tends to overlook citations in books unless these are explicitly made available online, and favours older publications as these have had greater time to be cited; however, some APJCE articles from post-2005 are included on the list of top 10 APJCE citations (Table 1). Increasingly APJCE articles are also being cited in scholarly books, for example the bulk of the post-2005 literature cited in the 2011 *International Handbook for Cooperative and Work-Integrated Education* (Coll & Zegwaard, 2011) were articles from APJCE (Zegwaard, 2012).

TABLE 1. Top 10 cited APJCE articles[1], in descending order, according to Google Scholar™.

Authors	Subject
Rainsbury, Burchell, Hodges, Lay (2002)	Researching perceived important graduate competencies from students and graduates perspectives
Hodges, Burchell (2003)	Researching perceived important graduate competencies from employers perspectives
Abeysekera (2006)	Curriculum design implications when incorporating WIL
Coll, Chapman (2000)	Research approaches and methodologies for co-op
Coll, Eames (2000)	Alternative models for the role of placement coordinators
Coll, Taylor, Grainger (2002)	Exploring current assessment practices of work-based learning for teachers
Martin, Leberman (2005)	Exploring learning perceptions by students and supervisors after practicum experience
Fleming, Eames (2005)	Work placement program structure impact on student learning
Zegwaard, Coll, Hodges (2003)	Competencies based framework for assessing workplace learning
Walo (2002)	Assessing how student competencies are enhanced by WIL

[1] as for February, 2012.

Conclusion and the future

Since the founding of APJCE, the submission and publication rates have steadily increased. The journal now holds a substantive collection of scholarly literature that underpins current research work in co-op/WIL. As the wider co-op/WIL literature has matured, APJCE has carved out a well-established presence within the wider literature. For example, compare the numerous citations of APJCE articles outside the two central co-op/WIL journals, including journals that are subject-specific and general educational journals, and the 2011 International Handbook for Cooperative and Work-Integrated Education. The open access, online model that APJCE has adopted has been a particular strength for the journal, as it has allowed for free accessible literature to the wider community. The bulk of APJCE authors are from New Zealand and, increasingly, from Australia, with a significant contribution from Europe and Africa. However, APJCE users are internationally more evenly distributed than its author base, indicating that APJCE is fulfilling a need for co-op/WIL literature well beyond the Asia-Pacific region, indicating that the journal has morphed into an international journal.

As the submission rate has increased, the journal's rejection rate has proportionally increased to 30%, largely because of a higher number of manuscripts submitted with content not relevant to the APJCE audience. With the restructuring of the website, APJCE is well situated for further growth. With APJCE being included into databases of scholarly journals, such as Scopus, the journal's profile will likely rise and may drive this growth further. Reflecting on the past growth and the potential future growth, it is encouraging to both the editors of APJCE and the authors who have published in APJCE that the journal has carved out a successful and well-established presence in the co-op/WIL community.

Acknowledgements

The author likes to acknowledge the editorial board who generously give their time and expertise to reviewing manuscripts, Jennifer Buckle, APJCE Copy Editor, for her work and gracious interactions with the authors, NZACE for the financial support, and the University of Waikato for allowing use of available resources.

Submission process

Full details of the APJCE manuscript submission process are available on the APJCE webpage (www.apjce.org), particularly on the Manuscript Submission page (www.apjce.org/submitting-manuscripts). In brief, manuscripts are to be between 3,000 and 5,000 words (excluding abstract, references, and tables). Formatting details are available on the Instructions for Authors page (www.apjce.org/instructions-for-authors); in general, APJCE uses Palatino Linotype font size 9, American English, and APA 6th edition referencing style. All manuscripts, as a .doc. or .docx file format, are submitted directly to the editor via email (editor@apjce.org). All manuscripts are double blind reviewed by two or more reviewers. Typically reviewing takes four weeks, after which notification of the reviewing outcome and required amendments will be provided to the author(s) by the editor-in-chief.

References

Aarssen, L.W., Tregenza, T., Budden, A.E., Lortie, C.J., Koricheva, J., & Leimu, R. (2008). Bang for your buck: Rejection rates and impact factors in ecological journals. *The Open Ecology Journal, 1*(1), 14-19.

Abeysekera, I. (2006). Issues relating to designing a work-integrated learning program in an undergraduate accounting degree program and its implications for the curriculum. *Asia-Pacific Journal of Cooperative Education, 7*(1), 7-15.

Bartkus, K.R. (2007). A review and synthesis of scholarly research in cooperative education and internship: Part 1. An analysis of quantitative research published outside the Journal of Cooperative Education and Internships. *Journal of Cooperative Education and Internships, 41*(1), 56-96.

Bartkus, K.R., & Higgs, J. (2011). Research in cooperative and work-integrated education. In R.K. Coll & K.E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 73-84). Lowell, MA: World Association for Cooperative Education.

Bartkus, K.R., & Stull, W.A. (2004). Research in cooperative education. In R.K. Coll & C. Eames (Eds.), *International handbook for cooperative education: An international perspective of the theory, research and practice of work-integrated learning* (pp. 67-81). Boston, MA: World Association for Cooperative Education.

Coll, R.K., & Chapman, R. (2000). Choices of methodology for cooperative education researchers. *Asia-Pacific Journal of Cooperative Education, 1*(1), 1-8.

Coll, R.K., & Eames, C. (2000). The role of the placement coordinator: An alternative model. *Asia-Pacific Journal of Cooperative Education, 1*(1), 9-14.

Coll, R.K., & Kalnins, T. (2009). A critical analysis of interpretive research studies in cooperative education and internships. *Journal of Cooperative Education and Internships, 43*(1), 1-14.

Coll, R.K., Taylor, N., & Grainger, S. (2002). Assessment of work based learning: some lessons from the teaching profession. *Asia-Pacific Journal of Cooperative Education, 3*(2), 5-12.

Coll, R.K., & Zegwaard, K.E. (Eds.). (2011). *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice*. Lowell, MA: World Association for Cooperative Education.

Fleming, J., & Eames, C. (2005). Student learning in relation to the structure of the cooperative experience. *Asia-Pacific Journal of Cooperative Education, 6*(2), 26-31.

Hodges, D., & Burchell, N. (2003). Business graduate competencies: Employers' views on importance and performance. *Asia-Pacific Journal of Cooperative Education, 4*(2), 16-22.

Martin, A., & Leberman, S. (2005). Keeping up with the play: Practicum, partnership and practice. *Asia-Pacific Journal of Cooperative Education, 6*(1), 17-25.

Rainsbury, E., Hodges, D., Burchell, N., & Lay, M. (2002). Ranking workplace competencies: Student and graduate perceptions. *Asia-Pacific Journal of Cooperative Education, 3*(2), 8-18.

Walo, M. (2002). Assessing the contribution of internship in developing Australian tourism and hospitality students' management competencies. *Asia-Pacific Journal of Cooperative Education, 2*(2), 12-28.

Zegwaard, K.E. (2012). Overview of the Asia-Pacific Journal of Cooperative Education. In K.E. Zegwaard (Ed.), *New Zealand Association for Cooperative Education 2012 Conference Proceedings* (pp. 43-49). Hamilton, New Zealand: New Zealand Association for Cooperative Education.

Zegwaard, K.E., & Coll, R.K. (2011). Exploring some current issues for cooperative education. *Journal of Cooperative Education and Internships, 45*(2), 8-15.

Zegwaard, K.E., Coll, R.K., & Hodges, D. (2003). Assessment of workplace learning: A framework. *Asia-Pacific Journal of Cooperative Education, 4*(1), 10-18.

Copyright © 2012 Karsten Zegwaard

The author assign to the Australian Collaborative Education Network (ACEN Inc.) an educational non-profit institution, a nonexclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to the Australian Collaborative Education Network to publish this document on the ACEN website and in other formats for the Proceedings ACEN National Conference Melbourne / Geelong 2012. Any other use is prohibited without the express permission of the author.