An integrated model for the evaluation of work placements

KATHRYN VON TREUER[1],
Deakin University, Australia

VANESSA STURRE,
Deakin University, Australia

SOPHIE KEELE
Deakin University, Australia

JANET MCLEOD
Deakin University, Australia

A fundamental purpose of university education is to enhance the skills of students. Recently there has been an increasing focus within the Australian higher education system to embed a greater amount of work-integrated learning (WIL) into the curriculum. The evaluation of different types of WIL is important, as is its improvement through evidence-based decisions. Researchers and theorists have been able to extend and develop theories (such as constructive alignment) and processes (such as the triangulation method) to inform work placement evaluation. These methods are not always used concurrently, and the complexity of work placements, and the large variation within these, may be reasons why no consistent evaluation measure has been refined. A neglected key stakeholder in formal evaluation process of work placements (particularly when the goal is graduate employability) is the recent course graduate. Here, we propose an integrated framework for evaluation of work placements that incorporates involvement of recent graduates. (*Asia-Pacific Journal of Cooperative Education, 2011, 12(3), 195-204*)

Keywords: work-integrated learning; placements; evaluation; triangulation; constructive alignment; competencies

INTRODUCTION

The fundamental purpose of quality higher education is to enhance the skills of students and, ultimately, to prepare them for employment after university (Harvey & Green, 1993). Due to the current skills shortage in Australia, this point is of great significance. The higher education sector must enhance the employability of its graduates as part of a wider strategy to increase the skills base. Further, the dynamic and competitive nature of organizations demands that universities deliver high-quality work-ready graduates. Abilities should exceed classroom-based knowledge and technical skill (Freudenberg, Brimble, & Cameron, 2008). To address this shortage, higher education institutions need to provide quality educational learning experiences that bridge the gap between the skills learned in the classroom and those required for the workplace. Universities now have the challenge of embedding work-integrated learning (WIL) into the university curricula, and then demonstrating its value.

WIL methods typically involve interplay between workplace experience and formal learning. WIL methods are widely acknowledged as developing generic or professional skills and improving the employability and work readiness of students (Patrick, Peach, Pocknee, Webb, Fletcher & Pretto,, 2008; Murakami, Murray, Sims, & Chedzey, 2009). For work placements (a type of WIL), the experience of work provides students with the opportunity to gain and "apply knowledge, skills, and feelings in an immediate and relevant setting" (Smith, 2001, p.

[1] Corresponding author: kathryn.vontreuer@deakin.edu.au +61 3 9244 6554

1). Consequently, students are exposed to authentic work practices in which conceptual change is gained through collaborative social interaction in the work context and reflection upon these experiences. The importance of work placements in the development of work readiness is clear.

While it has been reported that work placements are an important feature to assist work readiness, there is little published empirical evaluation of their effectiveness in achieving this. Consequently, the effectiveness of WIL in contributing to the development of work readiness competencies remains to be understood (Martin, 1996). Australian academics have made a healthy theoretical and empirical contribution to progressing teaching and learning assessment, but the current placement (unit level) evaluations appear limited. The value and benefit of placements are not easily measured, and conventional academic methods of evaluation for coursework units do not lend themselves to work placement evaluation. Despite this, there is significant anecdotal evidence about the efficacy of work experience in general and of embedded work placements in particular (Crebert, Bates, Bell, Patrick, & Cragnolini, 2004; Harvey, Moon, & Geall, 1997). Continuous improvement involving ongoing evaluation is the cornerstone of analyzing the effectiveness of WIL programs in realizing the variety of positive outcomes proposed in the literature. In this paper, individual level student evaluation will be referred to as *assessment* and unit level evaluation will be termed *evaluation*. This paper offers a solution by integrating the current theoretical ideas into a continuous improvement process for the evaluation of WIL placements. An initial discussion on the concept of placements is presented. Components of WIL placements, such as the development of competencies, constructive alignment, and triangulation methods for unit level evaluation, are reviewed. This brief review will then inform a discussion of an integrated approach to evaluation and a continuous improvement framework for placements.

WORK-INTEGRATED LEARNING — PLACEMENTS

Industry-based work placements have been reported to be a critical conduit to graduate work readiness (Richardson, Kaider, Henschke, & Jackling, 2009). Placements have been described variously as internships (Gibson, Brodie, Sharpe, Wong, Deane, & Fraser, 2002), work placements (Reeders, 2000), fieldwork (Hay & O'Donoghue, 2009), industry-based learning (Gibson et al., 2002), sandwich years (Bullock, Gould, Hejmadi, & Lock, 2009), job shadowing (Gibson et al., 2002), apprenticeship (Gibson et al., 2002), cooperative education (Reeders, 2000), practicum (Reeders, 2000), fieldwork (Allison & Turpin, 2004), or clinical placements (Booth, Collins, & Hammond, 2009). These types of placements share characteristics and most involve on-the-job training, yet they are not synonymous with each other. However, in this paper we recognize their similarities and as such place them within the framework of *work placements*. Embedding work placements into course curricula has provided an important vehicle in assisting new graduate work readiness (Richardson et al., 2009). Consequently, work placements within undergraduate and postgraduate courses have proliferated, resulting in a greater rate of student participation (Bates, Bates, Bates, & Coll, 2007).

Evaluation of work placement outcomes and the student experience is typically more complex than evaluation of a standard university unit. This complexity may be due to the broad variation of work experience that the student gains. Students are also likely to be

working in different organizations, or working on different projects within their various organizations during their course of study. Adding to this complexity, the organization supervisor is an additional stakeholder, critical to the process, who may ultimately judge student performance. Further, although an organizational supervisor may complete an individual feedback form for a student, generally the form's information is not strategically aligned with the broader university evaluation process. Initial examination of the literature revealed that a multidimensional approach is frequently proposed, but is not necessarily incorporated into evaluation of placements. Inadequate evaluation and assessment of work placements can be caused by a lack of understanding of the nature of learning in the workplace. Foley (2004) noted that workplace learning can be influenced by personal, interpersonal, institutional, social, and historical factors. Eraut, Alderton, Cole, and Semker (1998) stated that workplace learning can be formal, informal, non-formal, and incidental. As a result, the measurement of learning and the capture of individual learner progress are fraught with complexity.

Although work placements are important and valuable for student engagement, learning, graduate employability, and industry partnerships, there are few empirical studies or reviews that inform evaluation methodology for them. One pathway is to explore the possibility of a comprehensive approach to work placement evaluation by reviewing elements of the work placement process. The following sections briefly discuss work placement competencies, constructive alignment, and the importance of triangulated approaches. The importance of integration of these elements to overcome theoretical gaps is highlighted.

EVALUATION

Evaluation is central to continuous improvement efforts in the education sector. It is the "process of determining the merit, worth, or significance of things" (Scriven, 2003, p. 15) and its "most important purpose is not to prove, but to improve" (Stufflebeam, 2003, p. 30). As reviewed by Harvey and Green (1993), one conceptualization of *quality* in the educational setting is the transformative view, which judges quality as the extent to which fundamental changes have taken place. Quality is measured according to the extent to which the student experience is enhanced; the extent to which the educational experience has been valuable in the development of abilities, knowledge, and skills. Placement programs are implemented with the purpose of bringing about such fundamental changes. The nature of the implementation places the student at both the center of the learning process and the center of evaluation (Harvey & Green). Consequently, educational evaluation frequently relies upon information gathered via student surveys, which require students to assess teacher behavior and course design. This information then serves to illustrate the quality and effectiveness of teaching and course design, which Smith (2008) reports assumes a causal link. The approach relies heavily upon the assumption that the data gathered about the quality of teaching or course design represents the quality of learning that has been produced.

The core objective of work placement programs is the development of more relevant student abilities. It aims to transfer theory to practice, to develop generic skills and improve graduate employability. These work-readiness skills may include self-confidence, critical thinking, effective communication, problem-solving, teamwork, and professionalism (Bates, 2005;

Freudenberg et al., 2008). A comprehensive evaluation would be required to determine if a work placement unit is achieving this core objective.

Work placement units are yet to arrive at a comprehensive evidence-based framework applicable to the evaluation of WIL (incorporating work placements). With respect to the effectiveness of work placements, Reeders (2000) wrote, "where evaluations have been undertaken, the results are mixed" (p. 206). The sensitivity of evaluation for achieving work readiness skills should be most apparent in the placement context. There, the value of the experience is based solely on the integration of learning in the workplace. What remains unclear is the extent to which the programs contribute to work readiness outcomes. This is due to the lack of a comprehensive evaluative framework to assess their quality and effectiveness (Martin, 1996; Reeders, 2000).

Several unifying evaluation frameworks have been offered. For example, Stufflebeam (2003) developed the Context, Input, Process, and Product Evaluations (CIPP) framework. Smith (2010) proposed the Alignment, Authenticity, Integration, and Administration (AAIA) framework and Richardson et al. (2009) developed the Context, Capability Driven, Action Learning, Reflective, Developmental, Student Centered (CCARDS) assessment framework. However, none of these models incorporates graduate level feedback. As noted by Lees (2002), rather than testing abilities, a more satisfactory measure of work placement evaluation is to survey graduates' satisfaction with their program of study and their reflections on the skills they have developed.

IMPORTANCE OF IDENTIFICATION OF COMPETENCIES TO WORK READINESS AND WORK PLACEMENTS

Universities maintain an explicit vocational role for students. In recognition of this, every Australian university has developed a list of graduate attributes, which includes the qualities, skills, and understandings a university community agrees its students should develop. These attributes are developed during the candidature at the university and therefore guide the contribution the student can make to a profession and as a citizen (Bowden, Hart, King, Trigwell, & Watts, 2000). Ideally, the graduate attributes should be reflected in the objectives of each coursework unit, demonstrating their link to employability.

Referring to graduate employability, Bridgstock (2009) stated that graduates ideally "not only maintain and develop knowledge and skills that are specific to their own discipline or occupation but must also possess 'generic' skills, dispositions, and attributes that are transferrable to many occupational situations and areas" (p. 32). Generic skills have also been referred to as core skills, key competencies, transferrable skills, or underpinning skills (Mayer, 1992). Work placement units have a role in providing some of the discipline-specific skills that are often aligned to defined competencies, and may be more specific to the placement unit's own objectives. Therefore, it is the knowledge gained by the student during the placement units that should indicate potential for work readiness and employability. Individual student assessment of a placement unit and course evaluations would ideally reflect the breadth of skills learned by a student.

Current course evaluation surveys do not aim, nor provide enough information, to evaluate the work placement units adequately. Some authors (such as Hay & O'Donoghue, 2009) have reported using a triangulated approach, that is, information sourced from students,

placement co-ordinators, and organizational supervisors, to inform which competencies should be gained and assessed as part of the work placement unit. Green, Hammer and Star (2009) note that there is debate and confusion regarding the definition and implementation of graduate skills, attributes, and capabilities. This approach could be extended.

A neglected source that could inform work competencies is the graduate who has recently completed the work placement unit. The evaluation of competencies sought from graduates would serve two purposes. The first purpose would be to measure the effectiveness of the work placements once the graduate is employed. Assessment of how well the work placement has met its learning objectives and contributed to work readiness could be realistically measured at this point. The second purpose of sourcing graduate feedback would be to explore which competencies are required in their new positions. This would ensure that the competencies identified and measured within the work placement unit are relevant. Continual graduate feedback on competencies required in their employment would serve to provide confirmation and expansion or reduction of current competencies. It would also provide further assessment of the success of the learning achieved in the work placement. Both aims would inform a unit level evaluation as well as provide part of the information needed for a continuous improvement approach.

WORK PLACEMENT LEARNING AND THE CONSTRUCTIVE ALIGNMENT APPROACH

Learning theorists have been working toward meeting the learning needs of students in a way that provides skills transferrable into the workplace. As early as the mid-1970s, Kolb and Fry (1975) outlined a model whereby students learn through action, afterwards utilizing a process of critical reflection and evaluation of the experience. Building upon this idea, Brown, Collins, and Duguid (1989) supported the notion that knowledge was a result of the activity, context, and culture in which the knowledge is developed and used. Boud, Cohen, and Walker (1993) detailed a number of assumptions underpinning skill acquisition from experiential teaching and learning experiences. The assumptions include that experience is a foundation of, and stimulus for, learning; learners actively construct their own experience; learning is a holistic experience; learning is socially and culturally constructed; and learning is influenced by the socio-emotional context in which it occurs. While not the only learning theory (for example, socio-cultural learning theory), constructive alignment offers an approach to operationalize, and therefore evaluate, the learning that has occurred.

Smith (2008) stated that any learning environment contains learning objectives (LOBs). LOBs and the methods or activities used to assist students achieve them incorporate teaching and learning activities (TLAs). Such activities may include feedback, lecturing, and practice exercises. TLAs are implemented in order to achieve the LOBs and ultimately achieve the learning outcomes (LOCs) (Figure 1). Constructive alignment theory promotes alignment between the LOBs, the TLAs, and the assessed LOCs.

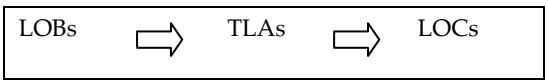

FIGURE 1.
Schematic diagram of the constructive alignment approach (Smith, 2008).

Of the several learning theories available, the constructivist theory appears to be the most dominant in the literature and in application. Constructivism developed in the field of cognitive psychology and has been more recently adopted in education (Biggs, 1996). The general concept of constructivism is the belief that "learners arrive at meaning by actively selecting, and cumulatively constructing, their own knowledge, through both individual and social activity" (p. 348). Biggs reports that:

> The learner brings an accumulation of assumptions, motives, intentions, and previous knowledge that envelops every teaching/learning situation and determines the course and quality of the learning that may take place … the centrality of the learner is a given. (p. 348)

Biggs recommends that the constructive alignment approach be underpinned by the notions that:

- Teachers need to be clear about what they want their students to learn and how they operationalize that learning in terms of performances of understanding; for example, memorizing and paraphrasing are not demonstrating understanding, when compared to recognizing an application in a novel context;
- The performance objectives need to be arranged in a hierarchy from most acceptable to barely satisfactory, which may become the grading system;
- Students are placed in situations that are judged likely to elicit the required learning; and
- Students are then required to provide evidence, either by self-set or teacher-set tasks (as appropriate), that their learning can match the stated objectives. Their grade becomes the highest level they can match convincingly.

Universities implement the constructive alignment approach to operationalize the links between learning objectives and learning outcomes. Students are assessed or mapped against their ability to achieve their learning objectives. The assessment is often performed individually in order to provide students with individual level feedback and marking. At a group level, this feedback may not be so readily analyzed, but would be useful to inform the continuous improvement of work placements. Moreover, if the work placement experience provides a critical opportunity to meet work readiness needs, then the LOCs could also be measured at the graduate level, which would then inform the effectiveness of the TLAs for work readiness.

Some learning is less obvious. Effective evaluation would benefit from the inclusion of several dimensions of potential learning. Smith (2008) identified five dimensions by various authors and extended the list to incorporate two more considerations (see Table 1).

This list of dimensions provides a good starting point for understanding differences in intended program delivery and the delivered program, and may serve to inform useful points for evaluations. The complexity of placements and the idea that what is taught and learned are different domains that require assessment must be appreciated. Consequently, the assessment and evaluation of placements should be able to measure these differences in intended program delivery.

TABLE 1
Seven Dimensions of Learning (Curricula) Based on Smith, (2008)

Dimension	Explanation
Intended or espoused	That which curriculum designers intend to teach; the one containing the learning objectives; the one that contains the intended TLAs and their intended outcomes.
Taught, enacted or explicit	The curriculum that teachers teach. This is the actual TLA enacted *in situ*.
Hidden or implied	That which is taught implicitly such as through evaluative judgments made explicitly or implicitly in talk, through the design of the TLAs, and through the relationships between teachers and students.
Learned	The learning the students take away from the experience. Often this exceeds the scope of what was intended, taught, and assessed.
Assessed	The learning that is assessed in the assessment protocols.
Experienced	The curriculum as experienced by students. This encompasses the idea that the student experience itself (created by factors such as enacted curriculum, inconsistencies between the espoused, enacted, and assessed curricula) is an object worthy of inquiry. Apart from their knowledge of the espoused learning objectives, the experienced curriculum is the only one the students can comment on, since it is the one they have experienced. From students' perspective, it is the experienced curriculum that holds the most importance.
Evaluated	The curriculum as construed or implied by the evaluation protocols used to assess it. Typically, program evaluation must specify the scope and design details of an evaluation before proceeding, which implies the specification of the evaluation.

THE TRIANGULATED APPROACH

As previously mentioned, the evaluation of educational programs in meeting their objectives is a difficult process, partly due to the variety of stakeholders involved in making judgments. In the educational setting, stakeholders may include students, university personnel, government agencies, and graduate employers. The evaluation of a unit can vary with each stakeholder (Harvey & Green, 1993) so there is the potential for multiple notions of what a quality unit encompasses and what learning outcomes it generates. A comprehensive evaluation process should take the different conceptualizations into account. Triangulated data collection refers to the utilization of one or more sources of data (Bryman, 2010). The use of triangulated data collection can increase confidence in the data findings as the assumptions made from findings gained from single source data are limited (Bryman). In this instance, the triangulated data sources would include data, potentially collected from students, organizational supervisors, and placement co-ordinators.

Hay and O'Donoghue (2009) conducted a study analyzing ten work placement programs for occupational therapists. They reported that most universities reported that they utilized a triangulated process of evaluation. The triangulated approach included receiving feedback

from the student, the university-based placement co-ordinator, and the organizational supervisor.

While the ideas above may be true, the value of the assessment is limited when the information is utilized only at the individual student level. In a separate process to student feedback for the purpose of individual assessment, student feedback is often gathered at a group level through end of unit formal student evaluations. This separate process may not then be integrated with the placement and organizational supervisor feedback.

INTEGRATING THE APPROACHES

The challenge is to develop a flexible framework with wide applicability across the spectrum of specific and generalist degrees. This should occur while maintaining a critical attitude to its pedagogical and vocational value. The development of competencies needs to be course-specific, meeting the levels of work-ready skills and knowledge that are required of the graduates. The triangulated approach is sound for student assessment. Ideally, it should be analyzed at group level to inform continuous improvement strategies. The commitment to constructive alignment in the context of work placement programs appears to be a useful operationalization of teaching and learning objectives. It is proposed that when each is considered alone, competency analysis, triangulation, and constructive alignment are limited in scope. Therefore, they may have limited benefit in the evaluation and continuous improvement of placements. However, the integration of the knowledge bases could contribute to the development of an integrated evaluation approach, providing a stronger platform for the efficacy of work placement experience (see Figure 2).

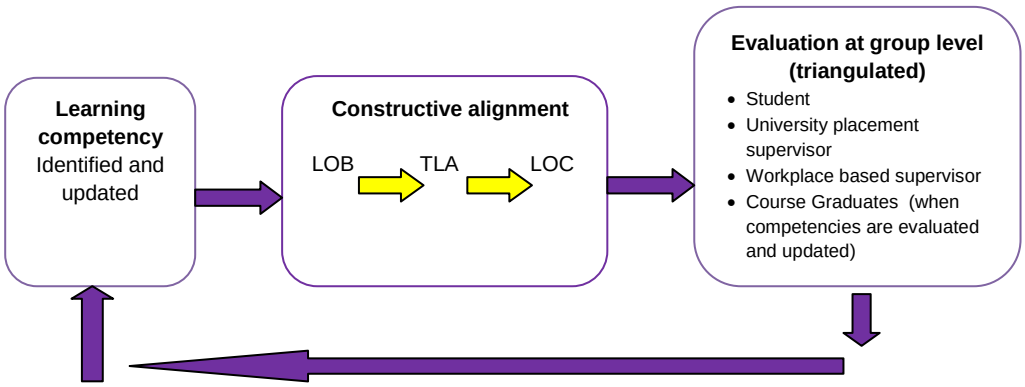

FIGURE 2.
An integrated model of the evaluation of work placements.

CONCLUSION

The adoption of a comprehensive and integrated model to evaluate work placement units demonstrates a promising method to comprehensively evaluate and therefore, continuously improve placement units. An advantage of utilizing this model (see Figure 2) is that it allows analysis, from multiple sources, of group level data including student and graduate experience. Further, the inclusion of graduate level evaluation, often a neglected feature of

placement evaluation, potentially could provide an understanding of how well the work placement objectives of work readiness are being met. A limitation of this approach is that each discipline would be responsible for evaluating its own placement programs. This proposed level of evaluation is complex and time consuming. Despite this limitation, it is envisaged that the gains that may be achieved through a comprehensive evaluation would outweigh the need for greater resources. Further research utilizing both qualitative and quantitative methods is needed to trial and test this approach to ensure that this proposed approach does indeed contribute comprehensively to informing work placement unit evaluation. The level of variation between the student, the university-based placement coordinator, and the organizational supervisor would be of interest and highlight the need to further investigate this area of research.

REFERENCES

Allison, H., & Turpin, M. J. (2004). Development of the student placement evaluation form: A tool for assessing student fieldwork performance. *Australian Occupational Therapy Journal, 51*, 125–132.

Bates, A., Bates, M., Bates, L., & Coll, R. (2007). Preparing students for the professional workplace: Who has responsibility for what? *Asia-Pacific Journal of Cooperative Education, 8*(2), 121–129.

Bates, L. (2005). *Building a bridge between university and employment: Work-integrated learning*. Brisbane, Australia: Queensland Parliamentary Library,

Biggs, J. (1996). Enhancing teaching through constructive alignment. *Higher Education, 32*, 347–364.

Booth, J., Collins, S., & Hammond, A. (2009). Considered evaluation of clinical placements in a new medical school. *Assessment and Evaluation in Higher Education, 34*(1), 17–29.

Boud, D., Cohen, R., & Walker, D. (1993). Understanding learning from experience. In D. Boud, R. Cohen & D. Walker (Eds.), *Using experience for learning* (pp. 1–17). Buckingham, UK: SRHE and the Open University Press.

Bowden, J., Hart, G., King, B., Trigwell, K., & Watts, O. (2000). *Generic capabilities of ATN university graduates*. Retrieved June 9, 2010 from http://www.clt.uts.edu.au/ATN.grad.cap.project.index.html

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

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher, 18*(1), 32–42.

Bryman, A. (2010). *Types of triangulation*. Retrieved July 22, 2011 from http://www.referenceworld.com/sage/socialscience/triangulation.pdf

Bullock, K., Gould, V., Hejmadi, M., & Lock, G. (2009). Work placement experience: Should I stay or should I go? *Higher Education Research & Development, 28*(5), 481– 494.

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 & Development, 23*(2), 147–165.

Eraut, M.E., Alderton, J., Cole, G., & Senker, P (1998). *Development of knowledge and skills in eEmployment*. East Sussex, UK: University of Sussex. [not cited in text]

Foley, G. (2004). Introduction: The state of adult education and learning. In G. Foley (Ed.), *Dimensions of adult learning: Adult education and training in a global era* (pp. 3–18). Crows Nest, NSW, Australia: Allen & Unwin.

Freudenberg, B., Brimble, M., & Cameron, C. (2008, October). It's all about 'I': Implementing 'integration' into a WIL program. *ACEN Conference (Australian Collaborative Education Network).* Retrieved July 22, 2011 from http://www.acen.edu.au/conferences/archive/index.php

Gibson, E., Brodie, S., Sharpe, S., Wong, D., Deane, E., & Fraser, S. (2002). Towards the development of a work integrated learning unit. *Celebrating teaching at Macquarie*. North Ryde, Sydney, Australia: Macquarie University.

Green, W., Hammer, S., & Star, C. (2009). Facing up to the challenge: Why is it so hard to develop graduate attributes? *Higher Education Research & Development, 28*(1), 17–29.

Harvey, L., & Green, D. (1993). Defining quality. *Assessment and Evaluation in Higher Education, 18*(1), 9–35.

Harvey, L., Moon, S., & Geall, V. (1997). *Graduates' work: Organisational change and students' attributes*. Retrieved July 22, 2011, from http://www0.bcu.ac.uk/crq/publications/gw/

Hay, K., & O'Donoghue, K. (2009). Assessing social work field education: Towards standardising fieldwork assessment in New Zealand. *Social Work Education, 28*(1), 42–53.

Kolb, D., & Fry, R. (1975). Toward an applied theory of experiential learning. In C. Cooper (Ed.), *Theories of group processes* (pp. 33–58). London, UK: John Wiley.

Lees, D. (2002). *Graduate employability literature review*. LTSN Generic Centre. Retrieved July 22, 2011 from http://driaj2009.blogspot.com/2008/11/graduate-employability-literature.html

Martin, E. (1996). *The effectiveness of different models of work-based university education (Report No. 19).* Retrieved July 22, 2011 from http://www.dest.gov.au/sectors/higher_education/publications_resources/profiles/archives/effectiveness_different_models_work_based_university.htm

Mayer, E. (1992). *Putting general education to work: the key competencies report*. Canberra, Australia: The Australian Council of Ministers for Vocational Education, Employment and Training.

Murakami, K., Murray, L., Sims, D., & Chedzey K. (2009). Learning on work placement: The narrative development of social competence. *Journal of Adult Development, 16*, 12-24.

Patrick, C., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2009). *Work-integrated learning: A national scoping study*. Prepared for the Australian Learning and Teaching Council. Brisbane, Qld. Australia: Queensland University of Technology

Reeders, E. (2000). Scholarly practice in work-based learning: Fitting the glass slipper. *Higher Education Research & Development, 19*(2), 205–220.

Richardson, J., Kaider, F., Henschke, K., & Jackling, B. (2009). A framework for assessing work-integrated learning. In *The Student Experience, Proceedings of the 32nd HERDSA Annual Conference, Darwin, 6–9 July 2009.* Milperra, New South Wales: HERDSA.

Scriven, M. (2003). Evaluation theory and metatheory. In T. Kellaghan, D. L. Stufflebeam, & L. A. Wingate (Eds), *International handbook of educational evaluation. Part 1: Perspectives* (Vol. 9). Dordrecht, Germany: Kluwer Academic Publishers.

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

Smith, C. (2010). Evaluating the quality of work-integrated learning: Authenticity, integration, alignment and administration. *Assessment and Evaluation in Higher Education,* accepted 2010.

Smith, M. K. (2001). David A. Kolb on experiential learning. *The encyclopedia of informal education*. Retrieved June 9, 2010 from http://www.infed.org/b-explrn.htm

Stufflebeam, D. L. (2003). The CIPP model of evaluation. In T. Kellaghan, D. L. Stufflebeam, & L. A. Wingate (Eds), *International handbook of educational evaluation. Part 1: Perspectives* (Vol. 9). Dordrecht, Germany: Kluwer Academic Publishers.

http://www.apjce.org

Asia-Pacific Journal of Cooperative Education

ABOUT THE JOURNAL

The Asia-Pacific Journal of Cooperative education (APJCE) arose from a desire to produce an international forum for discussion of cooperative education, or work integrated learning (WIL), issues for practitioners in the Asia-Pacific region and is intended to provide a mechanism for the dissemination of research, best practice and innovation in work-integrated learning. The journal maintains close links to the biennial Asia-Pacific regional conferences conducted by the World Association for Cooperative Education. In recognition of international trends in information technology, APJCE is produced solely in electronic form. Published papers are available as PDF files from the website, and manuscript submission, reviewing and publication is electronically based. In 2010, Australian Research Council (ARC), which administers the Excellence in Research (ERA) ranking system, awarded APJCE a 'B' ERA ranking (top 10-20%).

Cooperative education/WIL in the journal is taken to be work-based learning in which the time spent in the workplace forms an integrated part of an academic program of study. More specifically, cooperative education/WIL can be described as a strategy of applied learning which is a structured program, developed and supervised either by an educational institution in collaboration with an employer or industry grouping, or by an employer or industry grouping in collaboration with an educational institution. An essential feature is that relevant, productive work is conducted as an integral part of a student's regular program, and the final assessment contains a work-based component. Cooperative education/WIL programs are commonly highly structured and possess formal (academic and employer) supervision and assessment. The work is productive, in that the student undertakes meaningful work that has economic value or definable benefit to the employer. The work should have clear linkages with, or add to, the knowledge and skill base of the academic program.

INSTRUCTIONS FOR CONTRIBUTORS

The editorial board welcomes contributions from authors with an interest in cooperative education/WIL. Manuscripts should comprise reports of relevant research, or essays that discuss innovative programs, reviews of literature, or other matters of interest to researchers or practitioners. Manuscripts should be written in a formal, scholarly manner and avoid the use of sexist or other terminology that reinforces stereotypes. The excessive use of abbreviations and acronyms should be avoided. All manuscripts are reviewed by two members of the editorial board. APJCE is produced in web-only form and published articles are available as PDF files accessible from the website http://www.apjce.org.

Research reports should contain; an introduction that describes relevant literature and sets the context of the inquiry, a description and justification for the methodology employed, a description of the research findings-tabulated as appropriate, a discussion of the importance of the findings including their significance for practitioners, and a conclusion preferably incorporating suggestions for further research. Essays should contain a clear statement of the topic or issue under discussion, reference to, and discussion of, relevant literature, and a discussion of the importance of the topic for other researchers and practitioners. The final manuscript for both research reports and essay articles should include an abstract (word limit 300 words), and a list of keywords, one of which should be the national context for the study.

Manuscripts and cover sheets (available from the website) should be forwarded electronically to the Editor-in-Chief. In order to ensure integrity of the review process authors' names should not appear on manuscripts. Manuscripts should be between 3,000 and 5,000 words, include pagination, be double-spaced with ample margins in times new-roman 12-point font and follow the style of the Publication Manual of the American Psychological Association in citations, referencing, tables and figures (see also, http://www.apa.org/journals/faq.html). The intended location of figures and diagrams, provided separately as high-quality files (e.g., JPG, TIFF or PICT), should be indicated in the manuscript. Figure and table captions, listed on a separate page at the end of the document, should be clear and concise and be understood without reference to the text.

http://www.apjce.org

Asia-Pacific Journal of Cooperative Education