

Critical assessment issues in work-integrated learning

SONIA FERNS¹

Curtin University, Perth, Australia

KARSTEN E. ZEGWAARD

University of Waikato, Hamilton, New Zealand

Assessment has long been a contentious issue in work-integrated learning (WIL) and cooperative education. Despite assessment being central to the integrity and accountability of a university and long-standing theories around best practice in assessment, enacting quality assessment practices has proven to be more difficult. Authors in this special issue on assessment highlight the need for balanced assessment approaches that reflect the highly variable experiences students encounter, and the need to keep validity and reliability paramount when constructing assessment structures. Increasingly quality and standards policies driven by more regulatory university environments are impacting on the design of assessment profiles. The value of workplace supervisors' feedback in WIL contexts is discussed and the challenges of measuring the nuances of unpredictable, context-dependent WIL outcomes are explored. The benefits of ePortfolios are advocated and the use of these platforms as assessment tools that enable a creative way for students to provide evidence of employability capabilities highlighted. (*Asia-Pacific Journal of Cooperative Education, Special Issue, 2014, 15(3), 179-188*)

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Assessment is central to the integrity and accountability of a university. It is a key driver for student engagement (Knight & Yorke, 2006; Ramsden, 2003), forms the bulk of the teaching academic's workload (Race & Pickford, 2007; OECD, 2008), provides evidence of students' capabilities, and is increasingly built into university quality and regulatory frameworks (Ewan, 2009). Despite the prominence of assessment as being at the 'heart' of an educational institution (Brown & Knight, 1994), it continues to be the cause of dissatisfaction and angst among all stakeholders. The challenges of rigorous and effective assessment methods are more pronounced in a work-integrated learning (WIL) paradigm where outcomes are unpredictable, variable, and socially constructed (Garnett, 2012). Assessment has long been a topical issue in co-op/WIL (Canter, 2000; Coll, Eames, Zegwaard, & Hodges, 2002; Preece, 1993; Yorke, 2005; Zegwaard, Coll, & Hodges, 2003). Adding complexity to the WIL assessment conundrum is the influence of others on student outcomes. Students seldom work alone in the workplace – indeed often one of the desired learning outcomes of a WIL placement is the ability to work within professional teams resulting in highly variable learning inputs outside the control of either the student or the university.

Increasingly, there is a perception that the fundamental purpose of education is to address the needs of the labor market (Archer & Davison, 2008; Gai, 2012; Lomax-Smith, Watson, & Webster, 2011). The underlying motive is to build a sustainable, progressive, and global workforce through a rigorous, relevant, and engaging education system that is agile and responsive to emerging needs of the economy (Gardner & Perry, 2011). While the employability agenda has become a prominent feature of higher education institutions,

¹ Corresponding author: Sonia Ferns, s.ferns@curtin.edu.au

enacting a curriculum that scaffolds employability capabilities developmentally across the student life-cycle and evidencing generic attributes highly sought after by employers challenges traditional approaches to teaching, learning, and assessment. Students expect that a university qualification will comprise authentic experiences that equip them with skills to adequately prepare them for the world of work (Robertson & Scott, 2010). WIL is internationally recognized as a mechanism for enhancing graduate employability with educational institutions actively embracing pedagogies that facilitate embedding WIL in curriculum (Gardner & Perry, 2011; Johnston, 2011). However, in a traditional university setting, barriers to implementing authentic assessment profiles that reflect the performance-based emphasis of WIL are apparent. Typically, content is compartmentalized and disconnected with restrictive assessment policies that limit creative approaches to evidencing student outcomes (Yorke, 2006).

The workplace, and practitioners within the workplace, play a pivotal role in incorporating WIL in the student experience (Sharma, 2013). Input and feedback from practitioners provides substantial benefits for student learning and ensures currency of content and skills to which students are exposed (Hodges, 2011). Such collaboration is most effective when underpinned by mutually beneficial partnerships where roles and expectations are clearly communicated. Ideally external partners contribute to the assessment design, assessment process, and provide feedback on students' performance in the workplace (Hodges, 2009; Zegwaard, Coll, & Hodges, 2003). The contribution of external partners is advantageous for staff, students, and institutions but potentially adds complexity to the assessment process.

Assessment protocols for WIL education require a reconceptualization of the traditional approaches to assessment design, administration, and validation. The central theme of WIL is the application of knowledge in a practice-based setting where the intellectual capacity of the assessee is evident through working collaboratively, solving problems, and enacting professional behavior in a real-world setting.

The Asia-Pacific Journal of Cooperative Education, special issue on assessment (2014) provides an overview of assessment from a range of perspectives. With a focus on WIL and Cooperative Education, some of the challenges of assessment are explored and discussed. The educational theories on which WIL is based are considered in detail with specific reference to the alignment of assessment within the fundamentally social construct of WIL. The inherent complexities of measuring outcomes in the microcosm of cultural, professional, and social influences present in a WIL learning environment are explored. Authors articulate the conundrum of applying standardized grading systems when the learning has an intrinsically personalized component. The dilemma of quality assurance, the reliability and validity of assessments, and assessors' judgments on student proficiency emerged as a key theme throughout the articles. The growing focus on quality and standards globally does not factor in the unpredictable, volatile, and interdependent nature of a WIL scenario. The importance of rigorous and constructive feedback from workplace supervisors is highlighted as a crucial component when measuring intangible outcomes typified in an experiential

learning arrangement. Finally, ePortfolios are endorsed as a platform for showcasing students' artefacts to demonstrate the developmental nature of skill acquisition in authentic and relevant environments. An institutional case study highlights the challenges of implementing a systemic ePortfolio to establish a lifelong learning culture in contrast to a content-focused, knowledge recall infrastructure.

THEORETICAL PERSPECTIVES ON ASSESSMENT IN COOPERATIVE EDUCATION PLACEMENTS

One of the challenges often faced by WIL facilitators is a lack of understanding of the underpinning theory of assessment design and application. A reasonable understanding is required to design assessment that genuinely and accurately captures student learning and skill development (Nixon, Smith, Stafford, & Camm, 2006). However, even those well-rehearsed in assessment and learning theory struggle to apply assessment theory within in the complex setting of WIL placements. Hodges, Eames, and Coll (2014) provide a comprehensive overview of the theoretical perspectives that align to WIL pedagogy. These authors express the important theories of learning relevant to WIL and how they determine the way assessment of learning in WIL should construe. The article explores the philosophical foundations that inform work-based learning and assessment. Reference is made to higher education's traditional practices that fail to factor in the unique conceptual framework of the personal learning journey and unintended outcomes afforded by WIL (Barber, Donnelly, & Rizvi, 2013; Orrell, 2011). The importance of preparing, guiding, and supporting students throughout the work placement is considered. The authors attest that feedback on performance should focus on the process not the product, an approach which contests traditional measures of student success. They argue for learning experiences and assessments to be connected where students draw on personal competencies and build on this foundation to further develop work-readiness skills and personal aspirations. The social construct of a community where distributed learning is a key aspect presents opportunities for maximizing the impact and value of the cultural competencies of participants (see discussions by Kukla, 2000; Lave & Wenger, 1991; Wertsch, 1991).

While Hodges, Eames, and Coll emphasize the importance of the teacher-student relationship, they posit that the teaching academic is often not equipped to provide robust and appropriate feedback on workplace learning. The value of the industry partner's role is stressed but the authors believe a more balanced relationship is necessary to gain optimal benefit from the industry practitioner's expertise. They refer to this as 'proximal guidance' provided by workplace supervisors (p. 201). In summary, the authors reaffirm that curricula structure needs to be rethought to accommodate WIL assessment practices. Often the current program structures comprise a series of disconnected and discrete subjects where disjointed assessments fail to optimize the value of feedback to inform future progress and development. They believe WIL is a highly variable construct where student outcomes are dependent on the learning support provided and, thus, argue that assessment should reflect the individual nature and sociocultural dependencies of WIL.

ASSESSMENT OF STUDENT OUTCOMES FROM WIL: VALIDITY AND RELIABILITY

One of the core challenges of assessment (as with WIL research) is validity and reliability. When determining a student's capabilities, the assessment tool needs to measure the intended learning outcomes (Connaughton, Edgar, & Ferns, 2014). That is, if an assessment instrument is designed to measure the development of a particular student attribute, the assessor needs to be confident that it is measuring what is intended. Much like in qualitative research, survey questions need to be constructed in such a way that the question could not be interpreted in any other way, otherwise it results in responses that are in essence answering a different question than intended (i.e., the responses will not be valid). The challenge beyond validity is to ensure that the instrument produces consistent results repeatedly – that is, it is reliable.

Smith (2014) lays out the argument for the purpose of assessment and follows with an in-depth discussion of issues around validity and reliability. He defines validity and reliability, and relates it to the WIL context. Norm-referenced and criterion-referenced approaches are described and compared. Smith discusses at length the testing of knowledge as opposed to the affirmation of the ability to apply that knowledge in a practice-based setting that reflects real-world scenarios. The quandary of ascertaining validity and reliability in a WIL environment is espoused with particular reference to the nuances associated with reflective assessment tasks, a common feature of validating student performance, and indeed paramount to effective skill development (Moon, 2006). Smith attests that the complexity and multi-faceted nature of WIL challenges the traditional notion of what constitutes a valid and reliable assessment instrument. Given that individual students may experience a WIL task differently due to diverse personal dispositions despite aspiring to the same learning outcomes, the learning may culminate in different skill development and outcomes unique to each student. The uncontrolled and unpredictable nature of a WIL learning experience adds further complication to an already capricious scenario. Smith poses some intriguing thoughts around the 'centrality of integration to WIL' (p. 215) and the question of not only *how* to assess but *what* to assess when designing WIL assessments. In concluding, Smith emphasizes the importance of clarity in learning outcomes as the first step in validity and reliability of assessment profiles. He perceives the area of validity and reliability of assessments in a WIL context in need of targeted research.

QUALITY POLICY AND ROLE OF ASSESSMENT IN WORK INTEGRATED LEARNING

Regulatory environments where quality standards are mandated and specified evidence required to justify standards are met are part of the contemporary higher education landscape (Watty, 2012). Quality standards pertaining to assessment and student outcomes continue to be the focus of debate across the sector. The contentious nature of assessment is highlighted with student dissatisfaction and institutional quality audits cited as indicators that assessment quality continues to elude higher education institutions. Yorke and Vidovich (2014) highlight the complexity of WIL assessments and as a consequence, the

challenge of specifying standards in a quality framework. Standards are described as 'key reference points that describe what students should know and can do' (p. 225). An international overview of quality agendas and policy development is also provided to give a comparison of global practices

The paper discusses the recent history around implementing standardized testing instruments designed to evaluate generic skills and Australia's heightened interest in this domain. The instrument under consideration was perceived as 'flawed, narrowly defined, and irrelevant in an Australian context' (p. 230). Yorke and Vidovich outline a range of reasons why quality assurance in the assessment of WIL context is particularly difficult. The discussion raises issues with quality assurance when judgments of assessment outcomes are made by industry practitioners. While the practice is applauded from a WIL perspective, it does present challenges for monitoring and maintaining quality standards. Moderation is flagged as a strategy for addressing this problem but the authors recognize that traditional moderation approaches are not relevant for WIL assessments. They also challenge the traditional grading systems in universities and question their relevance and applicability in authentic learning and assessment environments. The paper concludes with the suggestion that the removal of narrow performance indicators and a rethink of restrictive policy requirements are required to accommodate quality assurance of WIL assessments.

FEEDBACK ON STUDENT PERFORMANCE IN THE WORKPLACE: ROLE OF WORKPLACE SUPERVISORS

The issue of uncontrollable variability of WIL learning experiences is further confounded with input from workplace supervisors in the assessment process. While feedback and support from workplace supervisors is considered to enrich the learning experience for students and enhance the authenticity and relevance of the practice opportunity, it adds an additional dimension to managing the student experience, requiring careful monitoring and collaboration (Smith, 2011). Work placement programs frequently include a form of work performance evaluation completed by the workplace supervisor. Many disciplines have a long standing arrangement where the host organization provides an evaluation of students' workplace performance. However, there are examples of programs where, to avoid the issue of uncontrollable variability, employers' work performance evaluation is not included in the student's overall result. A rather unhelpful argument sometimes presented against using employer feedback as part of the assessment of the student is that employers are not academic staff and, therefore, not appropriate individuals to be involved with student assessment. This argument ignores that there is a valid rationale for incorporating the workplace supervisor's perception of a student's proficiency in applying their learning in a practice-based setting. Indeed, the workplace supervisor is likely better placed to evaluate the student's work performance than academic staff, given that workplace supervisors observe the student's work activity over extended time periods in unpredictable situations. In contrast, the university supervisor usually undertakes an assessment where the student can 'orchestrate' particular situations with pre-warning of the assessment event (Woolf &

Yorke, 2010). The supervisor from the host organization should be seen as a crucial partner in the overall assessment of the student performance (Brown & Race, 2012). Using robust rubrics for work performance assessment and establishing explicit student expectations may reduce some of the variability.

Peach, Ruinard, and Webb (2014) present an overview of the challenges of work performance assessment with a comprehensive discussion focusing on complexities of incorporating feedback and decisions on assessment outcomes from workplace supervisors. The authors identify ways to collect quality feedback through the 'integration of dual perspectives of the workplace supervisor and the academic mentor' (p. 241). They also emphasize the importance of student engagement in the assessment process, the impact of their action on feedback, and their capacity to reflect on the feedback. The critical role of each stakeholder is often described as a tripartite arrangement. Feedback on assessments of WIL are often superficial, compliance focused, and fail to 'measure' student performance and their workplace proficiency (Lombardi, 2008). This manuscript suggests a feedback model which incorporates input from all stakeholders, thereby maximizing the value of the experience for students. The authors highlight the variability of a work placement where workplace culture, the discipline area, and employer-employee relationship significantly impact on the situation. While the authors acknowledge that the value of feedback from a workplace supervisor is imperative to quality outcomes for students, they stress that it is reliant on the approach and skill of the supervisor. Workplace supervisors may be reluctant to participate in the assessment of students' skills as there is a perception that it may compromise the relationship with the student. A common issue reported by host organizations is the time and resources required to support and guide students during their work placement (Coates & Gormley, 1997). Allocating time and energy to the assessment process exerts additional pressure on the workplace and is, therefore, imperative to have effective and efficient performance assessment that are not time demanding for the workplace supervisor to complete. The paper concludes with posing some constructive solutions for facilitating industry supervisors in the assessment process. Building meaningful partnerships with host organizations; establishing clearly defined communication channels; and developing user-friendly feedback tools and processes are useful strategies to encourage the participation of host organizations.

ASSESSING THE IMMEASURABLES OF PRACTICE.

Assessment is perceived as the mechanism for verifying student outcomes. In a standards-based, regulatory framework, a feature of the contemporary higher education sector, the validation of student outcomes is reliant on obvious and overt behaviors that can easily be assigned a measure or grade (Yorke, 2011). Measurable assessment outcomes are gleaned from tasks such as exams, written essays, and short-answer or multiple choice tests. While these examples enable the allocation of a 'grade' and by default, address accountability and compliance requirements, they fail to recognize the personalized learning that occurs in a WIL context (Hodge, 2011). Attributes such as ethical behavior, professional conduct, team work, and communication in a work-based setting are specified outcomes from a WIL

learning experience. Students aspire to build and nurture such skills in order to gain professional credibility and build employability capabilities to ultimately increase the likelihood of employment. The challenge lies in designing authentic assessments which align to the intended performance-based outcomes and provide the evidence of learning and capabilities for student, employer, and institution (Yorke, 2011). Higgs (2014) refers to these professional capabilities as the 'immeasurables of practice'.

Measuring proficiency in professional practice settings encompasses inherent complexities. Variation across professions, the uniqueness of individuals, and the diversity in self-efficacy and self-identify of students means different outcomes emerge from the one assessment and equitable learning outcomes (Clements & Cord, 2011). Higgs (2014) employs a creative approach in her exposition on the challenges of measuring the nuances of unpredictable, context-dependent WIL outcomes. Higgs describes the unique personal growth afforded by professional-practice opportunities where unintended and unobservable outcomes result. She views professional disciplines as exclusive entities each with their own culture, expectations, and behaviors. This in turn requires students to apply generic capabilities in different ways. The ability to adapt, make decisions, and evolve as a professional is integral to the development of employability outcomes. Traditional modes of assessment are not conducive to measuring these subtle and distinct behaviors. Higgs highlights the importance of self-critique, self-development, and reflexivity skills for which WIL is acknowledged as a strategy for developing. She asserts that assessment practices need reconceptualizing to accommodate the unobservable, personalized components of practice and suggests recommendations for improving assessment protocols in a WIL setting.

EPORFOLIOS AS EVIDENCE OF STANDARDS AND OUTCOMES IN WIL

Evidencing students' incremental skill development over the course of a degree program is challenging and defies the traditional assessment paradigm in universities. An increasingly popular tool to determine student learning is the evidence-based portfolio (Simmons & Williams, 2012). The portfolio, intended to capture student progression and enable self-reflection on strengths and gaps in learning, is a longstanding assessment methodology. With technological innovations, the paper-based portfolio has transitioned into an electronic platform (ePortfolio) which has given the notion of a portfolio a whole new meaning. The ePortfolio allows students to upload a range of creative forms of evidence to showcase capabilities and competencies.

Comfort and Ferns (2014) highlight the value of the ePortfolio with particular reference to the WIL context. They perceive the ePortfolio as a valuable tool for capturing and showcasing the nuances of a complex and variable WIL experience. Furthermore, through engagement with ePortfolios, students gain much-needed proficiency in working with technology. In addition, the authors argue that the ePortfolio benefits employers in the recruitment process as it provides a plethora of evidence of impending candidates' capabilities. There is also a compelling argument for using the ePortfolio in assessment design as it provides a more

engaging, authentic and personalized assessment experience culminating in robust outcomes for students. The paper articulates a convincing case for the strong connection between the authenticity of the assessment task, the integration of theory and practice, and the ePortfolio. The ePortfolio also facilitates the merging of co-curricular and curricular impacts on students' capabilities as the evidence can be the result of diverse experiences, not simply restricted to experiences emerging from curriculum-based activities (Voigt, 2009).

The authors outline the benefits and challenges of implementing an ePortfolio at Curtin University where a purpose-built platform was developed and trialed. Comfort and Ferns provide a detailed description of the system; the institution's expectations afforded as a result of the ePortfolio, and describe barriers that emerged from the pilot trial which will provide valuable insight for institutions considering introducing ePortfolios.

The experiences at Curtin University serve as a good example of how well-thought-out ePortfolio design can create good platforms to showcase evidence of learning and capabilities. While the value of ePortfolios to support WIL assessments is a given, this account cautions against making assumptions which may impact on the successful implementation of the ePortfolio.

CONCLUSION

Assessment has long been a contentious and challenging topic, especially so in WIL, and will likely remain so for some time yet. External forces are mandating a reshaping of all aspects of education, and with advancement of technology, opportunities for new assessment methods and approaches have emerged. With heightened accountability measures, increased stakeholder demand for evidence of graduate capabilities, and student feedback emphasizing the value of authentic and relevant learning experiences, higher education institutions need to rethink traditional assessment paradigms. WIL is deemed to be an essential component of the student experience, ideally embedded across curriculum to enable scaffolded skill development across a degree program. Traditional assessment methodologies are not designed to measure student proficiency in employability capabilities but rather focuses on knowledge acquisition. With WIL as a central aspect in university learning design, innovative assessment profiles that enable reflection on learning and the creation of artefacts that evidence generic capabilities are paramount.

This special issue on assessment in WIL has discussed opportunities, considerations, and challenges afforded through engagement in the WIL agenda. It is our intent that this special issue will advance thinking and prompt for further research work in developing robust, authentic, and reliable assessment practices in WIL.

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