

Special Issue: Advancing the WIL curriculum to enhance graduate employability

Developing graduate employability skills and attributes: Curriculum enhancement through work-integrated learning

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Work-integrated learning (WIL) is considered a key strategy for promoting graduate employability. Graduate employability is a complex concept, one which has broadened in recent years to encapsulate a diverse range of skills, attributes, and other measures such as networks, professional-identity and active citizenship. This special issue presents recent scholarship on WIL and employability, addressing the question of how WIL contributes to enhancing employability outcomes for students and graduates. The importance of embedding WIL experiences in the curriculum so they are effectively supported by appropriate pedagogical strategies is emphasized, as well as the provision of quality assessment to support employability outcomes. Such supports, while critical, have resourcing implications for higher education, including impacts on staff workload which also need to be considered. Employability is considered in relation to the related construct of employment outcomes, pointing to ways in which these two perspectives can be better integrated. Recommendations are made for future research. (*Asia-Pacific Journal of Cooperative Education, Special Issue, 2017, 18(2), 87-99*)

Keywords: Work-integrated learning, employability, employment outcomes, research developments, curriculum, assessment, workload

Internationally, there has been a growing emphasis on the role of higher education institutions (HEIs) in enabling employability and graduate employment, as evidenced by the rise of university graduate employment destinations as an important proxy measure of the value of a university education (Burke, Scurry, Blenkinsopp, & Graley, 2016). Many universities in Australia, New Zealand, and the UK are now including work-integrated learning programs in their degrees with the aim of enhancing graduate employment prospects. Often this perspective is based on the premise that universities can (and should) produce 'work-ready' or 'employable' graduates (Holmes, 2013). Notions of employability are often confused with employment outcomes, that is, securing a job following graduation, or having the potential to earn a higher salary (Burke et al., 2016; Zegwaard & McCurdy, 2014). In Australia, the UK, and New Zealand, graduates' employment status a few months after degree completion is increasingly used as the primary graduate employment performance indicator. The GOS (Graduate Outcomes Survey), previously the GDS (Graduate Destination Survey) in Australia, reports on graduates in full-time and overall employment, graduates in full-time study and the median salary of graduates. Similarly in New Zealand, the Graduate Longitudinal Study (which replaced the New Zealand GDS) is currently collecting information on the impact of tertiary education on graduates over a 10 year period (Tustin et al., 2016). Employability by contrast, is predominately conceptualized as the skills and personal attributes considered important by industry, and needed by graduates in order to secure employment (Bridgstock, 2009; Holmes, 2013; Jackson, 2016).

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² Author is Editor-in-Chief of APJCE. The review was managed by a third party and their review staff to maintain anonymity of reviewers and integrity of the reviewing process

This Special Issue on employability (2017) presents recent scholarship on WIL and employability, addressing the question of how WIL within the curriculum can contribute to employability through development of skills and attributes, as well as through the promotion of career-self management, global citizenship, and other employability related outcomes. While employment outcomes are also an important measure of WIL's impact, they are outside the scope of this particular publication.

CONCEPTIONS OF EMPLOYABILITY

The term employability is often used interchangeably with the notion of work-readiness. Yorke (2010) contends that work-readiness is a set of conditions sufficient for gaining initial employment, while employability is a set of skills which are necessary but not sufficient for gaining employment. Whatever term is used, it is better to holistically consider that a graduate needs to be both employable and work-ready to increase their chances of employment (Sachs, Rowe, & Wilson, 2017). Conceptions of employability have broadened in recent years, from a focus on mostly technical skills and attributes thought to be required by graduates in order for them to be considered work-ready, to a wider notion encompassing non-technical areas such as networking (Bridgstock, 2017) and professional identity (Zegwaard, Campbell, & Pretti, 2017). Both these conceptualizations focus on an individual's 'potential' to acquire desired employment (through the development of appropriate human capital), which differs from 'realized employability' - the actual acquisition of desired employment (Wilton, 2014, p. 246). The focus of this special issue is on the former.

Most existing conceptions of employability view it as a set of skills, both generic (e.g., teamwork, organizational, communication) and discipline specific (e.g., the skills and knowledge relevant to engineering, law or social work), as well as personal attributes (e.g., self-confidence, resilience, discipline) which are relevant to employment and desired by industry. For example, Oliver (2015), building on an earlier definition by Yorke proposed that employability is the ability to "discern, acquire, adapt, and continually enhance the skills, understandings and personal attributes that make [students/graduates] more likely to find and create meaningful paid and unpaid work that benefits themselves, the workforce, the community, and the economy" (p. 63). Bridgstock (2009) similarly observed that that universities' engagement with employability typically focusses on developing individual skills and attributes considered desirable by employers, in order to find and acquire suitable work, perform well in that work, and build a career. The Australian Bureau of Statistics (ABS), in developing the skill specialization criteria for the Australian and New Zealand Standard Classification of Occupations (ANZSCO) considered an employability skills approach, eventually accepting employability as both generic skills (e.g., communication, teamwork, problem solving, self-management, planning, and organizational) and personal attributes (e.g., loyalty, commitment, integrity).³ Others have similarly identified sets of employability 'skills'. For example, Smith, Ferns, and Russell (2014) identified six dimensions of employability (termed work-readiness): professional practice and standards; integration of theory and practice; lifelong learning; collaboration; informed decision-making; and commencement-readiness (confidence to start a job in the discipline).

³ Australian Bureau of Statistics (2009). *Australian and New Zealand Standard Classification of Occupations* (ANZSCO), First Edition, Revision 1. Retrieved from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/C36857C8F381F427CA2575DF002DA755?opendocument>

Recent calls for more critical approaches to understanding employability (e.g., Burke et al., 2016), including broader conceptions of the term (e.g., Clarke, 2017; Holmes, 2017), have led to views moving beyond the skills based approach to a wider conceptualization that better captures “the complexity of graduate work-readiness” (Jackson, 2015, p. 925). Some have advocated that the term ‘profession-ready’ may better capture the recent wider conceptualization and shift the discussion from ‘work’ to the ‘profession’ instead (Zegwaard et al., 2017). Advocates of the wider conceptualization approach argue that “employer-driven lists...do not address the full picture of what is required by the graduate facing the prospect of the labor market” (Bridgestock, 2009, p. 34). Namely, the shift from predictable, linear, and vertical progression pathways to horizontal organizational structures, global mobility, and rapidly changing work environments (McMahon, Patton, & Tatham, 2003), means that graduates need to be flexible and adaptive to manage uncertainty, ambiguity, and unpredictability, rather than acquiring a fixed set of skills (e.g., Barnett, 2012; Helyer & Lee, 2014). Emerging perspectives of employability reflect this change and are inclusive of a diverse range of areas including career self-management, professional identity, transfer of capabilities across contexts, students perceived employability (and their ability to articulate it), networking, global citizenship, and scholarship among other notions (e.g., Bridgestock, 2009; Jackson 2015; Mason, Williams, & Cranmer, 2009; Wilton, 2014). Despite the emergence of broader interpretations of employability, they appear somewhat haphazard according to Jackson (2016), who calls for an integration of “these various strands into a more holistic concept of graduate employability” (p. 927).

The impact of WIL on employability capability development emerges as a dominant theme within the literature (Hall, Pascoe, & Charity, 2017; Messum, Wilkes, Peters, & Jackson, 2017; Reddan, 2017), supporting recent developments in the evaluation of WIL initiatives and programs (e.g., Lloyd et al., 2015). The experience of WIL alone, however, does not guarantee employability outcomes for students and graduates. In order to be truly effective, such experiences should be embedded in curriculum and supported by pedagogical strategies throughout a program to maximize learning opportunities (Bates & Hayes, 2017). Finally, the quality of student learning, including development of employability capabilities, needs to be assessed. However, assessment of employability skills development is a complex endeavor requiring assessments to be framed carefully around notions of proximity and authenticity (Kaider, Hains-Wesson, & Young, 2017), and one which has resourcing implications for higher education institutions (Bilgin, Rowe, & Clark, 2017).

MEASURING THE IMPACT OF WIL ON EMPLOYABILITY

The term WIL encapsulates a range of experiential and practice based learning models (e.g., service learning, cooperative education, work-based learning) and activities (e.g., internships, fieldwork, volunteering, project based work, simulations, clinical placements, practicums) (for more comprehensive details, see Cooper, Orrell, & Bowden, 2010; Groenewald, Drysdale, Chiupka, & Johnston, 2011). WIL programs are considered a key strategy for developing employability capabilities in students (Freudenberg, Brimble, & Cameron 2011; Helyer & Lee, 2014; Jackson, 2013, 2015; Smith et al., 2014) and boosting employment outcomes for graduates (e.g., Ferns, Campbell, & Zegwaard, 2014; Mason et al., 2009; Silva et al., 2016), particularly for those areas not traditionally linked with employment outcomes. This is reflected by more universities extending WIL beyond disciplines steeped in a tradition of practice-based education (e.g., education, medicine, nursing, engineering) to other areas such as the arts/humanities. In response to these moves, the Australian National WIL Strategy

(2015) was developed by Universities Australia and interested parties promote the role of WIL in assisting students in the transition from university to work and improve productivity outputs for employers and the wider economy.

Specifically, WIL is thought to improve employability outcomes for students in a number of ways; firstly, through opportunities to build student's confidence in professional practice (Billett, 2011; Martin, Rees, & Edwards, 2011) and for students to gain a greater appreciation of the importance of employability skills (Freudenberg et al., 2011; Patrick & Crebert, 2004); and secondly, through the development of skills such as teamwork, professional judgement, communication, and problem solving (Coll et al., 2009; Freudenberg et al., 2011; Jackson, 2013). Evidence shows that WIL can enhance student work-readiness and development of generic/professional skills (Jackson, 2013; Smith et al., 2014); prepare students for transition into the workforce (Chillas, Marks, & Galloway, 2015; Jackson, Ferns, Rowbottom, & McLaren, 2015); promote higher earning potential/employment rates (Council of Ontario Universities, 2014; Gault, Leach, & Duey, 2010); contribute to career development (Jackson, 2015); and help develop professional identity (Jackson, 2016; Trede, 2012). However, inconsistencies in findings have been reported (Wilton, 2012) and the extent to which WIL contributes to enhanced employability outcomes can across disciplines is still debated (Peters, Sattler, & Kelland, 2014).

A limitation of WIL employability studies is that many are based on student and/or industry self-reported perceptions (e.g., Chillas et al., 2015; Gault et al., 2010) but not on employment data per se. There are some exceptions, however, for example, Silva et al. (2016) who investigated graduate unemployment rates in Portugal before and after the introduction of internships found that study programs that include internships can significantly enhance graduate employment, particularly when students undertake multiple shorter internships throughout their degree. This supports earlier findings by Gardner (2013) who reported a preference by employers for graduates to have completed two or more WIL experiences and have at least 6-12 months of full-time work experience before completion of their degree. These expectations are mirrored by recent graduate's reflections that they wished they had known of the employers' expectations, and that they had participated in more than one work placement before graduating (Perry, 2011).

This Special Issue features three studies on the impact of employability which contribute to this evidence base. Reddan (2017) provides a case for the incorporation of career development learning (CDL) in WIL, reporting on exercise science students' perceptions of the benefits of courses incorporating both WIL and CDL on employability. A group of students who completed two elective courses with a fieldwork component were interviewed about their perceptions of the impact of completing the course on their career decisions and work-readiness, and found that employability was enhanced as students transitioned into the workforce. Messum et al., (2017) identify a range of specific employability skills required for Health Services Management (HSM) obtained through a survey of HSM senior managers and recent graduates. Strong alignment was found between the perceptions of recent graduates and HSM managers as to what employability skills are most important for working in this area, many of which were generic. A number of skill gaps were also identified that, recent graduates do not seem to recognize, suggesting further work is needed by universities to develop strategies for improving students' self-awareness. This paper highlights the importance of identifying and developing context specific skills for particular professions, in addition to discipline specific knowledge and generic skills. Through interviews with

learners, Hall et al. (2017) explore the influence of WIL in developing graduate attributes for Exercise and Sports Science students. They report that WIL experiences do impact on the development of graduate attributes regardless of whether the experience was a positive or a negative one, at least in the case of communication, discipline specific knowledge and skills, and global citizenship. Interestingly, they note that participant's perceptions of what constitutes a positive WIL experience varies, however, personal conflict is identified as a prevalent negative experience. This draws attention to the importance of supporting the development of student capabilities to manage negative WIL experiences, through curriculum design and pedagogical interventions. As the work of Jiang, Lee, and Golab (2015) indicates, student satisfaction can be a complex space in need for further research.

PROMOTING EMPLOYABILITY THROUGH CURRICULUM DESIGN

Despite the growing body of evidence supporting WIL as a useful strategy for promoting employability, the WIL experience alone is not a guarantee of success. As Clarke (2017) and others have noted if it is to be effective then WIL activities must be meaningful, relevant, and intentionally integrated and aligned with university curriculum (Johnston, 2011; Patrick et al., 2008; Sachs et al., 2017). Indeed, recent scholarship suggests the relationship between WIL and improved employability may be less direct than once thought. Oliver (2015, p. 63), for example, conceptualizes WIL as a "means to an end (employability) rather than an end in itself." Clarke (2017) similarly contends that employability promotes a higher level of self-exploration, guidance seeking and other associated proactive career behaviors which in turn may improve employability, rather than impacting directly on employability per se (e.g., guaranteeing career success). Okay-Somerville and Scholarios (2017) found that the process of engaging in career self-management developed employability through the promotion of self-exploration, guidance seeking, and other associated proactive career behaviors. Another consideration is the role of WIL stakeholders in improving employability – much existing scholarship emphasizes the role and responsibility of HEIs, but there are other stakeholders such as industry, community partners, government, and employers, whose input into curriculum is vital to ensure it remains relevant to the needs of employment markets (Tran, 2015).

Employability capabilities can to some extent be fostered through 'bolt on' activities that sit outside of formal academic programs (e.g., co-curricular WIL), or more effectively using holistic approaches which embed employability within academic curriculum. There has been a move towards favoring the latter recent years (Blackmore, Bulaitis, Jackman, & Tan, 2016; Helyer & Lee, 2014). For example, Billett's work (2015) established that effective pedagogical interventions before, during, and after a WIL activity (including reflective practice, debriefing, and assessment) are key to maximizing students' learning from the experience (see also Helyer & Lee, 2014). Further, including WIL early on in a student's program of study and sequencing experiences throughout their study is thought to be particularly beneficial for assisting students to determine what study specialization they prefer and/or are best suited to (Billett, 2015). Despite such developments, Speight, Lackovic, and Cooker (2013) observe that "tensions over the relationship of employability to the academic curriculum" (p. 123) remain, and "employability as bolt-on serves those who need it least. Employability as 'hidden' within the curriculum serves no one as it cannot be articulated" (p. 124). There clearly is no one size fits all approach, and not surprisingly various models of developing employability are proposed in the literature. As Knight and Yorke (2004, p. 2) note, "the complexity of employability and the variety that exists in curricula...mean that no

single, ideal, prescription for the embedding of employability can be provided.” Reconceptualizing employability as capability, that is, “the combination of skills, knowledge, and personal qualities that engender flexibility and adaptability” (Speight et al., 2013, p. 123) may offer a middle ground.

In this Special Issue, Bates and Hayes (2017) present a case study for how employability can be embedded throughout a university degree program, in this case criminology. The authors draw attention to the importance of scaffolding employability before, during, and after a student’s time at university in order to build their awareness of career options from an early stage. An employability framework is offered for how this can be achieved in practice through career development learning, industry connections and student actions at four key transition points within a student’s career: transition towards, in, through, and up. The employability framework was designed to be used as a tool across other disciplines and provides a valuable contribution to WIL scholarship.

ASSESSMENT OF EMPLOYABILITY SKILLS AND ATTRIBUTES

Assessment of student learning and skill acquisition in WIL is a complex endeavor. As Ferns and Zegwaard (2014, p. 179) note, in WIL “the challenges of rigorous and effective assessment methods are more pronounced” and there is widespread recognition that the methods used in traditional classroom based teaching (i.e., measurement-based approaches) may not necessarily be the most appropriate. Rather, a broader range of assessments is needed to capture the holistic nature of learning (Winchester-Seeto & Rowe, 2017). This whole-person-learning can include a number of generic and professional skills and attributes that are perceived by many to be “either immeasurable or difficult to measure” (Higgs, 2014, p. 253), such as the capacity for professional judgement, collegiality and collaboration, the ability to self-reflect, and demonstrating citizenship attributes (e.g., ethical conduct, respect for others). Linn’s (2015) work highlights the value of learning that occurs outside the hours of the WIL activity (what she terms ‘5-to-9 learning’) - learning that is not necessarily captured or encouraged in the assessments students complete as part of their course. This may include important life skills (i.e., for students living away from home for the first time) or development of a sense of social responsibility.

Further complexity due the variability of workplace learning in terms of situatedness, unpredictability, and authenticity (e.g., Smith et al., 2014; Yorke, 2011) means that “assessment needs to be responsive to individual circumstances and the particular experiences [students] encounter” (Winchester-Seeto & Rowe, 2017, p. 185). Despite debates around the extent to which capabilities can be validly and reliably measured (including those related to employability), there is some agreement that assessments such as portfolios, oral presentations, reports, and reflective pieces are all useful approaches in WIL (Jackson, 2015; Riebe & Jackson, 2014; Winchester-Seeto & Rowe, 2017; Yorke, 2011).

In this Special Issue, Kaider et al. (2017) offer an authentic assessment framework and typology developed through an examination of a large number of assessments across a range of disciplines at an Australian university. The resources are framed within concepts of proximity (the extent to which assessment tasks occur within the workplace and with practitioners) and authenticity (the extent to which assessment tasks resemble professional practice), and include examples of assessment types and learning activities that can be used across diverse modes of WIL. They point out that authentic work-related assessments, when used to prepare students for employment by gathering evidence of their employability skill

development, could serve as an important learner engagement strategy. Given the importance of quality assessment, equal consideration must be given to the resourcing required to support it. As Winchester-Seeto and Rowe (2017) note, “it takes time and courage for academics to work out the most effective assessment practices and approaches” in WIL (p. 195). While experimentation and evaluation of different methods is desirable, there can be workload implications for university staff, particularly for large cohorts (Winchester-Seeto & Rowe, 2017). Bilgin et al. (2017) in this Special Issue, report findings from a larger mixed methods study on academic workload considerations in WIL. Assessment of student learning was found to be the biggest single contributor to academic workload in WIL courses at one Australian university. Specifically, courses with individual WIL activities (as opposed to group activities) that were sourced by university staff and located off-campus resulted in the highest workload related to assessment. This research draws attention to the complexities of providing quality assessment in WIL, and the implications for higher education institutions in terms of the design of WIL activities and associated resources needed to deliver them.

ADDITIONAL CONSIDERATIONS

Wilton (2014) makes a useful distinction between “employability as the potential to gain desired employment and the realization of this potential” (Wilton, 2014, p. 249; see also Holmes, 2013). That is, what graduates need to develop in order to obtain employment rather than how they need to behave/performance once in employment. Within this distinction he discerns three aspects to employability: individual human capital, context-specific employability and the ability to articulate possession of desired attributes. Existing literature has focused largely on human capital development, with less attention paid to other factors such as individual attributes, the impact of perceived employability and labor market forces on employment outcomes (Clarke, 2017). Because of this, the complex nature of graduate employability has been somewhat simplified through scholarly debate (Clarke, 2017). However, it is important to consider both the “human capital and contextual dimensions of employability” each of which are critical to understanding factors associated with labor market attainment (Wilton, 2014, p. 248). Recent calls for theory development in the field of graduate employability research (e.g., Holmes, 2017) means it is imperative to unite the various strands of literature into more integrated approaches such as the model proposed by Clarke (2017) which re-conceptualizes graduate employability across six dimensions – human capital, social capital, individual attributes, individual behaviors, perceived employability, and labor market factors. This also entails a better understanding of the roles of higher education institutions versus that of individuals in developing the required skills and attributes to attain successful employment outcomes (Clarke, 2017).

Discerning between perceptions of employability (often measured via self-reported data) and actual employment opportunities (i.e., the number of jobs available) is another critical issue. While employability, work-readiness, and employment outcomes are different constructs, they are related and tend to be used in the literature interchangeably. Therefore, it is important to consider these constructs together because many of the recommendations for future research presented here transverse each of these areas. This includes taking account empirical findings of research into graduate employment (Holmes, 2017). Despite the growing body of literature supporting the impact of WIL in enhancing employability outcomes, there are a number of challenges to evidencing the effectiveness of WIL with empirical data. For example, there can be difficulties tracking graduates over time and the

isolating the effects of WIL from other related factors that impact on employability and future careers (e.g., previous work or volunteering experience). Additionally, research suggests that employment outcomes are significantly influenced by other factors such as social class, gender, and ethnicity (HEFCE, 2015), the type of institution attended and course taken (Britton et al., 2016), location and mobility, and advice provided (Harvey, 2001), family lifestyle preferences (Hakim, 2002), and personal values (Brown & Crace, 1999). However, mixed results have been reported in this respect, for example, Okay-Somerville and Scholarios (2015) found no evidence for the role of social position impacting on employability. Hence, “the extent to which employment outcomes are significantly determined by factors outside of the control of students and HEIs yet are to some degree amenable to action taken by students and by HEIs” and need to be carefully considered (Holmes, 2017, p. 365). Indeed, employability can be affected by a number of factors which affect the actual number and types of jobs available for graduates, for example, the global recession, youth unemployment, and the increasing number of students entering post-secondary education (Helyer & Lee, 2014). Hence, the importance of viewing and exploring employability within its wider socio-economic context (Wilton, 2014).

Further research is needed around whole-of-curriculum (re)design that enables higher empowered work-ready graduates. This curriculum redesign needs to have employability at the centre of the design rather than retrospective mapping of desirable graduate competencies to current learning activities. According to Hanneman and Gardner (2010), there has been little movement over the previous 10 years towards new skills, rather they found that the workplace has escalated the expectation of skill level of new graduates. This study, thus, highlights the importance of sound curricular design that furthers the attainment of employability skills beyond what is currently achieved. However, designing a curriculum that scaffolds learning opportunity focused on employability capabilities, using WIL and other learning approaches, challenges traditional teaching, learning, and assessment approaches (Ferns & Zegwaard, 2014).

Further research is also needed to extend findings reported here, as well as address remaining gaps in the literature. Several guiding principles are important to consider when progressing this agenda. First, when determining the concept of graduate employability, future research should include other contributing factors (both positive and negative) important for graduates gaining relevant employment, the extent of the influence, and how these interact across diverse contexts (Holmes, 2017). Second, multiple sources of data are needed to triangulate the evidence of the impact of WIL on employability and employment outcomes. Some of these data are not yet available, for example, many graduate surveys do not yet (or are only just starting to) track transition to employment to long-term career progression, or measured the influence of the quality and relevance of a graduate’s first job. Third, as Holmes (2017) points out, it is important that “research into graduate employability...be oriented towards the practical implications” for students, graduates, higher education institutions, and other stakeholders. (p. 367). In keeping with these principles, the following is recommended:

- Studies which expand our understanding of employability and the role of WIL in developing a wider range of skills and attributes such as citizenship (Gamble, Patrick, & Peach, 2010) which are less well explored;
- Longitudinal studies to determine ongoing benefits to student employability and employment prospects, that is, studies on the medium and long-term impacts of

WIL, similar to those which have been undertaken on the effects of service learning (e.g., Astin et al., 2006);

- Intervention studies which identify the influence of different types of WIL (placement and non-placement models) on employability and employment outcomes including areas such as professional identity, citizenship and networking, thereby, addressing “the issue of exactly *how* [original emphasis] WIL contributes to employability” (Jackson & Wilton, 2016, p. 279);
- Studies which measure the actual impact (rather than perceived effects) of WIL on employability and graduate employment outcomes (i.e., studies based on a broad range of data sources in addition to self-reported ones, e.g., Silva et al., 2016).

There, however, needs to be a cautionary word around the recent narrowing of the employability focus to only employment within the discipline of study. Recent governmental focus in Australia and New Zealand is increasingly leaning towards determining post-secondary education institutional performance by measuring the linkages between student study direction with directly related career direction within the same field of study. Such approach, as meritorious as it seems, has limitations (consider the earlier critique by Harvey, 2001). These approaches tend to overlook the transferability of qualifications to other disciplines, which is important given the recent emphasis on preparing students for jobs that do not yet exist and to respond to the changing nature of future employment (i.e., the decrease of full-time permanent work, growth of short-term contract/casual work). This implies the focus should be on transferability of skills across contexts and disciplines, and proactive, entrepreneurial, innovative individuals who are capable of managing their own careers through creating, constructing, designing, and identifying employment opportunities, rather than training for a particular profession (e.g., Benneworth, 2016; McMahan et al., 2003; Trede & McEwen, 2016). The use of longitudinal research projects that include field of study, employability, and career direction will likely provide much needed insight on the importance of inter-discipline transferability of employment skills and subsequent career success.

CONCLUSIONS

Although employability seems to receive considerable attention and scholarly debate in the literature, there are still notable gaps around *evidence* that links successful attainment of work-ready skills to the impact graduate employability and employment, including the long-term career implications. There are few available longitudinal studies exploring employability. Furthermore, there is a need to consider curriculum redesign with employability foundational to the curriculum, where students can identify and explicitly link to their learning activity to a desirable graduate competency. Advancing the education provided to post-secondary students is integral to effectively preparing them for a life-long career in their chosen field. Therefore, it is likely that employability, despite the considerable discussion already in the literature, will remain a key research direction and focus of scholarly debate for some time yet.

REFERENCES

- Astin, A. W., Vogelgesang, L. J., Misa, K., Anderson, J., Denson, N., Jayakumar, U., Saenz, V., & Yamamura, E. (2006). *Understanding the effects of service-learning: A study of students and faculty. Final report to the Atlantic Philanthropies, U.S.A.* Retrieved from https://www.researchgate.net/publication/266456683_Understanding_the_Effects_of_Service-Learning_A_Study_of_Students_and_Faculty
- Barnett, R. (2012). Learning for an unknown future. *Higher Education Research & Development*, 31(1), 65-77. doi: 10.1080/07294360.2012.642841
- Bates, L., & Hayes, H. (2017). Using the student lifecycle approach to enhance employability: An example from criminology and criminal justice. *Asia-Pacific Journal of Cooperative Education (Special Issue)*, 18(2), 141-151.
- Benneworth, P. S. (2016). *Employability: Asia and Europe prepare the new generation*. Working Group 4: Strategies for the New Economy. Retrieved from: <https://research.utwente.nl/en/publications/employability-asia-and-europe-prepare-the-new-generation>
- Bilgin, A. A., Rowe, A. D., & Clark, L. (2017). Academic workload implications of assessing student learning in work-integrated learning. *Asia-Pacific Journal of Cooperative Education (Special Issue)*, 18(2), 165-181.
- Billett, S. (2011). Workplace curriculum: Practice and propositions. In F. Dochy, D. Gijbels, M. Segers, & P. V. D. Bossche (Eds.), *Theories of learning for the workplace: Building blocks for training and professional development programs* (pp. 17-36). New York, NY: Routledge.
- Billett, S. (2015). *Integrating practice-based experiences into higher education*. New York: Springer. doi: 10.1007/978-94-017-7230-3
- Blackmore, P., Bulaitis, Z. H., Jackman, A. H., Tan, E. (2016). *Employability in higher education: A review of practice and strategies around the world*. Report commissioned by Pearson. Retrieved from <https://www.pearson.com/uk/about-us/news-and-policy/reports-and-campaigns/employability-in-higher-education.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. doi: 10.1080/07294360802444347
- Bridgstock, R. (2017). The university and the knowledge network: A new educational model for Twenty-first Century learning and employability. In M. Tomlinson & L. Holmes (Eds.), *Graduate employability in context* (pp. 339-358). London: Palgrave Macmillan. doi: 10.1057/978-1-137-57168-7_16
- Brown, D., & Crace, R. K. (1999). Values in life roles choices and outcomes: A conceptual model. *The Career Development Quarterly*, 44, 211-223.
- Burke, C., Scurry, T., Blenkinsopp, J., & Graley, K. (2016). Critical perspectives on graduate employability. In M. Tomlinson & L. Holmes (Eds.), *Graduate employability in context* (pp. 87-107). London: Palgrave Macmillan. doi: 10.1057/978-1-137-57168-7_4
- Coll, R. K., Eames, C., Paku, L., Lay, M., Ayling, D., Hodges, D., . . . Martin, A. (2009). An exploration of the pedagogies employed to integrate knowledge in work-integrated learning in New Zealand higher education institutions.. Wellington, New Zealand: Teaching and Learning Research Initiative. Retrieved from <http://www.tlri.org.nz/tlri-research/research-completed/post-school-sector/exploration-pedagogies-employed-integrate>
- Chillas, S., Marks, A., & Galloway, L. (2015). Learning to labour: An evaluation of internships and employability in the ICT sector. *New Technology, Work & Employment*, 30(1), 1-15.
- Clarke, M. (2017). Rethinking graduate employability: The role of capital, individual attributes and context. *Studies in Higher Education*. doi: 10.1080/03075079.2017.1294152
- Cooper, L., Orrell, J., & Bowden, M. (2010). *Work integrated learning: A guide to effective practice*. New York, NY: Routledge.
- Council of Ontario Universities. (2014). *Bringing life to learning at Ontario universities. Experiential learning report*. Toronto, ON: Council of Ontario Universities. Retrieved from <http://cou.on.ca/reports/bringing-life-to-learning/>

- Ferns, S., Campbell, M., & Zegwaard, K. (2014). Work-integrated learning. In S. Ferns (Ed.), *HERDSA guide: Work-integrated learning in the curriculum* (pp. 1-6). Milperra, Australia: HERDSA.
- Ferns, S., & Zegwaard, K. E. (2014). Critical assessment issues in work-integrated learning. *Asia-Pacific Journal of Cooperative Education (Special Issue)*, 15(3), 179-188.
- Freudenberg, B., Brimble, M., & Cameron, C. (2011). WIL and generic skill development: The development of business students' generic skills through work-integrated learning. *Asia-Pacific Journal of Cooperative Education*, 12(2), 79-93.
- Gamble, N., Patrick, C.-j., & Peach, D. (2010). Internationalising work-integrated learning: Creating global citizens to meet the economic crisis and the skills shortage. *Higher Education Research & Development*, 29(5), 535-546. doi: 10.1080/07294360.2010.502287
- Gardner, P. (2013). *Framing internships from an employers' perspective: Length, number and relevancy*. CERI Research Brief 6. Retrieved from <http://www.ceri.msu.edu/wp-content/uploads/2010/01/internshipCERI-Research-Brief-XX.pdf>
- Gault, J., Leach, E., & Duey, M. (2010). Effects of business internships on job marketability: The employers' perspective. *Education & Training*, 52(1), 76 – 88. doi: 10.1108/00400911011017690
- Groenewald, T., Drysdale, M. T. B., 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.
- Hakim, C. (2002). Lifestyle preferences as determinants of women's differentiated labor market careers. *Work & Occupations*, 29(4), 428-459. doi: 10.1177/073088802237558
- Hall, M., Pascoe, D., & Charity, M. (2017). The impact of work-integrated learning experiences on attaining graduate attributes for exercise and sports science students. *Asia-Pacific Journal of Cooperative Education (Special Issue)*, 18(2), 101-113.
- Hanneman, L., & Gardner, P. D. (2010). Under the economic turmoil a skill gap simmers. CERI Research Brief 1-2010. East Lansing, MI: Collegiate Employment Research Institute, Michigan State University. Retrieved from <http://www.ceri.msu.edu/wp-content/uploads/2010/01/skillsabrief1-2010.pdf>
- Harvey, L. (2001). Defining and measuring employability. *Quality in Higher Education & Training*, 7(2), 97-109. doi: 10.1080/13538320120059990
- Higgs, J. (2014). Assessing the immeasurables of practice. *Asia-Pacific Journal of Cooperative Education (Special Issue)*, 15(3), 253-267.
- Helyer, R., & Lee, D. (2014). The role of work experience in the future employability of higher education graduates. *Higher Education Quarterly*, 68(3), 348-372. doi: 10.1111/hequ.12055
- Higher Education Funding Council for England (HEFCE). (2015). *Differences in employment outcomes: Equality and diversity characteristics*. Retrieved from <http://www.hefce.ac.uk/pubs/year/2015/201523/>
- Holmes, L. (2013). Competing perspectives on graduate employability: Possession, position or process? *Studies in Higher Education*, 38(4), 538-554. doi: 10.1080/03075079.2011.587140
- Holmes, L. (2017). Graduate Employability: Future directions and debate. In M. Tomlinson & L. Holmes (Eds.), *Graduate employability in context* (pp. 359-369). London, UK: Palgrave Macmillan. doi: 10.1057/978-1-137-57168-7_17
- Jackson, D. (2013). The contribution of work-integrated learning to undergraduate employability skill outcomes. *Asia-Pacific Journal of Cooperative Education*, 14(2), 99-115.
- Jackson, D. (2015). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education*, 40(2), 350-367. doi: 10.1080/03075079.2013.842221
- Jackson, D. (2016). Re-conceptualising graduate employability: The importance of pre-professional identity. *Higher Education Research & Development*, 35(5), 925-939. doi: 10.1080/07294360.2016.1139551
- Jackson, D., Ferns, S., Rowbottom, D., & McLaren, D. (2015). *Working together to achieve better work-integrated learning outcomes: Improving productivity through better employer involvement*. Retrieved

- from <http://acen.edu.au/wp-content/uploads/2016/06/Working-together-to-achieve-better-WIL-outcomes.pdf>
- Jackson, D., & Wilton, N. (2016). Developing career management competencies among undergraduates and the role of work-integrated learning. *Teaching in Higher Education*, 21(3), 266-286. doi: 10.1080/13562517.2015.1136281
- Jiang, Y. H., Lee, S. W. Y., & Golab, L. (2015). Analyzing student and employer satisfaction with cooperative education through multiple data sources. *Asia-Pacific Journal of Cooperative Education*, 16(4), 225-240.
- 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.
- Kaider, F., Hains-Wesson, R., & Young, K. (2017). Practical typology of authentic work-integrated learning activities and assessments. *Asia-Pacific Journal of Cooperative Education (Special Issue)*, 18(2), 152-164.
- Knight, P., & Yorke, M. (2004). *Learning, curriculum and employability in higher education*. London: Routledge Falmer.
- Linn, P. (2015). A lifespan perspective on cooperative education learning: A grounded theory. *Asia-Pacific Journal of Cooperative Education*, 16(4), 301-326.
- Lloyd, K., Clark, L., Hammersley, L., Baker, M., Rawlings-Sanaei, F., & D'Ath, E. (2015). Unintended outcomes of university-community partnerships: Building organizational capacity with PACE International partners. *Asia-Pacific Journal of Cooperative Education*, 16(3), 163-173.
- Martin, A., Rees, M., & Edwards, M. (2011). *Work-integrated learning: A template for good practice: Supervisors' reflections*. RHPF Central Regional Hub Project fund. Palmerston North, New Zealand: Massey University.
- Mason, G., Williams, G., & Cranmer, S. (2009). Employability skills initiatives in higher education: What effects do they have on graduate labour market outcomes? *Education Economics*, 17(1), 1-30. doi: 10.1080/09645290802028315
- McMahon, M., Patton, W., & Tatham, P. (2003). *Managing life, learning and work in the twenty first century: Issues informing the design of an Australian Blueprint for Career Development*. Subiaco, WA: Miles Morgan. Retrieved from https://cica.org.au/wp-content/uploads/Managing-Life-Learning-and-Work-in-the-21-Century-MMcM_WP_PT.pdf
- Messum, D., Wilkes, L., Peters, C., & Jackson, D. (2017). Senior managers' and recent graduates' perceptions of employability skills for health services management. *Asia-Pacific Journal of Cooperative Education (Special Issue)*, 18(2), 115-128.
- Okay-Somerville, B., & Scholarios, D. (2017). Position, possession or process? Understanding objective and subjective employability during university-to-work transitions. *Studies in Higher Education*, 42(7), 1275-1291. doi: 10.1080/03075079.2015.1091813
- Oliver, B. (2015). Redefining graduate employability and work-integrated learning: Proposals for effective higher education and disrupted economies. *Journal of Teaching & Learning & Graduate Employability*, 6(1), 56-65.
- Patrick, C.-J., & Crebert, G. (2004). The contribution of work placement to generic skills development. In *Proceedings of the 15th Annual AAEE Conference* (pp. 40-46). Toowoomba, Australia: AAEE.
- Patrick, C.-j., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *Work-integrated learning: A national scoping study. Final report*. Brisbane: Australian Learning and Teaching Council.
- Perry, A. (2011). *Real graduates, real transitions, real stories: Real insights to the life after university*. (Unpublished doctoral dissertation), University of Canterbury, Christchurch, New Zealand.
- Peters, J., Sattler, P., & Kelland, J. (2014). *Work-Integrated learning in Ontario's postsecondary sector: The pathways of recent College and University graduates*. Toronto, ON: Higher Education Quality Council of Ontario. Retrieved from <http://www.heqco.ca/en-ca/Research/ResPub/Pages/Work-Integrated-Learning-in-Ontario-s-Postsecondary-Sector-The-Pathways-of-Recent-College-and-University-Graduates-.aspx>

- Reddan, G. (2017). Combining quality work-integrated learning and career development learning through the use of the soar model to enhance employability. *Asia-Pacific Journal of Cooperative Education (Special Issue)*, 18(2), 129-139.
- Riebe, L., & Jackson, D. (2014). The use of rubrics in benchmarking and assessing employability skills. *Journal of Management Education*, 38(3), 319-344. doi: 10.1177/1052562913511437
- Sachs, J., Rowe, A., & Wilson, M. (2017). *Good practice report – WIL. Report undertaken for the Office of Learning and Teaching*. Retrieved from <http://www.olt.gov.au/resource-good-practice-work-integrated-learning>
- Silva, P., Lopes, B., Costa, M., Melo, A., Paiva Dias, G., Brito E., & Seabra, D. (2016). The million-dollar question: Can internships boost employment? *Studies in Higher Education*. doi: 10.1080/03075079.2016.1144181
- Smith, C., Ferns, S., & Russell, L. (2014). *The impact of work-integrated learning on student readiness*. Final Report. Sydney: Office for Learning and Teaching, Australia. Retrieved from <http://www.olt.gov.au/resource-impact-work-integrated-learning-student-work-readiness>
- Speight, S., Lackovic, N., & Cooker, L. (2013). The contested curriculum: Academic learning and employability in higher education. *Tertiary Education & Management*, 19(2), 112-126. doi: 10.1080/13583883.2012.756058
- Tran, T. T. (2015). Is graduate employability the 'whole-of-higher-education issue'? *Journal of Education & Work*, 28(3), 207-227. doi: 10.1080/13639080.2014.900167
- Trede, F. (2012). Role of work-integrated learning in developing professionalism and professional identity. *Asia-Pacific Journal of Cooperative Education*, 13(3), 159-167.
- Trede, F., & McEwen, C. (2016). Carving out the territory for educating the deliberate professional. In F. Trede & C. McEwen (Eds.), *Educating the deliberate professional* (pp. 15-28). Cham, Switzerland: Springer.
- Tustin, K., Gollop, M., Theodore, R., Taumoepeau, M., Taylor, N., Hunter, J., . . . Poulton, R. (2016). *Graduate longitudinal study New Zealand: First follow-up descriptive report*. Wellington, New Zealand.
- Universities Australia, Australian Chamber of Commerce and Industry, Ai Group, Business Council of Australia & Australian Collaborative Education Network National WIL Strategy. (2015). *National Strategy on Work-integrated Learning in University Education*. Retrieved from <http://cdn1.acen.edu.au/wp-content/uploads/2015/03/National-WIL-Strategy-in-university-education-032015.pdf>
- Wilton, N. (2012). The impact of work placements on skills development and career outcomes for business and management graduates. *Studies in Higher Education*, 37(5), 603-620. doi: 10.1080/03075079.2010.532548
- Wilton, N. (2014). Employability is in the eye of the beholder: Employer decision-making in the recruitment of work placement students. *Higher Education, Skills & Work-based Learning*, 4(3), 242-255. doi: 10.1108/HESWBL-07-2014-0027
- Winchester-Seeto, T., & Rowe, A. (2017). Assessment Strategies for new learning. In J. Sachs & L. Clark (Eds.), *Learning through community engagement: Vision and practice in higher education* (pp. 185-197). doi: 10.1007/978-981-10-0999-0_12
- Yorke, M. (2010). Employability: Aligning the message, the medium and academic values. *Journal of Teaching & Learning for Graduate Employability*, 1(1) 2-12.
- Yorke, M. (2011). Work-engaged learning: Towards a paradigm shift in assessment. *Quality in Higher Education*, 17(1), 117-130.
- Zegwaard, K. E., & McCurdy, S. (2014). The influence of work-integrated learning on motivation to undertake graduate studies. *Asia-Pacific Journal of Cooperative Education*, 15(1), 13-28.
- Zegwaard, K. E., Campbell, M., & Pretti, T. J. (2017). Professional identities and ethics: The role of work-integrated learning in developing agentic professionals. In T. Bowen & M. Drysdale (Eds.), *Work-integrated learning in the 21st century: Global perspectives on the future international perspectives on education and society* (pp. 145-160). Bingley, UK: Emerald Publishing Limited.

This APJCE Special Issue was sponsored by



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**Articles in this special issue derive from
presentations¹ delivered at the
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About the Journal

The Asia-Pacific Journal of Cooperative Education publishes peer-reviewed original research, topical issues, and best practice articles from throughout the world dealing with Cooperative Education (Co-op) and Work-Integrated Learning/Education (WIL).

In this Journal, Co-op/WIL is defined as an educational approach that uses relevant work-based projects that form an integrated and assessed part of an academic program of study (e.g., work placements, internships, practicum). These programs should have clear linkages with, or add to, the knowledge and skill base of the academic program. These programs can be described by a variety of names, such as cooperative and work-integrated education, work-based learning, workplace learning, professional training, industry-based learning, engaged industry learning, career and technical education, internships, experiential education, experiential learning, vocational education and training, fieldwork education, and service learning.

The Journal's main aim is to allow specialists working in these areas to disseminate their findings and share their knowledge for the benefit of institutions, co-op/WIL practitioners, and researchers. The Journal desires to encourage quality research and explorative critical discussion that will lead to the advancement of effective practices, development of further understanding of co-op/WIL, and promote further research.

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Before submitting a manuscript, please ensure that the 'instructions for authors' has been followed (www.apjce.org/instructions-for-authors). All manuscripts are to be submitted for blind review directly to the Editor-in-Chief (editor@apjce.org) by way of email attachment. All submissions of manuscripts must be in Microsoft Word format, with manuscript word counts between 3,000 and 5,000 words (excluding abstract, references, and tables).

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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.

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Publisher: New Zealand Association for Cooperative Education