

# A collaborative framework for enhancing graduate employability

SONIA FERNS<sup>1</sup>

*University of Western Australia, Perth, Australia*

*Curtin University, Perth, Australia*

VAILLE DAWSON

CHRISTINE HOWITT

*University of Western Australia, Perth, Australia*

---

Disruptive technologies, emerging global markets, and uncertain workforce requirements are driving the need for skilled graduates. This research developed a framework for collaboration between stakeholders to ensure work-ready graduates and sustained economic growth. A mixed-methods, multiple case study research design was deployed to gather data from graduates, employers, staff, students, and professional body representatives across three disciplines. The Australian course experience questionnaire generated 476 graduate responses and 1,175 comments. The graduate employability surveys collected responses from 88 graduates, 51 employers and 34 teaching staff. SPSS and Excel functions were used for quantitative data analysis and NVivo for thematic analysis. A cross-case analysis of the three case studies revealed consistency in stakeholder perceptions of domains perceived as important for graduate employability with collaborative partnerships emerging as integral to actualizing the domains. Findings from this research challenge conventional university approaches to brokering and maintaining partnerships and suggests a holistic engagement framework for stakeholders.

Keywords: Partnerships, collaboration, stakeholders, employability, professional accreditation

---

Emerging technologies, global economic transformation, and unpredictable labor markets are impacting on economic sustainability. Industry is seeking innovative, adaptable and resilient graduates with the capacity to navigate shifting workplace dynamics (Hagel, Brown, Mathew, Wooll & Tsu, 2014). "A seismic shift in our attitudes to careers" (Chartered Accountants Australia and New Zealand, 2017, p. 18) is required to manage the political, social and economic imperatives impacting world-wide on skills required for success in the future.

## RETHINKING HIGHER EDUCATION

While policy makers and higher education personnel espouse the value of higher education, the reality is that the currency and value of a degree for employability is diminishing (Jassal & Clark, 2016; Australian Industry Group [AiG], 2018). Students, graduates and employers question the return on investment and employability outcomes of a university qualification (Australian Higher Education Industrial Association [AHEIA] & Price Waterhouse Coopers [PWC], 2016). Despite this skepticism, there is also the credence that the demand for higher education will increase as automation and innovation impact on required skills (Davies, Fidler & Gorbis, 2011; McKinsey Global, 2017).

An innovative approach to a university education is warranted, given the "compelling evidence and new data analysis that the future of work will look very different" (Foundation for Young Australians, 2017, p. 23). A sustainable and innovative education system is essential for Australia to remain globally competitive (Reeves, 2013). Reconceptualizing how education is enacted is imperative for global well-being and economic productivity (Blessenger, 2016; Van Rooijen, 2011). Trends confirm that work experience is more highly valued as evidence of work-readiness than a degree. The traditional

---

<sup>1</sup> Corresponding author: Sonia Ferns, [s.ferns@curtin.edu.au](mailto:s.ferns@curtin.edu.au)

“episodic” (Jassal & Clark, 2016, p. 16) approach to education where ‘formal learning’ is restricted to specific periods in one’s life, are no longer relevant. Learning for life which integrates academic, social, professional, and self-awareness dimensions, is the way forward (Productivity Commission, 2017). Many authors in recent years have bemoaned the inability of universities to prepare work-ready graduates (Australian Workplace Productivity Agency [AWPA], 2014) and advocated that partnerships between industry and universities are paramount. The challenge is for universities to deliver these imperatives through rethinking their culture of collaboration and cooperation.

## WORK-INTEGRATED LEARNING

Work-integrated learning (WIL) has emerged as a key pedagogical strategy to enhance student learning, development and employability (Wilson, 2012; Kennedy, Billett, Gherardi, & Grealish, 2015; McRae & Johnston, 2016) and is increasingly incorporated into higher education curricula. WIL is a mechanism by which universities produce work-ready graduates, and meet national accountability requirements (Patrick, Peach, Pcknee, Webb, Fletcher, & Pretto, 2009; Precision Consultancy, 2007). The overarching aim of WIL is to improve graduate employability outcomes and contribute to a buoyant economy. WIL learning experiences, explicitly placement WIL, are used as discriminating factors in graduates seeking employment. “[Work] experience appears to be the decisive differentiating factor among graduates” (Gault, Leach, & Duey, 2010, p. 77). These authors conducted a survey with 185 employer respondents who hosted a total of 392 interns collectively. Employers reaffirmed the value of WIL placements in workplace preparation, confirming that students who had participated in work placements were provided more fulltime employment opportunities and generally started on higher than average salaries (Gault et al., 2010).

In a study conducted by Karns (2005) aimed to measure perceptions of learning activities, 227 student participants reported that WIL was the most stimulating, enjoyable and effective of all learning strategies. Furthermore, WIL improves student retention, clarifies academic aspirations and career intentions, encourages in-depth learning, facilitates motivation and engagement, and develops skills and attributes for lifelong learning (Jassal & Clark, 2016; Edwards, Perkins, Pearce, & Hong, 2015).

## PARTNERSHIPS

“Whether driven by the demands of an increasingly competitive global workplace or the realities of a rapidly changing and evolving innovation economy, corporations have come to place a high value on deeper learning” (Business-Higher Education Forum [BHEF], 2013). With education moving from exclusively institutional-based formal learning to a more comprehensive model, the imperative for universities and industry to work side by side in preparing work-ready graduates has never been more pressing (Australian Higher Education Industrial Association [AHEIA] & Price Waterhouse Coopers [PWC]. (2016).). Learning comprises intellectual, practical, and personal development of the individual, all of which is integrated into a ‘learning package’. An inclusive education stimulates the learner through a unified approach to their learning, heightening relevance, and instilling a lifelong approach (Jassal & Clark, 2016). These authors refer to it as a “harmonious combination of education and employment” (p. 38). Educational institutions alone do not have the expertise, nor resources to achieve this outcome. While partnerships between industry and universities have long been advocated, evidence suggests a more extensive and intensive partnership framework is required (Williams, Simmons, Levett-Jones, Sher & Bowen, 2012). Partnerships are the key to promoting a borderless education and reinventing the ‘learning economy’.

## PROFESSIONAL ACCREDITATION

A report titled “Professional Accreditation: Mapping the Territory”, was published in Australia in February 2017 (PhillipsKPA, 2017). The intent of the report was to identify the effect of professional accreditation processes on Australian universities and determine how it might be streamlined and less onerous for institutions (Dodd, 2017). The intended outcome is the development of a ‘national code of practice’ to inform, guide and appraise the process. Professional accreditation bodies are self-regulating organizations who promote their services to universities as a ‘marketing strategy’ given that a professionally accredited degree is considered more appealing to incoming students (Freeman & Evans, 2016). The absence of an agreed, systemic-wide approach to accreditation instigates confusion and a “power imbalance between providers and accreditors” (PhillipsKPA, 2017, p. 6).

Professional accreditation competencies and standards are frequently prescriptive of content rather than focusing on professional skills and attributes, although there is flexibility in how learning providers design learning experiences to evidence the competencies (PhillipsKPA, 2017). A broadened, more holistic perspective of the profession, rather than a narrow discipline knowledge stance, would be more conducive to a comprehensive curriculum. Skills highly sought after by employers such as entrepreneurship, innovation, adaptability and resilience rarely feature in professional accreditation standards. Furthermore, the intrusion on institutional imperatives, the absence of clarity in the accreditation process, and cost and imposition on university resources, prompts misunderstanding and discontent (PhillipsKPA, 2017).

## OVERVIEW OF THE RESEARCH

This research highlights the barriers to working in partnership to address graduate employability and suggests strategies for overcoming those barriers to ensure a quality educative experience. Furthermore, the findings show that the panacea requires a broadening of the partnership debate. A ‘WIL Partnerships for Employability Framework’ was developed which outlines the roles and responsibilities of partners, and how stakeholders should collaborate to ensure work-ready graduates. This overarching challenge was addressed through four Research Questions (RQs):

1. RQ1: What are the important components of a university education that support the development of employability capabilities?
2. RQ2: What are stakeholders’ perceptions of the gaps in the skills and knowledge of graduates in workplace preparedness?
3. RQ3: How does embedding work-integrated learning experiences in curriculum enhance graduate employability?
4. RQ4: What are the partnership characteristics that facilitate successful outcomes in preparing work-ready graduates?

This paper reports on RQ 1 and RQ 4.

## METHODOLOGY

A three-phase, mixed-methods, and multiple case study research design was adopted. The disciplines of Chemical Engineering (CE), Occupational Therapy (OT), and Primary Education (PE), all of which are professionally accredited, were the focus of each of the three case studies. Data was collected from graduates, employers, university staff, students, and professional body representatives for CE, OT and PE. Data collection methods included surveys, and individual and small group interviews.

The multi-dimensional nature of the research was best explored using a mixture of both quantitative and qualitative methods. Integrating quantitative and qualitative data enabled a connection of the datasets thereby strengthening the evidence on which findings are based (Creswell & Plano Clark, 2011). A cross-case analysis was undertaken to identify similarities and differences across the three individual case studies. Trends captured in the quantitative data-sets informed themes for deductive analysis of qualitative data. This was followed by inductive thematic analysis to determine themes emerging from qualitative data that were not evident in the quantitative data. Ethics approval for this study was granted in July 2014.

Data was collected via the following:

1. Australian Course Experience Questionnaire (CEQ): National survey administered annually to graduates three months post-completion aimed to determine graduates' satisfaction with their university experience.
2. Graduate Employability Indicator Survey (GEI): Gathered perceptions of teaching staff, graduates, and employers on important employability capabilities and the gaps in graduate skills.
3. Graduate Destination Survey (GDS): National survey administered annually to source information about employment outcomes of graduates.
4. Interviews: Students, employers, professional accreditation body representatives, and university staff.

Table 1 provides an overview of data collection in each phase, the number of participants, and data analysis approaches.

As shown in Table 1, the Australian course experience questionnaire (CEQ) quantitative data was collated and analyzed initially, the findings of which informed the thematic analysis of the CEQ qualitative data. The graduate employability indicator surveys (GEI) were then administered with quantitative data analyzed first, followed by the qualitative data. Building on the themes emerging from analysis of the CEQ data, an overall schema for each case study was developed. In phase two, data from the graduate destination survey (GDS) explored graduates' employment outcomes and the sources used to seek work. This phase also involved individual and small group interviews with current students. The interview questions were framed around themes identified in phase one, thereby enabling in-depth probing of the themes from the perspective of students. In phase three, professional accreditation bodies, employers, and teaching staff were interviewed to gather viewpoints from multiple stakeholders. Upon completion of the three phases, a series of domains and sub-themes (dimensions) were developed pertaining to each of the case studies. Figure 1 highlights the iterative process of the research methodology whereby analysis of the data in each phase was informed by the findings in the preceding phase.

TABLE 1: Data collection methods and analysis for each case study

| Phase   | Data Collection  | Sample Size<br>(Quantitative) | Sample Size<br>(Qualitative) | Analysis  |  |    |
|---|--|-------------------------------|------------------------------|---|--|----|
| ONE   | Course   | CE: 179                       | CE: 321                      | SPSS descriptive statistical analysis.<br>NVivo inductive thematic analysis |  |    |
|   | Experience   | OT: 180                       | OT: 336                      |   |  |    |
|   | Questionnaire (CEQ)  | PE: 322                       | PE: 492                      |   |  |    |
|   | Graduate Employability Indicator Survey (GEI)                          | CE:                           |                              | CE:   | Descriptive statistical analysis,<br>NVivo inductive and deductive thematic analysis |    |
|   |  | Graduates:                    | 32                           | Graduates:  |  | 51 |
|   |  | Employers:                    | 4                            | Employers:  |  | 7  |
|   |  | Staff:                        | 6                            | Staff:  |  | 21 |
|   |  | OT:                           |                              | OT:   |  |    |
|   |  | Graduates:                    | 26                           | Graduates:  |  | 47 |
|   |  | Employers:                    | 37                           | Employers:  |  | 35 |
| Staff:  |  | 19                            | Staff:                       | 21  |  |    |
| PE:   |  |                               | PE:                          |   |  |    |
| Graduates:                                    |  | 30                            | Graduates:                   | 57  |  |    |
| Employers:                                    | 10   | Employers:                    | 15                           |   |  |    |
| Staff   | 9  | Staff:                        | 25                           |   |  |    |
| TWO   | Graduate Destination Survey (GDS)                                      |                               | CE: 116                      |   |  |    |
|   |  |                               | OT: 118                      |   |  |    |
| Student individual and small group interviews |  |                               | CE: 9                        | Deductive and inductive thematic analysis                                   |  |    |
|   |  |                               | OT: 7                        |   |  |    |
|   |  |                               | PE: 13                       |   |  |    |
| THREE   | Interviews with representatives from professional accreditation bodies |                               | CE: 2                        | Deductive and inductive thematic analysis                                   |  |    |
|   |  |                               | OT: 1                        |   |  |    |
|   |  |                               | PE: 3                        |   |  |    |
|   | Employer interviews  |                               |                              | CE: 1   | Deductive and inductive thematic analysis  |    |
|   |  |                               |                              | OT: 1   |  |    |
|   |  |                               |                              | PE: 1   |  |    |
| Teaching staff interviews                     |  |                               | CE: 3                        | Deductive and inductive thematic analysis                                   |  |    |
|   |  |                               | OT: 2                        |   |  |    |
|   |  |                               | PE: 3                        |   |  |    |

Note: CE: Chemical Engineering, OT: Occupational Therapy, PE: Primary Education



FIGURE 1: Three phases of data collection.

## FINDINGS

A cross-case analysis of the three case studies revealed consistency in stakeholder perceptions of important components of a university education that support the development of employability capabilities (RQ1). Referred to as Domains for Employability, they included: 1. Work-integrated learning/Workplace relevance, 2. Staff quality and expertise, 3. Curriculum content and structure, 4. Assessment, 5. Social connections, 6. Confidence/Skill development, 7. Motivation, 8. Role models and mentors, 9. Professionalism/Professional identity, and 10. Workplace transition. Collaborative partnerships emerged as central to realizing these domains which prepare graduates for an uncertain workplace. Each of the domains are described below along with an overview of the 'WIL Partnerships for Employability Framework' developed as a result of the research.

### *Domains for Employability*

1. *Work-integrated learning (WIL)/workplace relevance*: WIL experiences embedded in degree programs emerged as the most dominant domain by all research participants. Graduates and students wanted "longer and more" (PE graduate, 2014) work placement opportunities. Connecting with industry and developing strong industry networks was considered to enhance "job prospects, and confidence" (OT graduate, 2013). WIL was described as inspiring, engaging, and beneficial, and perceived to be the mechanism which developed adaptability, resilience, reflection, and merged workplace skills with theoretical knowledge. There was unanimous agreement that WIL needed to be scaffolded across the curriculum to enable incremental development of workplace skills. The quality of supervision from both academic and industry-based sources was also deemed important. Consistent across all case studies was the perception of increasing tension between universities and employers as student numbers grew. However, there was agreement that "WIL partnerships are vital" (OT industry representative, 2015) for improving graduates' work-readiness.

2. *Staff quality and expertise*: The capability of teaching staff and their awareness of workplace practices was a high priority for all participants. To equip graduates with workplace skills, staff required strong links with employers, enabling enactment of an authentic curriculum. There was consensus that teaching staff would benefit from "time in industry to help maintain currency" (CE staff,

2015). While teaching staff applauded this idea, they were mindful of limited time and resources, and “the tension between research and teaching performance measures” (OT staff, 2015). Staff who combined a professional, industry-based role with teaching responsibilities, incorporated reference to real-world examples in their teaching and provided links to industry.

3. *Curriculum content and structure*: The sequencing, cohesiveness and relevance of curriculum was considered important by all research participants. There was a perception that curriculum focused on theoretical content and compromised the practical aspects of professional skills. The currency of the curriculum content was questioned with a perception that much of “the curriculum was out-dated” (PE student, 2016).

4. *Assessment*: In all case studies, students and graduates wanted “more meaningful assessments” (PE graduate, 2013) and “more authentic tasks” (CE graduate, 2012). Assessment profiles that incorporated problem-solving in real-world contexts was prioritized by all stakeholders. Feedback on performance from academic, workplace and peer mentors was believed critical to self-awareness and continual improvement. Assessments that were co-designed and implemented in partnership with industry, were perceived the most beneficial. Learning through failure was deemed a powerful process for preparing students for workplace challenges and “learning from it” (CE graduate, 2014). Staff conceded that “conducting effective assessments and providing feedback to students” (OT staff, 2013) was their greatest challenge with obstacles cited such as expertise, restrictive university policies and procedures, and limited funding. Mandated standards from professional bodies were also cited as a barrier to assessment design. The theoretical nature of assessment design was thought to impact on students’ learning behavior in that they aspired to attain a ‘grade’ rather than engage with the learning experiences.

5. *Social connections*: Establishing social connections was perceived to instill a sense of belonging and a supportive community that contributed to employability. Furthermore, social connections were attributed to enabling mentoring relationships to evolve, enhancing student engagement, instigating collaborative learning models, developing cultural competence, and providing a more sociable learning environment. Students and graduates valued connections with peers and the “support of fellow students” (PE graduate, 2014), teaching staff, and employers.

6. *Confidence/skill development*: All stakeholders agreed that skills important for future workforce requirements included self-awareness, lifelong learning, problem-solving, team work, reflective practice, communication and creativity. Personal capabilities such as enthusiasm, cultural competence, resilience, professionalism, and confidence were highlighted as important. In addition, graduates who displayed compassion, a healthy self-esteem, commitment, passion, empathy and tolerance were deemed to be more employable. Discipline knowledge within the context of skill development was perceived integral to confidence for workplace practice. WIL was considered instrumental for skill development, and as a consequence, positively impacted on self-confidence and the ability to tackle unfamiliar learning experiences.

7. *Motivation*: Motivation was highlighted in all case studies as fundamental to proactive, driven and self-regulating graduates. The perception was that students should be partners in their learning journey which afforded “personal responsibility” (PE student, 2015) and the empowerment to make decisions. Such an approach to learning augured well for the development of employability capabilities and professional success. Quality teaching staff and WIL were perceived as integral to student motivation.

8. *Role models and mentors:* Industry-based, peer and teaching staff role models and mentors were considered beneficial for reinforcing student capabilities, providing intellectual, emotional and practical direction and support, and role modelling professional attributes and behaviors. Enthusiastic, confident and communicative mentors were considered to have a substantial influence and impact on student outcomes and the development of professional identity.

9. *Professionalism/professional identity:* Opportunities for students to develop “self-efficacy, explore self-identity, and build emotional intelligence” (OT student, 2015), were deemed essential for establishing a professional identity. Stakeholders concurred that embedding WIL in curriculum encouraged the development of professional identity. Self-reflection whereby personal strengths and weaknesses are identified, strategies for addressing weaknesses determined, and failure is acknowledged, were reported to contribute to professional identity. Furthermore, social and professional interaction was cited as pivotal to reconciling a professional identity. Participants suggested professional accreditation played a role in professional identity, as it impacted on community perceptions of the profession. Professional identity was perceived as a complex construct with changing workforce requirements where flexibility and adaptation for different professional contexts was required.

10. *Workplace transition:* All case studies revealed a deficit in support for the transition from university to the workplace. With increasing competition for employment, a greater emphasis on showcasing skills and expertise, and digital recruitment processes, students felt poorly prepared for embarking on the job-seeking journey. The lack of industry networks and minimal, if any, engagement with the professional accreditation body were cited as mitigating factors in sourcing employment post-graduation.

#### *Partnerships for Employability Framework*

As outlined above, the domains for employability emerged as fundamental to the development of employability skills. Findings showed that the enactment of the domains for employability were dependent on three central elements: partnerships; professional accreditation; and university policies, procedures, protocols and priorities. These elements emerged as ‘pillars’ of the ‘WIL Partnerships for Employability Framework’, which was designed as an outcome of this research. The ‘WIL Partnerships for Employability Framework’ and the importance of pillars are outlined below.

While partnerships between industry and universities is championed across all sectors and a national strategic priority in Australia, the ‘WIL Partnerships for Employability Framework’ highlights the need for a more inclusive approach to working collaboratively. Partners in the framework include institutional leaders, teaching staff, employers, students, graduates, and professional accreditation bodies.

*Institutional leaders:* Stakeholders in this research made reference to institutional policies, procedures and priorities which inhibited innovative teaching approaches and engagement with external partners. Institutional leaders have a key role in a rethinking strategic directions and operational approaches to ensure teaching staff are encouraged and rewarded to engage with industry partners, thereby providing students with learning experiences that are real-world and informed through industry connections. A recurring theme in the research was the need for institutional leaders to allocate resources to support staff participation in professional development that facilitates industry currency and instils a culture of collaboration across the institution.



*Teaching staff:* The *WIL Partnership for Employability Framework* is characterized by teaching staff who actively engage with employers, lead curriculum development innovations in partnership with external stakeholders, and provide learning experiences that embrace students as partners. In addition, teaching staff have an obligation to remain connected with Alumni, pursue professional development opportunities, and design learning experiences that incorporate the domains for employability.

*Employers:* Employers have a role in maintaining the status and credibility of their profession through co-designing and implementing WIL curriculum and assessment, and actively supporting students' development to ensure quality graduates. Hosting students on WIL placements, co-designing innovative WIL models, providing constructive and relevant feedback on student progress, role modelling workplace behaviors, and mentoring students through their studies and as they transition into employment, are important roles for employer partners.

*Students:* Ownership of their learning is paramount to a personalized approach and attainment of personal aspirations for students. Actively engaging in the learning experiences, seeking and optimizing networking opportunities, and building strengths and addressing weaknesses is a key student responsibility. Curriculum design must be such that it affords students flexibility in their learning approaches, explicitly scaffolds WIL across the degree, and enables networking opportunities with key partners.

*Graduates:* Graduates are an invaluable but largely under-utilized resource with the advantage of recently transitioning from student to employee. They are ideally positioned as role models and mentors; a liaison between university and industry; and to critique the relevance of curriculum content and structure.

*Professional accreditation bodies:* Stakeholders in this research unanimously agreed that professional accreditation was a worthy process that contributed to curriculum design and content, and instilled credibility for the profession. However, professional accreditation bodies emerged as a largely untapped resource that was perceived as regulatory, time-consuming, and resource intensive. This research highlighted that stronger connections with professional accreditation bodies could potentially improve curriculum currency, facilitate industry-university partnerships, support students' workplace transition, provide mentoring, and address many of the issues with partnerships outlined by research participants. Furthermore, students would benefit from networking with professional accreditation body representatives and acquiring greater awareness of professional competencies and standards.

## DISCUSSION

The WIL Partnership for Employability Framework, integral to incorporating domains for employability in curriculum, was designed based on the findings emerging from this research. Partners working collaboratively to co-design curriculum is pivotal to developing and implementing curriculum with relevant and authentic content (Foundation for Young Australians, 2017; Van Rooijen, 2011). The research outcomes extol partnerships as integral to providing authentic learning experiences, constructive feedback to students on their performance, capacity building opportunities for all stakeholders, and a shared responsibility in the work-readiness of graduates. This resonated strongly with all stakeholders involved in the research and was a recurring theme across all phases of the research. In addition, partnerships were deemed to address perceived gaps in graduate employability, inform curriculum design, implement quality assessment practices, build social and professional networks, motivate and engage students, provide role models and mentors, and facilitate the development of professional identity for all stakeholders (Ferns, 2018). Research outcomes showed

that these features in turn impact markedly on organizational functionality, through enhancing research potential, building social capital, sharing knowledge, and co-branding for greater marketability. Working collaboratively enables “a shift from the instructional paradigm to the learning paradigm” (Evans-Greenwood, O’Leary, & Williams, 2015, p. 20), whereby students are afforded an authentic university experience that ensures workplace preparedness. Figure 2 highlights the key partners that form the ‘WIL Partnerships for Employability Framework’.

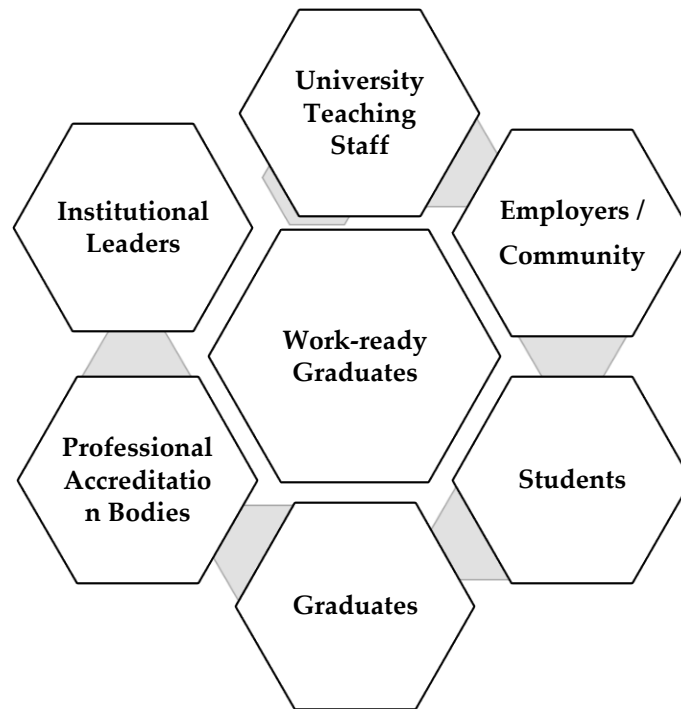


FIGURE 2: Partners in the WIL partnerships for employability framework.

All stakeholders (as shown in Figure 2) working cooperatively emerged as paramount to ensuring relevant and authentic learning experiences for students, culminating in work-ready graduates. Participants in this research emphasized that partnerships should be characterized by trust, balance of autonomy, clarity of roles and responsibilities, consultative, a shared vision and agreed goals.

While advantages and tangible outcomes emanating from partnerships were acknowledged, stakeholders were unanimous in citing several challenges with establishing partnerships. Findings in each of the case studies ascertained that current partnership models are “dysfunctional” (Professional accreditation representative [CE], 2015) “broken” (Primary education [PE] teaching staff, 2015), and “a storm brewing” (Occupational therapy [OT] teaching staff, 2015), with agreement that an innovative approach to collaboration was essential for optimal benefits and reciprocity. Participants reported that diverse approaches, poor communication, lack of information, vague roles and responsibilities, and different management and organizational arrangements created inequity and imbalance within partnerships. “Partnerships imply an equal relationship” (Williamson & Jones, 2013, p. 8) where parties establish a shared vision and purpose.

Partnerships were identified as important for co-designing assessments for workplace relevance, providing professional, real-world feedback to students, and enabling access to quality role modelling and mentoring (Hodges, 2009). Regular and constructive feedback from a range of sources supports skill development, self-awareness, and builds self-efficacy, confidence, motivation, and professional identity. Early career graduates are a valuable source in assessment design for informing proficiencies within the workplace to be built into learning outcomes and assessment (Scott, 2016). Staff expertise in assessment design was cited as a key challenge by all stakeholders. A major barrier appeared to be restrictive university assessment policies that inhibited innovative assessment practices, thereby disempowering staff (Ferns, 2018). The lack of agility in assessment policies and procedures deterred staff from creative approaches to assessing student proficiency (Yorke & Vidovich, 2014). Staff also perceived (perhaps incorrectly) that professional accreditation standards mandated certain assessment methodologies and outcomes. Negotiation and discussion with professional accrediting bodies during the assessment design phase would potentially rectify this perceived barrier.

Learning through connections with staff, students and external partners supports working with diversity, facilitates social connectedness, and provides intellectual and emotional support. Social inclusivity embraces cultural diversity which is shown to improve productivity and is valued by employers who are seeking a culture of inclusion, the ability to move across cultural contexts, and greater global reach and connections (Chartered Accountants Australia and New Zealand, 2017).

As evident through this research, course content and structure should embrace the social constructivists' ideologies where learning occurs in social situations by doing and experiencing (Eames & Cates, 2011). A curriculum design inclusive of these approaches builds intellectual capacity required to digest the increasingly complex analytics driving business agendas (Jassal & Clark, 2016). Flexibility in course content allows for personalized learning where students guide personal focus and outcomes. An amalgamation of course content that builds intellectual capacity enabling complex problem-solving of real-world issues is highly regarded. While academia is an important component of a university education, immersion of academic outcomes in authentic learning experiences registers relevance and engages students (Ferns, 2018).

Staff participants in this study expressed pride in the quality of graduates, considering it a personal reflection of their ability to teach and engage students, and effect quality graduates. While discourse on 'teaching excellence' is vague and largely misunderstood (Gunn & Fisk, 2013), this research uncovered some clear indicators for judging quality teaching. The passion, enthusiasm and confidence of staff was considered important for motivating and instilling interest in the learning experience. The industry expertise and relevance of staff was highlighted as critical for students' workplace preparedness. While staff were generally passionate about their role as teacher, they expressed concern about their industry currency, allocated workload, lack of reward and recognition, and their capacity to enact an authentic curriculum (Ferns, 2018; Devlin, Smeal, Currings, & Mazzolini, 2012). University policies and priorities, measures of quality, and student satisfaction metrics conflict with what constitutes a quality WIL curriculum and embedding employability development in curriculum.

## CONCLUSION

Universities are expected to prepare students for a volatile, complex and ambiguous workplace. Learning experiences that build resilience in the face of adversity, the capacity to embark on challenges, and 'bounce back' from negative experiences, auger students well for uncertainty. This research identified domains for employability that equip students with a lifelong professional identity through

embracing the ‘WIL Partnerships for Employability Framework’ which is premised on collaboration, collegiality and shared expertise. The framework is the basis for building communities of practice which benefit all participants and develop a culture of collegiality and connectedness, thereby enabling social learning, facilitating employability, enhancing engagement, and increasing motivation and commitment. The framework was developed as a result of intensive stakeholder consultation, all of whom benefit from the cultural shift embodied within the Framework.

## ACKNOWLEDGEMENTS

This work was presented at the 3<sup>rd</sup> International Research Symposium of World Association for Cooperative Education (WACE) in Stuttgart, Germany, in June 2018.

## REFERENCES

- Australian Higher Education Industrial Association [AHEIA] & Price Waterhouse Coopers [PWC]. (2016). *Australian higher education workforce of the future*. Retrieved from [https://www.aheia.edu.au/cms\\_uploads/docs/aheia-higher-education-workforce-of-the-future-report.pdf](https://www.aheia.edu.au/cms_uploads/docs/aheia-higher-education-workforce-of-the-future-report.pdf)
- Australian Industry Group [AiG]. (2018). *Workforce development needs. Skilling: A national imperative*. Retrieved from [http://cdn.aigroup.com.au/Workforce\\_Development/FactSheets/Employer\\_guide\\_UniStudents.pdf](http://cdn.aigroup.com.au/Workforce_Development/FactSheets/Employer_guide_UniStudents.pdf)
- Australian Workforce and Productivity Agency [AWPA]. (2014). *Work integrated learning AWPAs scoping paper*. Retrieved from <http://hdl.voced.edu.au/10707/309570>.
- Blessenger, P. (2016, April 8). Higher education as a multi-purpose enterprise. *University World News, Issue 408*. Retrieved from <http://www.universityworldnews.com/article.php?story=20160405161219332&query=higher+education>
- Business-Higher Education Forum (BHEF). (2013). *The national higher education and workforce initiative: Forging strategic partnerships for undergraduate innovation and workforce development*. Retrieved from <http://www.bca.com.au/publications/reports-and-papers>
- Chartered Accountants Australia and New Zealand. (2017). *The future of talent: Opportunities unlimited*. Retrieved from [www.charteredaccountantsanz.com/futureinc](http://www.charteredaccountantsanz.com/futureinc)
- Creswell, J., & Plano Clark, V. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage
- Davies, A., Fidler, D., & Gorbis, M. (2011). *Future work skills 2020*. Retrieved from <http://www.iftf.org/futureworkskills/>
- Devlin, M., Smeal, G., Currings, R., & Mazzolini, M. (2012). *Leading sustainable improvement in university teaching and learning: Lessons from the sector*. Final Report. Office for Learning and Teaching. Retrieved from <http://www.olt.gov.au/resource-sustainable-leadership-teaching-and-learning-initiatives-lessons-promoting-excellence-initi>
- Dodd, T. (2017, November 6). Accreditation too onerous and expensive. *The Australian*. <https://www.google.com/url?client=internal-uds-cse&cx=012148326047351459851:t-0dbr0qusq&q=https://www.theaustralian.com.au/higher-education/course-accreditation-costs-a-burden-for-higher-education-providers/news-story/cc2af0fd6821f3ca58194cecb25f47b5&sa=U&ved=2ahUKEwj-qKcKOrhAhV28XMBHVDJC10QFjACegQIABAC&usq=AOvVaw1CY7Qjt-vPeNexPodYnKya>
- Eames, C., & Cates, C. (2011). Theories of learning in cooperative and work-integrated education. Chapter 5 In R. Coll and K. Zegwaard. (Eds). *International handbook for cooperative and work-integrated education* (2<sup>nd</sup> ed.). Lovell, MA: World Association for Cooperative Education.
- Edwards, D., Perkins, K., Pearce, J., & Hong, J. (2015). *Work integrated learning in STEM in Australian universities: Final report*. Office of the Chief Scientist. ACER. Retrieved from [http://www.chiefscientist.gov.au/wp-content/uploads/ACER\\_WIL-in-STEM-in-Australian-Universities\\_June-2015.pdf](http://www.chiefscientist.gov.au/wp-content/uploads/ACER_WIL-in-STEM-in-Australian-Universities_June-2015.pdf)
- Evans-Greenwood, P., O’Leary, K., & Williams, P. (2015). *The paradigm shift: Redefining education*. Retrieved from <http://landing.deloitte.com.au/rs/761-IBL-328/images/deloitte-au-ps-education-redefined-040815.pdf>
- Ferns, S. (2018). *Collaboration, cooperation and consultation: Work-integrated learning partnerships for enhancing graduate employability*. (Doctoral thesis, University of Western Australia, Perth, Australia) Retrieved from <https://research-repository.uwa.edu.au/en/publications/collaboration-cooperation-and-consultation-work-integrated-learning>
- Foundation for Young Australians. (2017). *The new work smarts: Thriving in the new work order*. Retrieved from [https://www.fya.org.au/wp-content/uploads/2017/07/FYA\\_TheNewWorkSmarts\\_July2017.pdf](https://www.fya.org.au/wp-content/uploads/2017/07/FYA_TheNewWorkSmarts_July2017.pdf)
- Freeman, M., & Evans, E. (2016). *Professional associations, accreditation and higher education: Foundations for future relations*. Sydney, Australia: Chartered Accountants Australia and New Zealand.
- Gault, J., Leach, E., & Duey, M. (2010). Effects of business internships on job marketability: the employers’ perspective. *Education and Training*. 52(1), 76-88.

- Gunn, V., & Fisk, A. (2013) *Considering teaching excellence in higher education: 2007-2013: A literature review since the CHERI report 2007. Project Report*. Higher Education Academy. Retrieved from [https://www.heacademy.ac.uk/system/files/resources/TELR\\_final\\_acknowledgements.pdf](https://www.heacademy.ac.uk/system/files/resources/TELR_final_acknowledgements.pdf)
- Hagel, J., Brown, J. S., Mathew, R., Wooll, M., & Tsu, W. (2014). *The lifetime learner: A journey through the future of postsecondary education*. Deloitte University Press. Retrieved from <https://www2.deloitte.com/insights/us/en/industry/public-sector/future-of-online-learning.html?ind=74>
- Hodges, D. (2009). *Assessment of student learning in a business internship*. PhD, University of Waikato, Hamilton, New Zealand.
- Jassal, P., & Clark, H. (2016). *The new learning economy and the rise of the working learner: An anthology of recent evidence*. Retrieved from <https://pages2.act.org/riseofworkinglearners.html>
- Karns, G. (2005). An update of marketing students' perceptions of learning activities: Structure, preferences, and effectiveness. *Journal of Marketing Education*, 27(2), 163-171. Retrieved from <https://search-proquest-com.dbgw.lis.curtin.edu.au/docview/204413721/fulltextPDF/1AB1FB02088243C2PQ/1?accountid=10382>
- Kennedy, M., Billett, S., Gherardi, S., & Grealish, L. (2015). *Practice-based learning in higher education: jostling cultures*. In M. Kennedy, S. Billett, S. Gherardi & L. Grealish (Eds), *Practice-based learning in higher education : jostling cultures* (pp. 1-14). New York, NY: Springer.
- McKinsey Global. (2017). *Jobs lost, jobs gained: Workforce transitions in a time of automation*. McKinsey Global Institute. Retrieved from <https://www.mckinsey.com/-/media/mckinsey/featured%20insights/future%20of%20organizations/what%20the%20future%20of%20work%20will%20mean%20for%20jobs%20skills%20and%20wages/mgi-jobs-lost-jobs-gained-report-december-6-2017.ashx>
- McRae, N., & Johnston, N. (2016). The development of a proposed global work-integrated learning fraemwork. *Asia-Pacific Journal of Cooperative Education Special issue: Defining and Advancing Cooperative and Work-Integrated Education*. 17(4), 337-348. Retrieved from [https://www.ijwil.org/files/APICE\\_17\\_4\\_337\\_348.pdf](https://www.ijwil.org/files/APICE_17_4_337_348.pdf)
- Patrick, C.-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2009). *The WIL report- A national scoping study*. Sydney, Australia: Australian Learning and Teaching Council. Retrieved from <http://www.olt.gov.au/resource-wil-work-integrated-learning-griffith-2009>
- PhillipsKPA. (2017). *Professional accreditation: Mapping the territory*. Retrieved from [https://docs.education.gov.au/system/files/doc/other/professional\\_accreditation\\_mapping\\_final\\_report.pdf](https://docs.education.gov.au/system/files/doc/other/professional_accreditation_mapping_final_report.pdf)
- Precision Consultancy. (2007). *Graduate employability skills. Prepared for the Business, Industry and Higher Education Collaboration Council*. Retrieved from <http://www.dest.gov.au/NR/rdonlyres/E58EFDBE-BA83-430E-A541-2E91BCB59DF1/20214/GraduateEmployabilitySkillsFINALREPORT1.pdf>.
- Productivity Commission. (2017). *Shifting the dial: 5 year productivity review, Inquiry report*. Commonwealth of Australia. Retrieved from <https://www.pc.gov.au/inquiries/completed/productivity-review/report/productivity-review.pdf>
- Reeves.T. (2013). Bridging the gap between university and industry. *ViewPoints*, Vol. 1, Article 8. Retrieved from <http://www.microsummits.org/sacramento/bridging-the-gap-between-university-and-industry>
- Scott, G. (2016) Big ideas for Australian universities. *Higher Education Management and Policy*, 21(2), 1-15. <http://flipcurric.edu.au/sites/flipcurric/media/107.pdf>
- Van Rooijen, M. (2011). Transforming 21st century engagement: From work-integrated learning (WIL) to learning-integrated work (LIW) *Journal of Cooperative Education and Internships*, 45(01), 5-10. Retrieved from [http://www.ceiainc.org/wp-content/uploads/2017/08/CEIA\\_Vol45\\_Issue01\\_100311.pdf#page=4](http://www.ceiainc.org/wp-content/uploads/2017/08/CEIA_Vol45_Issue01_100311.pdf#page=4)
- Williams, A., Simmons, C., Levett-Jones, T., Sher,W., & Bowen, L. (2012). *Facilitating work-integrated learning (WIL) through skills enabled e-portfolios in construction and nursing*. Final Report. Sydney, Australia: Office for Learning and Teaching. Retrieved from <http://www.olt.gov.au/resource-facilitating-work-integrated-learning-wil-through-skills-enabled-e-portfolios-construction->
- Williamson, M., & Jones, S. (2013). *Guidance on the development and implementation of a student partnership agreement in universities*. Retrieved from <https://www.sparqs.ac.uk/upfiles/Student%20Partnership%20Agreement%20Guidance%20-%20final%20version.pdf>
- Wilson, T. (2012). *A review of business-university collaboration*. London, UK: Department of Business, Innovation and Skills. Retrieved from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/32383/12-610-wilson-review-business-university-collaboration.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32383/12-610-wilson-review-business-university-collaboration.pdf)
- Yorke, J., & Vidovich, L. (2014). Quality policy and the role of assessment in work-integrated learning. *Asia-Pacific Journal for Cooperative Education. Special Issue*. 15(3), 225-239. Retrieved from [https://www.ijwil.org/files/APICE\\_15\\_3\\_225\\_239.pdf](https://www.ijwil.org/files/APICE_15_3_225_239.pdf)