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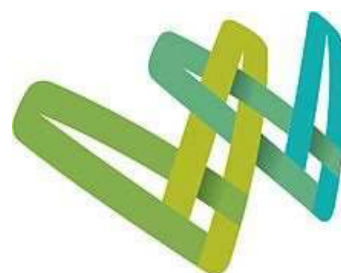
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* *Winners of the Allister McLay Best Paper Award*

Using a Placement Portfolio to Prepare Health Sciences Students for the Work-Integrated Learning Journey and Beyond

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The traditional role of university may be symbolised as one that transforms individuals through education and learning (Boud & Falchikov, 2006). However, for future work-readiness in an uncertain future (Frenk et al., 2010), academic skills are not enough. Work-Integrated Learning (WIL) programs are offered across many university disciplines and are considered to be a meaningful curriculum inclusion (Cooper, Orrell, & Bowden, 2010) to provide opportunities within and beyond the university constructs to learn and be educated. With appropriate preparation and resources provided, learning potentially occurs before, during and after the workplace experience (Nagarajan & McAllister, 2015). Assessment of WIL learning commonly includes self-assessment through reflection activities, workplace assessment through performance or competency evaluations and educational assessment that connects past learned theory into practice (Haddara & Skanes, 2007; Ferns & Moore, 2012). While there is an abundance of literature purporting the benefits of WIL there is limited literature on assessment methods and the role they play in the WIL experience (Cooper, Orrell, & Bowden, 2010; Hodges, 2011). Portfolios provide a practical means of incorporating academic assessment, reflective practice and an opportunity for students to showcase achievements to future employers (Hodges, 2011).

This paper discusses the implementation of a Placement Portfolio that was introduced as the result of re-development of assessment methods in a Bachelor of Health Sciences WIL topic (required unit of study) at Flinders University, South Australia. The re-development process employed an action research approach (Coll & Chapman, 2000) with the intent to effect change and where the researcher and those involved in the impact of that change (Reason, 2006) played an active role in the process (Barbour, 2014). The Placement Portfolio is intended not only for assessment but also a means for the university supervisor to engage in and monitor the student WIL experience, and for students to engage in and be responsible for their own placement journey through reflection and collaboration with university supervisors, host supervisors and university services that support career development.

UNIQUE FEATURES

Health Work Internship is a final year core topic undertaken by Bachelor of Health Sciences students, requiring 140 hours of field placement within a health or community setting. This is conducted two days per week over a ten-week period. The student cohort is varied with degree majors including: Health Promotion (HP), Health Management (HM), and Life Sciences. The Life Sciences major is used as a pathway for students who aspire to undertake physiotherapy or occupational therapy post-graduation. Whatever the degree major, professional outcomes are limited due to the current scarcity of workplace opportunities in the area of HP and HM and the competitiveness of entry into post-graduate physiotherapy and occupational therapy in South Australia. The topic learning outcomes therefore, focus on generic work-ready skills and university defined graduate qualities, as there are no accredited competencies attached to the degree. Providing continuity in placement experiences and assessment relevance is complex in this context as it is non-competency based, students come from a range of degree majors and they are placed within a broad range of health and community settings, with a consequently varied range of projects or workplace tasks being undertaken.

The opportunity to be placed within a professional workplace environment in order to nurture learning in a 'real world' context is highly valued (Billett, 2011; Billett, 2014; Garnett, 2012). However, where the placement is generic and there is a restricted nature to the tasks undertaken the value and relevance of the experience is not as

readily accepted (Kift, 2009; Wilson & Fowler, 2005). In 2014, a research study was undertaken with past *Health Work Internship* students to ascertain student perceptions of what was needed to ensure a positive WIL experience. Students were asked how they felt prior to placement, while on placement and at the completion of their placement. In addition, students were asked who or what supported the process. From this study it was established that students recognised the role of WIL in gaining a greater understanding of the workplace, and developing and enhancing work-ready skills, even where the placement occurred outside of their area of preferred professional practice. However, these students also highlighted the importance of preparation prior to placement, being pro-active while on placement and ongoing reflection for future professional practice or employability. A strong theme that emerged from the study was students' appreciation that they needed to play an active role in all aspects of their WIL journey and share the responsibility for a positive outcome.

The Placement Portfolio incorporates activities that are completed and submitted to the university supervisor progressively and all are retained by the student within a working word document that culminates into a format that provides a record of the placement outcomes, activities, and achievements. The activities are timed to reflect the stages of student, university and host placement expectations. This allows students to be responsible for preparing for the placement, completing placement objectives and also for university and placement supervisors to monitor student progress, identify any concerns and provide feedback and future direction. As identified by Boud and Falchikov (2006) this type of feedback, feed forward process supports the aligning of assessment with long-term learning that can carry through to future workplace environments and professional practice.

The Placement Portfolio activities include:

Pre-placement

- During an introductory session students complete a survey to measure preparedness and confidence.
- Within this session, representatives from the university *Careers and Employer Liaison Service* provide workshops on workplace skills and making the most of placement opportunities for future employability.
- Students view short videos of past students' experiences and respond to questions that encourage reflection on potential opportunities during and post placement.

During placement

- One of the first tasks is to research the host organisation, its role and underpinning philosophy and produce a 500-word overview.
- In consultation with the host placement supervisor a contract is prepared that outlines the student's roles and responsibilities, and placement expectations and deliverables.
- A follow up survey is completed to reassess perceptions of changes in preparedness and confidence and the resources or activities that have impacted these.
- A project plan and timeline is prepared to enable students to meet the placement expectations and deliverables. This is done in week three of the placement and reviewed at week seven where adjustments can be made if needed.
- Students undertake an additional workshop of their choice conducted by the university *Careers and Employer Liaison Service*.

Post-placement

- A 2,000 word report that details the aims and objectives of the placement and outcomes achieved.
- A 1,000 word personal reflection of the placement experience.

Students have identified many benefits to the activities contained within the Placement Portfolio. Completing a survey prior to the placement and during the placement provides students with the opportunity to consider their level of confidence and preparedness at each stage. At the initial introductory session there is the opportunity to share responses with peers and to realise they are not on their own if they are apprehensive. The university

supervisor can guide them at this point in how to increase levels of confidence and preparedness through support and resources available. By revisiting their perceptions of confidence and preparedness part way through the placement they can reflect on what, who has supported them to increase these levels, or if they have not increased then that can act as a prompt to seek support. Collaboration with the university *Careers and Employer Liaison Service* encourages students be cognisant of experiences that occur while on placement and how these could be used when considering future employability and applying for employment. It is surprising that even though these students are in their final year of study most have not made use of the career advice services offered through the university. Having a second workshop as a required assessment maintains the connection with the *Careers and Employer Liaison Service*; several students chose to undertake more than the one required workshop and all registered with the job alert email facility. The videos of past students were a successful inclusion; students enjoyed seeing real students and hearing real experiences. The overview of the host agency and preparation and review of the project plan and timeline allows students to be pro-active in their preparation and provides an understanding of the environment they are working within and their roles and responsibilities within that environment. All of the activities come together through writing the final report and personal reflection. This provides a formal representation of the placement experience and outcomes and an opportunity for personal reflection of the placement journey.

DISCUSSION

Assessment and learning are inevitable characteristics of the university experience. While methods of assessment and learning may vary, intended learning outcomes, required professional accreditation, expected university graduate qualities and student cohort are likely to impact on the format of assessment and learning objectives chosen in curriculum and topic development (Krause 2012). The central indicators for assessment are assessment *of* learning or assessment *for* learning. Assessment *of* learning is a summative approach most likely to be at the end of a learning period whereby a level of overall achievement is recorded (Broadfoot, 2007). Assessment *for* learning provides more than a judgement or measurement of learning outcomes it portrays assessment as a fundamental part of the learning process (Broadfoot, 2007; Brown & Race, 2012). Assessment *for* learning as opposed to assessment of learning encompasses a formative approach. Formative assessment methods involve a cumulative process of communication, self-reflection and student led learning outcomes (Tan, 2007). Assessment feedback encourages the student to reflect, critique and appraise outcomes and feed forward incorporating the feedback (Tan, 2007). The Placement Portfolio outlined incorporates assessment activities and as such the students view these as part of the inevitable however, the design of the assessment activities ensures that the process supports the student transition from university learning to workplace learning, enhances the WIL experience and enables students to look beyond the placement to future employment and employability.

IMPLICATIONS

The Placement Portfolio was put into practice in 2015. It has provided a student centred approach evolving through collaboration with past students and recognition of their WIL experiences. While the use of portfolios in varying forms is becoming a popular choice in WIL assessment it is important that students can see the value in this process not only to meet assessment requirements but also to cultivate personal and professional skills that can support preparedness for placement, confidence while on placement and be transferable for future employability. By completing and recording a series of activities that are progressive and timely students have the opportunity to develop skills and enhance confidence supporting them in transitioning into and then out of their placement. Ethics approval is currently being sought to formally evaluate the benefits of the Placement Portfolio. Anecdotal evidence and observation of student outcomes suggest that the Placement Portfolio has provided a valuable tool to support students in their WIL journey and beyond. These students have been able to gauge their work-readiness and accept that the skills gained while on placement, even though generic will be of benefit no matter what their future brings.

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Academic, Supervisor, Mentor, Mother: The Emotional Roller Coaster of Facilitating the Student Work-Integrated Learning Placement Journey

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Work-Integrated Learning (WIL) through industry placement undertaken outside of the university environment is becoming commonplace and in many cases an expectation of the university, the student and the future employer market (Patrick et al., 2008). While there is an abundance of literature asserting the benefits of university students' undertaking of a WIL placement, little attention is given to the emotional aspects involved for the university placement facilitator. It has been acknowledged that teaching roles often spill over into the role of caring (Nodding, 2003; O'Connor, 2008) and students need to recognise that they are cared for and supported (Nodding, 2003). As a result, a relationship between teacher and student is likely to develop that fosters positive teaching and learning outcomes (O'Connor, 2008; Rodger, Fitzgerald, Davila, Millar, & Allison, 2011) but this requires a commitment and emotional investment from both parties (Yin & Lee, 2012). However, the caring and emotional components of the teacher's role are often not recognised by the university, especially where other areas of productivity within the university are considered to be of higher value (Blackie, Case, & Jawitz, 2010; Constanti & Gibbs, 2004; O'Connor, 2008; Yin & Lee, 2012). Recognising the additional workload involved in WIL programs has been of recent interest, however, adequate ways to quantify and explain it remain unclear (Bates, 2011; Rowe, Clark, Cantori, & Bligin, 2013). The roles involved in facilitating a WIL placement include; sourcing quality placement opportunities (Rodger et al., 2011); maintaining relationships with industry partners to ensure continuing opportunities (Rowe & Winchester-Seeto, 2013); preparing students for placement; monitoring the progression and outcome of the placement; pastoral care; and mediation between the university, the student and the host organization particularly where expectations do not align (Rodger et al., 2011; Rowe et al., 2013). These roles are necessary but can be time consuming and emotionally demanding (Bates, 2011). This paper points to the valuable literature on the role of emotions in Higher Education and suggests the need to apply an emotions-based theoretical framework to more fully understand the WIL context and the relationship between staff and students.

UNIQUE FEATURES

In facilitating WIL programs challenges arise that are distinctly different to classroom based courses or topics (Bates, 2011; Rowe et al., 2013). Along with the academic and administrative tasks involved there is significantly more one-on-one time with students required compared to academic programs undertaken within the classroom environment (Bates, 2011). Rowe et al. (2013, p. 28) also discuss the notion of the "other student-related tasks" such as preparing students for placement prior to the semester, meeting with students face-to-face to determine skills and interests and then matching those to placement opportunities available. Once on placement there may be the need to monitor activities, liaise with the student and host placement supervisors to resolve any concerns or negative outcomes, and follow up support post placement is often required (Rowe et al., 2013, p. 28). For students to embrace the WIL experience and to be transformed by that experience (Cranton, 2011) "requires the academic to be invested in the learning of the students, rather than in the transfer of information and to be concerned about the actual process of learning..." (Blackie, Case, & Jawitz, 2010, p. 638). This is of particular significance in the generic WIL programs where unlike nursing, some allied health and education programs, specific professional competencies do not need to be met and often future professional identity is unclear (Frenk

et al., 2010). Students need support and guidance to determine where the placement fits within their academic pathway (Blackie, Case, & Jawitz, 2010).

One of the key factors in a successful WIL placement is communication and the subsequent relationships developed between stakeholders (Rodger et al., 2011; Rowe & Winchester-Seeto, 2013). The WIL placement that forms the basis for this paper is managed by one facilitator who is responsible for all WIL activities, including sourcing placements, student preparation before placement, assessment design, liaising with host placement agencies and supervisors, student supervision and all that is encompassed in pastoral care during the placement. In addition, as it is undertaken in the final year of the degree, often career advice post-placement is required. The placement as a topic is offered in semester one and two with student enrolment numbers at around 20-25 each semester. Due to the low enrolment numbers and a sole person facilitating the program, it is understandable that a close relationship with students develops.

Mothering or taking on the role of a mother has been discussed in relation to teachers (James, 2012; Yin & Lee, 2012) and fits well with the role of a WIL facilitator. Facilitation of placements often encompasses the responsibility of caring for, protecting and nurturing a dependent while at the same time managing and mediating the 'sibling rivalry' of demands from university policy and assessment, competing academic workloads, industry expectations and student aspirations. However, as with all caring roles it is impossible to remove emotional elements.

There is a growing body of literature that shines light on the role of emotions in higher education. This literature considers emotions from across a number of disciplines. Broadly speaking, the literature has been rooted in social psychology with an emphasis on the cognitive function of emotions and how this relates to student wellbeing. This is useful for identifying how different types of emotions play roles in relation to students' learning experiences. These can include the role of positive emotions in aiding student learning, and the impact of negative emotions on student wellbeing, retention and achievement (Rowe, Fitness, & Wood, 2015; Trigwell, Ellis, & Han, 2012). We argue that this is useful for the WIL context as it explains the importance of positive emotions for both facilitators and students in building supportive relationships that foster successful learning (Rowe et al., 2015).

The sociology of emotions takes a slightly different view of the role of emotions in the higher education context. Similar to social psychology, the way in which relationships and social context interact with emotions is seen as significant. However, the intersection between emotions and social relationships, and the process of managing emotions in particular, are given more weight. We argue that the negotiation of emotions and the social implications of engagement in emotional labour (Hochschild, 2012) need attention alongside the cognitive understanding of the role of emotions. The concept of emotional labour acknowledges not only the importance of positive emotions in learning experiences, but also the workload implications and pressure of being responsible for the production of positive emotions in the self (staff) and in others (students). This is what we refer to as the roller coaster; in order to create the positive emotions a significant level of input is required that is not acknowledged in existing workload models (Bates, 2011; Rowe et al., 2013). This has the potential to lead to stress and strain in the management of WIL programs if not adequately addressed. This extra input includes high levels of emotional labour that, as Hochschild (2012) has already demonstrated, is uniquely gendered.

DISCUSSION

As the facilitator of a WIL placement program within a generic degree program we are often faced with not only facilitating the program and supervising the placement but also balancing a mentoring and support role with encouraging autonomous and professional behaviour that is the expectation of industry of the work-ready student (Kirke, Layton, & Sims, 2007; Rodger et al., 2011). Although many students are in paid employment at the time of undertaking a WIL placement, there is a great deal of emotion and anxiety where the workplace is new, expectations are unknown and the placement outcomes are being assessed or evaluated. Simple things like what to wear, who to report to and clarification of roles and responsibilities can be difficult for the student to negotiate without guidance. Across the placement duration, the university supervisor may be responsible for

providing the student with behavioural advice, professional advice, career counselling and problem solving skills. Students value and potentially depend on the personal relationship developed with their university supervisor. This relationship however, can only be effective where the university supervisor is in a position to show genuine commitment, enthusiasm, and enjoyment in the task that may be limited by university demands for efficiency and accountability in program management.

The role of WIL facilitator is shaped by our life narratives and dominant discourses about caring, motherhood, and assumptions of teaching as being a caring relationship and, therefore, 'women's work' (Hochschild, 2012; James, 2012). As carers, it is hard to resist the obvious parallels between our roles as mothers and the relationship we have with students. However, we agree with James (2012) that careful consideration of the implications of taking on the 'mother' identity in this context is needed. We suggest that a helpful way to explain these tensions is to ensure that where caring in HE exists, there needs to be a conception of caring as a reciprocal relationship, rather than a virtue or disposition that we hold as individuals (Noddings, 2002). In addition, seeing the emotional labour of staff as in a cyclic relationship with student wellbeing is also worthy of further attention as it acknowledges the way staff practices of caring through teaching are embedded, though rarely acknowledged, in complex institutional practices, protocols and expectations (Berry & Cassidy, 2013).

IMPLICATIONS

Expectations are high from all stakeholders for those facilitating WIL programs. The demands on university staff in terms of workload and emotional labour are not easily quantifiable for workload calculations. Therefore, staff in these areas fall prey to the risk of their own emotional and workload vulnerability when attempting to allay the student emotion associated with undertaking an industry WIL placement. While this paper has presented a somewhat negative aspect of facilitating a WIL program, as with all 'Mothering' roles the positive aspects cannot be denied. Yet we call for further consideration of the dangers of relying too heavily on certain problematic notions of care in education, as James has already cautioned (2012). Nevertheless, it is impossible not to feel a sense of pride and achievement when a student has an "ah hah" moment. That is, when they see the connection between theory and practice, or the value of the WIL placement for future employability, or where as a supervisor you can see the personal and professional growth in a student in a short space of time, or when the student is able to reflect on the WIL placement taking pride and ownership of outcome, or sends an email thanking you for the support and guidance with the comment "this is the best thing I have ever done at uni thanks for all your support, I couldn't have done it without you!".

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Work-Integrated Learning: Making a Contribution to Less Privileged Communities at Home and Abroad

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There is growing emphasis on internationalization in Australian universities, with one of the key areas of focus to increase opportunities for students to study abroad (Parsons, 2010). While only 5% of university students undertook an international placement experience in 2005 (Olsen, 2008), the benefits of doing so are widely reported (Dwyer & Peters, 2004; Crossman & Clarke 2010; Forsey, Broomhall, & Davis, 2012; Ingraham & Peterson, 2004; Nunan, 2006; Vinceti, 2001). Among the key benefits associated with international study experiences are broadened perspectives, increased independence, open-mindedness and confidence as well as the development of intercultural competencies (such as cultural self-awareness, respect, valuing other's cultures, behaving appropriately with regard to one's intercultural knowledge, skills and attitudes) (Deardorff, 2004, cited in Deardorff, 2006, p. 254).

Traditional models of work-integrated learning (WIL) have centred on workplace visits, work experience, apprenticeships and cooperative education (Choy & Delahaye, 2009). Harris, Jones, Coutts, and Grigg (2008) suggest traditional models are also based on a singleton approach in which a single student is placed with a host organisation that can potentially isolate the student and become a drain on stakeholder and university personnel and resources. Fleming (2012) however, argues that cooperative education can be "expressed in terms of a partnership between students, university and industry" (p. 88). In order to achieve a successful partnership involving all three parties, a shared understanding about the requirements, value, expectations and responsibilities is required (Fleming, 2012).

Specifically, in the sport industry, collaborations between universities and organisations are commonly referred to as interorganisational relationships. These collaborations can include one-off relationships as well as strategic alliances (Fleming, 2012). One of the key methods in which collaborative partnerships are formed in the sport industry is through mutual acquaintances or already established friendships (Babiak & Thibault, 2008). Networks that are already formed may be between students and industry professionals or through academic staff contacts, therefore, it is important to consider ways to align goals and meanings of WIL experiences to develop a long-term investment in the partnership (Fleming & Hickey, 2013).

This paper discusses issues related to designing a WIL program for an undergraduate multi-discipline Australian sport degree that also includes the globalisation of the 'world of sport'. The industry based WIL topic in the Bachelor of Sport, Health and Physical Activity at Flinders University, will be undertaken by students for the first time in 2016 and has been based on adapted criteria which centres on the guiding principles developed by Community Campus Partnerships for Health (2006) and Torres (2000), as outlined by Cooper, Orrell, and Bowden (2010):

- A shared vision and clearly articulated values,
- Shared goals that are mutually beneficial to partnering institutions,
- Multi-level relationships that are based on trust and mutual respect,
- Balance of power amongst the partners,
- Multi-dimensional participation of multiple sectors that act in the service of a complex problem,
- Sharing of strengths and resources,
- Integrating institutional mission and support systems of the partnering institutions,

- Clear communications, decision-making processes and feedback mechanisms for all stakeholders,
- Shared credit for the partnerships' accomplishments, and
- Regular evaluation with a focus on both methods and outcomes.

(adapted from Community-Campus Partnerships for Health, 2006; Torres, 2000: p. 5-7)

UNIQUE FEATURES

The Bachelor of Sport, Health and Physical Activity is the only degree in South Australia that uses sport as its central point of focus around which learning occurs with and through, sport and tourism, sport and business, sport and nutrition, sport and disability studies, sports coaching, and strength and conditioning coaching. An important part of this degree is the flexibility to enable students to choose a pathway that they will enjoy, leading to the type of employment or future education they desire. As part of the final year of this degree, students will undertake a minimum 100 hour WIL component within a topic requiring an industry project in one of the following areas: sport coaching; sport and disability; sport business; sport marketing; sport tourism; or sport nutrition. Students are not limited to South Australian based projects; both interstate and international WIL experiences will be offered and encouraged. The timing of the placements is also flexible, with students being able to complete their placement hours in one of three semesters across the calendar year. The flexible nature of the degree pathways requires diversity in student placement opportunities. While there is a current body of literature detailing work-integrated learning partnerships, literature that deals with models for sports based placements in Australia is limited.

Given Flinders University's strategic priority to provide an international experience for students, a Department of Foreign Affairs and Trading New Colombo Mobility Grant was successfully applied for in 2015 in partnership with the Darren Lehmann Cricket Academy (DLCA) to allow students the opportunity of doing their industry project in India. The three-year grant will provide \$3,000 scholarships for students to travel to India to work on projects related to the development of Indian students in sports activities. Ten students in 2016 will be awarded scholarships, 15 in 2017 and 20 in 2018. Without the partnership with the DLCA this placement opportunity would not have been possible as the Academy staff provided the avenue through which introduction to the schools and sports clubs in India was made possible. The DLCA has an established network of contacts in India, but lack the staff and resources to be able to implement this program on their own, therefore, the partnership between the university and this organisation is mutually beneficial.

While in India the students will work in pairs to partner with a school or sporting organisation in either Mumbai or Kolkata. The nature of the project to be completed is specific to the organisation in which the students are placed. In order to maximise the cultural emersion experience, home stays with schoolteachers, or coaching staff in sports organisations or accommodation in boarding houses aligned with school campuses are planned. Some proposed projects include introducing the game of netball to an all-girls high school, teaching and assessing fundamental movement skills to underprivileged primary school children in a rural setting and introducing the game sense coaching approach to junior cricketers at a sports club. Students applied for and then were interviewed and selected for the scholarships in January/February 2016 with a planned departure in November 2016 for a four-week placement. Given that schools in India are often not equipped with physical education resources (Chelladurai, Shunmuganathan, & Stephen, 2011), in preparation for this international placement, students will be involved in fundraising events throughout the year to raise funds for equipment purchase that will be left in India as an ongoing resource.

DISCUSSION

Parsons (2010) suggested that travelling to developing countries provides significantly more effective change to students in terms of knowledge, cultural and national self-awareness, friendship, and flexibility than travel to a developed country. Additionally, students have been shown to have increased international mindedness with regard to their attitudes, skills and behaviours following an international experience (Parsons, 2010). Forsey, Broomhall, and Davis (2012) determined international experiences can also instil a sense of appreciation in

students for their home country, therefore, an additional benefit of overseas study placements is the insight it can bring to one's own culture and lifestyle.

It is recognised that there is a need to develop long-term sustainable partnerships with the schools and sports clubs in India in order for the potential to make a significant change to the health of underprivileged children be realised. Thurkral and Bharti (2005, p. 47) state that the health of children in India needs "serious attention," because the current health care system in India perceives children's health as an extension of reproductive health. Physical inactivity has been recognised as an important and independent risk factor for non-communicable diseases (Swaminathan & Vaz, 2012), and yet is an area of the school curriculum in India which is often neglected (Narayanan, 2014). Therefore, developing and implementing physical activity and sport programs is important in efforts to improve the health of children in India. Delivering a four-week placement project in underprivileged areas without developing strategies for the program to continue long-term would be of little benefit to the host country. Therefore, while the New Colombo Mobility Grant will provide funds for three years, Flinders University intends to continue to offer this international placement in India beyond the funding of the grant years. The development of the WIL placement topic based on the guiding principles adapted by Cooper, Orrell and Bowden (2011), provides a solid foundation through which the development of a sustainable international placement in India is possible. Initially the Australian Government funded the program, however, the DLCA have an established network of contacts in critical government positions in India through which funding for subsequent years of the program may be sourced. Therefore, a sustainable partnership between Indian and Australian organisations is being developed through the multi-dimensional participation of multiple sectors that act in the service of a complex problem (Cooper, Orrell, & Bowden, 2011). The DLCA staff have a wealth of knowledge pertaining to developing partnerships in India and will conduct cultural awareness sessions for Flinders University students prior to leaving Australia for their international placement. However, given the DLCA is a small organisation they lack the staff and resources to conduct this program alone and are not as familiar with research evaluation methods as the academic staff at Flinders University. The sharing of strengths and resources between the DLCA and Flinders University has been a driving factor in the strategic collaboration between the two key organisations making this international placement possible (Fleming, 2012) and has been developed based on the shared vision of improving the health of children in India (Cooper, Orrell, & Bowden, 2011). Flinders University and the DLCA have a shared focus on sport, therefore, given India's Government has recently developed policies regarding the promotion of sport in India (Chelladurai, Shunmuganathan, & Stephen, 2011), sport for development is a significant avenue through which international placements for Bachelor of Sport, Health and Physical Activity students can be involved in making a contribution to less privileged communities abroad.

IMPLICATIONS

One of the challenges for academic staff identified in the literature is that in order to develop collaborative partnerships with industry a long-term approach to developing relationships is required (Choy & Delahaye, 2009). Previous research suggests that six months or more may be needed to establish a partnership in which the university sufficiently understands the provider organisation's needs. Fleming and Hickey (2013) suggest that a greater level of responsibility is traditionally placed with the university in cooperative education partnerships. However, it is when organisations actively participate in the development of the relationship that true partnerships are formed.

The partnership model has the potential to create opportunities that go beyond providing a placement for students as credit towards their degree qualification. Additional benefits that are currently apparent from the DLCA partnership are:

1. the opportunity for university staff to contribute to research and the body of knowledge around sport for development in less privileged areas;
2. providing policy recommendations and curriculum for schools in India;

3. significant potential to positively influence the health status of children in disadvantaged areas in India and;
4. the opportunity for 'fellowship' programs where Indian Physical Education and Sport educators can come to Flinders University in the future to further their education and understanding of sport and physical education provision in Australia.

Therefore, we argue that by creating work-integrated learning experiences through a sport partnership model for the Bachelor of Sport, Health and Physical Activity students around an established partnership model, moves work-integrated learning for the student from a narrow focus related to the completion of one university topic towards something that has the potential to create change in the individual (student) and provide significant support to less privileged communities in India.

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Promoting Development of Critical Thinking Through Work-Integrated Learning

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Critical thinking is critical in business, engineering, education, and, in fact, all walks of life. It is essential to solving complex problems and making difficult decisions—capabilities demanded of graduates in the professional work-world (Hays, 2015; Richmond, 1993; Treleaven & Voola, 2008). Almost anyone can think critically, yet few do consistently (Finn, 2011; Kuhn, 1999). Indeed, there is a critical shortage of critical thinking, and, despite our good intentions and honest best efforts, we are failing to equip many tertiary education students with the skills and dispositions to think critically (Belkin, 2015; Byrnes & Dunbar, 2014; Paul, 2005).

The good news is that skills and dispositions toward critical thinking can be improved amongst most individuals through education and assessment (Brookfield, 2008; Nosich, 2012; Paul, 1993). Willingham (2007), whilst clearly seeking to promote the development of critical thinking through education, reminds us just how difficult it is to do so. It is very much like, he alludes, to deep learning and learning for transfer (Halpern, 1998; Hays, 2015; Star & Hammer, 2008), objectives many educators and WIL practitioners believe possible and desirable. Achieving these objectives, however, requires effort on learners' and educators' parts, and probably reform in the way learning is structured (Ferns & Zegwaard, 2014; Hays, 2013, 2015; Paul, 2005).

Outside of the classroom, an area that appears particularly fruitful for developing and demonstrating critical thinking is Work-Integrated Learning. WIL encompasses Cooperative Education, Professional Practice, Industry-Engaged Learning, Industry-Based Learning, internships, and other programs designed to bridge the theory-practice divide (Clements et al., 2012) and is, by definition, empirical and experiential (Jenkins & Cutchens, 2011). These programs prepare students for the real world, the professional roles they will fill in communities and organisations upon graduation (Freudenberg, Brimble & Cameron, 2011; Jackson, 2013; Leong & Kavanagh, 2013).

The focus of this article is on how development of students' critical thinking and other higher-order thinking capacities can be advanced and assessed through their WIL experience; in this case, employing an adaptation of the Critical Incident Approach (for detail on Critical Incident Techniques; see Edvardsson & Roos, 2001; Gremler, 2004; Turunen, 2002). Griffin's (2003) research contributes to this current work in identifying levels of reflective and critical thinking that can be ascertained through use of critical incidents. The authors also turned to Oermann (1997) who outlined the use of critical incidents to evaluate critical thinking in clinical practice, and whose guidance on observation, questioning, and use of written assignments to build and assess critical thinking was most helpful.

In service of the aim to demonstrate gains in critical thinking, the authors have developed a profiler. The capabilities and orientations it assesses can serve as the centrepiece of a curriculum supporting; a) the preparation of students to get the most out of their WIL experience; and b) ongoing developmental strategies promoting critical thinking; and then c) providing a means to assess and document the gains in critical thinking. The need for new forms of assessment more closely-aligned with the nature of learning in the workplace and the uniqueness of individual experience and resultant learning was recently and strongly asserted in an *Asia-Pacific Journal of Cooperative Education* special issue on assessment in Work-Integrated Learning (Ferns & Zegwaard, 2014).

A WORKING DEFINITION

The following definition of critical thinking, developed by the authors, conveys the aspects believed to be relevant and useful for the proceeding discussion.

Critical thinking is the demonstrable application of a set of capabilities and dispositions leading to better solutions, decisions, and courses of action, including analysis, planning, implementation, and evaluation.

Critical thinking involves a raft of complex higher-order qualities, including analysis, inference, interpretation, implication, explanation, evaluation, synthesis, application, and self-regulation (Facione, 1990), and attention, categorisation, selection, and judgement (Cottrell, 2005). Barnett (1997) adds the dimension of knowledge construction and reconstruction, what he refers to as “reconstitution”. As such, critical thinking has elements of creativity and openness to possibility (Seymour et al., 2003) and generativity (Bailin & Siegel, 2003; Bonk & Smith, 1998). It is constructive and action-oriented (Cope, 2003; Jenkins & Cutchens, 2011). Finn (2011) includes decision-making as a quality of Critical Thinking, along with interpretation, judgement, evaluation, metacognition, and the importance of evidence.

Jones (2015) specifies that critical thinking is a disciplined act. To be most useful, critical thinking must be purposeful, disciplined, and conscious; the thinker should be continually inclined to question, investigate, and challenge (Griffin, 2003; Green, 2015), persisting to reveal truth, reality, and wholeness in the face of difficulty (and, perhaps, when seemingly unnecessary). This may be the “critical spirit” some scholars discuss (e.g., Facione, 1990; Smith, 2003).

Brookfield (2012) stresses that the critical thinker constantly seeks to surface and explore assumptions, the “taken for granted” that so often cloud our thinking. Attentiveness, mindfulness, and reflection appear in many treatments of Critical Thinking (see Byrnes & Dunbar, 2014; Finn; 2011, Gray, 2007; Kuhn, 1999, as examples). critical thinking is improbable without awareness. One must be attentive to both external stimuli and internal responses and states.

A significant quality of critical thinking is analysis (Byrnes & Dunbar, 2014; Facione, 1990). Integral to problem-solving and decision-making, “being analytical” is very important (Elder & Paul, 2007). Another term that must apply is objectivity. One cannot be a critical thinker without attempting to remain objective (see Facione et al., 1995, Garrison, 1991). Objectivity is a key attribute of the critical thinker (West et al., 2008) and a state he or she tries to attain and sustain. Training in critical thinking must cultivate an awareness of the susceptibility to fall victim to subjectivity and its dangers; hence the focus of many advisors on critical thinking on combatting effects of perceptual blinders, biases, assumptions, and beliefs (Garrison, 1991; Mezirow, 1997, 2012; Paul & Elder, 2001).

THE CONTEXT

Many tertiary education institutions assert their graduates will demonstrate the ability to think critically, and critical thinking counts amongst the learning objectives in many courses across a wide range of academic disciplines (Jenkins & Cutchens, 2011; Smith, 2003). Aspects of critical thinking figure in the guidelines or requirements of educational institutions promulgated by national education departments (Knight & Yorke, 2003; Treleaven & Voola, 2008; Willingham, 2007). Finally, business and other organisations expect graduates of tertiary institutions to demonstrate critical thinking skills (Star & Hammer, 2008). Despite the rhetoric, recent research indicates that tertiary education institutions would be hard pressed to justify their students are developing critical thinking skills and dispositions (Belkin, 2015).

Many instructors think, hope, or assume that students are developing critical thinking skills through assessments and learning activities offered... that this happens somehow organically even though little, if any, formal instruction is provided. At the same time, it is reasonable to assume that students do develop critical thinking skills and dispositions as an unintended consequence of their coursework and other curricular experiences. This leaves much to chance, however, and institutions have little right to claim responsibility for gains; and even if gains are evident, institutions cannot confidently specify what activities led to them. Worse, there is some

indication that the grasp of critical thinking and its application by faculty members is no greater than that of the students they teach (Paul, 2005; Seymour et al., 2003).

THE CRITICAL THINKING PROFILER—A SIMPLE-TO-USE AND VERSATILE INVENTORY

Development or sourcing of practical assessments and their use are essential if academic institutions are to demonstrate that students are becoming more capable of thinking critically. With respect to WIL, it is reasonable to assume that students might develop critical thinking skills and dispositions through their WIL experience, but that development is by no means guaranteed. First of all, jobs may or may not demand critical thinking. Even if they do, students may not acquire the skills and dispositions without preparation or support along the way. Further, they may theoretically hone skills of critical thinking and not be aware of this.

Moreover, few would be the individuals who could concretely and defensibly articulate whether or not and under what circumstances a student (or any other employee) were demonstrating critical thinking. Thus, the authors have developed an assessment regime and device that can be used in a variety of settings to ascertain a given individual's skills applying and dispositions toward critical thinking. It is important to use both a pre-test to establish a baseline and to follow an instructional activity or learning experience with a repeat to document any change.

The test consists of a brief instruction to the learner and seven tasks or questions to complete. Thirty minutes should be sufficient for most learners to complete the test, but setting a maximum of 60 minutes gives those who need or would like longer to be able to provide more detail. And, though, intentionally not explicit in instruction, detail is important. Without detail it would be impossible to ascertain what factors learners took into consideration in the problem or decision confronting them, how they approached the task, or on what and how they evaluated or critiqued their performance.

The test asks students to come up with their own problem, decision, or other challenge. Where a downside of this is lack of standard across tested subjects, it offers the decided advantage of tailoring to the student's own experience, an important WIL assessment consideration (Ferns & Zegwaard, 2014). Administered during or after a WIL experience, students could be instructed to describe a situation arising from their experience, thus relevant to them and their work context. This is an adaptation of the Critical Incident Method, as discussed by Gray (2007) and others.

Underlying the profiler is a set of ten attributes derived from dozens of research articles and scholarly texts on critical thinking. To assist the evaluator, scales have been designed for each of the ten attributes (here called dimensions) (Table 1).

TABLE 1: The ten dimensions of critical thinking.

- | | |
|---------------------|--------------------------------|
| ▪ Perceptivity | ▪ Morality, ethics, and values |
| ▪ Thoroughgoingness | ▪ Big picture |
| ▪ Veracity | ▪ Logic and rigour |
| ▪ Evidence | ▪ Exploration and speculation |
| ▪ Extension | ▪ Awareness of subjectivity |

Development of the proposed critical thinking assessment had its genesis in earlier work of Hays and colleagues (Hays et al., 2012; Hays, 2014) on higher-order thinking capabilities and dispositions referred to as Reasoning, Judgement, and Reflective Action (RJRA). RJRA (Figure 1) is a model indicating interdependent relationships amongst elements known to be important for professional practitioners. It is, fundamentally, a professional effectiveness model.

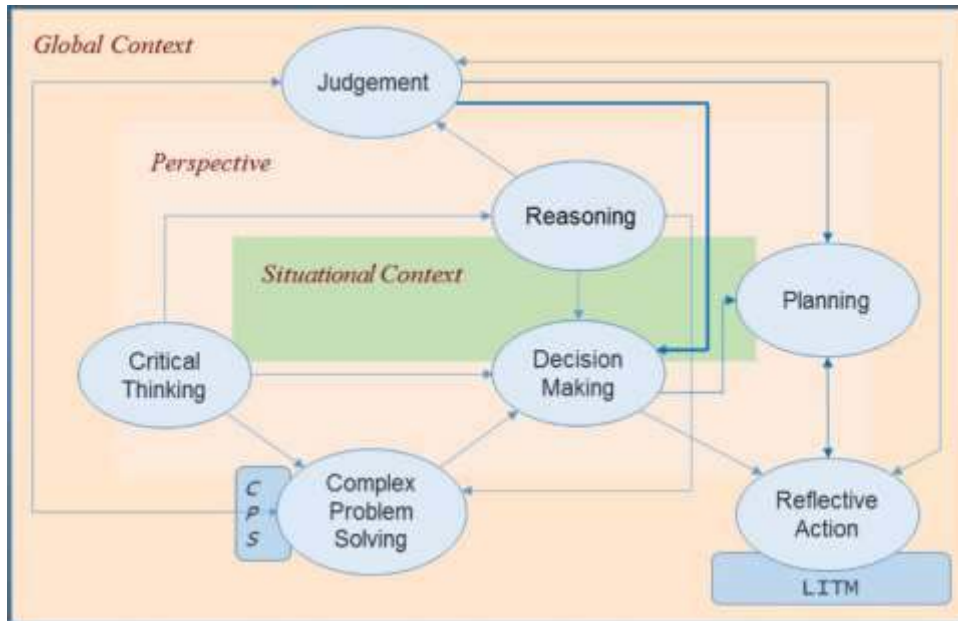


FIGURE 1: The Reasoning, Judgement, and Reflective Action (RJRA) Model, showing elements and their dynamic relationships.

The RJRA Model situates critical thinking in context and addresses many of the conditions and qualities of critical thinking, perspective being one dimension worthy of highlighting. Finally, RJRA is not a static model. It implies continuous learning, prudent change, and immediate corrections through the aegis of Reflective Action and Learning in the Moment (LITM). Effective, purposeful action, and learning from experience would also be aspirations of critical thinking.

A FINAL WORD

Work-integrated learning provides manifold opportunities to learn and to develop a variety of skills and dispositions of life-wide significance. In addition to discipline knowledge and skill, and, thus, narrowing the theory-practice divide, WIL has been shown to build a range of important generic skills such as teamwork, communication, and leadership. One essential skill that has not been extensively linked to or explored within the WIL context is critical thinking, perhaps due to its subtle and complex nature, and the perceived difficulty in teaching and assessing it.

Critical thinking may be more authentically and practically learned in the communities and organisations in which individuals attempt to apply the principles, theories, and other discipline knowledge gained in study. These contexts generally provide ‘far-from-classroom’ circumstances—rife with ambiguity, contestability, multiple and competing agenda, dilemmas, and risks, and where solutions, decisions, and the actions taken have immediate and significant impact, sometimes costly.

In such environments, potentially any event can be critical, or at least become a source of important professional learning if scrutinised—or critically reflected upon. To the degree that students on WIL can and do develop healthy critical thinking capabilities and dispositions, they are likely to be more effective in their future careers in professional practice. If they practice critical thinking throughout their WIL experience, they are likely to be perceived as competent, confident self-starters and reliable contributors, which could pay dividends in being given greater responsibility or promise of further employment.

Independent thinkers are less subject to bias, misinformation, delusion, groupthink, and other facets of social, political, and organisational life. Having one’s own view and trusting in it, knowing that it has been critiqued and informed, gives one a sense of confidence and control. The skills and dispositions of critical thinking—being

based in self-directed enquiry and investigation— equip an individual for a lifetime of learning and continuous growth.

Students on WIL do not automatically develop critical thinking skills and orientations, and might not be conscious of and able to articulate them if they did. Most students need preparation and ongoing support to get the most out of their WIL experience. If research and local experience are at all true, students probably get insufficient training in critical thinking in their coursework, and current attempts to assess and document critical thinking fall short. Even with formal training, students may not be able to transfer or apply their learning into novel and complex situations. Few academics and workplace supervisors have skills or tools in facilitating development of or evaluating critical thinking. So, more needs to be done to equip students to deliberately and consciously practice critical thinking. Likewise, more needs to be done to support academics and workplace supervisors to support development and documenting of critical thinking.

For these reasons, the authors have developed the critical thinking profiler and propose it be administered prior to and after the student's WIL experience. It can also be used as a pre- and post-test for training received, or on one or more occasions during a WIL experience. This would assist in identifying impacts of specific interventions (or situations), as well as indicate areas where students are improving or need more support. Instructing students in the ten dimensions of critical thinking would at the minimum give them areas to think about in undertaking a problem-solving or decision-making process and/or subsequently critiquing that process. Results on their first iteration will provide valuable formative feedback that they can incorporate next time around. Shared dialogue and reflection on their critical incidents will deepen and extend their learning.

Workplace supervisors should be apprised of the adoption of critical thinking as an element of WIL learning, and be guided through the profiler and scales. This will help them to set job tasks that lend themselves to building or demonstrating critical thinking, and may lead them to asking student-employees questions or giving them prompts that stimulate their critical thinking.

In the final analysis, development and assessment of critical thinking are critical. WIL experiences provide an obvious opportunity to practice critical thinking in a way that traditional coursework simply cannot. The authors hope that the critical thinking profiler and curriculum it suggests stimulate WIL practitioners and workplace supervisors to engage students more fully in thinking critically about their work and supports them sufficiently in doing so.

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Are Students Acquiring the Skills, Competencies and Work Experience that Align with Industry Needs and Work-Integrated Learning Course Design?

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According to Coll et al. (2009) “A key purpose of work-integrated learning (WIL) is the notion of providing graduates with a comprehensive skill set desired by potential employers” (p. 15). The notion of providing a comprehensive set of skills and competencies that align with current employers’ desires can, however, be a constant challenge (Burchell, Hodges, & Rainsbury, 2000; Hodges & Burchell, 2003). WIL course designers need to not only remain up to date with key skills and attributes demanded by employers, but also need to monitor whether or not students are learning these skill sets to the satisfaction of the employers. It is hoped that by exploring students perceptions of their workplace experience through their end of placement reflections, this paper will contribute to the gap in the research in terms of what WIL students learn (Eames & Bell, 2005) and examine whether or not there is alignment between course design skill delivery and employer demands.

PROGRAM

The Bachelor of Business degree at Unitec involves a compulsory 30 credit Industry Based Learning (IBL) course at Level 7. In their final semester, students from five discipline areas namely; Accountancy, Finance, Human Resources, Marketing, and Operations complete a project and work tasks in industry for a period of 220 hours under the supervision of both an industry and academic supervisor. Currently, approximately 200 business students are enrolled in the IBL course annually.

Students are assessed across a number of areas via a self-assessed ePortfolio of learning that evidences their work achievements and reflections of their work experience. This discussion on work-readiness and course alignment considers students across all five discipline areas of business as mentioned above.

UNIQUE FEATURES

Whilst there is a considerable body of research examining the benefits of WIL experience for employers and students, this paper explores the alignment of students’ perceived acquired skills with industry employability needs and WIL course design.

DISCUSSION

Three intertwining threads on work-readiness, in terms of skills and competencies acquired by IBL business students; IBL course design, student perceptions, and employer demands. Each of these are discussed in turn.

1: Industry based learning course design

In line with many models of WIL within tertiary education, the IBL course has been designed with the aim of providing students with the opportunity to integrate their learning across their programme of study and apply theoretical and practical business skills to an approved project and work objectives in industry (Jackson, 2013). Equally important is the further aim for students to critically reflect upon the processes undertaken in completing their project and work objectives to inform their future personal and professional development.

Assessments, to encourage students’ reflection on their workplace experience, are commonly used in WIL course design (Sheridan, Kotevski, & Dean, 2014) and the IBL course design is in keeping with this practice. Students reflect both during and at the end of their workplace experience to foster integration of knowledge (Coll et al.,

2009) and help students develop a deeper self-awareness of their skills and competencies acquired and those requiring further development in the future (Coll, Lay, & Zegwaard, 2001).

The key assessments, within the IBL course, which focus on skills and competencies evident in the student at the end of the placement period are: '*a three party collaborative assessment*', and an '*end of placement reflections*' essay. The *three party collaborative assessment* requires that the host, academic supervisor, and student assess the student's performance in four broad competency areas: Professionalism, Interpersonal skills, Intellectual skills and Project/Time Management as well as the value of work contributed (project and work tasks). The *end of placement reflections* assessment encourages students to critically reflect on their workplace experience and discuss what they have learnt. Students are provided with a page of questions relating to general and personal learning experiences as well as the workplace culture, values and practice. The focus of this discussion centres on the '*end of placement reflections*' assessment and examines the skills and competencies that students perceive to have developed during their IBL placement.

2: Students' perceptions of skills and competencies developed from their workplace experience

A qualitative content analysis (Bryman & Bell, 2003) was performed on students' end of placement reflections on their workplace experience. Two IBL cohorts (semester two, 2014 and semester one, 2015) were contacted and permission was requested to analyse their end of placement reflections. The resulting sample included 19 students from semester two 2014 and 12 students from semester one 2015. The fact that students contacted had already graduated or left Unitec is a contributing factor to the average response rate of 17%.

Emerging themes and patterns from the data were identified using an open coded method (Bryman & Bell, 2003) and then grouped into sub –themes guided by the four course competencies used in the IBL Collaborative Assessment. The two cohorts' responses were analysed separately, however, as no apparent differences in themes could be ascertained, the two groups were considered as one sample. The most pertinent competencies and skills that emerged from the analysis are discussed below in order of importance.

Emerging themes: Overall, the strongest themes that emerged from the analysis were those involving increased confidence levels and a deeper awareness of own abilities and future career choices; "I feel more confident in being able to reach my potential in the business world and have a successful career change" (KN), "the experience helps me build confidence in doing accounting jobs in the future", "my drive to get tasks completed may show through at times as overly controlling"(AG), "I am a very fast learner and can work independently on assigned tasks"(RG), "I am not a very good self-directed learner, which I need to work on in the future" (ZT), "I tend to underrate myself" and "I learn better by doing " (AT). "I sometimes place my high standards onto others, which I feel is a negative" (VQ), "I work best under pressure and can rise to a challenge without becoming stressed" (SN), and "I am not a person with enough patience " (WX). Further comments included; "My experience has helped me with future career choices and establishing the type of organisation I may wish to work for" (AG), "In the future, once I have gained more experience, I will look at this type of position again as I like the idea of a job that makes a real difference in society" (VM), and "like to be an accountant, using my knowledge and skills to help small businesses" (XZ).

Interpersonal competencies (196 mentions): In line with previous WIL research on placement reflections (Paku & Lay, 2008) students most frequently reflected on acquiring interpersonal competencies. Teamwork and building relationships in the workplace emerged as the strongest interpersonal skill; "I have never seen employees work in a team the way they did" and "I was able to work hard and build long-lasting relationships at work" (NN). Comments also included; "It was rewarding to be involved in a team" (AM), "there was a real sense of working together for a common cause" (NS), and "I hope that I am fortunate enough to work with such a team in my future endeavours" (VQ). Improved verbal communication proved to be the next most frequently acquired competency; "was able to present this information to managers and be able to answer any related questions" (JD), "I am most proud of my development with client communication. I was quite nervous at the start and didn't know exactly what questions I should be asking" (TD), and "now I have enough confidence to have good communications with customers" (JU).

Intellectual competencies (69 mentions): Most students commented on gaining new technical skills or subject matter knowledge whilst in their placement; "I learnt how to work in software for email marketing" (MM), "particular insights were gained for myself in regards to social media and digital marketing" (CU), "improvement in using X software" (SN), "more insight into the internal control area" (AT), and "experience in analysing the company's financial reports" (JD).

Project/time management competencies (59 mentions): Unsurprisingly, students found that the placement experience improved their project management and/or time management abilities; "I've learned that I must learn to prioritise my task better" (JL), "Time management and planning ahead proved to be an important competencies learnt during this experience" (LN), "I found that meeting deadlines was an integral part" (IT), and "having the balance right was important as I had to juggle so many things while completing the work placement" (RG).

Professional competencies (59 mentions): Specific professional competencies focussed on work ethic and the culture of the organisation; "People work hard and still have a laugh and a joke with each other" (RG), "I will be able to work hard and build long lasting relationships at work" (NN), "Even though it is very busy, the staff were very fulfilled and happy in their jobs" (DM), "Not much talking was really done as everyone just seemed to work all day long, even during their lunch break" (ZT), and "I learned a lot about how to behave in the situations that were part of the work culture of the company which should help me to adapt faster in my future career" (AT). These emerging skills and competencies appear to align with course aims and outcomes but are they aligned with industry's employability demands? The last discussion thread briefly examines current research on the topic of employers' perceptions of skills and competencies required of graduate students.

3: Industry's employability needs

According to a recent survey conducted by Victoria University the top ten skills and attributes which employers seek in new graduates are; 1) work ethic, 2) Verbal communication skills, 3) Energy and enthusiasm, 4) Analytical and critical thinking, 5) Problem solving, 6) Teamwork, 7) Interpersonal skills, 8) Written communication skills, 9) Self-management, and 10) Initiative (Victoria Careers and Employment, 2015). Interestingly, work ethic, which was so highly ranked in this survey, was not highly ranked in their 2006 survey.

The results differ slightly from Career NZ's article on the "top 10 skills employers are looking for" which places communication skills, customer service skills and teamwork in the top three places (Careers NZ, 2015). The picture in Australia is not dissimilar with over 80% of employers rating teamwork, oral communication, interpersonal skills and problem solving skills as very important competencies in their selection of candidates (Australian Association of Graduate Employers, 2011). The research both locally and internationally indicates that overall types of skills expected of graduates by employers are similar with only the ranking of skills differing. It would appear that the types of skills demanded of graduates by employers are in line with students' perceptions of skills developed during their IBL course.

Of concern, however, are employers' satisfaction levels with graduate employability skills. In New Zealand only 34.6% of employers surveyed felt that Universities and Polytechnics graduates were well prepared to be effective in the workplace (Deloitte-BusinessNZ, 2014). British employers share these low satisfaction levels, particularly with graduate employability skills such as; positive attitude to work, basic literacy/use of English, problem solving, teamwork, self-management, and business/customer awareness (Confederation of British Industry, 2011).

The employers' low satisfaction levels with these skills raise a number of questions. Are students' perceptions of skill development at odds with employers' expectations? Can improvements in course design reduce the gap between industry's expectations of graduates' skills and the skills they actually bring? Are employers demands unrealistic and could they play a greater part in shaping students' development of skills required?

IMPLICATIONS/ISSUES

Students perceive to be learning the key skills demanded by employers. However, research indicates that there is a low level of satisfaction among employers regarding these skills developed by the graduates. Possible explanations for this significant gap in perception between students and employers include:

- Students' tendency to over-estimate their capabilities,
- The course failing to deliver the skill set at the required level, and
- Employers having unrealistic expectations of graduate students.

Further research into this perception gap between students and employers would help to ascertain the reason for its existence and provide options for reducing or eliminating it. Irrespective of the reasons for the differences in view between students and employers, it is clear that there is opportunity for improvement of WIL course design to align more closely with key employability skills desired by employers and thus achieve higher levels of satisfaction amongst employers of our graduates.

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Participants' Experience and Impact on their Practice from Engaging in an Online Professional Development Work-Integrated Learning Module

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As communities of educators develop and advance their practices, professional development for new-comers becomes increasingly important (Borko, 2004). Previous research on stakeholders within the work-integrated learning (WIL) community focused on the benefits and needs of key stakeholders (see reviews by Braunstein, Takei, Wang, & Loken, 2011; Crump & Johnsson, 2011; Dressler & Keeling, 2011). However, there has been little focus on the changing demographics of the WIL community (Zegwaard, 2015). As the WIL community diversifies, it needs to develop individuals new within the community. Research exploring educators understanding of teaching the nature of science concluded that a community of practice was useful for advancing educators' understanding, however, had limited impact unless it also included professional development (Akerson, Cullen, & Hanson, 2009). The global community of practice of WIL practitioners and researchers has grown and during that time the understanding on best practice of WIL has significantly advanced. However, there has been a growing shift to WIL practitioners who are not research active nor enabled to teach, however, hold roles vital to the success of student learning and delivery of the WIL program. Such practitioners require opportunities to learn about different models and an appreciation of the theories that underpin best practices (Zegwaard, 2015).

To address the need for professional development, four national associations (ACEN, CAFCE, NZACE, VILAR¹) developed an online module which was made available to members of the four associations. This paper describes the module structure, participants' experiences, and revisits the first cohort of participants eight months after having completed the module.

MODULE DESIGN

Module description

The first module offered as part of the Global WIL course² focused on developing a theoretical grounding in experiential learning theory and WIL, based around two readings: Fenwick (2000) and Eames and Cates (2011). The module offered participants an opportunity to interact with fellow participants from four countries, each of which were applying the theories in their WIL programs and encountering challenges and issues.

¹ Australian Collaborative Education Network (ACEN), Canadian Association for Cooperative Education (CAFCE), New Zealand Association for Cooperative Education (NZACE), the VILAR Network, Sweden.

² Entitled "Global Perspectives in Work-Integrated Learning".

The module was offered online using a word press blog was created. The blog acted as a platform to post reflections on readings, respond to the postings of others, and to present the issue or problem. Lock (2006) argued that successful online professional development should require changes to the flow of information and interaction that is more natural within an online environment. With that in mind, considerable design effort was undertaken to consider the learning experience for the participants. The activities included reflections on the readings and relating this to their own practice, reviewing a certain perspective of their WIL practice, and identifying a current challenge or issue. Throughout the module, the instructors engaged with participants individually and through small group chats. The module concluded with a webinar, where participants discussed their identified issue and reflected on the learning gained from the module.

METHODS

Sampling method

The same module was delivered twice, with the second iteration using slightly modified learning activities. Participants from both modules completed a pre-module and post-module online survey (using SurveyMonkey). The survey used agreeance statements (10 point Likert scale) and open-ended questions. The pre-module survey consisted of 22 questions, obtained demographic data, and explored self-perceptions about the level of knowledge and confidence of participants on relevant theories of learning and best practice WIL. The post-module survey consisted of 30 questions and gathered views on how participants thought this newly acquired knowledge could change their practice. The first cohort was surveyed again eight months after having completed the module to determine if participation in the module still impacted their thinking about best practice. The research had ethical approval from the University of Waikato, New Zealand.

Demographics

Participants were from Australia, Canada, New Zealand, and Sweden and had a range of job responsibilities and backgrounds, however, both cohorts were relatively similar in range of diversity (Table 1). The WIL program size participants were involved with varied widely from 9 to >6,000, with 100-500 being most common. The module completion rate is around two thirds, which is typical for an online offering (Carr, 2000; Dutton, Dutton, & Perry, 2001).

TABLE 1: Demographic data from participants having completed the first and second delivery of the module.

Participants	First module	Second module
Number	34 started, 22 completed	39 started, 26 completed
Gender	18% male, 72% female	17% male, 83% female
Age		
Mean (years)	~53	~46
Job responsibilities		
Placement coordinators	46%	66%
Teaching	54%	40%
Research	33%	11%
Actively researching	50%	24%
Managers/directors	25%	26%
Faculty/academic	59%	54%
Staff/non-academic	15%	31%
Running WIL program	78%	79%
Qualification level		
Sub-bachelor	0%	1%
Bachelor/hons/grad dip	37%	24%
Masters	52%	44%
PhD	15%	24%
Years involved with WIL	8 years	6 years

RESULTS AND DISCUSSION

Progress through the module

Both cohorts presented similar perceptual shifts about their abilities and knowledge between pre-and post-module (Table 2). A major component of the module focused on discussing relevant theories of learning, including how these theories inform practice. It was, therefore, not surprising that participants' views of their understanding of learning theories had increased after having completed the module (5.16 to 7.61; 4.94 to 7.59; $p < 0.01$). Post-module, both cohorts believed they still required a greater understanding of relevant theories (8.00 and 7.61, respectively); (the lower post-module result in the second cohort was not statistically significant). It was expected that the 'need to gain further understanding' perception would have declined after the module. It is likely that completing the module did result in greater understanding, as other data indicated. Participants also realised how much they didn't know and self-identified a need to keep learning.

TABLE 2: Responses to selected agreeance statements from the pre- and post-module surveys of both cohorts, and from the survey eight months after completing the module for the first cohort.

	Module 1		Module 2		8 months post-module one ($n=16$)
	Pre ($n=28$)	Post ($n=19$)	Pre ($n=35$)	Post ($n=22$)	
I have a good understanding of the theories that underpin my WIL practice	5.16	7.61***	4.94	7.59**	
I (still) have a need to gain more understanding of underpinning theories	8.28	8.00	8.33	7.61	
I believe my WIL program is well informed by theory	5.11	7.40***	5.64	7.29**	
I believe that I now have a good understanding of why WIL is practiced the way it currently is in my program	5.67	7.78***	7.41	7.70	
I now know how to enable effective learning for WIL students	7.28	7.89	8.17	7.88	
The knowledge I gained from this module will improve my practice		8.84		8.05	
It became evident to me during the module how I could apply theoretical knowledge in my practice		8.16		7.24	
The module allowed me to draw better links on how theory underpins practice		8.53		8.00	
Eight months after completing the module, my thinking about best practice and student learning has continued to be changed compared to before I started the module					7.63
Since completing the module, I still reflect on the discussions					6.63
Since completing the module, I began to read more literature					6.44

Note 1: statistical significance of difference using paired student t-test comparing pre-module data to post-module data, where; *** = $p < 0.01$, ** = $p < 0.05$, and * = $p < 0.1$. This test only includes those that have completed the module and not those who dropout partway through the module.

Note 2: response rates were 82%, 86%, 90%, and 85%, respectively.

Note 3: only selected survey responses shown, not all survey questions

The first cohort differed from the second cohort, in that they were more unsure why their WIL program held its current practice (cohort one 5.67 and cohort two 7.41). However, the first cohort did significantly shift in their views when comparing pre-module views to post-module views (5.67 to 7.78; $p < 0.01$). There were mixed results

within each cohort where, for example, on several occurrences participants felt less sure or confident after completing the module than before. After gaining a better understanding of learning theories and best practice, it is likely their thinking was more challenged.

Both cohorts were confident of their ability to facilitate learning for WIL students before starting the module, a view that was not statistically significant ($p > 0.05$) when comparing pre- to post-module views (pre 7.28 to post 7.89; pre 8.17 to post 7.88, respectively). Considering both cohorts gained theoretical understanding and felt confident on linking theory and practice to improve approaches, it is likely the module affirmed participants' thinking about their abilities by providing a better foundation for their confidence for what previously may have been unsupported perceptions.

Lasting impact of the module for first cohort

Eight months after completing the module, participants of the first cohort identified enduring impact from the module. Immediately after finishing the module, this cohort indicated their thinking about best practice and student learning improved and held that view eight months later (7.63), with one participant commenting that their thinking has "continued to evolve". Since completing the module participants still reflect on the discussions from the module (6.63) and were reading more literature than before (6.44 Likert). Three participants said they visited the module website again to read the blogs, with one participant having bound printouts to be read later. When asked if they could think of other benefits gained from the module, the comments implied that participants were now using a different 'lens' to interpret their practice. For example, one participant said "I'm now evaluating more – ensuring that I have evidence for future planning".

The module may also have impacted on participants' practices. For example, 63% indicated that they had changed some of their practices, 81% were planning to review an aspect of their practice or program, and 63% had initiated a research project.

One of the intended outcomes of the module was for participants to form lasting connections with other participants. Only two participants indicated that they had been able to do this despite 69% indicating they wanted remain or renew contact with other participants. Responses to open-ended questions suggested time restraints was the main challenge. The desire of participants to remain in contact with other participants highlights an issue that needs to be addressed. Future offerings of the module could include a shared online space (e.g., Google Hangouts) that would allow for a convenient way to remain in contact. This fits within recommendations by Akerson et al. (2009) who strongly advocated for continued interaction after engaging with professional development and suggested that online platforms will likely be effective.

CONCLUSION

The module had a positive impact on participants' perceptions of their understanding in underpinning theories of learning, however, the data collected is self-perceptions, which is limited to participants' knowledge at the time of the survey. For example, the lack of difference between the pre- and post-module data for confidence around facilitation learning, may be limited by participants' pre-module notions about their understanding of their own abilities.

The participants valued engaging in discussions with their peers around challenges in their own workplace, however, very few were able to maintain these discussions after the module. For future offerings of this module a continuing post-module, shared online space (e.g., Google Hangouts) will be considered.

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Some Aspects of Supervising Students' Action Research: Challenges and Possible Solutions

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Practicum experiences are an integral component of both the Diploma and Bachelor of Teaching early childhood education curriculums. Work-related learning allows the students to test their theoretical knowledge in practice, to acquire the knowledge, skills and attitudes to succeed in their studies and be better prepared to join the workforce in the future. An important part of work placements in the third year of the degree programme is the students' action research project. Each student is assigned a supervisor and the three lecturers (authors of this paper) involved in the supervision process, carried out the collaborative action research project outlined in this paper to identify effective supervision strategies.

CONTEXT

Using action research methodology, this paper explores the issues of supervising the early childhood education degree students. Ultimately our goal was to uncover the challenges that the three research supervisors encountered and to identify practices to support and empower student researchers to embark on meaningful research projects. The findings of this study also contribute to improving the delivery of the second and third year Professional Studies paper in the degree.

The study began with discussions about the diverse roles of research supervisors - what this involves and the numerous ways to support students in what is considered the most academic and challenging task of the final year of the degree programme. This supervision process was happening in the programme for the first time since the degree was accredited at the Auckland campus.

The researchers' interpretations of the processes they engaged in and the areas needing improvement generated the findings of this study. Social cultural theory, which includes the sharing of ideas and the co-construction of knowledge, was applied in the study. The theoretical framework, the interpretivist paradigm, influenced the way the study's findings were interpreted. The paradigm sets out assumptions about the social world that we live in, including what constitutes proper techniques and topics for inquiring into that world (Punch, 2005).

METHODOLOGY: THE INTERPRETIVIST PARADIGM

In the interpretivist paradigm approach (MacNaughton, Rolf, & Siraj-Blatchford, 2010; Mutch, 2005; Punch, 2005) a paradigm consists of certain assumptions about the nature of reality and how knowledge is constructed. Mutch (2005) described a paradigm as being "a particular view of the world, linking theory and research style" (p. 222). A researcher in the interpretivist paradigm recognises the value of uncovering the multiple truths of research participants, appreciating the fact that people's daily lives are influenced by their knowledge, attitudes and beliefs. The authors were both researchers and participants in this study. Therefore, the multiple truths of the research participants' lives elucidated the complexity of this project.

Interpretivist research was an appropriate paradigm for this study as the aim was to gain an in-depth understanding about what supervising meant to the three supervisors all practising from different perspectives. Locating the research within an interpretivist paradigm determined the choice of a qualitative approach for the interpretation of the participants' understandings and their practices.

A semi-structured focus group (the three supervisors/participants) interview was chosen as the method of data collecting. Through semi-structured focus group interviews, insights were gained, not only into the views but also the feelings, emotions and experiences (Denscombe, 2007) of the three supervisors all of whom come from different cultural and educational backgrounds.

RESULTS

The findings outlined three areas of focus. Solutions were tried in each area but more research is needed to evaluate their effectiveness. Consequently, some new strategies will be piloted in the future.

1. Understanding the instructions for writing a research proposal and a research report

A search for specific strategies for supervising undergraduate students in the current literature did not yield effective results. Most publications deal with postgraduate research supervision. Moreover, the authors of this paper also understood that they were researching the supervision of undergraduates in a particular context - the entire programme's students are second language learners and all are genuine beginners in the research field. After analysing the students' questions to the supervisors, it became obvious that extra support offered in advance of the research project would benefit students.

It was decided that providing some general principals and methods of research, irrespective of the field of the research, would be of use to the students. Two guest lecturers both doing their PhDs, were invited to conduct workshops on action research and research methodology. Both sessions proved very helpful in promoting understanding of basic research concepts. Then, in Professional Studies classes, the concepts were enlarged on and developed in relation to early childhood education topics. Last but not least, these guest speakers who are passionate about research helped the students to overcome their fears of the activity. We will continue to use the expertise of the research lecturers from other programmes.

As in any assignment, understanding instructions and following them is a prerequisite for success. As well as help with understanding basic research concepts, the students also needed assistance in understanding the use of terminology and synonyms in the instructions. As from this year, the year two language paper tutors will include specific vocabulary exercises to help the students to deal with these issues.

It has become clear that because the student research project was cyclical, there were inevitable duplications in the instructions. The supervisors had to unpack parts of the assignment to help students understand the difference between seemingly similar instructions for writing the research proposal and the final report, and to assist them to get a clear idea of what the quantitative requirements in some parts of the instructions implied.

In the future (the second trimester of 2016) the programme lecturers will compile guidelines to facilitate understanding of the instructions. The guidelines will also be of use to domestic students who are beginner researchers too.

2. Narrowing the focus of the research area and making connections between the literature review in Year 2 and Year 3

The findings revealed that links need to be made between the year two literature review and the year three action research project. Therefore, more emphasis was put on investigating how the literature in year two can transfer into the action research project in year three. This facilitated better understanding of the links between the literature review in the second and third year in both the research proposal and the final report.

The findings also identified the need for students to narrow the focus of their chosen research area to enable implementation of the action research project within the five-week timeframe. It was recognised as important to guide students to identify specific ideas and strategies from their year two literature review which they could implement in their action research project.

3. *Overcoming difficulties in designing the research and in writing the implementation section in the report*

The students were required to go through the action research cycle developing a framework for designing a study that explored the chosen strategies and collected data to address the research question. The design cycle (which included four stages) was to be repeated at least three times during their five-week long practicum.

The findings revealed that generally students need to go through the four stages of the cycle only in the first week, and then the three stages of the cycle in subsequent weeks. The students deduced the need to modify the design cycle to correlate with the context of the action research project. The context analysis happens in the first stage of the cycle and need only occur once. Repeating the other three stages helps strengthen students' understanding about how to put their strategies into action more effectively. It is planned to try this with the next cohort of the students.

The findings also showed that it is important to ensure that the students differentiate between the two terms methods and strategies. The term method should be used to refer to data collecting, whereas strategies should be understood as activities or actions designed to achieve the research goals. The initial range of strategies chosen from the year two literature review could be revised in year three and implemented in the action research cycle. It was left open for the students to decide if they wanted to use the same strategy once or many times in a week.

This flexibility to negotiate the testing of strategies was executed well by all students as was evident in their reflective journaling. However, it became clear that the students experienced challenges when it came to writing about the data elicited from the reflective journaling, and then recording this data in their final report. The students also tried triangulating data from multiple sources to verify and check the accuracy of facts and interpretations. However, they were less successful in using talanoas and questionnaires to collect data. This suggests that students need more guidance from their supervisors in preparing questionnaires on how to collect specific data and how to use the data in their reports.

CONCLUSIONS

The three areas of focus in the action research; the research design, data analysis, and formulating possible solutions to improve supervision practices were dealt with collaboratively.

The analysis of the findings and the students' results (not lower than B+ for the research project report) have confirmed that the supervisors' focus is correct and that they should continue guiding the students in understanding the assignment instructions, in choosing suitable strategies and methods, and in learning how to interpret the findings of their action research.

The results of the initial research were presented at the Whitireia WelTec Research symposium. The feedback received proves that those results were of interest to the staff involved in supervising students' research projects in other programmes. The project continues and more time is needed to make improvements in the three areas the researchers were focusing on. Moreover, the role of supervisors is an attractive research area for the future because it "remains crucial in ensuring that students complete their education in a timely manner and gain enriched abilities with regard to research skills, scholarly endeavour and academic identities" (Rath, 2008, p. 5).

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Giving Academic Credits for Students who have Obtained Summer Internships

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Internships in various forms such as apprenticeships and work experience have been around for years, and are increasingly common within academic qualifications. Research shows potential benefits to all parties involved, especially when the opportunity is given for the interns to develop not only their technical skills but communication and work ethic (Holyoak, 2013).

There is a shortage of IT staff throughout the world, so the need to train more is imperative, hence students can obtain work either as part-time during term-time or during breaks from study. It makes sense therefore to be able to give academic credit to these students to reward them for their initiative (Carpernter, 2003). The high salaries demanded by qualified and experienced employees is a barrier to smaller companies when hiring staff. Internships can often provide a 'try before you buy' system to allow employers to test potential employees at a lower pay scale.

In Wellington, a summer internship programme is run for students who are studying areas related to information technology called 'The Summer of Tech'. The organisers of this programme run boot camps and workshops to prepare the students for entry into the workforce. They also run a speed dating type of matching service for positions which are provided by industry within the geographical area. Over the years we have become more involved in this arrangement and our students have been very successful. It seemed appropriate to be able to offer academic credit to the students while taking part in these internships.

AIM

Our aim is to develop papers to allow the students who obtain their own internships to earn academic credit for the work they undertake. We run both undergraduate and postgraduate courses, so we needed to develop both a Level 7 and a Level 8 Internship paper. We wished to investigate the performance of the papers once they have run for the first time. This will help in the future development of both our program and the individual papers.

METHOD

The various aspects of internships were examined including level, full time/part time, academic credit allowance and benefits to the stakeholder (Maertz Jr, Stoeberl, & Marks, 2014). The literature pointed to definite advantages to all involved. Internships are a good vehicle to prepare students for a career within their chosen field (Hurst, Thye, & Wise, 2014). It could also help with the 'catch 22' problem of employers wanting experience and students being unable to gain their first job without any experience.

A search was undertaken to investigate best practice for offering papers earning academic credit for both Level 7 undergraduate internships and Level 8 applied research internships. This search was undertaken by looking at internship courses advertised on the internet and identifying common methods of assessment. The lessons learnt by running capstone projects for over 15 years were incorporated. Descriptors were developed for each paper and approved through the academic board to allow inclusion into the relevant programmes. A handbook was written outlining the processes the students needed to complete to enrol, and the assessment task details needed to earn the credits.

The process developed, requires students to find their own paid internship placements of at least 240 hour' duration. The internship placement must then be approved as relevant to our programme of study by faculty,

before the student can enrol in the academic paper. There is then a meeting between faculty, student, and employer to finalise the terms of the internship placement and the academic requirements. During the internship the students keep weekly journals, and meet with the internship coordinator fortnightly. The final assignments are a report and a presentation.

RESULTS

The first step, to ensure that all stakeholders were aware of the requirements necessary to complete the paper, was to confirm the position and to highlight any potential risks. As the Information Technology industry often involves sensitive information, an agreement was made with each stakeholder to ensure that any barriers to the students being able to complete the academic requirements were discussed, and overcome, if possible. No specific issues were identified for any of the internship placements completed by the first trial group. All agreements addressed the ownership of intellectual property and the information that was to be made publicly available.

Three assessments were developed for each paper. These were a log or journal of the weekly work tasks, to ensure the work was relevant to the course, and that the number of hours spent in employment was reasonable and met the requirements. All students completed the required logs and in most cases they put in considerably more hours over the time period.

Each student submitted a report that explained the strategies used within the workplace and how they related back to the various subjects the students had learnt within their studies. This was extended in the case of the postgraduate students to include reference back to the current literature. A presentation to the faculty and interested parties was the final assessment. This outlined the learning the student achieved while undertaking the Internship, as well as describing the company and tasks.

Six Level 7 students and one Level 8 students were enrolled. Most of these have found their own positions with only two coming through The Summer of Tech programme. Only the students who needed the credits to complete their qualification have been enrolled for the papers. A few students actually worked as interns but did not need the credits to complete their qualification, so chose not to spend the money and enrol. At this point all of the students have obtained further employment within the same company as their Internship placement. This supports Malcolm Coco's (2000) supposition of 'try before you buy' on the part of both employers and employees.

All completed the course, however, the results have not been finalised yet but they look very positive. A number of students have already enrolled for the internship papers this semester and our current plan is to offer the internship papers every semester, as well as during the summer break, going forward, as the feedback has been very positive from both students and industry.

CONCLUSION

There were more queries from students than was expected, not all the queries about the papers culminated in the student enrolling. Some did not need the credits and so did not want to spend the money or do the extra work, some thought we should find their positions for them which was not an option. All enquiries that progressed to employer, student, faculty interviews completed successfully.

The students appear to appreciate the option of gaining credit for work they are undertaking anyway. Quite a few of our students are international, and they view this as an opportunity to gain the experience necessary to obtain permanent employment within New Zealand when they have finished their qualification. Internships can reinforce technical competencies and highlight the awareness of the need to be adaptable (Coco, 2000), especially within Information Technology which is constantly changing. The research performed by Laura Galloway, Abigail Marks, and Shiona Chillias (2014) indicates strongly that internships are very useful to all stakeholders. They not only have the positive results in skill development, but can also help the student identify the particular areas within the industry they are particularly suited to, or interested in. There may even be some cases where students could decide this career option is not for them, allowing them to pursue other avenues.

This is the first time we, as a department have offered internships, although we have extensive experience in running industry related capstone projects. This previous experience has fostered many useful contacts within the industry. We also have good relationship with the people who run the Summer of Tech within the Wellington region. Some of their workshops are delivered on our campus. These relationships have helped enormously in our decision to offer internships for credit. In the future we plan to analyse the reports to provide us with information on the tools and methods currently being used within the local Information Technology industry, thus allowing us to align with current industry practices, and incorporate any new ideas into our program, as well as identify any gaps in the knowledge we are giving our students. The expectation is that the papers in our qualifications will evolve over time and adapt to the market based on this feedback, just as our capstone projects have assisted in the development of our programmes in the past.

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Benefits of Cooperative Education: Student Perceptions at Manukau Institute of Technology

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Cooperative Education is a form of work-integrated learning. Work-integrated learning (WIL) implies and accentuates the notion that it entails an integration of knowledge and skills gained in the tertiary education institution, and in the workplace" (Martin, Fleming, Ferkins, Wiersma, & Coll, 2010, p .25). The Canadian Association for Cooperative Education (CAFCE) defines 'cooperative education' as "a program that formally integrates a student's academic studies with work experience with participating employers" (CAFCE, 2005, p.1).

The tertiary education sector in New Zealand is changing with increasing emphasis now being placed on the relationship that institutions have with industry-based stakeholders (MacDonald & Melchior, 2008). Professional and vocational preparation is increasingly a part of many tertiary qualifications and one strategy to address the learning and teaching that needs to occur in such initiatives is to introduce a cooperative education component into the qualification. In doing so, cooperative education can also address the key goal in the Tertiary Education Strategy 2010-2015 (Ministry of Education, 2010) of building a competent and skilled workforce which is part of the knowledge-based economy.

This research aims to investigate the extent to which the benefits of cooperative education are perceived by the students aligned with the skills outlined in the Bachelor of Applied Management (BAM) Graduate profile. The BAM is offered by the Faculty of Business and Information Technology (FBIT) at Manukau Institute of Technology (MIT) has incorporated a 60- credit point cooperative education project in its curriculum. This Project is the capstone of the BAM that students normally take in their final semester of study in a workplace setting in which they require to apply their knowledge and skills. Students reflect on their learning experience in the workplace and prepare for their future employment through professional practice components completed prior and during the placement. Academic support process is in place to provide assistance to the students while they carry out a significant work component for the host organisation. These activities are normally drawn from the field allied to their major. An academic supervisor provides overall guidance and closely monitors each student project. A mentor from the industry also provides assistance to the students.

The Bachelor of Applied Management with the inbuilt work-integrated learning components together with its multiple and adaptable major structure built upon a common base is well suited to the diversified industry mix of the Auckland region. The aim is to provide graduates to those industries that characterise the current employment market compared to the previous degree Bachelor of Business that had no industry project component in the programme. MIT will be able to strengthen the focus on employment outcomes for students in line with Tertiary Education Strategy (2007) and contribute to the regional and national skills development and growth.

The main objective of the Faculty of Business is to be responsive to the workforce demands by preparing 'work-ready' graduates. MIT graduate capabilities are a foundation of non-technical skills, knowledge, and attitudes underpinning effective practice in real world situations. The skills encompass character/value attitudes, people related skills and thinking skills. This relates to the demands from the Tertiary Education to meet the education and training needs of the students and the needs of the stakeholders and communities prioritised. Increased importance is also required to ensure that the knowledge, skills, and attitudes are linked with tertiary study are transferred (MOE, 2010).

LITERATURE REVIEW

The key goal of cooperative education at the tertiary level is to apply and integrate theoretical ideas to the work environment (Rainsbury, Hodges, Burchell, & Lay, 2002). Cooperative education experience allows students to learn through a diverse range of experiences that supports changes in their actions and behaviours. Taking part in a 'real life' project is seen as a particularly valuable learning strategy within cooperative education programs that enhances student learning and prepares students for the challenges they may come across in the workplace (Fleming & Eames, 2005).

Cooperative education facilitates personal development by giving opportunities to students to take responsibility that builds confidence and the use of initiative. The nature of the applied project also gives the opportunity to students to apply a range of technical skills and knowledge that they have learnt during their studies, yet also develop a wide range of new capabilities (Fleming & Eames, 2005).

Workplace research found that industry and graduates value highly the inclusion of a substantive industry integrated project in a degree and graduate diploma programmes (Canadian Association for Cooperative Education, 2005). Industry and graduates explicitly support emphasis on interpersonal skills, teamwork, leadership skills and communication skills in every degree irrespective of discipline. The BAM programme serves students from a variety of backgrounds and intends to prepare students for work in a broad range of business-oriented industries. There is a huge importance of industry/workplace projects and the need for graduates to have communication and soft skills as well as the need for adaptability in the workplace. One of the reasons why MIT selected this degree is the extent to which soft skills, communication and work-readiness is reflected in the graduate outcomes and content of BAM programme. The Cooperative Education Applied Project is particularly important for ensuring that students can integrate theory with practice and are 'work-ready'.

Bachelor of Applied Management graduates are expected to acquire the following graduate capabilities from cooperative education project (Manukau Institute of Technology, 2012):

- Decision making skills, for example, improve problem solving skills, enhanced decision making skills;
- Communication skills, for example, improve oral communication and written skills;
- Soft skills, for example, improve interpersonal skills, work effectively in group situations as a leader or a follower;
- Technical skills, improve technological skills;
- Management skills, able to plan, take responsibility for tasks; and
- Develop new ideas, for example, develop critical thinking, including analysing, evaluating and critically reflecting on information.

The cooperative project gives the opportunity to students to apply a range of technical skills and knowledge that they have learnt during their studies, yet also develop a wide range of new capabilities (Fleming & Eames, 2005). On completion of the project, students present the project outcome to their academic supervisor.

In a student reflective learning case study, Martin et al. (2010) identifies the following key themes relating to the benefits of reflective practice:

- Students gained self-confidence and communication skills;
- Students showed initiative in their personal planning and organisational skills;
- Students gained industry business knowledge and customer service management skills; and
- Students engaged in professional networks and professional ethic.

Cooperative education helps in critical thinking and reflective practice. For example, when students engage in cooperative education they are able to identify an issue, structure a solution, implement the proposed solution and evaluate the outcome, it challenges students to obtain a variety of resources available to them. The nature of cooperative education intends to increase student learning, in addition the action research process offers students to apply problem-solving tool that particularly seeks to incorporate practice and theory. The students are challenged not to just agree to the current practice but to find methods of improvement, to implement such

methods and to assess the outcome. According to Ferkins and Fleming (2006) the collaborative experience facilitates a shared solution between the organisation, client and student

METHODS

This is an exploratory study of the student perceptions of the benefits of cooperative education. Data was collected from the first cohort of students enrolled in the Cooperative Education Project BAM. A structured questionnaire including a Consent Form and Participation Information Sheet (PIS) was circulated among all the cooperative education project students at MIT to elicit their opinions on their projects. The total number of students who were enrolled in the cooperative education project in Semester 2, 2014 was 45.

A consent form, participation information sheet, and questionnaire were given to the academic supervisors to distribute to the students together with the questionnaire.

DATA COLLECTION AND FINDINGS

A structured close ended questionnaire was circulated among the BAM students undertaking the cooperative education project. The questionnaire was designed using a 5-point Likert scale. The Likert scale is designed to examine how the students rate the cooperative education project in achieving the graduate capabilities. The 5-point scale has the following anchors: Strongly Disagree (5), Disagree (4), Neutral (3), Agree (2), and Strongly Agree (1) (Sekaran, 2009). Thirty five students out of 45 responded to the questionnaire (Table 1).

TABLE 1: Showing level of agreeance to the statements asked to the participants

		Disagree (%)	Neutral (%)	Agree (%)
1	Improved oral communication skills	10.3	17.3	72.4
2	Improved written communication skills	13.8	13.8	72.4
3	Improved interpersonal skills	10.7	17.9	71.4
4	Soft skills have improved	10.0	33.3	56.7
5	Improved decision making skills	13.8	27.6	58.6
6	Enhanced problem solving skills	10.3	17.3	72.4
7	Able to plan better	13.8	6.9	79.3
8	Took responsibility for the tasks performed	7.4	7.4	85.2
9	Developed new ideas	6.9	10.3	82.8
10	Improved technological skills	13.8	13.8	72.4

CONCLUSION

Table 1 indicate that the students perceive the cooperative education project as contributing to enhance the skills outlined in the graduate profile. The results of the survey suggest that students' experiences with the cooperative project were mostly positive. Eighty five percent of the students believed that they benefitted most from taking responsibility for the tasks they performed during the industry attachment. These were the final year mature students who took their studies seriously, hence they were able to plan better and develop new ideas. However, less than 60% students perceive that their decision-making and soft skills were improved, both are important key skills required by graduates in the employment. This is an interesting result and will help the BAM programme developers to enrich the existing curriculum that will improve students' decision-making and soft skills. Future research will explore the underlying reasons for the current results in depth.

As outlined in the methodology, the students included in the sample were selected only from one institution (MIT), therefore, the findings cannot be generalised. Future research covering other Polytechnics in New Zealand may enable us to compare the experiences and perception of the students studying in different tertiary institutions across the country.

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Designing and Implementing Work-Integrated Learning within a Computing Degree Course

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Applying the concepts of work-integrated learning (WIL) has provided an opportunity to embed real work experience within a programme. This approach has enabled learners to apply their learning in a more authentic manner (Martin & Hughes, 2009). Traditionally, within a computing qualification, WIL has been in the form of an internship or capstone project (Cleland, Snell-Siddle, & Steele, 2010). This internship and project has typically occurred at the end of a degree, where students are required to pull together their learning from various courses into one applied assessment and course. It has been acknowledged however; that an embedded work experience throughout a qualification is more beneficial to providing a more rounded learning experience (Cleland & Steele, 2015; Skelton, 2015). Embedding real work practices and experiences within each standalone course, however, can be difficult. WIL traditionally requires students to apply a range of abilities that may span the spectrum of courses and this makes it harder to cover specific learning outcomes related to specific standalone courses. Some courses, such as programming lend themselves reasonably well to such a work-experience approach. While other courses, that only touch on one aspect of the software development process (such as design) can often be more challenging, since it can be difficult to extract only one aspect from the overall work experience. Therefore, careful integration of WIL is important to ensure that the specific course outcomes are being met as well as maximising the impact of learning resulting from the interaction with the industry.

Ensuring good integration of WIL it is important to carefully consider how to embed the work-based practices within the classroom environment (Nagarajan & McAllister, 2015). The paper outlines how Billett's (2009) framework of pedagogical and curriculum considerations for the integration of WIL was applied to the User Interface Design (UID) course. It described how the framework was used to the integrate WIL within the specific standalone course. The framework provided a structure to embed effective WIL practices before, during, and after the work experience (Nagarajan & McAllister, 2015).

UNIQUE FEATURES

User Interface Design (UID) is a second year Bachelor of Computing Systems course that covers the design principles and techniques of graphical interface design. The course covers traditional Human-Computer Interaction (HCI) and usability techniques and concepts but also adopts a wider perspective of designing interfaces to support effective user experience (UX).

The inclusion of a real industry project within a course as a way to provide industry relevant training within computer education is not a new concept (Cleland, Snell-Siddle, & Steele, 2010). This approach has been suggested as a way to increase educational value but also ensuring learning happened in a controlled, supported, and assessable academic environment (Cleland & Steele, 2015). However, these projects are typically software engineering projects, which lend themselves more effectively to clear deliverables and development. The adoption of an industry project within UID raises issues around the clarity and structure. Since the students will only be working on one part of the software development cycle (the interface design) it can often be confusing for both the student and client to understand the deliverables of the interaction. In addition, the matching of the learning outcomes need to be clearly covered and clearly assessed. Despite these issues the interaction with a real industry project within the course would be of benefit to support authentic learning and provide essential discipline knowledge and encourage transferable generic skills like communication, teamwork and problem-solving (Leong & Kavanagh, 2013).

For the UID course a software development industry client was approached to provide a suitable project. The client identified a suitable system that they were developing for a third party. The system was to be redeveloped from a PC based system to an online web-based system. The students' role would be to evaluate the current design and propose and design the web-based system. The client would then take this feedback and implement this in the development of the system.

THE APPROACH

To support effective integration of WIL into UID course careful consideration was needed on all three phases of WIL (pre-WIL, Table 1; during WIL, Table 2; and post-WIL, Table 3). The following explains how Billett's (2009) pedagogical and curriculum framework was used to design and implement the industry project undertaken in the UID course.

TABLE 1: Curriculum and pedagogic considerations for pre-WIL experiences

Prior to WIL (Billett, 2009)	Approach taken within course
<p>1. Establish theoretical bases for experience in practice settings including developing or identifying capacities in practice settings</p>	<p>Since only one industry client and project was identified it was decided that the project would be arranged into a group project. Students were to work within self-managed teams of 5-7 students to accomplish all parts of the assessment. To support this approach a scrum framework, a popular framework supported by an Agile methodology. This approach was undertaken since it enabled students to adopt clear roles in the assessment and project activities could be negotiated and shared amongst the team.</p> <p>The assessment was focused on getting students to develop their own problem solving skills, with an emphasis problem based education and reflective practice. The scrum methodology of sprints enabled team members to select tasks, clearly share a reflecting on work undertaken provided a clear framework for the assessment. The students were to be self-managed and to work within their teams, however, still be responsible for tasks that they had decided to undertake.</p> <p>In addition, the system was also broken down into three different parts. Each team investigated and developed a different smaller part of the same general system. This enabled the teams to work in unique parts of the system. However, it was required that cross team communication was still required, since there would be overlap within each subpart of the system and students were probably going to experience some of the same issues.</p>
<p>2. Clarify expectations about purposes of WIL, support for WIL, responsibilities of all participants</p>	<p>Learning goals are identified and provided to students in advance to meeting with the client. The learning outcomes were identified and matched to the assessment. Since UID focuses on a specific area within the lifecycle of software development it was important that it was clear what the outcomes of the assessment were apparent.</p> <p>To support this, the assessment was developed into five sprints. Each sprint would require a new scrum master. This allowed students to share the responsibility of the management of the group. The role of the scrum master was to support and facilitate the scrum process. However, the tasks within each part of the sprint would be shared and clearly indicated with the adoption of a sprint backlog. Since the teams comprised of students with different skills and backgrounds, it was up to the individual team members to decide which tasks each member would undertake. After an agreement with others, these task assignments would be recorded in the sprint backlog. These tasks generally aligned with the individual student's' abilities and interests. The teams were expected to be self-organising and managing, and to strongly collaborate throughout the sprint.</p> <p>Since the course focused on just the design of the system. A close relationship with the client was needed especially in terms of meeting and clarifying expectations. The client was made aware that the students were just development a prototype of the system. To keep it easier the client was the software development.</p>

<p>3. Inform students and supervisors and placement sites about purposes, roles and expectations</p>	<p>Careful consideration was made to ensure that the student and client roles were clear and their expectations of each other are aligned. The roles were clarified and explicit with the help of the sprint backlog.</p> <p>Prior to the course it was important that the client was made aware of the outcomes of the project. The overall deliverable of the project was development a prototype of the system. However, since the course did not require any programming ability the form of prototype was in a non-functional low-fidelity prototype with emphasis placed on the interface design and not the programming.</p> <p>The client came into the classroom to engage and explain the assessment. Direct contact with the client was supported, however, the educator often provided as a mediator to ensure the directives and deliverables were understood on both sides of the relationship.</p>
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TABLE 2: Curriculum and pedagogic considerations during WIL experiences

During to WIL (Billett, 2009)	Approach taken within course
<p>1. Direct guidance by more experienced practitioners</p>	<p>In class practicals were designed and established to guide the learners and provide in class interaction and support. The practicals would cover important concepts, tool, techniques to undertake specific sprints students were to work within their teams on various activities that would lead towards the specific deliverables of each sprint.</p> <p>The use of the sprints enabled to focus effort into short stretches of work. These stretches scaffolded on each other and at the end of each sprint a deliverable was submitted for marking, therefore, feedback could be provided.</p>
<p>2. Sequencing and combinations of activities</p>	<p>Structured tasks and activities that provide increasing levels of student learning opportunities and skill development were identified. The course was split into five sprints that each developed and built on the other.</p>
<p>3. Effective peer interactions</p>	<p>The course tutorials were redesigned around teamwork and focused on the project. Tutorials are no longer held inside a computer lab - since they did not support team communication, as communication was limited due to the arrangement of the lab room. Tutorials are now conducted in open plan room with a strong Bring Your Own Device philosophy. The desks were configured into groups and students were encouraged to bring their own devices to work on in the class.</p> <p>Online tools were used to support communication and sharing. A number of Google Plus Communities were set up for students to share and discuss course content and assessment work inside and outside groups. Google Plus was adopted to support this communication. This was also selected, as they were easily accessible from all devices including mobile devices. The first community that was set up was an open access class community. This was set up to enable all students in the class to share and discuss common issues and class content. Separate private communities were set up, one per team, where they could discuss, share and work on their assessment.</p> <p>In addition to the Google Plus communities, team collaboration was supported via either shared OneNote or Google Drives. These were used to share work and support collaboration on their assignments. These resources were also shared with lecturer to support instant access by the lecturer and opportunity to provide instant feedback. Since OneNote and Google Drives are accessible via mobile devices, not only could students collaborate via their mobile devices, the lecturer was also able to get updates and view student work and provide feedback via her mobile device.</p>

TABLE 3: Curriculum and pedagogic considerations for after WIL experiences

After to WIL (Billett, 2009)	Approach taken within course
1. Facilitate the sharing and drawing out of experiences	Throughout the project students were encouraged to reflect on their experiences and work, since this was an important part of the sprint cycle. However, the reflections were largely superficial and were more a way to ensure that lecturer was aware of any issues within the teams. At the end of the project a final reflection from each team was required in the form of an oral presentations. This was a way for the teams to showcase what they did as well as reflect on the overall journey. It provided a way to hold an informal de-brief session.

CONCLUSION

This paper contributes to the discussion of how Billett’s framework can be used to promote good integration of WIL within specific IT courses. We have framed this discussion around Billett’s work on curriculum and pedagogic considerations for good integration of academic and practice experiences. The paper highlights the process and the ways that the industry project was implemented into the course. It also indicates some educational initiatives, such as how agile methodologies and online technologies can help support the WIL and improve quality-learning outcomes in WIL.

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The Internship Paper as an Overseas Experience for International Students

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The offering of an internship paper has opened up opportunities for international students to get work experience while studying in a foreign country. The faculty has now taken additional responsibility to connect to industry to find internship projects for students. With international students, we have become aware of the cultural-related challenges of fitting our students into any internship project even for just a short period of time.

PROGRAMME

The recent introduction of the internship paper in Information Technology (IT) programmes have opened up opportunities for students to work in the industry while they are studying their IT course. The students now have an additional paper apart from the compulsory capstone project paper which gives them the experience of working in an IT project. Both these papers, offered at Level 7 and the third year of the Bachelor's qualification have provided a significant amount of experiential learning by undertaking IT projects for industry clients. However, in case of internship, students working in the industry come under the direct supervision of their employer in their day to day tasks. Students have the basics and are able to learn new technologies and apply them at work. Most pre-requisite papers are studied in the first and second year of their qualification. A significant number of international students study the Bachelor's or Graduate Diploma in IT. Both these programmes offer internship papers that give international students the advantage of including overseas work-experience along with their study in a foreign country.

An internship paper at Post Graduate and Master's level was also offered. The internship at this level was pitched at the research component to allow students critically analyse the concepts and perspectives studied, and give recommendations for issues and problems faced in the industry. Although the paper was offered from last year, we have some early experience of offering it and the expectations of different parties involved – employers, students and academia.

UNIQUE FEATURES

Work related experience has been offered in different programmes and is common in health and hospitality programmes. Students get academic credits and the paper is treated as part of their course work. It is also becoming popular as part of technical courses such as engineering and IT. As an education provider, the quality of the course has to be regulated.

With the new paper approval, there were policies to be followed and clarification required around these. The expectations of the three parties had to be made clear. The course had to adhere to given guidelines and an agreement between all parties had to be drafted. Many students had queries about the course and how they could go about looking for an internship in the industry. Staff managing the capstone project and research projects along with Programme Manager took the responsibility of managing the internship projects. Other academic staff with subject expertise were assigned as supervisors for these projects.

Students could look for a suitable internship project and an academic staff member had to meet the industry partners to scope the project at the right level and credits. Industry partners offered a few internships projects

which students could take. Staff and students felt a rich experience and there are plans to manage the process differently in future.

DISCUSSION

An internship project involved three parties – student, academic staff and employer. The three parties added value to nurture the partnership well. A discussion from each perspective is presented in the light that it will make us understand the internship offering in a better way.

International students

International students come from diverse backgrounds and provide a vast knowledge pool. This adds value to a community and to a business where diverse cultures improve the understanding of the business. International students will value the work experience they have in a foreign country of study and take back fresh ideas to implement in their own country. A great deal of learning will take place in terms of work culture, and students who had work experience in their own country will relate to this experience better than others. Students with no past work experience will learn the importance of professionalism required in their work. Although it is stressed by tutors in their assignment work, many realise it only when they actually work in a real environment. The students were involved in certain phases of the project using their technical skills. Academic study programmes emphasise the importance of soft skills, such as good communication and knowledge of ethics. These were applied without further thought in the internship project. Thus, the experience is a blend of technical and soft skills applications.

It is advantageous to international students to get work experience in a foreign country of study. They can complete a qualification from overseas and get short term work experience at the same time. They value their education here as it is applied, practical and hands on. Many students came with theoretical background but were unable to apply their knowledge in a practical situation. Attention to detail was missing from some students, in the case of practical work.

Some students may plan to take a job locally and live in the country for some time, while others will want to return back to their home country. This is true in countries such as the US where students are returning back to their home country to take engineering jobs (Bhandari & Blumenthal, 2013). In either case, it is an experience that will shape their future.

The introduction of 'Study Abroad' programmes has generated interest from German and Asian students to study part of the course with an internship paper included. The students intend to take back academic credits along with the experience of studying and working in a foreign country.

Industry expectations

Internship has created new job, business and funding opportunities through collaboration between academic institutions and industry (Lee, 2000). Complex problems in industry could be solved through these collaborations. The industry looks for fresh graduates for recruitment, and young graduates bring in innovative solutions by applying the theory they have studied in classrooms.

The expectations from an employer were close to that of an actual job. Students with good academic background and who could demonstrate practical knowledge were able to receive the internship placements. Communication and soft skills also played an important role in filtering student applications. The interpersonal skills of international students may differ to those of domestic students, which is a disadvantage for international students.

Students were expected to have a positive attitude, as many clients expressed it when meeting with academic staff. The employer was ready to train these students if they have the right attitude and eager to learn new technologies.

Academic expectations

All internship projects coming through had to have a clear job title and description. Once an internship was assigned to a student, a proposal was written by the student to define the scope and requirements of the job. Although paid internships were preferred, sometimes the industry client struggled to get extra funding for the new role. A safe environment for the student was sought that included a desk, computer and meal breaks. Students studying internship should have a mentor at the workplace and an academic supervisor. Communication between the three parties was maintained in a logbook and students got signed off for the task assigned each week. These weekly progress logs were important to keep track of the internship work. A reflective report and presentation at the end ascertained the learning achieved through the internship. Students who had come with mostly classroom knowledge, and experience only of academic assignments and projects, were now applying their skills in a real work environment. It gave academics pride and confidence in graduating the students.

Students were encouraged to take the internship paper. The staff made connections with the industry to get more internship project for students. The client base from capstone projects was a starting point and employers had the opportunity to employ these students on a short-term basis for the duration of the internship.

With the diversity in cultures among students and mentors, the study pathway will help students adjust to working in a global work environment wherever they wish to go. Mentors should have empathy and understand the different psychological adjustments they may go through (Zhuang, Wu, & Wen, 2013).

Student expectations

Most students wanted to enrol in an internship, however, they had to apply for the internship project as they would apply for a job vacancy. There was disappointment with some who could not get through the selection process. Students with good grades, good technical, practical knowledge and good communication skills were successful in being selected for internship projects. Although paid internship was expected, the students took the internship for they knew the work experience was of greater value to their career in the IT industry. This left some students out of pocket for money as most other students could work part time in non-IT roles and get paid. Internships taken during summer break time were convenient to all parties as there were no regular classes and international students could work full time. International students were aware that during term time they were only allowed to work 20 paid hours per week. They also may have to study a paper with internship paper to complete full time study in a year. Making variations to student's visas could be an option in future.

Students who took the internship were enthusiastic and optimistic of the opportunity given and looked forward to learn and apply their skills.

IMPLICATIONS

The early experience of offering internship programmes through the polytechnic has proved that students who had good technical and communication skills had better chances of successfully taking part in an internship in industry. If high performing students could get an opportunity to take these internship projects, how could other students achieve a similar experience? In consolation, the compulsory capstone project is also able to give IT students the experience of an IT industry project. However, students taking the internships had the advantage of gaining additional work related experience in their final year of study. Although the practice of giving academic credits for the internship project was only recently introduced in our programmes, it has been offered in other institutions (Skelton & McLay, 2007). Work-based learning is applying what is studied in the classrooms and bringing that knowledge to fruition.

To foster a good background in students who take the internship paper, a balance of core papers on technical and soft skills need to be taken in the first year of study. Students are allowed to choose optional technical papers at a higher level. Papers such as Project Management and Communication are made compulsory for all programmes

of study. There are windows of opportunity to improve the academic course and its delivery through industry engagement that is expected to be useful and relevant to the IT industry.

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Are Internships Less Academically Robust than Final Projects? Answering the Critics

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This paper discusses the issues involved when academic leaders are called to justify the use of the internship model in terms of providing sufficient evidence for academic rigour for final year capstone industry-based learning. Previous research has already discussed the benefits for students undertaking internships including increased work-readiness and more successful direct graduate transitions within the same organisation (Jackson, 2013; Skelton, 2009). In some tertiary environments and programmes, there still appears to be a preference for capstone projects due to a perception that these demand clearer academic output and rigour from students.

The discussion comparing internships to projects builds on previous research that examined the characteristics of each type (Steele & Cleland, 2015) and it is hoped that this further discussion may help academic teams in defending the academic rigour of internships and work experience to accreditation and auditing panels.

Although most academics involved in work-integrated learning (WIL) and cooperative education, in both research and practice, are satisfied with the academic performance and standards achieved by students in this area, there can be challenges in providing full evidence of all academic requirements particularly for the scrutiny of external audit bodies.

THE ACADEMIC EVIDENCE

Accreditation panels, industry advisory representatives, and academics have varying views on the academic robustness of internship experiences. The paper draws from research in the WIL area where researchers have compared the differences in nature of the two types of programme (Steele & Cleland, 2015).

From the critic's perspective, it can seem to be evident from a superficial judgement of comparing assessment evidence between a capstone project (e.g., a completed website and a 100 page requirements report) and evidence from an internship (e.g., a 40 page descriptive report, poster and industry feedback) that the capstone project appears to be more difficult, meets the learning outcomes more precisely, and entails more work by the student. However, this evaluation may not take into account the 300 or 400 hours of pressured, technically advanced work within a professional workplace by an internship student.

Previous research has also examined the influence of WIL assessment influenced by industry which is often balanced alongside academically based assessment. This balance between academic and industry evaluation can reflect the "tension between the processes and priorities of the academic world and the pragmatism and priorities of the corporate/industry environment" (Skelton, 2006, p.42). An internship assessment schedule typically combines a partnership approach between academia and industry which is itself a reflection of the knowledge society (Jacob, Hellström, Adler, & Norrgren, 2000). Bosco and Ferns (2015) discuss the model of 'authentic assessment' which takes into account the professional activity performed by students in workplace settings. This is an area where external moderators and accreditation representatives may need some education on the authenticity of workplace supervisor evidence which is meeting assessment criteria. This can also be proven and reinforced by the cooperative education literature.

The comparison study by Steele and Cleland (2015) also appeared to show that there are indeed differences between internships and projects, particularly in student achievement outcomes, even although both types may be stemming from the same course prescription. Therefore, institutions who offer both types under the one official course may need to consider creating separate courses for each to avoid learning outcome matching

confusion. However, for the capstone concept it is probably preferable to have one main overall target for the students in their final year whether they choose project or internship.

INTERNSHIPS MAY EXHIBIT LESS WRITTEN EVIDENCE: THE EMBEDDED MINI-PROJECT

By their very nature, internships require students to undertake embedded tasks in the workplace and much of this activity is expended on an hourly, daily basis. The evidence for this activity may be in the form of a reflective journal, blog, vlog, poster, industry site visits, and reports. So from the viewpoint of an external moderator or auditor, the actual substance and depth of the daily internship work is not such an easily identifiable exhibit in the way that an output from a capstone project can be.

One remedy for this seeming deficiency is to require a small project/s within the internship so that more concrete evidence can be recorded. A mini-project can also meet the needs of the industry client, particularly if the intern has "down-time" from task-based duties.

EXTERNAL ACADEMIC AUDITING

External NZQA, or Degree Monitors, or other external audit panels do frequently focus on the WIL component of a degree for a number of reasons including the fact that it is often a pivotal final year full semester based 45 or 60 credit capstone paper, also because it is different in nature from a conventional academic subject. The experience of NZQA workplace assessment is often at the unit standard level 2 or 3 where tasks are very specifically defined which may not suit a management or IT internship paper at Level 7 where a wide range of tasks may be encountered by the student. Vocational or industry certification panels may also suffer from a narrowly technically oriented focus and may not wish to allow a wide range within the learning outcomes.

Senior academics themselves can often retain a bias for capstone projects due to their experience in marking requirements reports and running their capstone projects as large-scale versions of their subject specialty papers. In these cases, the internship type may represent a loss of control by the academic. "The lack of control over the workplace environment has led some commentators to question the academic integrity of internships" (McNamara, 2010, p.3).

If some learning outcomes within an internship are being met from the industry client feedback, then does the academic supervisor need to verify this evidence themselves as well? These are typical questions that may arise from an external moderation process and it is advisable to be able to point to a range of evidence for clusters of learning outcomes.

MISPERCEPTIONS ON WHAT CONSTITUTES AN INTERNSHIP

In New Zealand, internships are most often undertaken within the context of an applied degree at a University or Institute of Technology and so benefit from additional oversight. In other countries, such as Australia or the USA, internships can often be performed after graduation and interns are often performing fulltime work with no or low wages while competing for limited permanent employment without any supervision by a tertiary institution. This has the effect of discouraging some institutes to embrace the internship concept due to this reputation and retain their preferred main capstone option of the final project.

DISCUSSION AND CONCLUSIONS

There would appear to be good potential for tertiary institutions to maintain or add the option of internships as an alternative to their capstone projects.

For institutes already offering internships they may benefit from ensuring that assessment and more concrete artefacts are included as evidence that internship programmes are as robust academically as other cooperative education alternatives such as the capstone project. These benefits would include more readily and transparently meeting audit requirements from degree monitor visits, external accreditation panels, emerging blended delivery approval from NZQA, and other external moderation requirements.

Although the field of WIL and cooperative education has matured, and has a rich history of research-based evidence of the effectiveness of this type of education, there are still parts of the tertiary education sector who are less convinced, along with more detailed audit requirements from national and international bodies that may require more evidence of authentic work-based education meeting learning outcomes and academic robustness within applied degree programmes.

Further research examining the graduate destinations of students who had undertaken internships compared to those who had completed capstone projects may be useful in further evaluating the value of each WIL type. The examination of external audit panel reports of various degrees at tertiary institutes may also help faculties or schools to prepare academic documentation to prove academic robustness of internship papers.

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Psychology Interns, Alumni and Field Supervisors: Collaboration via Online Community of Practice

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Professional training programmes in psychology are not typically identified as Cooperative Education. However, the internship is very much a partnership between workplaces and educators. In Aotearoa New Zealand, the psychology internship occurs after completion of Masters level training in the discipline and requires 1,500 hours of supervised practice in conjunction with university-based learning. Workplaces provide interns with a position that is recognised as a learning opportunity shaped across the year in terms of workload, complexity, and responsibility. The University provides complementary academic training in the application of the discipline's knowledge-base to practice. The key operational linkage is between the designated university supervisor who promotes connections between academically understood principals of practice, and the workplace psychologist supervisor who typically takes responsibility for day-to-day oversight of the intern's work with clients to meet organisational requirements.

The Postgraduate Diploma in Psychological Practice (PGDipPP) at Massey University is an internship programme preparing students for registration under the "Psychologist" scope. Essentially, this means that such a psychologist may work in any role for which they are competent but may not use one of the defined vocational scope titles. This programme is unique in that typically all students in a given cohort are working in different types of psychological practice, for example, addiction, child protection, disability, health. Although discussion of the framework of the curriculum is beyond the scope of this paper, it is relevant to note that being both integrated and competency-based rather than a more traditional content-based curriculum provides common ground for a diverse cohort. Interns often enter this programme with experience in the helping professions, and internships are constructed across a wide range of sectors utilising psychologist's services across the country. Under these circumstances, the process of becoming acculturated in the new profession has warranted close attention and development by the PGDipPP programme.

To maintain competence as a professional over the span of a career requires more than proficient and up-to-date application of specified theoretical and technical knowledge, skills, and techniques. Bowman (2013) argues that it is more about a way to *be* than it is about what you do, a perspective that highlights the centrality of the formation of a particular professional identity. Having a rich array of professional connections is widely recognised as a key strategy for both developing this professional identity and maintaining professional health. To that end, professional trainees in psychology are typically alerted to the importance of becoming socialised into the profession, learning its culture, norms, and expectations, and developing a professional network.

In this context, network refers to the broad-based group of colleagues with whom one feels comfortable to have meaningful professional conversation, to exchange ideas, learning, and enthusiasms. An ideal professional network sustains and nourishes not only professional identity but also shared perspectives, values, and passions. Having such a trusted network is especially important during early stages of one's career when it is more likely that situations will arise that outstrip developing professional awareness, insight, knowledge, and skills.

Although reported applications of the Community of Practice idea typically focus on the social construction of knowledge the primary focus of the PGDipPP's innovative application is on the construction and facilitation of a virtual professional network. This network transcends boundaries of location, type of psychological practice, and level of experience.

COMMUNITY OF PRACTICE: CONCEPT AND PURPOSE

Originally conceived by Lave and colleagues, a community of practice has been conceptualised as creating and sharing knowledge among members who have mutually defined practice, beliefs, and understandings, and are informally bonded through shared expertise and passion for a joint enterprise (Lave & Wenger, 1991; Wenger, 1998; Wenger & Snyder, 2000). Interns and graduates of the PGDipPP, along with the psychologists from whom they receive supervision and support, may be identified as comprising this sort of group.

Alongside gathering knowledge and learning skill sets for practice, is the requirement for socialisation into the profession. Central to this is professional identity, which Brott and Myers (1999) described as the process of developing a conceptualisation of self in relation to a certain profession that serves as a frame of reference for the execution of professional role and duties. A well-supported theory that may provide an appropriate framework is social identity theory (Tajfel & Turner, 1979) in which individual identity and group membership identity are bipolar anchors of social behaviour. More recently, in the field of social work, Miller (2010, 2013) framed professional socialisation using structural functionalism and symbolic interactionism. Another productive framework may have emerged in Chiu, Kwan, and Liou's (2014) use of cross-cultural psychology's theory base to examine the notion of distinctive disciplines and professional cultures.

Research regarding professional socialisation/ identity is scant. However, with respect to how educators may structure experiences to foster the development of professional identity, Murdoch, Stipanovic, and Lucas's (2013) qualitative analysis supported the use of a co-mentoring programme. Johnson, Morgeson, Illgen, Meyer, and Lloyd (2006) investigated the functions served by identification with employing organisation, workgroup, and profession, and found all were important predictors of job satisfaction, which is linked to job performance. Such studies, and the theories that support them, seem to support the notion of professional socialisation occurring through avenues of self-identity, identity with peers and colleagues, and with work and workplaces.

In this project then, we seek to explore the utility of a community of practice, not directly for knowledgeable-skill learning (Lave, 1991) *per se* but rather with an explicit focus on the development of a robust professional identity in the context of interactions, albeit virtual, with a referent group diverse in depth and areas of experience. Thus, education may be connected with other components relative to growth of identity of oneself and with others in the field, and a scaffold of continuous, supported, distinctive, and individual, learning nurtured.

CREATING THE COMMUNITY OF PRACTICE

The impetus to develop this community of practice to scaffold professional network development for PGDipPP participants emerged naturalistically. In the course of responding to various inquiries from both students and graduates, the coordinator found herself in a role not unlike that of a telephone exchange operator of yesteryear, or in modern networking parlance, operating as a "connector". As the graduate pool has grown, this connection function has become increasingly complex, and decreasingly tenable. Additionally, it was always limited by such factors as the coordinator's personal knowledge of the available pool, any personal bias, memory, and reliance on individuals to overtly ask for or offer pertinent information. There was no opportunity for the sort of connections that arise from peripheral participation in a conversation, real or virtual. There was also extremely limited opportunity to engage the considerable expertise of field supervisors, especially those not supervising at any given point. Although most supervisors enjoyed working with interns, following the internship year, it was rarely appropriate to draw on the wealth of experience represented within the pool of field supervisors.

It seems likely that some particular conditions of programme culture, cohort structure and specific teaching approaches served as pre-dispositional factors in the emergence of interns' and graduates' interest in making connections with one another. Graduates spontaneously offered to assist current interns, with a frequent reflection being something like: "I wish there had been someone like me – for me – when I was an intern, so I would be happy to help". Both interns and graduates occasionally asked if there was "someone" who had specific experience or expertise. These connections were facilitated directly, through the programme coordinator

and staff being aware of both a need and of an individual who might be able to provide some information or short-term support. As a result, a variety of cross-cohort connections were made.

Examples of some facilitated interactions between individuals have included: how to thrive in internship year; overcoming oral examination anxiety; observing session work; specialty case consultation; additional rehearsal of case presentations; sharing explanations of how to learn a particular skill, such as structuring assessment interviews; making the transition from a cognate paraprofessional identity to a psychologist identity; application of a particular aspect of a specific approach to therapy; sharing experience about working with a particular client group or condition; sharing specific resources for client work; clinical time management; finding a supervisor with particular expertise; job search/preparation for job interview; information about the nature of work in particular settings.

Although all of the examples listed are discussions that also occur as part of formal supervision from both the field supervisor and university staff, often a recent graduate can offer a struggling student a perspective that better addresses their need. Students have also valued the reassurance they felt from a recent graduate admitting they had, or knew a colleague who had, a similar difficulty. In addition, as the number of graduates expands, so does the diversity of expertise that becomes available in the widening group that has completed internships in a tremendous variety of roles, specialisations, and locations.

MYPORTFOLIO AS A COMMUNITY OF PRACTICE PLATFORM

Although designed primarily as a platform for asynchronous distance classroom learning throughout New Zealand schools, MyPortfolio is also proving adaptable to the sharing and professional socialisation needs presented by a community of practice. Four logistical parameters were particularly influential in the choice of this platform for constructing a community of practice: security for discussion of case material, which is critical even when anonymised; capacity for the potential size of community; financial sustainability over time, and; capacity to include non-university members, as field supervisors are generally in this category.

MyPortfolio allows:

- Mixed closed membership (students, graduates, field supervisors, university staff);
- Forum discussions;
- Personal private messages between members;
- Notice-board (e.g., forthcoming professional development opportunities not specific to the PGDipPP);
- Sharing professional resources (useful web-sites, client worksheets, etc.);
- Other discrete areas for posting targeted information (e.g., Tips for Students, or 2010 Cohort Updates);
- Individual private data storage space from which material can be shared with designated members of the community, or exported elsewhere (e.g., students develop an internship plan, which may be shared with field and university supervisor, and which then articulates into the documentation required for meeting the Continuing Competence Programme for registered psychologists, and may be sent to the Psychology Board); and
- Individual pages that may be constructed to link with other professional social media sites (e.g., MyPortfolio and LinkedIn).

SUMMARY

The PGDipPP programme has brought specific opportunities and challenges to new psychologists joining the ranks of psychology in New Zealand. One of the challenges for some, is accessing a breadth of opportunity for socialising with other psychologists who may serve as models and mentors, and who may contribute to the development of a shared identity in the field. This may be due to geographic location, area of specialisation, or any number of other factors. The growth of a virtual Community of Practice holds promise for addressing this challenge, and bringing further opportunities to this programme.

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‘The Ends Justify the Means’: Reconciling Reputation Management with the Meaning of Work in Cooperative Distance Education

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The purpose of this paper is to make inferences about the meaning of work that helps to contextualise the teaching of a communication reputation management paper by distance at tertiary level. In liberal democracies the two common ideals are that we own our own labour and we own our own freedom, we can exchange our freedom for labour, and our labour for money, but most people need to sell their work to make a living. The two ‘founding thinkers’ of modern Western economics, John Locke (1632-1704) and Adam Smith (1723-1790) both knew that people are mostly not paid for what they produce, rather they are paid or compensated for their loss of freedom at work. The loss of a freedom involves, a restriction of their liberty and some form of control or deliberation over their actions during the time they are working, for employers labour at work is a form of ‘value added’. Thus a professional or tradesman’s knowledge derives from their ability and knowledge about how to do something, and a worker’s strength derives also from their ability to perform a particular task that is valuable to the employer, and the same for a manager of employees. While they are carrying out this task they are also not free to do something else, and so they are compensated for it, because it frees the employer from having to do it, and so on.

With new industrial technologies, people developed internal notions of time that were in accordance with the shifts of machinery. So with the proliferation of more modern ICT technologies, it has in some sense given us more use of time, but in others made us, 24 hours a day, 365 day employees. Our culture tends to valorise people who work all the time. By comparison, the English work leisure comes from the Latin *licere* – ‘to be permitted’. But consumerism and credit reliance reinforce the grip of work on people, and consumption creates the need to work, even when desire to work is weak (Ciulla, 2000, p. 200). For some people, the reasons why they work are more important than work they do, if this wasn’t the case and the work was more important than the reasons people do it, then everyone would be a comedian. Free society gives us choices, but our behaviour is determined by what others think we should want, and increasingly under the ‘clientalism’ ethos, employers may treat employees like customers (Ciulla, 2000, p. 203). Arguably, most meaningful jobs are those that people directly help others or create products that make life better. Consequently, work makes life better if it helps others, alleviates suffering, eliminates toil, makes us feel healthier and happier, or aesthetically or intellectually enriches people and improves the environment (Ciulla, 2000, p. 225). We live in extraordinary times, people have an array of choices about where they live, the types of work they may do and what to buy, while machines do much of the drudgery. However, the relationship of people to their work has never needed more prominence in discussions about the market place.

As Abraham Lincoln (1809 – 1865) suggested, “character is like a tree and reputation like its shadow. The shadow is what we think of it; the tree is the real thing” (cited in Doorley & Garcia, 2011, p. 2). A truism of reputation management is that communication can’t make a bad product good and it is all too easy to confuse behaviour and performance with communication. So while common objectives should be in synchrony with business objectives, they are distinct from them (Doorley and Garcia, 2011). Thus, as Doorley and Garcia (2011) state, “the challenge of professional public relations is dealing with truth, falsity, and ambiguity, and managing through the muddle with integrity” (p. 39). Therefore, the integrity of a public relations practitioner is exercised in using professional judgment and promoting statements that are true and beneficial to the client (Doorley & Garcia, 2011).

There are five facets to media relations: corporate media relations, concepts about the corporation as whole, media relations (stories featuring individual products), marketing public relations (coverage of company,

products, issues and people) and financial media relations. Each has a distinct function in each geographic region or company (Doorley & Garcia, 2011). Certain items of information – proprietary information, personal information, information that is not fully developed or information that would threaten security are protected (Doorley & Garcia, 2011). But reputation management is also concerned with both positive and negative disclosure (the ‘reach’ or distribution of information) by a company in compliance with laws and regulations and its stakeholders. Any conversation about company reputation takes place in a larger framework of the market conditions.

Since the 1970s, there has been a growth of service industries and a rise of service occupations at all levels; the growth of technological changes, progressive increase in computer power and software, new ideologies of management, the rise in production of goods and services; globalisation of trade (Green, 2006, p. 6). There has been a corresponding shift from a resource-based to a knowledge-based economy, revolution in information and communication technologies, changes in market relationships. But the modern labour market context may be informed by concepts of gender equality, health and safety at work, flexibility and security, inclusion and access to the labour market, the organisation of work/life balance, a dialogue about diversity and non-discrimination and work productivity and performance (Green, 2006, p. 21). For many the re-distribution of wealth is more of a ‘trickle-up’ rather than ‘trickle-down’ effect. In today’s technological world, increasingly people are captured by the demands of communication – voicemail, email, pager and mobile phone; it is increasingly a portfolio society, with people assembling together collections of fragmented bits of work, rather than have a single career path all their working lives.

Paugam and Zhou (2007) point to ‘labour market segmentation’ theory as highlighting the central place of issues of job insecurity in work discussions – the polarization between a primary sector of skilled, protected ‘core’ workforce who hold regular work contracts; and a secondary sector of low-skilled, less protected employees who hold non-defined and changing work contracts (p. 180). Growth of indicators of job insecurity include, the increase of temporary work, a focus on short-term contracts, and higher level of employment fluctuation. The 90-day trial period employment law period and consequently the threat of dismissal may destabilise an important periphery of the workforce and heighten anxiety about the future (Paugam & Zhou, 2007, p. 202). Under such conditions of high labour-market volatility, flexible learning is an attractive option for those who are transitioning between employers and skill-sets. Ironically, job security and productivity are strongest in countries in which class differentials are lowest. To gain practical qualifications, upskill and retrain on the job, people increasingly turn to distance education.

As Farajollahi, Zare, Homozzi, Sarmadi, and Zarifsanee (2010) argue that distance learning may contain up to six features. These include: Telepresence, flexibility, communication, active-learning, collaboration and motivation (p. 65). The modifiers of class contact are largely the online teaching infrastructure, asynchronous learning and the use of products such as *Moodle* or *Blackboard* for learning management system teaching practices. There are considerable benefits such as:

- Real-time communication,
- Asynchronous communication - 24/7 global environment,
- ‘Virtual’ class collaboration,
- Electronic publishing and dissemination of information, and
- Real-time access to research resources and results.

At the centre of any practice of distance education is a mediating artefact – a tool, technology, learning device, content material. As Engeström (1999) suggests mediation by ‘tools and signs’ “breaks down the Cartesian walls that isolate the individual mind from culture and society” (p. 29). The main difference between contact learning and distance learning from one perspective is simply the centrality of the mediating artefact in distance learning (albeit by tool, technology, course material or text). If you are interested in issues of work rationale and motivation, then I highly recommend that you study a communication reputation management paper with the

Open Polytechnic – it will help to reconcile you with the demands of the labour market and show you ways to enhance your business image and that of your company.

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Don't get Left Behind: Using LinkedIn and Online Technology to Enhance Work-Integrated Learning

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BACKGROUND

This paper explored the use of LinkedIn, a professional social media platform, and its ability to be able to enhance students' Work Integrated Learning opportunities. It focuses on the ability of LinkedIn to support students as they record and reflect on their work placements, as well as help them provide connections and build confidence in linking with industry.

Students and practitioners are living in a time of massive change around the future of innovation, technology and employment (Frey & Osbourne, 2015). There is an increased focus amongst tertiary institutions that WIL is often offered as the solution (Oliver, 2015). There has also been a rise in the use of electronic portfolios to record and support student reflection around their work integrated learning (Koch, 2010).

LinkedIn is a well-known professional tool for recording work experience, developing an on-line presence and making connections with people in industry. While students are often highly experienced internet users (even digital natives), when it comes to applying these tools for the benefit of their careers they are often inexperienced (Longridge, Hooley, & Staunton, 2013).

Longridge et al. (2013) developed the concept of Digital Career Literacy which is the ability to use the online environment for the purpose of enhancing our careers. They composed 7 Cs of Digital Career Literacy with two of these, connecting (building relationships) and curating. The 7 Cs of digital career literacy are:

1. *Changing*: describes the ability to understand and adapt to changing online career contexts and to learn to use new technologies for the purpose of career building;
2. *Collecting*: describes the ability to source, manage, and retrieve career information and resources;
3. *Critiquing*: describes the ability to understand the nature of online career information and resources, to analyse its provenance and to consider its usefulness for a career;
4. *Connecting*: describes the ability to build relationships and networks online that can support career development;
5. *Communicating*: describes the ability to interact effectively across a range of different platforms, to understand the genre and netiquette of different interactions and to use them in the content of a career;
6. *Creating*: describes the ability to create online content that effectively represents the individual their interests and their career history; and
7. *Curating*: describes the ability of an individual to reflect on and develop their digital footprint and online networks as part of their career building.

Longridge et al. (2013) suggested that the online environment can be used variously by career workers; 1) to deliver information, 2) to provide an automated interaction, and 3) to provide a channel for communication. Given that people experience their careers as a blend of online and onsite experiences, it is highly likely that they will seek, expect and respond to career support that recognises and utilises the potential of this blended environment.

Until recently there has been limited research around student's knowledge, confidence, and use of digital technologies in a New Zealand context. There has been none around using LinkedIn in a WIL context.

A survey conducted with Bachelor of Communications students at Massey and Unitec looked at their use of digital technology and LinkedIn in relation to their careers. Of the 130 respondents, one of the consistent themes was that students had the lowest levels of confidence in building professional networks online. That even though it was deemed as highly important, it was an area that they struggled (Tui & Verhoeven, 2015).

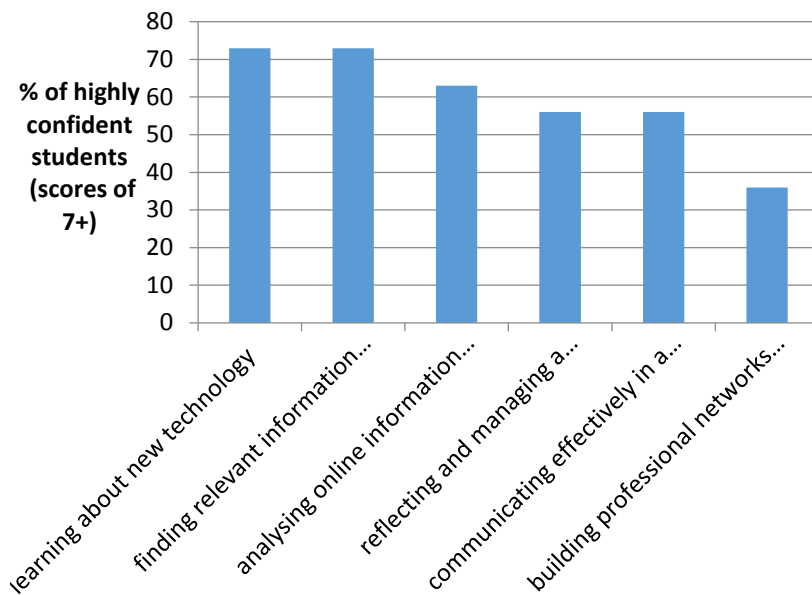


FIGURE 1: Student rating of confidence in using digital technology

In order to not be left behind, this paper argues that for the sake of our students, there are opportunities around the use of tools such as LinkedIn to help students build confidence in growing industry connections and communicate their experiences in an attractive way to potential employers.

UNIQUE FEATURES

There is an opportunity to support students in how to build their professional relationships online. This had the lowest level of confidence yet was still rated as extremely important. Thus one opportunity for practitioners is to help encourage, develop and support students around the use digital platforms such as LinkedIn, Facebook and others that allow students to do these things.

The employability focus of using a tool such as LinkedIn in a WIL context is unique. While the link between WIL and employability has been established, the incorporation of platforms such as LinkedIn has not been addressed.

The discussion around building student confidence in building industry connections has not been discussed in depth. While in many cases they are encouraged to find their own opportunities, they are sometimes given limited tools and education on how to do this.

Some ways in which LinkedIn can be used are:

- Build connections with Alumni, past employers, academic staff, industry connections and other contacts that can assist in the progression of one's career;
- Take control of one's digital brand and present a professional image when, not if, a potential employer Googles them;

- Communicate and reflect on experiences so that they can convey the skills developed and outcomes reached as part of a work experience opportunity;
- Join relevant groups and write posts that raises awareness within a professional community;
- Highlight achievements through the use of pictures, video and links to other websites;
- Convey a high degree of self-awareness through the choice of an appropriate profile picture and the skills, experiences and strengths highlighted in the profile; and
- Provide endorsements and recommendations of previous work by others, adding credibility to experiences undertaken.

Career services teams can consider working more closely with departments within their institute who can provide expertise and assistance around the use of the technologies. This could include internal marketing, communications, and information technology teams. Within the career services team there could be a refocus on the competencies of career practitioners to have an adept understanding of digital technologies, or to create new roles that focus on these activities. Overseas there are many career services teams that have their own digital/social media policy and strategy, so this could be formalised within the structure of a team.

The focus on encouraging WIL educators to consider different forms of digital technology, even adding a relevant social media platform such as LinkedIn into the assessment.

DISCUSSION/ARGUMENT

It is important in such changing times that both WIL educators and students can develop their digital career literacy in reflecting on their experiences and building industry connections.

LinkedIn is one tool that can be used to help students record their experiences but is valuable in helping them record their accomplishments and learnings. It can provide a valuable bridge between students and industry especially in setting up WIL opportunities. In many cases students need to find their own placements and via a social media tool such as LinkedIn can be introduced.

Teaching students to use LinkedIn in a WIL context helps address one of the key findings of recent research into digital career literacy, students' confidence in connecting with industry. LinkedIn also can assist supervisors and academic staff to make the connections also.

IMPLICATIONS/ ISSUES

Several implications arise from this paper. The paper provides an opportunity for WIL educators to consider LinkedIn as a tool for enhancing their WIL practice. Students, while confident in the use of digital technology, often do not know how to use it effectively to enhance their career, personal brand and confidently build connections. LinkedIn could be incorporated into assessment and measurement (as one component) of WIL and an outcome reflective process.

However, LinkedIn has its limitations. It is focused around being a professional online CV so encourages students to focus on the end outcome rather than a formal reflective process. It does not ask specific questions that encourage students to reflect on their experience and so may require some facilitation in its use around WIL.

LinkedIn, while being used by up to 60% of students, is often not utilised so there is a level of training required in upskilling students to use it effectively. A series of resources is available by LinkedIn for students, however, none of these have a WIL focus.

Finally, there is an opportunity around linking the different digital platforms together for career development usage. Whilst this survey focused on LinkedIn it is important to remember in certain disciplines (e.g., design) there are other relevant digital platforms (e.g., Behance, Google Docs, Facebook). Blogging and developing personal websites was also not considered but are also useful way of building an effective personal brand.

The relevance of digital career literacy is clearly identified and articulated in this paper and the work of Longridge et al. (2013) can be used as an underpinning framework for working alongside and supporting academic departments in embedding digital career literacy within the classroom and beyond.

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“You can See it in Their Eyes”: Learning Flashpoints in Work-Integrated Learning

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Academic and workplace supervisors commonly report that their work-integrated learning (WIL) students experience “light-bulb” moments when many aspects of their learning suddenly integrate or become clear. Examples include: making connections between theory and practice, clarifying professional roles and/or, experiencing diverse (and sometimes clashing) cultures and ideas. In this paper, we refer to these moments as learning flashpoints, and WIL seems to provide a particularly rich environment for this phenomenon.

Such experiences provide valuable learning opportunities, but evidence suggests that learning does not happen as a result of experience alone (Shinnick, Woo, Horwich, & Steadman, 2011). Rather, strategies such as debriefing, and reflective practice are needed to promote and foster such flashpoints that can in turn stimulate the acquisition of knowledge, skill development and achievement of other learning outcomes (e.g., Chronister and Brown, 2012).

There is little available literature on learning flashpoints in WIL. One exception is Fallon (2012) who identified three distinct learning flashpoints that occurred before, during and after WIL activities for business-management students:

- realising that the WIL activity was a fundamental part of the course (i.e., not an add on) and appreciating the need to be prepared for engaging with industry;
- recognising the value of ‘learning by doing’; and
- realising that learning is a life-long endeavour.

Although both our paper and Fallon’s define flashpoints in a similar way, that is, as realisations or “revelation[s]”, the flashpoints identified by Fallon (2012) are more akin to threshold concepts, (i.e., “learning events...about what students were required to comprehend or overcome in the course of their learning” (2012, p. 75), while our research is based on a broader conception.

AIMS

This research aims to explore the idea of learning flashpoints in WIL, specifically: what kinds of learning flashpoints have been observed, and what strategies are being used by the academic and/or host (workplace) supervisors to facilitate and promote these flashpoints.

METHODS

The study forms part of a broader investigation of the role of debriefing in WIL. Research design for the whole investigation used an exploratory, qualitative approach, involving a series of semi-structured interviews with academic and host supervisors involved in the delivery of WIL courses. To date, 21 participants have been interviewed (16 academic supervisors and five host supervisors), across broad range of disciplines (e.g., education, health, business) and institutions within Australia and New Zealand. Interviews were undertaken both face to face and over the phone.

The current study focuses on two questions from these interviews: Have you observed learning flashpoints with students? In what sorts of circumstances do you think such flashpoints might occur? Participants were also asked to describe learning flashpoints or give examples. The relevant interview segments were subject to

thematic analysis. The analysis was focused on locating evidence of learning flashpoints, the type of flashpoints reported, as well as any underpinning triggers or strategies that could be used to facilitate them. Each researcher independently coded data using QSR NVivo 11, and then met to discuss and agree on final codes.

RESULTS

Were learning flashpoints observed by participants?

All participants reported observing learning flashpoints in their dealings with students. But flashpoints were not always identified as sudden moments of realisation; they could also be the culmination of a slow realisation following a number of experiences including the WIL activity, scaffolded learning activities, etc.:

So it might be I've had a chat with them, they've talked to their friends, there might have even been a teaching session, there might have been an online video, there might have been experience in the workplace. All of it sort of culminates to be an aha moment. (Participant 18)

Further, learning flashpoints were not necessarily a purely cognitive process:

They've actually begun to think about it, why it affected them, on all sorts of different levels. It may be it's not just a cognitive level. It might also be a physical level, an emotional level, a spiritual level, so lots of different ways. (Participant 5)

What types of learning flashpoints do students experience?

Four main areas of learning flashpoints were reported by participants (Table 1). The first, involved students confirming and questioning their previous ideas about career choices:

[it allows] them to more fully understand what it's like to be a doctor in training and what it's like to be their profession they will be in a matter of a few months or years. (Participant 16)

The second involved making connections between what students learned at university and in practice. As articulated by an academic supervisor (Participant 7), it is the "realisation of two worlds coming together – the study world and the work world".

The third area concerned flashpoints about learning itself, and included recognising and consolidating learnings in order to build the foundations for future learning, as well as confidence:

Firstly realise actually what you did learn and what you can now do now, what you can now do that possibly before you didn't have the confidence or the knowledge to do. (Participant 18)

The fourth, flashpoints about self, related to learning associated with personal beliefs, attitudes, preferences, and emotions. For example, the realisation that one has a racist attitude, or having expectations challenged such as through the experience of culture shock. Personal flashpoints also occurred when students came to realise their own preferences or inclination to engage in certain types of behaviours, for example:

one student will say something like I never realised that I shy away from conflict or I shy away from confrontation. But today I really realised that I do because I did this and this and this and it shocked me. (Participant 10)

Learning flashpoints were also reported in relation to other areas, although these were less frequently mentioned, for example, developing a sense of professional identity, mastering new skills, managing difficult/confronting situations and challenging assumptions.

TABLE 1: Types of learning flashpoints experienced by students

Type of learning flashpoint	Examples
Future career choices	Confirming future career choices; deciding against a particular career/aspect of career; deciding what kind of work /work conditions one seek and/or are prepared to accept.
Making connections between theory (and classroom learning) and practice	Internalising the lessons, attitudes learnt previously from working with clients; connecting the dots between interventions and theoretical rationale; imagining oneself in a future work situation.
About learning	Recognising and consolidating learnings; building foundations for future learning by recognising gaps; realising what's possible in the future with new knowledge/confidence gained.
Self-awareness	Attitudes, personality traits; repetitive patterns of behaviour; beliefs/values; strengths, weaknesses and preferences; challenging expectations; emotional flashpoints (developing empathy, resilience, self-confidence).
Professional identity	Sense of professional identity, clarifying professional role/purpose; making connections between professions.
Other	Developing new skills (e.g., techniques/approaches for effective practice); challenging assumptions; managing challenging/confronting situations (including emotional ones); developing different approaches to problem solving; realising the transferability of skills developed; recognising other students are experiencing similar challenges.

What are some strategies and triggers to facilitate learning flashpoints?

Many practitioners see considerable value in these learning flashpoints and have devised strategies to facilitate them. The strategies vary enormously due to differences in discipline and/or profession, as well as practical considerations related to how the course and placements are conducted. The most common approach is to have individual or group debriefings or discussions. Participants make the point that “relationships” between the staff and students are important, and commonly some kind of structured and guided discussion in a place “where students feel comfortable and secure” (Participant 18) is the most productive. The group debriefing is seen as particularly powerful as there is “identification with some of the experiences of other people” and “it gives a whole new lens to their experience, comparing and contrasting with other students” (Participant 4). Different circumstances, however, prompt different approaches and one participant found that unstructured conversations around the dinner table were useful. Written reflective exercises such as critical incident analyses also proved beneficial.

Of perhaps greater value are the insights of these practitioners about the actual triggers for the flashpoints, which encompassed: challenges to strongly held beliefs of students, students feeling perturbed, insecure, or disappointed, experiencing critical incidents (or near ones) and questioning of assumptions. One participant commented: “often it's when people are unbalanced that they actually learn the most”, echoing some concepts associated with transformative learning (Winchester-Seeto, McLachlan, Rowe, Solominides, & Williamson, In Press).

All participants reported observing learning flashpoints in their dealings with students. However, not all students experience these flashpoints. Participants suggest that some seem to be more open to such moments, described by one participant as having a “teachable spirit”, and students need to be willing to debrief as “it forces intentional reflection” (Participant 5). Participants also singled out particular experiences that prompt learning flashpoints, but not all students will face these and others may not realise the significance within the timeframe of their course/unit. Further research is needed to determine which triggers and strategies are most effective in promoting wider experience of individual learning flashpoints.

CONCLUSIONS

Learning flashpoints appear to be the culmination of many different aspects of the student experience including, debriefs/discussions with supervisors and peers, adequate preparation (personal and academic) and the actual workplace experience. Where they occur they seem to have a powerful and profound effect on the students involved. It is, unfortunately, unrealistic, to expect all students to have such moments, or that such moments will neatly fit into the university and course schedules, although the latter would certainly make program and course evaluation much easier. Nonetheless, if we could find strategies that reliably assist more students to experience learning flashpoints, this would vastly improve learning outcomes for WIL students and, incidentally, enhance the experience and reward the hard work of educators and partners involved.

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