

Where there is a WIL there is a way: Using a critical reflective approach to enhance work readiness

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Creating authentic learning experiences that prepare students for their future work in an ever-changing workforce represents a key challenge in higher education. One key way to enable the integration of learning and work is to foster students' capacity for critical reflection and reflexive thinking. This paper seeks to contribute to knowledge of how to foster the integration of learning and work and presents a case-study of a work integrated learning curriculum intervention within the discipline of project management. We explore how to authentically integrate learning and work by creating learning for students that deepens and broadens their critical understandings of their future profession and role as professional practitioners. We apply thematic analysis to students' reflective journals to explore their shifting perceptions of professional practice, and discuss how these findings may be applied to more authentically foster students' preparation for professional practice. (*Asia-Pacific Journal of Cooperative Education, Special Issue, 2015, 16(3), 211-222*)

Keywords: Graduate outcomes, project management, reflective practice, work integrated learning, work readiness

In the last decade, increasing attention has been given to fostering work integrated learning (WIL) in higher education both within and beyond educational settings. As the literature makes explicit (Boud & Falchikov, 2006; Smith, 2012) the increasing priority given to WIL reflects the widely accepted view that preparation for professional practice is fundamental to the purpose of higher education. Such commitment to an increased focus on outcomes focused education in higher education, which seeks to prepare graduates for their chosen profession, is also shared by government and industry. It is within this context that universities are challenged to not only create authentic links between learning and work, but to assess how outcomes can, as Boud and Falchikov (2006) advocate, "lay the foundation for a life time of learning" (p. 400).

Implicit in the WIL experience is the expectation that universities will create learning experiences and foster learning outcomes which, as transferable, will prepare students for futures unknown (Bowden & Marton, 1998; Stephenson & Yorke, 1998). Implicit also in the WIL experience is the assumption that gaps between "the increasing diversity of universities as learning sites, and the divergence and multiplication of knowledge and disciplines within universities can be bridged" (Barrie & Prosser, 2004, p. 244). Notably, students also expect that universities will prepare them for professional practice, highlighting the importance of ensuring that linkage between students' learning and their future career aspirations is actively fostered and made explicit through teaching practice and course design (Peach & Gamble, 2011). Critical to fostering such a linkage is to actively foster and evidence the development of graduate attributes. As generic, graduate attributes are assumed to be applicable to diverse contexts and settings (Barrie & Prosser, 2004; Boud, 2000), and, as defined through university mission statements, commonly encompass critical thinking, problem solving, communication skills, ethical practice and logical and independent thought (Bath, Smith, Stein, & Swann, 2004). As Rowe, Winchester-Seeto, and Mackaway (2012) identify, it is through the integration of work and learning that educators can create rich learning opportunities for students in educational and practice settings to enable the development of these attributes - the skills, dispositions and knowledge required for effective professional practice.

Conceptually, the notion of WIL draws upon a number of prominent learning theories and student centered pedagogies which include experiential-based learning, immersive learning

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and transformative learning (Andresen, Boud, & Cohen, 1995; Kolb, 1984; Mezirow, 1997). As Smith (2012) identifies, WIL importantly creates the opportunity for universities to design, refine and teach curriculum that: is responsive to current and future needs, to equip students with the knowledge and capability that goes beyond the acquisition of discipline knowledge, and to engage students actively with industry and community partners and enhance work readiness. Yet in order to achieve these transformative learning outcomes, the WIL experience must be underpinned by robust curriculum design and pedagogic practices which promote student's agency in their learning. Core to preparation for professional practice is to enable students to view themselves as future agents for change within their profession. As Merzirow (2006) notes, providing students with opportunities to examine and reflect on their beliefs fosters such agency. In order to integrate learning and work in ways which promote lifelong learning, it is also vital to engage students in learning that transcends the higher education setting and which supports them to become critical and reflexive practitioners. As Dewey's (1938) model of reflective learning defines, reflection importantly enables the construction of knowledge through active reflection on past and present experiences.

This paper seeks to contribute to knowledge of how to effectively integrate learning and work by fostering student's reflective practice. In particular, we explore how engaging industry mentors and fostering students' critical self-reflection was found to deepen student's understandings of the project management profession, and their relationship to it. The authors present and analyze findings from a qualitative study which investigated the impact of introducing industry mentors in an undergraduate project management course and of engaging students in learning whereby they were supported to critically reflect on their newly acquired professional knowledge and perspectives. This paper focuses on the initial 2012 pilot phase in which the course was introduced. This work-based learning course was taught to twenty-eight third year project management undergraduates. The course design was a collaboration between the two authors. The first author works as an academic developer within the discipline of project management and the second author co-developed and taught the course in 2012.

THE REFLECTIVE PRACTICE APPROACH

Reflective practice is widely acknowledged in the literature as effectively supporting students to become critically orientated, reflexive practitioners. As the literature affirms, reflective journals offer a highly effective means of promoting the process of critical reflection, and evidencing this higher order thinking (Coulson, Harvey, Winchester-Seeto, & Mackaway, 2010). Drawing upon this evidence base we developed the project management course 'Project Management Domains'. This project management WIL course was designed to enable students to develop, integrate and apply their disciplinary skills and knowledge to project management professional practice contexts, and to critically reflect on their learning. Responding to recent student feedback, a key element in our course design was to diversify student's understandings of the industries in which project management is practiced, challenging existing assumptions, beliefs and knowledge. The curriculum design, assessment and teaching approach recognized and valued the use of life experiences for both students and industry mentors, and continued reflection on learning.

Notably, reflection is acknowledged in the literature as contributing to a range of learning outcomes that include enhanced learning and meta cognition (Smith, 2011). As Harvey et al. (2012) argue, reflective practice plays a key role in the development of student's critical understandings of their future profession. Importantly, the process of reflection enables us to assess our own thoughts and actions for further learning and development. As Schon (1983)

identifies, such meaning making encompasses the process of doing, during reflection and after, reflection on action. As Ramsden (1992) notes, assessment defines the very core of the curriculum which includes defining what students regard as important and how they come to see themselves as both learner and graduate. The assessment design and teaching approach we adopted was intended to support students to engage in a critical dialogue with industry and to articulate and reflect on this learning to inform developing conceptions of the project management profession. Engaging in reflective practice can importantly support students to utilize tacit knowledge and, as Bringle and Hatcher (1999) note, “confront ambiguity and critically examine existing beliefs” (p. 85). As the literature identifies, reflection contributes to learning through actual experience (Bringle & Hatcher, 1999; Ryan & Ryan, 2012).

THE CONTEXT OF PROJECT MANAGEMENT WITHIN AND BEYOND OUR UNIVERSITY

Project management is an emerging and relatively new discipline. By its nature, project management is grounded in professional practice undertaken across a suite of diverse industry contexts. Core to the delivery of effective learning and teaching within this field is to ensure a strong nexus between education and industry. Such a nexus relates to both local and global contexts. Similar to many professions, within the discipline of project management the generic attributes of teamwork, collaboration and critical thinking are deemed as fundamental to effective professional practice. As Pant and Baroudi (2008) identify, similar to many other professions, the role of the Project Manager comprises a complex hybrid of skills sets, with “interpersonal ability, technical competencies, and cognitive aptitude” paramount (p. 124). They also identify that such skills and attributes are paralleled by the need for project managers to effectively discern and analyze the needs of diverse stakeholders and to demonstrate effective teamwork and leadership behaviors.

Despite encompassing a range of roles, levels of leadership and industry contexts, traditionally education within the discipline of project management has, as the literature reports, tended to focus on the technical aspects of managing projects, rather than developing the communication, people and management skills graduates require for effective professional practice (Pant & Baroudi, 2008, p. 125). Commonly these skills are known as ‘soft skills’. Authentically developing and assessing these skills requires the creation and assessment of learning experiences which enable students to utilize both tacit and explicit knowledge. Inherent in developing student’s capacity for reflexive thinking is to create learning experiences whereby students are supported to apply their tacit knowledge as appropriate for each context. Fostering students’ capacity to recognize and apply tacit knowledge is to foster emotional intelligence, to support students to identify and reflect on their own experiences and values, and to “monitor one’s own and others feelings and emotions, to discriminate among them, and to use this thinking to guide ones feelings and actions” (Salovey & Mayer, 1990, p. 189). Underpinning this learning, it is of critical importance for educational programs to foster lifelong learning: to equip graduates with the capability to adapt to an ever and rapidly changing world.

Within our university, the discipline of project management is located within a built environment faculty. In our context the discipline of project management has, to a great extent, been conceptualized and enacted within the domain of construction and built environment management. Diversifying and broadening student’s understandings of the project management profession across a range of domains represents a key and important challenge within our faculty.

COURSE DESIGN

The pedagogical approach adopted in this course was intended to support students to develop a critical awareness of their own assumptions and of the values, principles and belief systems which underpin their chosen profession. This entailed students' direct engagement with industry mentors, supported by a teacher-guided approach to self-reflection. As Lave and Wegner (1991) identify, students need to be immersed in learning where they can observe, interact and respond to that particular context. The course design and teaching approach created learning experiences whereby students were exposed to diverse professional practice contexts, and in doing so, could observe and interact with, respond to, and ultimately reflect on, the different professional practice project management contexts each industry mentor represented. As Peach and Gamble (2011) note, "reflecting on how one's values and beliefs intersect with those which define a profession provides a powerful learning experience and the opportunity whereby truly transformative learning can occur" (p. 179). The course design sought to enable students' engagement through what Merzirow (1997) defines as "recognising frames of reference and using their imaginations to redefine problems from a different perspective" (p. 10). The assessment design and delivery was supported by the detailing of explicit assessment criteria through rubrics.

The course was designed to support students to reflect on, rather than merely describe, their perspectives and learning. The process of reflection was scaffolded, including through class discussions and tailored curriculum materials. Students' reflections were scaffolded as they were supported to make links between theory and professional practice. The approach focused on professional and personal identity, with students viewed as co-creators of knowledge. Students' critical reflections relate to discursive contexts, the professional practice contexts provided through discussions led by the industry mentors.

In accordance with the principles of constructivism as defined by Biggs (1996), students were firstly supported to construct meaning through the process of engaging with industry mentors and reflection. Secondly, the intended course learning outcomes were developed to encompass and integrate the development of students' knowledge and skills and create learning experiences whereby students could apply such knowledge and skills to practice. Thirdly, the learning activities and assessment tasks were explicitly aligned with the intended learning outcomes, with the process of developmental learning supported by formative assessment. The following course learning outcomes were fostered and assessed:

- identify how the nature of an industry sector determines the approach required for effective project management, and
- critically reflect on and examine project management practice across diverse industry sectors

METHODS

The course design sought to encourage students to engage with a breadth of industries with a focus on industries that they were considering for future employment. Industry mentors who participated in the pilot represented a range of industries including construction, consulting, health, infrastructure/building, international development, mining, museums, rail, telecommunications and banking. The lecturer allocated students to an industry mentor whose role was to share professional practice and to explore with students the nature of their industry, considering the key capabilities and attributes for effective professional practice, guiding students to further explore the industry. Further, industry mentors participated in weekly lectures conducted over a nine week period. Industry mentors provided insights into how project management was undertaken within their particular industry context, thus

contextualizing the practice of project management and situating students learning in real life contexts. Course design required that subsequent to each weekly lecture, the students analyzed this new knowledge, and were encouraged to critically appraise and reflect on the profession. In order to engage students in reflexive thinking, prompts were provided to guide their reflections. These prompts were pivotal to ensuring that rather than reconstructing a narrative, students responded to criterion referenced assessment which was formulated and communicated to students through rubrics. The established criteria were (1) demonstrated understanding of lecture content, and its application to professional practice; (2) clear expression and articulation of thoughts and ideas. Ideas and perspectives are logically organized; and (3) reflection on your own thoughts, beliefs and assumptions and how these can impact on your professional practice. Reflections were in written format and were submitted online.

The following results focus on the tenth and final reflections whereby students were asked to reflect on their learning over the entire semester. Students were encouraged to revisit their prior reflections, and to use their existing reflections to inform their final reflections. Two questions provided by the teacher were considered by students:

- (1) What was the one key piece of information that has had the biggest impact on you?
- (2) How did the information presented to you during the semester alter your perception of project management?

Ethics approval to publish students' responses was sought and granted by the University's Ethics Committee. Responses from students were analyzed using thematic analysis. Student's responses were interpretively analyzed to determine emergent themes and to build qualitative understandings of student's reflections.

RESULTS

In this section the authors present and analyze students' reflections on professional practice and their perceptions about their profession and the degree to which they deepened their critical understandings of the practice of project management.

Participants

Twenty-two students undertaking 'Managing Project Domains' during 2012 completed a journal. This represented 78% of students enrolled in the class. These students were undertaking their third year of a four year Bachelor of Applied Science program at RMIT University, Melbourne, Australia.

Key Learning from the Student Perspective

Students were asked to reflect on the key learning from the course that had the biggest impact on them. Thematic analysis of journals resulted in the emergence of ten themes, as summarized in Table 1. Three themes accounted for 68% of responses which are further explored using quotes from students to highlight key findings.

Seven students (32%) perceived that the applicability of project management skills and knowledge to multiple industries represented one key learning from the course that had the most significant impact on them. For example one student commented:

Although working in different industries, the challenges or the project management tools will be different, but basically the skills and attributes of project managers are almost the same, such as communication, pressure, time management, leadership, and so on. As a project manager, I need to obtain these abilities through studying.

TABLE 1: Key learning from the course that had the biggest impact on students

<i>Theme</i>	<i>Frequency</i>
1. Applicability of project management skills and knowledge to multiple industries	7 (32%)
2. Raised awareness of other industries in which project management is practiced has created new career aspirations and possibilities	4 (18%)
3. The importance of having a mentor as a means of ongoing professional development	4 (18%)
4. Anything is achievable through hard work	1 (4.5%)
5. Requirement of organizations to continually adapt to remain competitive	1 (4.5%)
6. Commonality of project based challenges across industries	1 (4.5%)
7. Requirement of project managers to have a degree in project management	1 (4.5%)
8. Incorporating ethics into professional practice	1 (4.5%)
9. Project manager must be proficient in contract management	1 (4.5%)
10. Content knowledge and expertise in the industry in which the project manager is practicing	1 (4.5%)

Another student explained: "Throughout the semester, well in particular last week, it dawned on me how the basic project management process is applicable to any industry and then it can be individually tweaked for a specialised sector".

Some students explained that, prior to participating in the course, they believed that the construction industry was the only option in which they could practice project management. This may have been the case as the Bachelor of Applied Science (Project Management) program is positioned within a built environment faculty resulting in a focus on construction related projects. However, participation in the course had challenged the view that projects are specifically construction based. For example, one student commented:

It has made me think of project management in different fields, not just construction, prior to this class everything we studied has been predominately construction based. This has educated me in the way project management is applied to completely different fields.

Similarly, another student explained:

The most valuable piece of information I have heard this semester has been reiterated week to week; that almost all sectors require some form of project management. Project management isn't just limited to construction but can be applicable to a wide range of sectors from health to telecommunications.

Four students (18%) perceived that the key piece of information from the course which represented the most significant learning for them was their raised awareness of other industries in which project management is practiced. This resulted in the emergence of new career aspirations and possibilities For example, one student explained:

The talk on the pros and cons of project management definitely woke me up and got me excited. There are so many things I can take from those to apply to my motivation and perspective of the future. For instance there is no ceiling with project management. To me that really showed the endless possibilities that this degree can give.

Another student commented: "During this subject we covered different industries with an explanation of their features and weakness...That really inspired me to change my mind about just working on construction projects and ignoring other interesting industries".

Four students (18%) perceived that having a mentor as a means of ongoing professional development represented the most significant learning they had acquired from the course.

One student explained: “The key point of this is that it is beneficial for not only undergraduates, but as well as people in industry to have mentors, who can provide guidance and key information to help you progress further in your career”. Similarly, another student commented:

Get a mentor; they will assist in keeping you grounded and working towards your goal. The investment in time and effort will result in the clear career goal set and directed in the right direction providing guidance, confidence and motivation in the decisions required.

Altered Perceptions of Project Management

Students reflected on how their industry mentor-led sessions altered their perception of project management. Some students raised more than one theme therefore the total frequency equals more than 100 percent. Seven themes were identified through thematic analysis, and are outlined in Table 2. Table 2 shows that the first three themes accounted for 86% of all responses, and these are further explored using quotes from students to highlight key findings.

TABLE 2: Altered perception of project management

<i>Theme</i>	<i>Frequency</i>
1. Raised awareness of other industries in which project management is practiced has created new career aspirations and possibilities	14 (64%)
2. Applicability of project management skills and knowledge to multiple industries	10 (45%)
3. Expanded understanding and clarity of the practice and role of a project manager	7 (32%)
4. While project management skills are generic, there are nuances between industries and this is demonstrated in specific skill sets and knowledge.	3 (14%)
5. Application of project management skills to life	1 (4%)
6. Reassurance that the program is relevant to industry and will lead to graduate positions	1 (4%)
7. Requirement of project managers to have excellent communications skills	1 (4%)

Fourteen students (64%) indicated that raised awareness of other industries in which project management is practiced has created new career aspirations and possibilities. The perception that project management could only be practiced in the construction industry had been altered as a consequence of participating in the course. For example, one participant commented: “Until I attended this class I really only considered construction to be my only option but upon reflection of all of the presentations this semester I can confidently say that there are many more possibilities such as the consultancy sectors or the health sector, both of which I found very interesting”. Another student commented:

There are so many different sectors that a ‘project manager’ can be involved in and the opportunities endless. Now that I’m applying for jobs, I won’t just look at construction companies but will broaden my application approach to multiple sectors.

Similarly, another student explained:

I think it is very important to note that before I entered into this class at the beginning of the semester I had little to no knowledge of the operations of project management outside the ‘construction’ industry.

The student then went on to describe how his thinking had progressed:

I now feel confident moving into the banking and finance, mining, consultancy, and property industry. I have purposely chosen those three because before this course I had

little interest and equally as little knowledge about them. Now I not only have an insight into these industries, I now have a genuine interest in endeavoring into these areas.

Ten students (45%) indicated that their perception of project management has been altered through a deepened insight into the profession. Students identified a new understanding that project management skills and knowledge can be applied across multiple industries. As one student explained “I think this semester has been very eye opening for me. The role of a project manager can be applicable in virtually any sector”. Similarly, another student commented:

Although I’ve already known that project management is used in other industries (such as health, telecommunication, consulting, gaming, etc), still it is quite a surprise that the concept of project management methodologies learned in my program can be applied in those industries.

Data also evidenced that students had gained an understanding of the nuanced similarities and differences across sectors. For example, a student commented: “The information presented to me throughout the semester has broadened my understanding of the vast areas of project management that exist as well as giving me an insight in to how they operate and also differ from one another”.

Seven students (32%) indicated that the course had altered their perception of project management through expanding their understanding and clarity of the practice and role of a project manager. For example, a student commented:

The information presented to me during the semester completely altered my perception of project management. Before taking this subject, I thought of project managers being very similar to each other, and I can honestly say I didn’t know there could be so many different types of project managers for so many different jobs. For example, I didn’t think project managers were needed to run a museum.

Another student commented: “This subject in particular with all different professionals talking to us really expanded my ideology in terms of what I thought project management was”.

Students’ engagement in reflection assisted them to make sense of themselves, their learning experience and supported preparation for future practice. Analysis of students’ perceptions:

- Evidences an emerging professional identity;
- Emphasizes the importance of linkages between theory and practice, and of providing authentic learning experiences;
- Illustrates that students conceptualized the profession of project management and the discipline in its broader industry context;
- Affirms that students deepened their critical understandings of the complex nature of the profession and professional practice;
- Contributes to transfer of learning from university to the workplace;
- Fosters students’ career aspirations and goal setting;
- Enhances employability and marketability;
- Enhances understanding of what work in industry entails and the industry context - the nature of professional practice, industry needs and drivers, external market forces and impact.

DISCUSSION

We designed the ‘Project Management Domains’ course with the purpose of creating and assessing learning experiences and outcomes which fostered students critical understandings

of their chosen profession through the integration of learning and work. Underpinned by a constructively aligned curriculum, students were supported through the learning activities and assessment design to make sense of and to theorize about this new knowledge in relation to their own experiences and perspectives. Through interactions with industry mentors, students analyzed new professional perspectives, experiences and paradigms in relation to broader social, political and cultural contexts.

In considering the pedagogic principles and practices that effectively integrate learning and work, the role of mentors was vital. Importantly, students' direct engagement with industry mentors enabled them to experience and reflect upon authentically real life professional practice. This new knowledge could in turn be integrated with their existing disciplinary knowledge. Developing critical understandings of professional practice by being exposed to the industry perspective of expectations and ethical standards supports work readiness. As Aggett and Busby (2011) identify, it is also important that students develop a clear understanding of careers, roles and professional settings and standards.

As the literature makes explicit, reflective practice creates the opportunity for students to integrate theory and practice, and importantly to make sense of their experiences (Higgins, 2011; Peach & Gamble, 2011; Smith, 2011). In this way, reflective practice enables students to think more critically and deeply about the skills and knowledge they have acquired by fostering students' sense of professional identity. Critical reflection encourages students to be willing and able to question, explore and critique ways of behaving and thinking as they engage in workplace experiences (Higgins, 2011) and into the future. Consequently, the student is better able to understand and gain insights into his/her skills, competencies and knowledge. The use of critical reflection in cooperative education increases the chances of the learning being relevant and meaningful to the student. Understanding how students engage with the experience of learning, and in this case reflective practice, is vital to continuous improvement in the quality of learning and teaching. So too is going beyond providing practice based authentic WIL experiences, to ensuring that student's learning is supported and enriched through their engaged and supported participation in rich opportunities to share and reflect on learning.

As the data evidences, engaging students directly with industry mentors, and supporting students to critically reflect on their newly acquired knowledge and self awareness, importantly broadened student's perceptions of the project management profession beyond the Built Environment. Such enhanced awareness encompassed an understanding of the similarities and differences between the practice of project management across diverse sectors. This outcome highlights that if we are to prepare our students for their future professional practice we must authentically integrate learning and work through course and program design, and enable our students to critically reflect on their learning to enable a capacious world view of professional practice. Effectively fostering and assessing student's critical understandings of their chosen profession, and attribute development, requires scaffolding both within a course and holistically across the entire program. As the study's findings indicate, engaging students directly with industry mentors, and providing the opportunities for them to reflect on their learning, delivered the direct benefit through industry connectedness of exploring and demystifying professional practice in its broadest professional context. This finding also highlights the power of reflective practice to foster self awareness.

Students reported that they had broadened their career aspirations. This finding goes some way towards illustrating the transformative power of critical reflection. Notably some students reported a shift in their perceptions of self in relation to their career aspirations and belief systems. This shift in perception was enabled in part at least by students developing a

greater clarity about the nature of the work that project management entails, with findings indicating that some students were energized and inspired by this new knowledge, and more confident to pursue their professional interests and passion. This enhanced confidence included the confidence to undertake professional practice in diverse settings.

For some students, the learning experiences provided through direct engagement with industry mentors, and their reflections on this learning, reinvigorated and reshaped their career aspirations, which included feeling more inspired to pursue the project management profession in diverse sectors, and a newly formulated view and belief that their developed attributes and skills were transferable. Another key finding relates to student's perceptions and experience of engaging with an industry mentor. For some students, this experience importantly resulted in a heightened self-awareness of how their own learning needs and interests could be met, and a deepened understanding of the role of lifelong learning as fundamental to their career learning journey. This meta cognition strikes at the heart of preparing our students for futures unknown, importantly encompassing declarative knowledge (understanding one's own capabilities) and strategic knowledge (the capability to utilize strategies to develop new knowledge).

From the teacher perspective, formal and informal student feedback, including from Course Experience Survey (CES) data, evidenced that the curriculum intervention resulted in enhanced student engagement. Beyond its quality assurance and performance measurement function, the CES is administered to support educators to obtain feedback about their courses and contribute summative feedback for the improvement of student learning. CES data reported a high level of student satisfaction and engagement. The students were actively engaged in the process of reviewing and reflecting on their learning, and critical and reflective insights and perspectives were identified through assessment of the student journals. Students' grades evidenced enhanced quality learning. Sixty-five percent of students received a credit grade or higher. This shows that students were successful in reflecting on professional practice, and in doing so, in integrating and applying their professional knowledge to form deeper and enhanced understandings of the project management profession. For the teacher, the journals evidenced deepened understandings of students' developmental learning, and the ways in which students integrated their learning and future professional practice.

As Barnett identifies, educators in higher education are charged with the responsibility and complex challenge of preparing students for "futures unknown" (Barnett, 2004, p. 250). As he further defines, this entails preparing students for a complex changing world, that is "radically unknowable" (p. 250). As Barnett advocates, "amid (this) super complexity, the educational task is primarily an ontological task" (p. 252), enabling one to thrive amidst continual change, in a "situation in which there are no stable descriptions of the world" (p. 252). In the context of the massification of the higher education sector, characterized by an increasing focus on performance metrics and quality indicators, educators face many challenges including fostering student engagement, designing and teaching innovative student centered curriculum and ensuring that graduates are fully equipped with the skills and knowledge to work effectively in their chosen profession. Yet in order to ensure our students are prepared for their unknown futures, (their future lives and work) the acquisition of skills and knowledge is alone not sufficient. As Barnett (2004) notes, "what is in question in a situation of super complexity is neither knowledge nor skills but being" (p. 259). This being relates to human qualities that include the capacity for critical self-reflection.

CONCLUSION

Findings from this study reinforce the role of reflective practice in preparing students for their future work. Our findings will inform the future pilot and refinement of this WIL course, and have implications for teaching within the wider discipline of project management and the wider context of undergraduate education. To date, our findings indicate that enhancing students' capacity for self-reflection supported work readiness, as student's critically engaged with the profession of project management in collaboration with industry mentors. In doing so, the quality of learning and teaching was enhanced. These findings highlight the importance of pedagogic practices which support the development of engaged and critically reflective graduates.

In this paper we have discussed our endeavor to design a robust curriculum and enact a work integrated learning pedagogy to support our students to engage effectively in their future professional lives by fostering self-awareness through critical self-reflection. What lies ahead for us is a deeper analysis of the student learning journey through which we will seek to make a further contribution to pedagogical knowledge of the power of self-reflection as an enabler for preparation for professional practice in futures unknown.

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This APJCE Special Issue was sponsored by



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Work Integrated Learning: Building Capacity

¹ Papers included in this APJCE Special Issue stem from selected manuscripts from the 2014 ACEN Conference Proceedings. All manuscripts were expanded and modified to meet APJCE requirements, double-blind reviewed by the APJCE editorial board, and amended before being accepted to be published in APJCE.



About the Journal

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

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

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

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

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Typically, authors receive the reviewers' comments about 1.5 months after the submission of the manuscript. The Journal uses a constructive process for review and preparation of the manuscript, and encourages its reviewers to give supportive and extensive feedback on the requirements for improving the manuscript as well as guidance on how to make the amendments.

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The Journal does also accept *best practice* papers but only if it present a unique or innovative practice of a Co-op/WIL program that is likely to be of interest to the broader Co-op/WIL community. The Journal also accepts a limited number of *Book Reviews* of relevant and recently published books.

Research reports should contain; an introduction that describes relevant literature and sets the context of the inquiry, a description and justification for the methodology employed, a description of the research findings-tabulated as appropriate, a discussion of the importance of the findings including their significance for practitioners, and a conclusion preferably incorporating suggestions for further research.

Topical discussion articles should contain a clear statement of the topic or issue under discussion, reference to relevant literature, critical discussion of the importance of the issues, and implications for other researchers and practitioners.



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