Mapping WIL activities in the curriculum to develop graduate capabilities: A case study in accounting

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Big business continues to request universities to produce graduates who possess both technical and generic skills. Although work-integrated learning (WIL) programs can be used to develop these skills, WIL placements in Australia are undertaken by a minority of students. Perceiving a gap, one Australian university undertook a major WIL revamp to expand WIL offerings embedded within its courses. This required major organizational change that impacted significantly on curriculum design. From a quality assurance perspective, this paper provides an overview of a revised WIL program in the accounting discipline, and discusses the issues and challenges associated with the revised WIL program four years after its implementation. The findings demonstrate that the discipline area has not yet fully met the revamped WIL program as defined by university policy. Recommendations are provided that form a valuable learning tool for educational institutions considering embedding broadly defined WIL within their courses. (*Asia-Pacific Journal of Cooperative Education, 2013 14(2), 75-88)*

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According to a recent Clarius Skills Index report (prepared by KPMG Econtech, 2011), accounting graduates face a positive employment outlook in Australia. Whilst the current high demand for accountants offers good job prospects for students, it does so primarily for those who are well qualified. To employers, this means graduates who are both proficient in their discipline (technically competent) and able to work successfully with clients, customers, colleagues and managers while matching the culture of the organization. The Business Council of Australia (BCA) has stated that Australia's higher education sector should produce graduates who possess both technical and generic skills (graduate capabilities) (Business Council of Australia, 2011).[2] From an accounting perspective, preferred graduate capabilities closely align with the skill requirements of professional accounting bodies, such as CPA Australia, and the Institute of Chartered Accountants in Australia (ICAA) who expect that accredited educational providers will integrate a range of both technical and non-technical skills into the core curriculum of accounting courses. These skills comprise, but are not limited to teamwork, problem solving, communication and critical thinking (Institute of Chartered Accountants in Australia and CPA Australia, 2009).[3]

Universities have traditionally responded to the demand that graduates have a range of non-technical skills by offering work-integrated learning (WIL) programs, which have predominately comprised workplace placements of one type or other, for a period ranging between 1 and 12 months. In recent years, however, WIL has come to encompass a far greater

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[2] The terms generic skills and graduate capabilities are used interchangeably in this paper.

[3] The skill requirements set out for accountants via the professional bodies were updated in 2012. Although some slight changes have occurred since 2009, since the WIL review took place in 2011, it would be prejudicial to the outcome of this study to use the 2012 document as a reference point.

range of experiential and applied learning experiences. The general definition of WIL as posited by an Australian Learning and Teaching Council (ALTC) report is "An umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum" (ALTC, 2009, p. iv). The Australian Collaborative Education Network (ACEN), a professional association representing higher education engaged with WIL practice in Australia, identifies some of these approaches as including internships, cooperative education, work placements, industry-based learning, community-based learning, clinical rotations, sandwich year, and practical projects (ACEN, 2010). Additional approaches have been added by universities and include live and virtual simulations, service-based learning, multi-disciplinary projects with industry, and curriculum-integrated career development learning (Orrell, 2011).

Although work placements have been regarded by potential employers as a means of students attaining non-technical skills, placements have become less prevalent in the business education curriculum. First, because universities are experiencing increasing difficulty in placing a large number of students in 12-month work placements and second, because students are increasingly shunning the 12-month WIL placements as they seek more rapid degree completions – three years rather than four (Australian Council for Educational Research [ACER], 2008). These difficulties led the university under study to seek an alternative means to achieve the goal of enhancing the employability of its graduates.

The university instituted two significant policies to achieve this goal: a policy on graduate capabilities, and a policy on WIL. The graduate capabilities policy sought to promote the development of generic, non-technical skills required by employers such as communication, problem-solving and teamwork; whilst the introduction of a broad WIL policy offered a range of applied learning activities that were authentically linked to the workplace. While many universities have integrated WIL into their curricula, the university under study devoted 25 per cent of its course assessment to WIL. The adoption of a broadened WIL policy meant that extensive changes to the pedagogy were required. The changes had to encompass a strong, student-centered, reflective, work-related approach to be offered through projects, placements, apprenticeships (work-based learning) or authentic simulations undertaken with industry and community organizations (Russell, Kay & Standfield, 2010; Woodley & Beattie, 2011; Usher, 2012). As Choy (2009) argues, workplace pedagogies can act as useful epistemological tools that can facilitate and support learning. Key dimensions such as questioning, observing, and listening can, as Billet (2002) suggested, be achieved via guided learning strategies that revolve around work.

The changes in learning and teaching strategies that impact on students and teachers, as Barrie (2004) posits, emanate from top-down institutional agendas, driven by business, and are often viewed with suspicion at the level of curriculum implementation. Therefore, curriculum reform often does not translate into the noteworthy changes to pedagogical practice that are anticipated. Hence, the main motivation for this study was to perform a 'quality control' analysis of how the institutional policy changes were implemented in the learning and teaching practices in the accounting discipline. The aim of this study, therefore, is to assess the extent to which the broad offerings of WIL have been successfully incorporated into the accounting curriculum. The approach to analyze this was through mapping the WIL learning activities and assessments in 15 accounting units of study from a 24 unit Bachelor of Business (Accounting) degree covering accounting core, specialist and elective units.

The next section of the paper reviews the literature on embedding employability skills[4] in the curriculum and is followed by an outline of the research methods employed. Next we present the analysis of the findings, incorporating examples of curriculum adaptation. The final section makes recommendations for further embedding of graduate capabilities in WIL activities and assessments as well as enhancing WIL learning.

LITERATURE REVIEW

Much of the literature on WIL attests to the benefits that WIL has for employers, students and the university (Abeysekera, 2006; Brown, 2002; Murphy & Calway, 2006; Weisz & Smith, 2005). WIL is generally accepted as a powerful vehicle for developing generic and professional skills, thereby providing students with the opportunity to improve their employability and work readiness (Freudenberg et al., 2011; Harvey, Geall, & Moon, 1998; Knight, 2006; Subramaniam & Freudenberg, 2007; Yorke, 2006). The growth of WIL in universities reflects both government and industry concern about addressing skill shortages[5] as well as making students more employable upon graduation.

Despite the potential advantages offered by the work placement option of a WIL program, the percentage of students who undertake this traditional program is relatively low across universities in Australia. According to McLennan and Keating (2008), only 28 per cent of Australasian students participate in practicums, internships, fieldwork or clinical placements compared to 53 per cent of later-year US students. Reduced participation is exacerbated in disciplines outside the health and education field partly because it is increasingly difficult to find appropriate placements for all students. In accounting, a typical program offers accounting students placements to enable the students to work within a host organization for two semesters (often up to 12 calendar months). The student remains enrolled at the University for assessment and unit credit purposes and usually has to submit a substantial report and reflection on the placement experience, while simultaneously performing the role of a trainee employee.

The traditional WIL model is also becoming less attractive as students increasingly prefer to fast-track their degrees by removing the extra year required by a WIL placement. Embedding WIL in the curriculum offers universities an alternative way in which to enable all students to enhance their employability skills. It has also provided universities with an appealing avenue to meet the accreditation requirements of professional associations (McLennan & Keating, 2008; Woodley & Beattie, 2011).

Key contributors to a theoretical understanding of learning in WIL contexts include Coll and Chapman (2000), Boud (2001), Billet (2002), and Calway (2006) who generally maintain that WIL is applied and experiential learning that takes places *in* the workplace, *through* the workplace and *for* the workplace. Placements occur *in* the workplace, projects determined by organizations are done *for* the workplace and where the organization serves as the vehicle for student learning through setting a learning context or providing feedback this can be deemed

[4] The term 'employability skills' is often interchanged with the term 'graduate capabilities' and 'generic skills'.

[5] It also reflects educational concerns as evidenced by the inclusion of WIL as a reporting category in the new Tertiary Education Quality and Standards Agency (TEQSA) report for Australian higher education institutions.

as WIL *through* the workplace. The concept most applicable to the accounting curriculum is that of enabling students to undertake WIL *through* or *for* the workplace.

Papadopoulos, Taylor, Fallshaw and Zanko (2011)) hold that business students arrive at their university studies with a set of cognitions and behaviors based on their previous experience and what they have learnt in the past. Thus, students draw on what they know when engaging in professional learning activities which can lead to a change in the conceptual outlook of the learner. This well-established link between cognition and behavior provides the foundation of the pedagogical basis for professional learning. Orrell (2011) suggests that professional learning "integrates graduate attributes with teaching modes guided by principles of good practice… to guide academics' decision-making in designing curricula and selecting pedagogical approaches that fit their purpose" (p. 54).

With respect to curriculum mapping, four main domains were established as outlined in Papadopoulos et al. (2011, p. 30): student engagement in learning (transmissive, reciprocal or immersed); embeddedness (required, elected or selected); industry engagement in curriculum (industry-referenced, industry-based or industry-led); and principal location (on-campus, off-campus or online). The ideal features for WIL in the university under study would have learning activities and assessments immersed, compulsory, industry-based or industry-led, and principally located off-campus at a work site or in direct engagement with employers.

In mapping the accounting units against the WIL criteria, it was found that case studies were claimed as the predominant form of WIL. This was based on the interpretation by academics that they portrayed real life scenarios which provided students with an opportunity to engage with problems likely to be encountered in a work situation, often as a team based activity. As Hancock, Howieson, Kavanagh, Kent, Tempone and Segal (2009) argue, with teamwork, which is deemed a desirable work-ready skill by the ICAA/CPA, the pedagogic assumption is that when organized into groups students' learning will be enhanced by solving problems at rising levels of difficulty. By doing so, students will improve a range of skills such as problem solving, communication, planning and organization. A limitation, however, is that this form of WIL does not necessarily put students at the coal face that involves various levels of accountability for actions and nor does it necessarily include student-industry interaction, considered important for the development of graduate capabilities.

Universities' ongoing commitment to the development of graduate capabilities has led to the evolution of an increasingly wide range of strategies aimed at enhancing graduates' employability skills and, in many cases, making them more explicit: introducing new courses, modifying existing courses and expanding opportunities for work experience (Cranmer, 2006). An evaluation of these approaches by Cranmer (2006) suggests that, at best, mixed outcomes result from the various models of embedding graduate capabilities within the curriculum. Structured work experience, which can be reflected in various models of WIL, has been shown to have positive effects on graduates' outcomes in terms of their ability to find graduate-level jobs within six months of graduation.

Mason, Williams, Cranmer and Guile (2003) suggest that the extensive resources allocated to enhancing the development of graduate capabilities in classrooms need to be reviewed, given that no significant independent effect on graduate labor market outcomes attributable to classroom-based activities has been identified. This has led some to claim that a classroom-

based development of graduate capabilities is limited and results in a mismatch for graduates with respect to the skills acquired at university compared to those needed for employment (Cranmer, 2006; Mason et al., 2003). It is critiques such as these that have shifted the development of graduate capabilities to learning activities that are strongly linked with workplaces and interaction with professional personnel.

Based on the review above, the objective of this study was to analyze the effectiveness of the implementation of WIL learning activities and assessments in the form of industry projects and simulations within the Bachelor of Business (Accounting) program as a means of enhancing the work-readiness of accounting graduates. Consequently, the following research questions were addressed:

RQ1: To what extent does the accounting curriculum reflect the WIL policy framework of the university?

RQ2: To what extent are graduate capabilities specified in the WIL learning outcomes?

RQ3: To what level are the learning activities embedded in the WIL tasks aligned with the professional accounting bodies' accreditation guidelines? and

RQ4: What challenges can be identified in terms of implementing change in WIL policy on accounting learning activities and assessments?

RESEARCH METHOD

The research questions were investigated by means of a case study approach following the four stages of a case study outlined by Yin (1984). The case study diagnosis was based on insights gained mainly from the content analysis of the Unit of Study Guides for undergraduate accounting units in the Bachelor of Business (Accounting) and was supplemented by discussions with Unit of Study coordinators. This approach provided detailed data about, and a deeper understanding of, the WIL practices and issues to corroborate the findings obtained from the content analysis (Seale, 1999).

The WIL learning activity and assessment tasks identified within the Unit of Study Guides were jointly reviewed by members of the research team and analyzed by identifying for each Unit the type of WIL activity and observations about the activity; whether the WIL activity satisfied the university policy on WIL; whether the WIL activity aligned with the competencies specified by the professional bodies; whether the WIL activity aligned with the university's graduate capabilities; and the type of assessment related to the WIL learning activity and its grade weighting. Finally, the analysis was followed by suggestions about how the WIL learning activity and assessment could be improved in pedagogical terms via the enhancement of graduate capabilities.

The Bachelor of Business (Accounting) degree includes 24 units of study consisting of 10 core subjects, which are common to all business degrees of the faculty and which provide students with an exposure to each of the business disciplines. These core subjects are *Accounting for Decision Making*; *Information Systems for Business*; *Economic Principles*; *Business Statistics*; *Introduction to Marketing*; *Business Law*; *Management and Organization Behavior* as well as three units known as *Professional Development 1*, *2* and *3*, which are intended to provide generic business skills not specific to a particular discipline. The remaining units of study comprise seven specialization units constituting the academic discipline in which the student is majoring (in this case accounting), and seven elective units which may be a second

specialization. Within the degree, there are 16 accounting-specific units available to students, namely one accounting core unit, seven specialization units and a further eight accounting units available as electives. Of these 16 accounting units, 15 were identified as claiming to offer WIL activities and hence formed the basis of the analysis in this study.

Obviously, judgment is required to interpret the WIL assessment activities. Having the members of the research team classify the skills implicit in the content of the assessment activities presented in the Unit of Study Guides is one of the possible means of reducing the prospect of inter-rater reliability problems (Gwet, 2012). In addition, a focus group was conducted with six unit coordinators who oversaw core and specialized accounting units. The discussions identified the challenges associated with the implementation of WIL and focused on issues of pedagogical support and planning, industry engagement and resource support.

FINDINGS AND ANALYSIS

RQ1. To what extent does the accounting curriculum reflect the WIL policy framework of the university?

Of the 15 accounting units that claimed to offer WIL activities, 80 per cent offered case studies, with two units only giving students the opportunity to engage directly with industry and a third providing a sound, simulated work experience. The accounting academics who offered case studies viewed them as simulations because they reflected an aspect of an accounting task applicable to a work situation. However, what is deemed a simulated learning environment in the WIL field is that it is an emulation of the workplace not a replica of a single workplace task. Case studies, although they portray real work situations, are really no different to any other class-based learning that uses contemporary examples as part of the curriculum. Case studies have been a traditional feature of accounting courses and are typically offered for analysis in the classroom, be they as an individual project or a team task. Although the cases are invariably based on workplace examples, sometimes written by the academic themselves and based on their personal experience in the field, if they do not provide students with any opportunities for direct interaction with industry they are excluded from being categorized as authentic WIL. Additionally, the relatively low apportioning of marks (10% - 25%) to these case studies also reduces the potential for the depth and significance of any WIL learning, especially as it applies to the development of graduate capabilities.

An example of assessment which just fell short of an authentic simulated learning environment was the Australian Stock Exchange (ASX) simulated trading activity in the *Accounting for Decision Making* unit. This activity requires students to role play various trading positions, with real time data, and contend with a number of contingencies that occur on a regular basis. Students have to interact with a number of stakeholders and if this were to include real industry representatives who might brief, mentor or provide feedback to students, it would be considered a rich WIL simulation consistent with the revamped policy.

One of the units that was categorized as genuine WIL was *Accounting for Small Business*, where students were required to prepare a case study analyzing and reporting on an existing small business. Students had to interview an owner who had operated a business for a minimum of five years in order to assess their accounting system and financial circumstances. In an additional unit, *The Practising Accountant and Technology*, students were required to undertake an industry research report intended to develop an understanding of

the legal, professional and conceptual requirements associated with the preparation of external financial reports and taxation returns, for various types of businesses. Following the preparation of the report, students engaged in a discussion with an industry panel on the case studies that they presented.

In all, three units (the third unit to be reviewed in the next section) were found to fulfill the requirements of the University's WIL policy (Research Question 1). The ASX simulation was very close to meeting it, and would have done so if some industry interaction were facilitated (Table 1).

RQ2. To what extent are graduate capabilities specified in the WIL learning outcomes?

WIL learning activities are a prime vehicle in which the graduate capabilities are able to be developed in each course at the university within the context of the knowledge and skills of each discipline field. There are six graduate capabilities at the university under study which include the ability to:

1. problem solve in a range of settings;
2. locate, critically evaluate, manage and use written, numerical and electronic information;
3. communicate in a variety of contexts and modes;
4. work both autonomously and collaboratively;
5. work in an environmentally, socially and culturally responsible manner; and
6. manage learning and career development opportunities.

Intentions to align the WIL activities and assessment with the university graduate capabilities (Research Question 2) are demonstrated in the Table 2.

However, a close inspection reveals a less than positive alignment with graduate capabilities. WIL projects which have only apportioned 10, 15, 20 or 25 marks do not provide scope to develop between four or five graduate capabilities as claimed, in addition to the discipline-specific skills in that unit. As stated earlier, given that only three (four if the ASX simulation is counted) of the 15 units provided an authentic WIL activity, it is unsurprising that the claims to develop graduate capabilities as well as discipline skills could not be met.

TABLE 1. WIL learning activities meeting WIL policy criteria

General Learning Environment Characteristics	Frequency (No. of units)
Resembles the real workplace in its function and operation	12
Provides students with access to a broad range of related experiences and scenarios	11
Supported by industry/community representatives	3

TABLE 2. WIL learning activities aligned with the appropriate university graduate capabilities

University Graduate Capabilities	Frequency (No. of units)
Problem solving in a range of settings	9
Locate, critically evaluate, manage and use written, numerical and electronic information	9
Communicate in a variety of contexts and modes	10
Work both autonomously and collaboratively	10
Work in an environmentally, socially and culturally responsible manner	2
Manage learning and career development opportunities	0

One of the three units that provided authentic WIL learning, the *Introduction to Small Enterprise* (which comprises 30% of total assessment) requires students to interview a full-time business operator and write a case study covering issues such as entrepreneurial characteristics, factors which have helped them to survive and succeed, problems they have faced, growth aspirations, and where they get support.

When analyzing the data, students were required to compare their findings with the theories presented in the literature, noting similarities and differences. Based on the task's explicit learning outcomes, the WIL assessment activity was judged to address the following graduate capabilities: locate, critically evaluate, manage and use written, numerical and electronic information; communicate in a variety of contexts and modes; and work both autonomously and collaboratively. It is a good example of students undertaking a WIL project that is *through* the workplace.

RQ3. To what level are the learning activities embedded in the WIL tasks aligned with the professional accounting bodies' accreditation guidelines?

As well as satisfying the university's general graduate capabilities, a major aspect of WIL activities for accounting units is to develop specific occupational competencies (technical or professional skills) as identified by the joint accounting professional bodies (Research Question 3). In this aspect, the WIL assessment tasks were seen to have a strong alignment with the accounting professional competencies, particularly routine skills and analytical skills. Overall, the WIL activities and assessment tasks enabled students to demonstrate particularly the use of technical skills. It should be noted that the analysis of WIL assessment activities was based upon accounting discipline subjects only.

The competencies identified in the accreditation guidelines of the joint accounting professional bodies were used to assess the WIL activities of the 15 units of study. This was undertaken to determine whether students were provided with opportunities to develop these competencies. Figure 1 below provides an overview of the skill development expected to be provided in the accounting curriculum of higher education providers accredited by the professional accounting bodies.

The findings were that all 15 units of study required students to demonstrate routine and analytical skills; eight units required students to demonstrate appreciative skills and two units partially[6] required students to do so; three units required students to demonstrate personal skills while five units partially required student to do so; and eight units required students to demonstrate interpersonal skills and three units partially required students to do so (see Table 3). A unit that demonstrates the alignment between a WIL assessment task and the skills hierarchy identified in the accreditation guidelines of the joint accounting professional body is the aforementioned ASX simulation in the *Accounting for Decision Making* unit.

TABLE 3. WIL learning activities meeting professional accreditation competencies

Professional Competencies	Yes	No	Partial (No/ units)
Routine skills	15	0	0
Analytic skills	15	0	0
Appreciative skills	8	5	2
Personal skills	3	7	5
Interpersonal skills	8	4	3

RQ4 What are the challenges associated with implementing change in WIL policy on accounting learning activities and assessment?

The WIL policy at the university was ambitious in terms of the assessment requirement of 25 per cent (which is a significantly greater expectation than for other Australian universities) of total course assessment to be WIL compliant (Usher, 2012; Woodley & Beattie, 2011). Requiring that a quarter of the curriculum be student-centered, experiential non-classroom based and involving industry and community denotes a major change in pedagogy as well as resource allocation.

A focus group was conducted with six unit coordinators who oversaw core and specialized accounting units to identify a range of issues from the review of study guides. Generally, the unit coordinators remarked on the lack of adequate resourcing across the accounting discipline even though the resource implications had been assessed at the faculty and university level. These general views, which were held by many academics across the university, translated into major challenges faced by the School of Accounting. As stated earlier, another major barrier to the effective implementation of the WIL policy was the apparent lack of understanding or misinterpretation of the WIL policy. This barrier was attributed to the initial lack of communication on interpretation of policy, lack of professional development and lack of capacity building for academic staff.

[6] A partial finding for a specific professional competency refers to the fact that the WIL assessment task met some (but not all) of the listed criteria outlined by the joint accounting bodies professional for that competency.

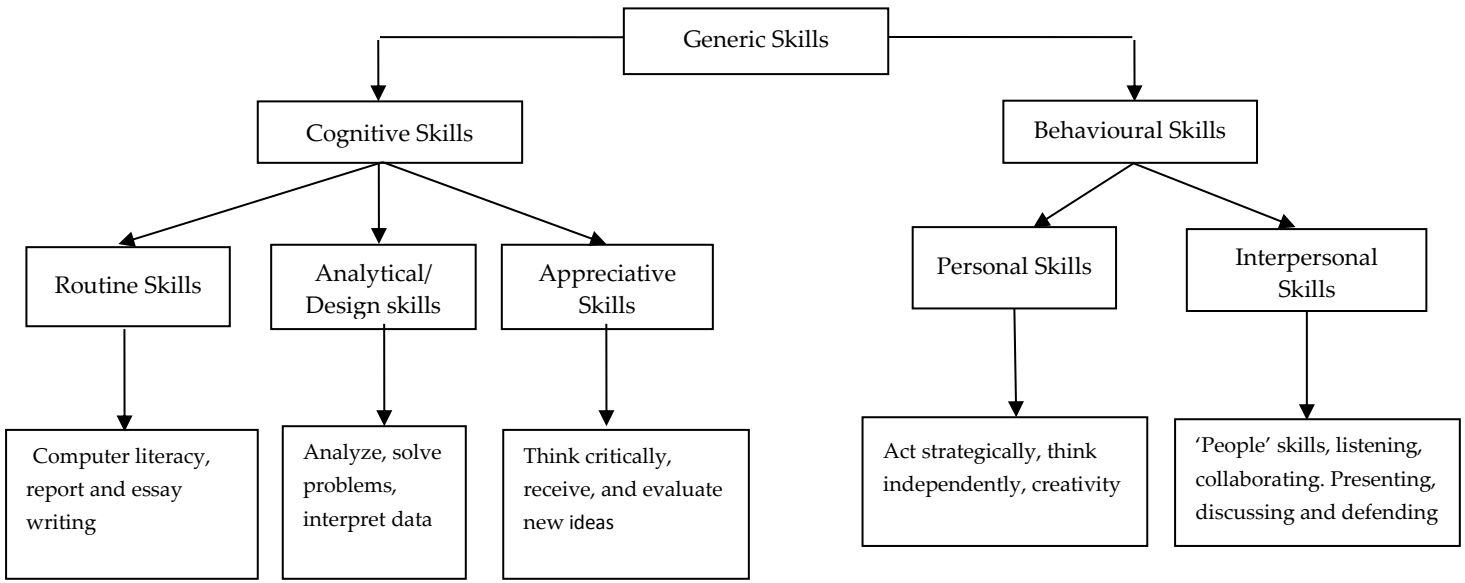

FIGURE 1. Generic Skills Hierarchy (ICAA/CPA Australia, 2009)

For example, there was considerable confusion among many unit coordinators over the term 'simulated environment'. The focus groups revealed that case studies based on real companies were deemed to be simulations.

Case studies included in the curriculum, in most instances, represented traditional, passive learning and not the authentic emulation of real work projects or processes aspired to via the revised WIL. By adding the provision to receive briefings, have questions answered or receive feedback from industry, these activities would have been rendered as authentic WIL learning. However, there was little evidence of this engagement with industry in order to enact the WIL policy.

The problems outlined above were reflections of, and resulted in, a lack of sufficient engagement, lack of coordinated planning, lack of a pedagogical understanding of WIL, and lack of tools and techniques to actualize the policy into learning activities and assessments in the curricula. The absence of a planned, coordinated approach by course teams is evident in the lack of authentic WIL activities offered in the accounting units, which then also limits the variety of WIL activities and any scaffolding of WIL activities over the duration of the three year course which would enable progression from the simple to the complex integrated learning activities. These problems seriously limited the opportunities that students had to develop graduate capability skills using WIL.

Another factor which may have hindered the effective implementation of the policy was the under-estimation of the resources required to initially establish this time-intensive and new pedagogical approach (for many academics). The resource requirements included time release, or at least attribution of the extra time, for academics to design and develop experientially based and industry-connected WIL activities. Extra time or additional personnel were needed to source, develop and maintain relationships with industry, community and professional partners. Even where academics engaged willing external parties to participate in a unit of study, they still had to address other demands such as how best to use that partnership where there were multiple streams of delivery of a unit (on-campus, off-campus) as well as multiple locations, including offshore.

The introduction of this significant change in the WIL policy not only required a change in the pedagogical practices of academics but also in the accompanying operational support systems (Russell et al., 2010). A major reason why a large number of the accounting units did not fully comply with WIL policy was that the policy was enacted without full appreciation of the concomitant cultural change issues that had to be addressed. Higher levels of engagement might have been achieved by providing incentives and accountability measures to ensure the policy was effectively implemented.

CONCLUSIONS AND RECOMMENDATIONS

The aim of WIL is to make students work- and career-ready through a curriculum that enables them to apply their discipline specific skills to a work situation while simultaneously developing graduate capabilities valued in workplaces (ALTC, 2009). As the results of this case study demonstrate, the Bachelor of Business (Accounting) at the university under study is in the early stages of adoption of a WIL program. Based on the review conducted in this case study, there is considerable scope to redesign and augment existing learning activities that have been considered to be WIL. Greater emphasis needs to be given to ways of enabling students to interact with industry in order to maximize opportunities to develop graduate

capabilities via the accounting curriculum. Specifically, this study has highlighted that curriculum change that involves industry engagement as part of innovative learning and assessment activities within a course of study, requires substantial resourcing and support for academics charged with the responsibility for implementing the changes. These resources are needed to equip and aid academics to change learning and teaching practices to be more WIL-oriented. To enhance the progression towards meeting the types of changes required for the implementation of a WIL policy similar to the one investigated in this study, a number of recommendations are advanced for others seeking to implement similar changes. These include making provision for structured and ongoing capacity-building support for academics to develop curricula, either situated in the School or Faculty, in a University teaching and learning center or both; a detailed mapping exercise at the discipline or Course level to ensure that WIL learning outcomes, learning activities and assessments offer students an integrated, scaffolded and cohesive experience; the appointment of an industry liaison officer to establish and maintain relationships with industry and community, which would enable academics to work collaboratively with industry representatives in designing and implementing WIL learning and assessment tasks (Papadopoulos et al., 2011); and availing industry representatives of online options for participating in university WIL programs (Orrell, 2011). This would have the potential for increasing the range and scope of prospective industries involved in the course by reducing their time commitments to visiting campuses.

Although the journey to embed a university-wide WIL program within the accounting discipline and more broadly across university discipline areas has been challenging, this paper has endeavored to outline ways to successfully implement a revised approach to WIL. The adaptation of the curriculum to meet a revised interpretation of WIL potentially changes the educational landscape. While the evidence from this case study demonstrated that the progress towards the revised WIL approach as a means of developing graduate capabilities is in its infancy, there was evidence of some exemplars in the accounting discipline. Several units of study were mapped appropriately to the university and professional bodies' skill level requirements and thus provide a basis for building a set of graduate capabilities that accounting students are likely to encounter when entering the employment market.

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REFERENCES

Abeysekera, I. (2006). Issues relating to designing a work-integrated learning program in an undergraduate accounting degree program and its implications for the curriculum. *Asia-Pacific Journal of Cooperative Education*, 7(1), 7-16.

Australian Collaborative Education Network (ACEN) (2010). Work-integrated learning: Responding to challenges. Available at http://www.acen.edu.au/conferences/archive/ACEN-2010-Booklet.pdf Australian Council for Educational Research (ACER) (2008). *Attracting, engaging and retaining: New conversations about learning*. Retrieved from http://www.acer.edu.au/documents/ AUSSE_ASER-Report.pdf

Australian Learning and Teaching Council. (2009). *The WIL (work-integrated learning) report: A national scoping study*. Brisbane, Australia: Queensland University of Technology.

Barrie, S.C. (2004). Using conceptions of graduate attributes for research-led systematic curriculum reform. *Higher Education Research & Development, 23*(1), 261-275.

Billett, S. (2002). Workplace pedagogical practices: Co-participation and learning. *British Journal of Educational Studies*, *50*(4), 457-481.

Boud, D. (2001). Creating a work-based curriculum. In D. Boud & N. Solomon (Eds.), *Work-based learning: A new higher education? (*pp. 44-58). Buckingham, UK: Open University Press & Society for Research into Higher Education.

Brown, R. (2002). *Work related learning report.* Nottingham, UK: Department for Education and Skills.

Business Council of Australia (BCA) (2011). *Lifting the quality of teaching and learning in higher education.* Melbourne, Australia: Business Council of Australia.

Calway, B.A. (2006). What has work-integrated learning learned? A WIL philosophy. *Asia-Pacific Journal of Cooperative Education*, *10*(3), 151-162.

Choy, S.C. (2009, April). *Aligning workplace pedagogies with learners: What do they need to know?* Paper presented at the 12th annual conference of Australian Vocational Education and Training Research Association. Sydney, New South Wales.

Coll, R.K., & Chapman, R. (2000). Evaluating service quality for cooperative education programs. *Asia-Pacific Journal of Cooperative Education*, *1*(2), 1-12.

Cranmer, S. (2006). Enhancing graduate employability: Best intentions and mixed outcomes. *Studies in Higher Education*, *31*(2), 169-184.

Freudenberg, B., Brimble, M., & Cameron, C. (2011). WIL and generic skill development: The development of business students' generic skills through work-integrated learning. *Asia-Pacific Journal of Cooperative Education*, *12*(2), 79–93.

Gwet, K.L. (2012). *Handbook of inter-rater reliability*. Gaithersburg, MD: Advanced Analytics, LLC.

Hancock, P., Howieson, B., Kavanagh, M., Kent, J., Tempone, I., & Segal, N. (2009*). Accounting for the future: More than numbers. Volume 2: Strategies for embedding non-technical skills into the accounting curricula.* Sydney, Australia: Australian Learning & Teaching Council.

Harvey, L., Geall, V., & Moon, S. (1998). *Work experience: Expanding opportunities for undergraduates*. Birmingham, UK: Centre for Research into Quality, University of Central England.

Institute of Chartered Accountants in Australia and CPA Australia (ICAA/CPA). (2009). *The professional accreditation guidelines for higher education programs*. Melbourne, Australia: CPA Australia.

Knight, B. (2006). Expert's view: Getting the best from work experience. *Personnel Today*, July 3, 29-29.

KPMG Econtech (2011). *Increased demand for accountants to spark talent war*. Retrieved from http://www.lloydmorgan.com.au/news/2011/4/18/increased-demand-for-accountants-to-spark-talent-war-says-latest-clarius-skills-index/?1526

Mason, G., Williams, G., Cranmer, S., & Guile, D. (2003). *How much does higher education enhance the employability of graduates?* (Higher Education Funding Council for England [HEFCE]). Retrieved from http://www.hefce.ac.uk/pubs/rdreports/2003/rd13_03/default.asp

McLennan, B., & Keating, S. (2008, June). *Work-integrated learning (WIL) in Australian Universities: The challenges of mainstreaming WIL*. Paper presented at the Australian Learning & Teaching Council National Association of Graduate Career Advisory Services National Symposium.

Murphy, G., & Calway, B. (2006). Education for professionals through work-integrated learning. Paper presented at the *AARE National Conference, Adelaide.* Retrieved from http://www.aare.edu.au/06pap/mur06334.pdf

Orrell, J.E. (2011). *Good practice report: Work-integrated learning*. Sydney, Australia: Australian Learning & Teaching Council.

Papadopoulos, T., Taylor, T., Fallshaw, E., & Zanko, M. (2011). *Engaging industry: Embedding professional learning in the business curriculum.* Sydney, Australia: Australian Learning & Teaching Council.

Russell, L., Kay, J., & Standfield, R. (2010). Realising the vision: Implementing learning in the workplace and community at Victoria University (VU)**.** *International Conference on Work Integrated Learning University-Industry Collaboration for Real Life Education*. World Association of Cooperative Education. Retrieved from http://www.waceinc.org/conferencepapers.html

Seale, C. (1999). *The quality of qualitative research*. Thousand Oaks, CA: Sage.

Subramaniam, N., & Freudenberg, B. (2007). Preparing accounting students for success in the professional environment: Enhancing self-efficacy through a work integrated learning environment program. *Asia-Pacific Journal of Cooperative Education*, *8*(1), 77–92.

Usher, A. (2012). Victoria University learning in the workplace and community: Connecting partners, connecting fields, connecting learning. *Asia-Pacific Journal of Cooperative Education*, *13*(1), 13–22.

Weisz, M., & Smith, S. (2005). Critical changes for successful cooperative education. *Research & Development in Higher Education*, *28*, 605-615.

Woodley, C., & Beattie, S. (2011). Communal reflections on the workplace: Locating learning for the legal professional. *Asia-Pacific Journal of Cooperative Education*, *12*(1), 19–30.

Yin, R. (1984). *Case study research: Design and methods*. Beverly Hills, CA: Sage.

Yorke, M. (Ed) (2006) Employability in higher education: What it is - what it is not, *The Learning and Employment Series 1*. York, UK: The Higher Education Academy.

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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 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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