Enhancing Accounting Graduates’ Skills and Employability through a Work Integrated Learning (WIL) Capstone Course: An Australian University’s Experience

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Introduction

The skills required of accounting professionals have changed drastically during the last few decades. Accounting graduates are now expected to be equipped with the necessary skills to perform well in a fast changing corporate world. However, recent empirical evidence has shown that there is an increasing gap between what skills new accountants possess and skills they need at the workplace (Kavanagh, 2007). Howieson, 2003 suggested that universities will have to rethink their role and approach as they are now expected to offer generic, life-long learning skills to students essential for success in the current corporate environment. In response, universities are now increasingly making industry experience a pre-requisite of accountancy programs (Lebihan, 2007).

In a recent survey, 85% of all students work in paid jobs with 67% of full-time students reporting that the type of work they do is unstructured and not related to their studies (BIHECC, 2007). A discussion paper put forward by Universities Australia (UA) recently on a National Internship Scheme for proposed implementation received strong support that enhance earnings, learning and employability skills (Universities Australia, 2008).

Work Integrated Learning (WIL) including internships has a long history of existence under different names such as experiential learning and action learning. Reeders (2000, p.205) defined WIL as “student learning for credit designed to occur either in the workplace or within a campus setting that emulates aspects of the workplace”. Simply put, WIL is learning by doing. It is a partnership arrangement among students, educational institutions and employers with designated responsibilities for each party.
WIL programs complement the traditional university education model as it equips students with work-ready skills as well as discipline-specific knowledge that facilitate positive contributions to the workforce. Van Gyn et al, 2004 adapting from Millers & Seller, 1990 presented perspectives on learning in education in their context and educational practice. These orientations are classified as transmission, transaction and transformation.

The traditional way is viewed as transmission as it ensures that knowledge and skills are transmitted to students. The responsibility falls on the educational institution with the learner students reduced to a passive role. WIL takes on the transaction perspective. It is one where it emphasises the development of skills needed to acquire knowledge. Transaction emphasises on learning rather than teaching and learner centred outcomes. These may take the form of critical thinking skills, self directed learning and continuous learning processes, all of which are highly valued by employers (Millers, 1990).

Literature review

Mathews et al (1990) identified areas of perceived weakness in accounting courses and recommended a greater emphasis on the generic skills to assist graduates in the workplace. The greatest skill deficiencies among new graduates were in the areas of creativity and flair, oral business communications and problem solving. The skill deficiencies most commonly cited by employers in 2000 were similar being lack of communication skills, lack of personal skills and lack of understanding of business practice¹.

Candy et al, 1994 suggested that teaching methods that encourage graduates to become lifelong learners should make use of peer-assisted and self-directed learning, include

¹ ACNielsen Research Services, 2000, Employer Satisfaction with Graduate Skills: Research Report
experiential and real-world learning, make use of resource-based and problem-based teaching, encourage the development of reflective practice and critical self-awareness and as appropriate, make use of open learning and alternative delivery mechanisms.

Future accountants will take on the role of ‘knowledge’ workers with more significance placed on analysis skills, innovative problem solving, communication and client relations (Howieson, 2003). These skills are similar to the Graduate Skills Assessment (GSA) test developed by the Australian Council of Educational Research (ACER) in 1999 used by employers and graduates. This test covers critical thinking, problem solving, interpersonal understandings and written communication. Universities can assist by embedding such employability skills as part of the graduate skill set through curriculum redesign, course content, pedagogy and delivery strategy (Albrecht and Sack, 2000).

Curriculum reform and core competency studies have now become more important to accounting educators because of recent accreditation standard changes. Association to Advance Collegiate Schools of Business (AACSB) standards require that accredited programs should be mission driven and this mission is reflected in the curriculum with specific measurable goals.

The Australian ‘Accreditation Guidelines for Universities’ has also compiled a list of generic skills areas based on Professor William Birkett’s 1993 study recommendations on competency standards for accountants. The recommended accounting graduate attributes may be broadly classified as cognitive skills, analytic/design skills and behavioural skills. These are the skills applied in practice and valued by employer groups and professional

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2 ‘Competency Based Standards for Professional Accountants in Australia and New Zealand (1993).
bodies (Jones and Sin, 2003) and should be integrated and incorporated into the accounting content in courses and mapped into a university’s accounting program.

Coupled with these professional requirements, the qualities a USQ graduate should include attributes of discipline expertise, professionalism, global citizenship, scholarship and lifelong learning. The link between the five qualities are skills in ethical research and inquiry, problem solving, academic and professional literacy, written and oral communication, interpersonal communication, teamwork, cultural literacy, management, planning and organisational skills and creativity, initiative and enterprise. (USQ Acad Prog, Pt 4, Sect 4.2.5)

Accounting WIL courses can help to bridge and establish the relationship between tacit and explicit knowledge. Accounting curricula have to embrace change by changing the focus from “knowing what” to “knowing how” and from knowledge-based to task-based. Tacit and explicit knowledge transfers can take place more effectively in a WIL setting (Hunt, 2000).

Real tasks are used as the vehicle for learning. Student’s learning is immediately relevant and useful to the work setting. Accounting WIL programs will also benefit the university from enhanced placement opportunities of graduates, the reinforcement of classroom learning, and increased support of their programs by industry and feedback on the relevance of the accounting curriculum. (Beard, 1998) They also benefit industry by providing a means for recruiting and retaining employees, providing part-time work for potential employees and enhancing the company’s image in the community (O’Keefe, 2007)

Jervis and Hartley (2005) explained the need for an accounting capstone course to interconnect courses within Accounting and to transition students to the career world. The
rationale is based on the institution’s objectives to produce work-ready accounting graduates as well as to satisfy accounting education change initiatives. These courses should attempt to integrate skills and competencies from earlier courses, synthesise their accounting knowledge and enhances a student’s ability to develop an aptitude for life-long learning.

In the United States, a research study by (Beard, 1998) found that most accounting internship WIL programs were fairly new, for credit only, occur in the junior year, are paid and require a written project to be completed by the student. To the best of my knowledge, no such study has been done in Australia. Hence, a preliminary study was done to look into the various accounting work integrated learning models practised by other Australian universities (Appendix 1).

Abeysekara, (2006) looked into the issues related to designing a WIL course for an Australian undergraduate accounting program. Although such courses are common in other professions like education and engineering, they have not much prominence in Australia and are not well researched.

**Proposed implementation of USQ AWIL**

A one-size fits all approach is inappropriate as there is a need to offer different approaches for different kinds of learners within the program. In a speech made in 1929 by the father of WIL, Herman Schneider “There are no two cooperative education courses the same and different tactics have to be used in different places.” (ACCE)

Having considered all the prior literature, USQ proposed to offer an Accountancy Work Integrated Learning (AWIL) practice-oriented capstone course in 2009. The proposal is to
follow the UA initiative to adopt the internship model where work is carefully supervised and monitored and students have intentional learning goals.

A suggested format would be the standard 165 hours per course. This may be done in a block of 4 weeks during a semester, working 6 hours per day. A total of 40 hours is suggested for written assessments. This is equivalent to a standard 1-credit accounting course in a semester.

The aim is to extend the depth of student learning by experiential application of the concepts, theories and graduate attributes relevant to lifelong learning developed in the Accounting discipline to their workplace activities and make a useful contribution to industry. It is envisaged that this course will encourage a reflective approach to the development of students’ workplace skills but also enhance students’ learning experiences and post-graduation prospects.

**Research problem/questions**

This study aims to expand on existing research literature by introducing AWIL as a capstone final semester course in USQ’s accounting curriculum. This will be done through curriculum changes to meet the needs of the AACSB standards for accreditation by embedding generic skills identified by the professional accounting professional bodies (ICAA & CPA Australia) into the course as required to ensure the accounting programs offered are current, mission oriented and goal-driven and meets the needs of the profession (Jones and Sin, 1997) and the university. This research will examine the relationship of work-integrated learning with its goals and objectives and the assessment of learning in this course.

This research study aims to find solutions to the following research questions:

Q1: How can these skills and attributes be identified be incorporated into a capstone workplace integrated learning course in a university accounting program?
Q2: To what extent have these skills and attributes being developed and enhanced in students during and upon completion of the AWIL course?

Q3: How has the completion of the AWIL course helped the students in their ability to secure relevant permanent employment after graduation?

**Research Methodology**

**Sampling**

Initial enrolment will be limited to 30 on-campus and 30 external students across the Toowoomba, Springfield and Fraser Coast campuses. Students are required to find their own work experience placement though the university may assist students in future when an employer database is established. This may be done through faculty contacts and through alumni who may be potential employers.

**Internship assessment**

Zegwaard et al, 2003 identified three models of student assessment that incorporates the stakeholders’ needs. They are:

- A performance-based model incorporating desirable workplace competencies
- Negotiated placement objectives agreed between the employer and the student and
- A portfolio approach providing a student achievement profile and employer reference

It is with these elements and models in mind that a mixed-methodology approach is proposed.

Selected students going for AWIL will have their learning tasks mapped to objectives and these in turn are integrated to the competency standards and generic skills developed by the professional accounting bodies blended with USQ graduate attributes checklist is found in Appendix 2A (herein named as Form 2A). A proposed skills competency levels assessment form using a 5-point Likert scale adapted from Form 2A is shown in Appendix 2B (Form 2B).
Students and employers will keep Form 2A as reference before internship begins. Students will self assess complete Form 2B pre and post internship. Employers will complete both Forms 2A and 2B upon completion of internship.

Each student will have these forms tailored based on the work experience plan of aims and outcomes supplied earlier. This constitutes 30% of the total weight of the course.

Boud (1985) explored the field of experiential learning and found the key to turning experience into learning is reflection with new understanding and appreciation. Students would also have to maintain a work journal/reflective diary (30% weight) detailing their tasks and work throughout reflecting on the application of theory to practice.

They also have to complete a written 3,000 word final report (40% weight) on their work learning experiences. On-campus students will have the option of presenting their experiences to an audience.

To gauge if this WIL experience has resulted in a permanent position in the work place, a form will be developed to measure the time taken to secure employment after the internship.

**Data analysis**

If learning occurs in placements, then internships will be viewed as educational. Data collected from forms in Appendices 2A and 2B will be analysed. To measure if the students have learnt from the AWIL experience from their self assessments, paired samples t-tests (more than sample of 30) will be carried out using SPSS software.
A qualitative means of inquiry (Eames, 2004) may be further employed to ascertain subjective views such as placement experiences and when greater depth is required. This may be done through questionnaires accompanied by semi-structured interviews (Coll and Chapman, 2000) and reviews of the reflective diaries and written reports.

Results from the measurement of employment outcomes can be compared to a control group who have not done AWIL to see if there are any differences in employment prospects again using paired samples t-tests.

**Significance/potential contributions**

This proposed study aims to investigate how the gaps between the skills needed by practitioners and the skills of the new graduates can be effectively narrowed or closed through the introduction of a work integration learning course. It is an attempt to identify skills and attributes required by participating employers and mapping them to tasks that students perform in their learning during their work attachment.

The assessments will measure and reflect on the competency of skills required of student interns and make the students’ learning experience interesting, practical and relevant. A course like AWIL, will enhance a student’s ability to integrate academic knowledge with practical applications (Beard, 1998). With the introduction of this capstone course, students will be able to experience the real world in an academic setting and tie together many previous courses in an accounting course and facilitate transition to an exciting accountancy career ahead (Jervis, 2005).
It also hopes to find out if the workplace experience will result in increased permanent positions when the students graduate. This study may also be extended to overseas placements when the necessary infrastructure is in place.

Current accounting WIL university courses cater to on-campus students. The accounting student cohort in USQ is a rich blend of student types ranging from ex high school students to mature working adults working in industry, studying in different modes, spread across city and regional campuses. The findings in this study will assist other accounting educators to incorporate workplace learning in their accounting curriculum suitable to their circumstances to meet the needs of the employers by learning from our experience.

This study should also stimulate interest in the professions by fostering improved communications and closer relationships between academics and practitioners, better aligning accounting education and research with the needs and problems not just of the profession but also with the demands and desires of society generally (Diamond, 2005).

**Limitations**

This study’s sample size is restricted to a combined size of 60, with 30 on-campus and 30 external students across all campuses. Hence, the insights obtained will be confined to the results obtained from this sample. If the experiences are positive, further work may be carried out to expand the course to be a compulsory course for all graduating accounting students.

**Feedback**

I would appreciate feedback on the overall proposal and in particular suggested research methodologies to measure learning and employment outcomes from intern participants.
References


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Birkett, W. 1993, ‘Competency Based Standards for Professional Accountants in Australia and New Zealand’, Sydney


Business, Industry and Higher Education Collaboration Council (BIHECC), August 2007, Graduate Employability Skills, Precision Consultancy.


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Jarman, R & Willey, K. 2007, ‘Benchmarking capstone projects in UTS Faculty of Engineering’, *ATN 2007 Assessment and evaluation for real world learning conference*, QUT, Brisbane


Universities Australia, October 2007, ‘A National Internship Scheme’, Discussion paper


University of Southern Queensland, The Qualities of a USQ Graduate, Part 4 Academic Program, Section 4.2.5


## Preliminary status of Work-Integrated Learning (WIL) programs in Australian undergraduate accounting degrees

<table>
<thead>
<tr>
<th>No</th>
<th>University</th>
<th>Program</th>
<th>Compulsory?</th>
<th>Level</th>
<th>Placement?</th>
<th>Salary</th>
<th>Duration</th>
<th>Assessment</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>1</td>
<td>UTS</td>
<td>Internship</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td>6 months</td>
<td>Formal evaluation by employer, Report</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>UWS</td>
<td>WIL</td>
<td>Y</td>
<td>3</td>
<td>Y</td>
<td></td>
<td>13 weeks</td>
<td></td>
<td>Launched in 2007</td>
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<tr>
<td>3</td>
<td>CQU</td>
<td>WIL</td>
<td>N</td>
<td>2/3</td>
<td>Y</td>
<td>50% graduate</td>
<td>4 weeks</td>
<td></td>
<td>Official transcript, certificate</td>
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<tr>
<td>4</td>
<td>Griffith</td>
<td>WIL</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Presented, 2 stage workshop series</td>
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<tr>
<td>5</td>
<td>JCU</td>
<td>WIL</td>
<td>N</td>
<td>3</td>
<td>N</td>
<td></td>
<td>60 hours</td>
<td></td>
<td>Presentations, e-portfolio and journal, assignments</td>
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<tr>
<td>6</td>
<td>USQ</td>
<td>WIL</td>
<td>N</td>
<td>3</td>
<td>N</td>
<td>Negotiable</td>
<td>13 weeks</td>
<td>Work skills assessment, Reflective diary, Final report</td>
<td></td>
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<tr>
<td>7</td>
<td>Flinders</td>
<td>WorkReady</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Gippsland only, interview, minimum GPA</td>
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<tr>
<td>8</td>
<td>Monash</td>
<td>Work Placement</td>
<td>Y</td>
<td>3</td>
<td>Y</td>
<td></td>
<td>8 weeks</td>
<td>7000 word report</td>
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</tr>
<tr>
<td>9</td>
<td>RMIT</td>
<td>CO-OP</td>
<td>Y</td>
<td>3</td>
<td>Y</td>
<td>26000-40000 pa</td>
<td>12 months</td>
<td>Organisational analysis, proposal, 5000-7000 word business report</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Swinburne</td>
<td>IBL</td>
<td>N</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Selective, high calibre students, 4th year</td>
</tr>
<tr>
<td>11</td>
<td>VU</td>
<td>CO-OP</td>
<td>N</td>
<td>3</td>
<td></td>
<td></td>
<td>&gt;= 40 weeks</td>
<td></td>
<td>More than 30 years existence, full-time, 4th year</td>
</tr>
</tbody>
</table>

Sources: Universities’ accounting program homepages and handbooks
Accessed 27-May 2008
### Proposed - CPA Generic Skills and USQ Clusters Tasks checklist

<table>
<thead>
<tr>
<th>Number</th>
<th>Skill Cluster</th>
<th>Attribute Description</th>
<th>Identified task(s)</th>
<th>Demonstrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Accounting knowledge</strong></td>
<td>Discipline</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multidisciplinary</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td><strong>Core</strong></td>
<td>Communication</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Decision making</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Teamwork</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><strong>Research and inquiry</strong></td>
<td>Analytical and critical thinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Problem solving</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Research methodologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td><strong>Self management</strong></td>
<td>Self management</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Independent learning</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Life-long learning</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Intellectual autonomy</td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td><strong>Literacies and context</strong></td>
<td>Information literacy</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Cultural literacy</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Information technology literacy</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>Numeracy</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Local, national and international contexts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td><strong>Personal &amp; professional responsibilities</strong></td>
<td>Personal ethics and responsibilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Professional ethics and responsibilities</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>Societal responsibilities</td>
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</tbody>
</table>

(Adapted from Jarman & Willey, 2007)
Example: Proposed - Skills competency levels assessment

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Identified tasks</th>
<th>Expert</th>
<th>Proficient</th>
<th>Adequate</th>
<th>Limited</th>
<th>Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information technology literacy</td>
<td>Use of Microsoft Excel to create a business spreadsheet with formulae built in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Adapted from Zegwaard, Coll & Hodges, 2003)