An organization overview of pedagogical practice in work-integrated education

ANDREW J. MARTIN[1]
MALCOLM REES
MANVIR EDWARDS
Massey University, New Zealand

LEVINIA PAKU
Waikato University, New Zealand

Tertiary curriculum design has increasingly emphasized work-integrated learning (WIL) opportunities. This qualitative study provides an overview of a variety of WIL activities at Massey University, New Zealand. Descriptive comments, provided through interviews with fifteen academic supervisors from disciplines ranging from the applied sciences through social sciences to business, education and creative arts, highlight the following six factors to be considered in the resourcing of WIL programs. Themes related to set-up include placement requirements, support, selection, location, and risk management issues. Student preparation involves pre-requisite theoretical knowledge, general career preparation (CV & interview skills) and readiness for practice. With respect to supervision, an on-campus academic mentor and a work-place supervisor are both important to the student. Competencies linked to team work and professional standards include self-confidence, communication and people skills. The teaching pedagogies used include lectures and labs, oral presentations, scenario-based-learning and project work. Assessment involved a learning contract, reflective journal, oral presentation, and final report. (*Asia-Pacific Journal of Cooperative Education, 2012, 13(1) 23-37*)

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INTRODUCTION

There is increasing emphasis on work-integrated learning (WIL) or work-based experiential learning within tertiary organizations in New Zealand and Australia to enhance graduates' employability (Freudenberg, Brimble & Cameron, 2009; Newcastle University, Australia, 2008, Orrell, 2011). A national scoping project, undertaken in Australia (Patrick, Peach & Pocknee, Webb, Fletcher & Pretto, 2008) raised a number of issues relating to WIL, including equity of access to such programs, stakeholder expectations and resourcing. Notwithstanding some of the issues surrounding WIL, one of the outputs from that project was the posting of a large list of examples, as vignettes, of WIL to the Australian Cooperative Education Network (ACEN) website. This list of activity demonstrates a keen interest in this approach to learning across a wide range of disciplines. In New Zealand, a similar project spanning Higher Education Institutions sought to explore WIL pedagogy in terms of the integration of student knowledge and the student learning outcomes (Coll, Eames, Paku, Lay, Ayling, Hodges, Ram, Bhat, Fleming, Ferkins, Wiersma, & Martin, 2009).

A WIL dimension has been included in the Australasian version of the Survey of Student Engagement (AUSSE), at the request of academic staff from this region. Embedding data collection of this type in one of the key data sets shows a keen interest in this approach to learning in this region. The AUSSE provides information for stimulating evidence-based conversations about the quality of student engagement in university education (Coates, 2011). Most universities have administered AUSSE on more than one occasion since 2007. Coates (cited in Higher Education Update, 2011) states that "if learning how to think is the

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[1] Corresponding author: A.J.Martin@massey.ac.nz

primary purpose of University then getting a job at the end likely comes a close second" (p. 13).

At Massey University, WIL has been included in the university's strategic plan. This demonstrates a strong commitment to this approach to learning "by increasingly embedding workplace and applied learning opportunities within the curriculum" (Massey University, 2011, p. 7). A departure from the conventional understanding of WIL and applied learning has been the inclusion of simulated activities along with the more traditional WIL approach that would typically involve a work placement. The inclusion of similar experiential WIL activity has been reported by other researchers (Patrick et al., 2008, Winberg, Engel-Hills, Garraway & Jacobs, 2011).

Experiential learning is a cyclical process that involves observation, reflection and action (Dewey, 1938). Dewey advocated the value of experiential learning, but argued not all experiences are educative. He suggested that learning occurs as a result of problem solving and requires thinking and reflection guided by educators. Similar characteristics define the pedagogical approach of WIL (Huddara & Skanes, 2007). A range of pedagogies provide students with content knowledge and theory, linked to practical work through the placements/practicum or project. Programs should be applied in nature, employing group work and other pedagogies to foster both industry skill development and behavioral soft skills development (Coll et al., 2009).

This paper highlights the specific components which, when melded together, enhance the WIL tripartite partnership of employer, academic staff, and student. The student brings to the WIL placement theoretical knowledge, industry skills and prior experiences, which have helped develop the person he or she is now (Boud & Knights, 1996). WIL then provides the opportunity for the student to develop both personal and professional attributes and enhance employability upon graduation. It adds a complementary, professional dimension to academia and builds networks. Done well, WIL benefits each stakeholder within the tripartite relationship.

A good application of WIL occurs when it is woven through the entire fabric of a program of study as an assessed activity, threading the theoretical knowledge and learning outcomes with an understanding of professional practice and expectations, and the competencies necessary to be successful. This scaffolding or stair-casing of student's experiences over time enhances reflective practice (Leberman & Martin, 2004). Matching students' expectations to projects and supervisors (Martin & Leberman, 2005) and providing opportunities for the student to build industry relationships (Martin, Fleming, Ferkins, Wiersma & Coll, 2010) are both important considerations.

A particular strength of the WIL experience is the ability to enhance those soft skills that could not be learnt in the classroom environment (Fleming, Martin, Hughes & Zinn, 2009). Student learning is supported through appropriate industry and academic supervision (Martin & Fleming, 2010). By being open minded, observing, listening, asking questions, preparing documents, reflecting and requesting feedback, students develop self-confidence, people and communication skills supported by their supervisor's positive reinforcement, criticism and feedback. Engaging with different stakeholders and developing a network of contacts is important in enhancing future career opportunities (Martin & Hughes, 2009).

Billet (2011) provides a view of WIL that characterizes three components of the learning experience in terms of the curriculum demonstrating that there are aspects to learning that

extend beyond conventional expectations from lecture-based courses: intended, enacted and expected.

1. Intended curriculum. What are the intended learning goals?

2. Enacted curriculum. What actually occurred to shape the learning.

3. Expected curriculum. What students actually experienced as they engaged with what was intended.

A particular interest for this current project was the extent to which on-campus and e-simulations are contributing towards the WIL experience (Stewart, 2011). On-campus scenario-based learning occurs in a context, situation or social framework (Kindley, 2002) and reinforces theoretical concepts. Reasons for using on-campus options can vary, for example, managing WIL with large classes or exposing students to group project work. Patrick et al. (2008) argued that project work is a particular strength of the WIL approach. Simulations are also used where the subject is perishable (e.g. clinical practice with animals or human subjects) or where the health and or safety component to the learning may be hazardous if done in reality (e.g. aviation).

Off-campus project and personal learning objectives can be individually determined between the student and academic supervisor, along with evaluation strategies to demonstrate that these objectives have been achieved (Fleming & Martin, 2007). Learning outcomes should also be determined between the student and work supervisor as they emerge during the course of the placement (Hodges, 2011).

Typically, WIL utilizes both formative and summative assessment with the formative component more dominant than with conventional lecture-based assessment of learning. Many of the assessment approaches employed reflect the complexity of the dual and complementary nature of the learning environments (Eames & Bell, 2005) and incorporate elements of reflection along with more conventional modes of assessment (Coll et al., 2009; Hodges, 2011). The WIL experiences encourage the development of the student as a reflective practitioner (Schön, 1983, 1987, 1991), where they transform experience and theory into knowledge (Roberts, 2002), resulting in transfer of learning (Macaulay, 2000). The reflective journal entails revisiting feelings, re-evaluating the experience (Boud, Cohen & Walker, 1993), planning future action and linking theory to practice (Fleming & Martin, 2007). A unique feature of WIL assessment is the inclusion of workplace supervisors or employers within the overall assessment process. Not only do the students reflect on their own experiences in a formative and summative way but also a third party can contribute to the authenticity of the overall evaluation process (Cooper, Orrell & Bowden, 2010; Hodges, 2011).

The aim of this New Zealand case study was to provide an overview of a variety of WIL activities for tertiary providers either offering or considering WIL as an option for enhancing student learning. This study also aims to provide academic supervisor observations about WIL practice from a specific set of university programs for students, lecturers, and employers involved in the pedagogy of WIL so as to positively influence teaching and learning methods.

METHOD

This study employed a qualitative case study methodology (Bassey, 2003; Stake, 2008), which allowed the researchers to gain an in-depth understanding of the issues of interest and to

explore meaning from a number of angles and across different work-based experiential education contexts (Merriam, 1998). Case studies are a common methodological approach used in WIL research because of the highly contextualized nature of such programs (Coll & Chapman, 2000).

A convenience sample of fifteen academic supervisors engaged in WIL provided a snapshot of WIL activity from across a range of academic disciplines (e.g. business, creative arts, education, applied & social sciences) was used in the study. The participants related aspects of their WIL programs at Massey University, New Zealand and shared opinions on meeting learning outcomes and the needs of students during the WIL experience. The semi-structured interview was an appropriate method to understand respondent's opinions and beliefs (Easterby-Smith, Thorpe, & Jackson, 2008).

The use of qualitative data analysis in this case study aimed to communicate understanding from the different interview responses (Stake, 2008). The interview data was transcribed and sent back to the participants to be member-checked. These descriptive responses were summarized and combined independently by the three authors into themes resulting in six factors: organization set-up; student preparation; supervision; competencies; pedagogies; and, assessment. The demographic and open-ended questions were tabulated using Microsoft Excel.

Whilst it is recognized that the extent of generalization from the research is limited, this is concordant with the nature of qualitative and case study research, which seeks to form a unique interpretation of events rather than produce generalizations. Transferability is the interpretive equivalent to generalization, and is enhanced here by the provision of a "thick" description (Merriam, 1998), which details the context, method and data analysis procedures. It is expected that the findings of this study will lend themselves to being transferred more widely to, or in other, WIL contexts i.e. by any tertiary provider either offering or considering WIL as an option for enhancing student learning.

The credibility and dependability of the research was enhanced by triangulating the themes from the data analysis by the three authors, involving relevant documentation (e.g. course/paper outlines, graduate competencies, etc.) and literature (Stake, 2008; Yin, 2009). The reporting of the descriptive responses attempts to convey the holistic understanding and meaning of the phenomena under study (Merriam, 1998). The study followed human research ethics regulations, which considered issues of confidentiality of participant identities and informed consent.

RESULTS

The qualitative data findings focused on six key factors: organization set-up; student preparation; supervision; competencies; pedagogies; and assessment (Martin, Rees & Edwards, 2011). The quotes throughout the results section are gathered from the semi-structured interviews with the fifteen academic supervisors. They are representative of their responses. The importance of the WIL component to the overall program is highlighted in the following typical quotes:

> WIL is the heart of the program …

> …. serving as a culmination of theoretical studies...

> … hands on experience... leads to a better graduate

Organization set-up

The findings indicated that themes related to set-up include placement requirements, support, selection, location, and addressing risk management issues; and, that certain considerations foreshadow the set-up, administration, resourcing and implementation of WIL. The rationale and approach to WIL within an academic program or course is linked to how these precursors combine and thereby influences the extent of support and resource to assist management of placements. In this study, it was found that the foreshadowing considerations that influence what is done, why and how, with respect to the WIL curriculum include the following:

- Is it a program completion requirement and/or does it carry academic credit/points?
- Is it undertaken within an academic year or outside of the academic year?
- What is the number of students involved?
- What is the number of hours involved?
- Is it an individual/standalone paper or is it a component integrated within a program?
- Does it involve a scaffold approach over a number of years with multiple exposures, or is it a single exposure in one year only?
- Is it stipulated as part of an accreditation requirement, or for registration and recognition by a professional field/body/agency?

The findings indicated that there is value that can be derived by students from WIL opportunities irrespective of the timing, location and duration of the program of study in which the opportunity is presented. A positive WIL opportunity for students can be achieved regardless of the foreshadowing considerations. Typically, WIL was seen as an off-campus activity; however, examples were also provided of on-campus simulated activities which were viewed as effective demonstrations of WIL. Placement either was specified by the supervisor or was self-selected by the student. Self-selection allows students the capacity to choose an environment or organization about which they feel passionately; the cold-calling process necessitates the early use of soft skills relating to communication and time management; another strong motive is the prospect of future employment.

> …the students select the companies they would like, or the type of product or market they want to work in and then they research that company or a number of companies, and then they look for a placement.

Placing commonly requires the university to have a long-standing relationship with the workplace organization. Students can be placed in environments where the workplace is familiar with the education expectations and are comfortable with having a student present. It is often a time-consuming process for academic staff or WIL liaison staff to create and maintain the networks with industry or the professions but the benefit to WIL and the student is that a known and reliable environment is provided. This is important and necessary, particularly in professions where there is either competition for placements from other educational providers or limited opportunities for placements.

> …we do a placement plan for all three years.

> Our relationship with the particular institutions is very close; it needs to be highly professional… so the type of relationship and discussion has to be of mutual trust… the nature of the practice, the nature of the work that we do together has to be on that basis.

> We invite all prospective employers to come and visit our students and informally mix and mingle with our students enticing them to come and apply to work for them.

The study found that the length of placement can vary from a few weeks to full one-year internships; it is likely to span at least one semester. It is noted that in some parts of the world an internship is understood to mean a full one year gap year which is sometimes in paid employment. To manage expectations, define lines of responsibility, and mitigate risk, academic requirements should be articulated and other obligations made known as these relate to those within the tripartite partnership for WIL.

> My job is to ensure that the university regulations and the industry regulations integrate nice and safely.

Formal contract, confidentiality agreements or similar formal demands from the employer may be required prior to the placement taking place. In turn, workplaces are encouraged to expose students to the same level of induction training as they would for permanent employees.

> There's the university contract that we require the students to get their host internship post to sign-off and I also sign-off, and that indemnifies the institution against students making some kind of error.

Providing clear documentation on academic/learning and administrative matters around WIL, and identifying the support available if needed, to students and supervisors in the field allows each to make the most of the workplace opportunity and assists them to establish realistic expectations and achieve learning outcomes. The information and support should be readily available and accessible, including online:

> [A] memorandum of understanding… signed by both the students and the clients… stated up front that the learning outcomes that were required for the students were the first and foremost thing that we were interested in.

Developing and maintaining ongoing good relationships with industry staff and organizations in the field is vital for the success of WIL programs so that they understand the ongoing expectations and academic learning outcomes that may not necessarily align with the commercial imperatives and having students involved.

> We send a letter once the student has found the place and the contact… we send them a letter to say 'thank you' for offering the opportunity… we usually give a bit of background about the internship… what the student needs to be looking at, what they're going to complete at the end of their internship and then we also have an evaluation sheet which they fill in.

Student preparation

The findings suggest that student preparation involves pre-requisite theoretical knowledge, general career preparation (CV & interview skills) and readiness for practice. Students should gain the theoretical knowledge and skills either prior to or concurrently with WIL and scaffold an early work experience with a later year assessed WIL activity.

> A lot of the initial preparation is done in papers that they're doing as pre-requisites. They do lots of lab work and role plays as well as learning about the theories. They get to do some work around ethics and boundaries, supervision, integration of theory

> in practice, action reflection material, conflict management, stress management, time management.

> They actually get a lot of exposure in other papers that bolt the knowledge base and the skill base… before they enter into the practicum paper… to allow them to be effective in the practicum.

University careers' and employment service professional support staff should be used, at an early stage, to develop students' CV and interview techniques, awareness of professional requirements, and the soft skills needed for a the workplace environment (e.g. team skills, communication skills, coping skills).

> We prepare them in terms of the knowledge base of skills they need to go into a particular setting... A careers' person will come in and work with students … [giving] guidance with developing CV and a portfolio.

It is important for students to be provided with information which clearly indicates the expectations of the student, suitable work activities, required competencies, assessment requirements, and theoretical resources. Students should also research potential organizations, plan, be proactive and establish clear expectations of the placement and employer (Martin & Leberman, 2005).

> We have documents that the students have to do before we look at placements for them… they are given specific guidelines of what we want and we check those before they go out.

> Students also have to fulfill our fit and proper and readiness for practice criteria.

> …we encourage students to make their own pitch to an organization of their choice …it's good practice for them to try to sell their skills …they are more likely to go for an organization that they feel passionate about and that gives them the opportunity to look inside that organization once they are there as an intern and figure out if they would actually want to try to get a job there on graduation.

Supervision

An on-campus academic mentor and a work-place supervisor are both important in providing on-going support and guidance to the student. The academic mentor provides advice and support to the student while the student is on placement and is a point of reference within the university to whom the student can turn for either academic/learning outcome or administrative matters related to the placement.

> The best resources are the discussions they have from time to time with [the] mentor.

> [The workplace supervisor is] the local expert… the internship host… someone on the ground who knows intimately what the business is trying to achieve and that kind of thing.

Some professions, such as in the health sector, require the presence of university staff in the workplace to act as supervisors for the students on placement. The workplace supervisor should have a good understanding of the academic requirements in relation to learning outcomes and WIL objectives, as they are are often, but not always, asked to contribute towards the assessment process. Each WIL student should have both on-site, hands-on direct

workplace supervision of activity, and an off-site academic mentor offering advice from a distance on a regular basis, perhaps participating in formative assessment, reinforcing theories and generally also providing support. As WIL progresses, mentoring encourages the student to align the theory learned in lectures with practice in the workplace.

> You're trying to send them out with a level of experience so that they're not going to be inept and make a fool of themselves. But, in fact, what you're hoping is that you give them enough skills at the imitation level so that when they're in their placements they can actually start to take that up to the next level.

Mentoring entails oversight of, and regular contact with, the student. It is time-consuming and resource intensive and to some extent dictates the possible scale of WIL in an institution.

Competencies

The findings indicated that despite the variation in the type of work placement, the range of competencies identified by the academic supervisors, outside of specific professional skills, are similar for all placements. These include self confidence; communication skills; people skills; teamwork; and professional standards.

> Other competencies get developed too… Students encounter the pressures of the workplace… They encounter the politics of the workplace… They're quite naïve when it comes to workplaces.

Enhancing communication skills, oral, non-verbal (gestures, kinesthetic) and written begins very early in the process and is important especially if students are expected to liaise directly with industry stakeholders. Developing such self-confidence through WIL exceeds the possibilities of classroom-based learning. Meeting the competency needs of industry stakeholders may require planning, engagement, discussion, review and evaluation.

> What a lot of practicums do is to give students confidence… They've seen how industry works. They can see why their technical skills are going to be wanted by the industry.

> They see how people in commercial situations interact with clients and they get to practice these social skills.

Team- or peer-based on-campus activities provide complementary learning opportunities that closely resemble or simulate the real world environment. This is a particularly useful way of exposing many students to WIL all at the same time rather than applying selection criteria to placements.

> They worked on small projects… sometimes there were four groups working with one client and the client would choose one of those groups… it was hugely successful.

> The company isn't interested in the fact they've got a degree… that's [technical knowledge] kind of taken as a given… what they want to see is can the students' communicate?… what sort of personality they have… can they work in teams?

Professional standards and prescribed competencies support the culture of an organization. Employees are expected to be honest, trustworthy, courteous and conscientious.

> The students have to meet the competencies that are set by [industry].

Pedagogies

Particular teaching methods used in academic courses are frequently theory-based lectures and labs, oral presentations, scenario-based learning and project work. Regardless of which approach is utilized, the theory taught should be reflected in the learning outcomes for the WIL course.

> Initial preparation is done in their practice papers that they're doing as pre-requisites… We start off by providing them with theoretical understanding and knowledge of the areas that they are going to be trained up in…which they take in their first year… that is followed up in second year by an applied paper which actually does teach skills and practical skills… which they do implement by seeing clients initially in a sheltered environment of our teaching clinic.

Guest lecturers, such as university careers' service professionals, external industry experts, or recent graduates, provide an expanded view and the link between university/academic course and the emergent workplace curriculum/career/profession and therefore should be considered to augment the teaching.

> We invited people of all walks of life and all stages of their profession… One of the most illuminating lectures we brought in recent graduates… Students who've been out for one or two years come and talk about their experience of transitioning from a university to the workplace… There was a lot of empathy.

Informal, formal or even on-line oral presentations are common ways to provide opportunities to reflect on action (Schön, 1991) both during and at the end of the work placement.

The strength of scenario-based learning (SBL) or project work in the academic curriculum is that such simulations provide the opportunity to incorporate several competencies, often in a very controlled way without needing to leave the campus or learning environment. Working on specific projects in groups or teams prior to the WIL experience provides opportunities to develop skills that may enhance project work in the workplace. Thus, SBL can be a precursor or substitute for a physical placement.

> When we are teaching theoretical concepts we make them come alive through case-based learning, case studies, role plays, demonstrations, and then when they get into their actual applied papers that intensify more so that by the time they get to their internship they are seeing actual clients… to simulate what it's going to be like in the real world.

> The students do lots of group work right throughout our degree… They've all had these fantastic experiences that we try and get them to impart to other students so that students can learn from each other.

> [The students] have to build up a project plan, budget etc., and time plan… and have to work through it. Each project is supervised by an academic staff member… they've been quite successful in developing new products or in sorting out manufacturing problems.

Assessment

WIL should have some form of assessment, unless it involves transitional activities i.e. a work experience activity that may be observations only (not assessed) that develops into an assessed WIL activity. The assessment could be an initial learning contract, followed by a reflective journal, oral presentation, and/or a final report by the student. In some instances, a supervisor's report can augment the overall student assessment.

> All of our assessment follows our learning outcomes so everything is tied to those learning outcomes that we've set for the papers.

WIL offers the opportunity to enhance greatly the combined use of both formative and summative assessment. Informal formative approaches are varied, ranging from the use of technologies such as emails, blogs and other e-journals, through to the use of more formal approaches such as reflective journals. Summative assessment provides a meaningful opportunity to assess, in particular, report writing and oral presentations both of which can be learning outcomes from WIL. Equally, the development of soft skills, such as confidence, can be evaluated using such assessment, through using WIL.

> Soft skills… probably hard to mark… the fact that I'm working with them six hours every week on the floor I can see how they develop and I can sort of give them feedback (advising and managing them as far as I can) on how they dealt with…

> They keep a diary… they do a presentation when they come back... written presentations (as well)… they do a written report… They do a daily record, daily form, and they have a list of questions to talk to the company about.

A learning contract is a specific document describing work activities and project focus and is prepared and negotiated by the student with the host organization, which is then approved by the academic supervisor. It outlines the goals, targets, and expectations of the practicum experience.

> They have to do an assessment document… they are expected to contribute to the learning contract and they have to sign the learning contract… that's the foundation for the placement so it specifies a whole lot of things that the student's going to be doing.

A reflective journal outlines the tasks performed and includes reflections on all activities that take place throughout the practicum experience. In some instances, a regular summary report of the student's reflective journal is also submitted to the academic supervisor. The use of technology is developing through, for example, electronic blogs and e-portfolios.

> Following every week in the workplace they have to email their academic with a short report (about 200 words) of what actually they learned from that day, or what their reflections on it were and, at the end of their workplace semester, they then aggregate those … emails to the supervisor and they re-write them in a form of an assignment… It's an overall assignment which they pull out from those emails… Typically the academic supervisor will respond to each of those emails… There's interchange which occurs and that enables the student to get ongoing feedback…

A common feature of assessment in WIL is the submission of a final report, which is often complemented by an oral presentation. The final report typically brings together the

formative reflection from the various earlier contacts coupled with the summative outcomes as the student reflects on the overall activity.

> They have learning objectives… they have to design and show how they've met those learning objectives. The students have to go back at the end of their placement and get the original learning contract and indicate whether they've achieved those goals that they set.

> We assess the student's report which states what skills they took to their placement, what new skills they've learnt, what they've learnt about the place where they were working, and also the broader context.

Some professional accredited programs require specific competency based assessments and are often the style of assessment throughout the entire program of study.

> They've actually got to be assessed as meeting the competencies attached to that particular placement… and the assessors are looking at both that do they have the knowledge with which to make decisions, and do they make appropriate decisions as well as can they carry out particular skills.

Courses can require a formal report from the workplace supervisor to contribute or guide towards the final grade from the university. It should be noted that the following comments are pertinent to the specific way in which particular staff within the institution are managing the WIL experience.

> We asked them to contribute a written document to us… we asked them specifically not to grade the students… we felt that it was inappropriate for them to be grading… because they might take things into account that weren't a part of our learning assessment.

> We don't directly go and evaluate… Student(s) tend to attach a commendation letter from their employer that reflects how well the person is doing… the interpersonal relationships… the group dynamics.

In some cases, a signature from the workplace supervisor suffices to attest that the student has undertaken practicum during the time that the student has claimed. In other cases, a report is included within the assessment process that can be viewed in the context of the learning outcomes.

Oral presentations, individually or in groups, can be used for either formative or summative assessment and delivered to fellow students, academic supervisors or industry staff.

> [The students] present a prepared 10-15 minute oral presentation, which is usually a PowerPoint presentation. So under that they discuss the type of organization that they've visited, describe the types of activities… they identify main roles and the type of structure of the business... they're looking at how that whole business is operating.

> There's two assessment points in the course and one is a formative assessment where [supervisors/mentor] sat with the clients as a panel and the students presented a business strategy, which had clear things that they had to have in it and had to have achieved… We [give] feedback verbally to them…

DISCUSSION

The findings of this study highlight that there are certain foreshadowing considerations that influence WIL set-up: placement requirements, support, selection, location, and addressing risk management issues. Student preparation involves pre-requisite academic coursework and theoretical knowledge, general WIL/ career preparation (CV & interview skills) and readiness for the WIL placement (Johnston, 2011). The academic campus supervisor/ mentor and a work-place supervisor are both important for on-going support and guidance to the student. A variety of compulsory and optional WIL approaches were observed that included both scaffolded and final year projects/placements. Each approach has a place, purpose and constraints for further development that are largely based on strategic decisions within the organization and are contingent on the provision of appropriate organizational support of staff.

Academic supervisors highlighted soft skill competencies related to self-confidence, communication and people skills linked to team work and professional standards, which support the student and employer findings of Fleming et al. (2009). The teaching methods/pedagogies used consistently include theory-based lectures and labs, oral presentations, scenario-based learning (Kindley, 2002), and project work (Patrick et al., 2008). The main forms of assessment are an initial learning contract, followed by a reflective journal, oral presentation, and final report by the student and the supervisors. These forms of assessment support an evidence portfolio approach to WIL, as advocated by Hodges (2011). Formative feedback at various stages of the placement has also been advocated. For example, predetermining learning objectives between the student and academic supervisor before the placement, alongside ongoing feedback between the student and work supervisor during the course of the placement, recognizes that reality may dictate how well or even whether these outcomes can be met. This project supported the findings of others that the students:

> … get to see what it's like in the real world as opposed to the classroom world. They get to figure out whether or not this field of practice is for them or not in terms of clients, and in terms of the profession.

It should be noted that whilst the paper presents a useful overview of particular observations and opinions made by fifteen academic supervisors at one university regarding their experiences with a variety of WIL-related activities and student learning, it does not triangulate with the learners themselves or employers. Hence, the findings are qualified from these third party and singular organization perspectives.

CONCLUSIONS/IMPLICATIONS

The work-integrated learning (WIL) experience is increasingly providing a point of difference for students in enhancing their employability. Structured preparation and clear guidelines allow more effective applied learning as part of the whole program. This paper has highlighted that there are a number of considerations to be addressed in the resourcing of effective WIL programs (see Figure 1). Themes related to set-up include placement requirements, support, selection, location, and addressing risk management issues. Student preparation involves pre-requisite theoretical knowledge, general career preparation (CV & interview skills) and readiness for practice. With respect to supervision, an on-campus academic mentor and a work-place supervisor are both important for on-going support and guidance to the student. Soft skill competencies linked to team work and professional

standards are highlighted; these include self-confidence, communication and people skills. The teaching methods/pedagogies used consistently include theory-based lectures and labs, oral presentations, scenario-based learning and project work. The main forms of assessment are an initial learning contract, followed by a reflective journal, oral presentation, and final report by the student and the supervisors.

There are a number of accepted forms of WIL, particularly in professional programs. Issues of access, equity and consistency need to be reviewed related to the learning outcomes for all, as does the level of integration. WIL policy needs to be driven by institutional policy, which in itself needs to adequately resourced. Further research is needed to validate these current findings in other tertiary organization contexts, and to triangulate with the learners themselves or employers, particularly in the development of new programs. In particular, further work is needed to validate the assessment of the soft skills that students learn through WIL.
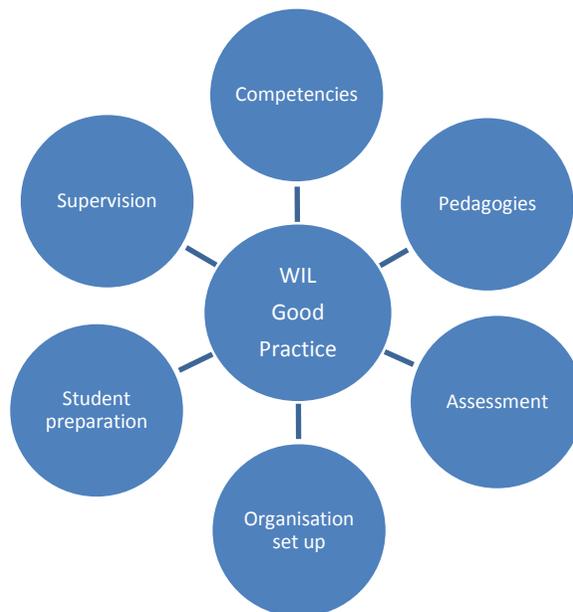
FIGURE 1
Factors for WIL good practice (Martin, Rees & Edwards, 2011, p. 9)

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ABOUT THE JOURNAL

The Asia-Pacific Journal of Cooperative education (APJCE) arose from a desire to produce an international forum for discussion of cooperative education, or work integrated learning (WIL), issues for practitioners in the Asia-Pacific region and is intended to provide a mechanism for the dissemination of research, best practice and innovation in work-integrated learning. The journal maintains close links to the biennial Asia-Pacific regional conferences conducted by the World Association for Cooperative Education. In recognition of international trends in information technology, APJCE is produced solely in electronic form. Published papers are available as PDF files from the website, and manuscript submission, reviewing and publication is electronically based. In 2010, Australian Research Council (ARC), which administers the Excellence in Research (ERA) ranking system, awarded APJCE a 'B' ERA ranking (top 10-20%).

Cooperative education/WIL in the journal is taken to be work-based learning in which the time spent in the workplace forms an integrated part of an academic program of study. More specifically, cooperative education/WIL can be described as a strategy of applied learning which is a structured program, developed and supervised either by an educational institution in collaboration with an employer or industry grouping, or by an employer or industry grouping in collaboration with an educational institution. An essential feature is that relevant, productive work is conducted as an integral part of a student's regular program, and the final assessment contains a work-based component. Cooperative education/WIL programs are commonly highly structured and possess formal (academic and employer) supervision and assessment. The work is productive, in that the student undertakes meaningful work that has economic value or definable benefit to the employer. The work should have clear linkages with, or add to, the knowledge and skill base of the academic program.

INSTRUCTIONS FOR CONTRIBUTORS

The editorial board welcomes contributions from authors with an interest in cooperative education/WIL. Manuscripts should comprise reports of relevant research, or essays that discuss innovative programs, reviews of literature, or other matters of interest to researchers or practitioners. Manuscripts should be written in a formal, scholarly manner and avoid the use of sexist or other terminology that reinforces stereotypes. The excessive use of abbreviations and acronyms should be avoided. All manuscripts are reviewed by two members of the editorial board. APJCE is produced in web-only form and published articles are available as PDF files accessible from the website http://www.apjce.org.

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. Essays should contain a clear statement of the topic or issue under discussion, reference to, and discussion of, relevant literature, and a discussion of the importance of the topic for other researchers and practitioners. The final manuscript for both research reports and essay articles should include an abstract (word limit 300 words), and a list of keywords, one of which should be the national context for the study.

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