



The Journal of the Education Research Group of Adelaide
ISSN 1835-6850

Volume 2, Number 2, August 2011

Contents

Editorial	3
Stimulating self assessment and reflection in first year engineering using ePortfolios. <i>Margaret Faulkner and Syed Mahfuzul Aziz</i>	5–17
Transitioning from enabling education into higher education: A case study of the benefits and challenges presented to and by mature students with life experience. <i>Christopher M. Klinger and Neil Murray</i>	19–26
Learning and leading: An innovative approach towards maximising the effectiveness of work-integrated learning at Flinders University. <i>Ceri Macleod, Linda Sweet, Angela Cavaye, Chris Fanning, Damien Mills and John Oliphant</i>	27–35
The development of an assessment matrix to promote student learning in postgraduate multidisciplinary research projects. <i>Jackie Venning and Femke Buisman-Pijlman</i>	37–44
Engaging design students through a video-based tutorial system <i>Rebecca Francis and Joshua McCarthy</i>	45–54

Learning and leading: An innovative approach towards maximising the effectiveness of work-integrated learning at Flinders University

Ceri Macleod¹, Linda Sweet², Angele Cavaye³, Chris Fanning⁴,
Damien Mills³ and John Oliphant⁵

Centre for University Teaching, Flinders University¹

Clinical Education, Flinders University Rural Clinical School²

Flinders Business School, Flinders University³

Department of Tourism, Flinders University⁴

Department of Social Work and Social Planning, Flinders University⁵

Abstract

Flinders University recently contributed to a funded Australian Learning and Teaching Council (ALTC) Fellowship led by Professor Stephen Billett, Griffith University, as one of six institutions from the Innovative Research Universities (IRU) network. The project, entitled 'Curriculum and pedagogic bases for effectively integrating practice based experiences within higher education', required each participating university to consider a number of work-integrated learning (WIL) practices. Flinders identified four discipline areas: Business; Medicine; Social Work; and Tourism, with representatives of each of these being tasked with researching how their different practice-based initiatives could be improved from pedagogic and epistemological perspectives. The results of this analysis, whilst contributing to the Fellowship project, also provided an invaluable insight into WIL practices across the four disciplines at the University.

Whilst the nature and scope of these studies varied considerably, the key findings complement each other and reflect the broader strategic approach taken by the University in its aim to maximise student participation in, and the effectiveness of, WIL at Flinders. The findings can be summarised as follows:

- Preparation is essential prior to the commencement of WIL
- Students need to be adequately supported whilst on placement
- Reflection plays a critical role in maximising learning potential
- WIL is highly valued by students
- Non-placement WIL can be just as effective as placements
- The particular requirements of international students need to be recognised and met
- Successful delivery of WIL is enhanced by a common understanding amongst all University staff involved in its development and delivery
- WIL activities must be adequately resourced by the University

This paper presents a summary of the outcomes of the studies undertaken within each of the four teaching areas, and considers how these findings can contribute to the development of an innovative, cross-faculty approach to maximising the effectiveness of WIL. The paper then moves on to look at the implications of this approach, focusing on key concepts such as preparation, implementation, reflection, and the implications on systems of management and resourcing.

Introduction

In recent years, the value of applied, practical experience has been given a high priority in Australian higher education institutions. In 2009, the then Deputy Prime Minister, Julia Gillard, in her address to the DEEWR International Education Roundtable review of higher education, emphasised the need for tertiary institutions ‘...to produce job-ready graduates with high level qualifications, from Certificate IV and diploma through to Masters and PhDs’ (Gillard, 2009).

Students at Flinders University are provided with the opportunity to participate in a wide variety of work-related learning activities, within a range of disciplines. These activities may be compulsory or optional depending on the nature of the discipline and professional bodies associated with them. They may be located off-campus, in the form of placements, field studies or internships, or on-campus, via simulated workplace settings and assessment activities. These activities fall under the umbrella term of ‘work-integrated learning’ (WIL); a term widely used within higher education in Australia.

Flinders is one of the many Australian universities to have embraced the concept of WIL as a means of producing ‘job-ready’ graduates. Whilst as an institution it has made a commitment to improving the number of WIL opportunities available to students, it also recognises the need to maximise the quality or *meaningfulness* of these activities and, as such, strives to ensure the effectiveness of the learning opportunities that they offer. Flinders has developed a strategic approach in promoting the development and delivery of effective WIL practices across the University. One element is to identify examples of good practice, internally and externally, and to disseminate these across the institution. Through participation in the ALTC Fellowship, Flinders University was able to examine four approaches to WIL, across a broad range of disciplines, to identify examples of good practice, in addition to problems that limit their potential. The project also provided an opportunity to disseminate these findings across the University, to invite discussion from other WIL practitioners, and to consider outcomes within the context of the University’s strategic position in relation to WIL.

What is Work-Integrated Learning?

Experiential learning, or the process of learning from experience, has long been acknowledged as a significant factor in providing rich learning opportunities within an educational environment (Cantor, 1997; Kaufman, 2003; Boud, Cressey & Docherty, 2006). Practicum, placement, field study and other forms of ‘work experience’ have been factored into professions such as nursing and teaching for many years, and is increasingly becoming a common feature across a broad range of disciplines within higher education. For some time, graduates have been required to demonstrate a degree of ‘work readiness’ and the ability to link theory and practice, in order to gain employment (Harvey et al., 1998). As a result, universities are becoming increasingly aware of the need to integrate meaningful experiential learning opportunities within the curriculum.

Work-integrated learning is a term used particularly within Australia to encapsulate the concept of work-related experiential learning. WIL can be defined as ‘An umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum’ (Patrick et al., 2009, p. iv). Flinders University defines WIL as ‘...an intentional, organised, supervised and assessed educational activity that integrates theoretical learning with its applications in the workplace’ (Flinders University WIL Policy, 2010, p1). WIL may occur as work placements, practicums and internships, virtual activities

and simulated workplace settings, or assessment activities designed to simulate authentic workplace activities or requirements.

Work-integrated learning is recognised as a key educational priority at Flinders University. Whilst significant numbers of students already undertake some form of these activities, the University aims to ensure that WIL is available to all undergraduate students. To meet this target, Flinders University has implemented a significant program of activities to measure and build upon existing WIL provision (Smigiel & Macleod, 2008), to maximise its delivery and effectiveness (Smigiel & Macleod, 2010). Identifying and sharing examples of good practice, both internally and externally, forms part of this program, with a particular emphasis on the development of collaborative projects.

Background to the ALTC Fellowship

In 2009, Flinders University became actively involved in an ALTC National Teaching Fellowship entitled 'Curriculum and pedagogic bases for effectively integrating practice-based experiences within higher education', led by Professor Stephen Billet from Griffith University. The aim of the project was to identify and appraise how specific practice-based experiences (these being a form of WIL) were being integrated into curriculum and pedagogic practices. There were three aims:

- To identify curriculum and pedagogic practices that may support effective WIL;
- To appraise the educational worth of these practices in terms of WIL; and
- To align these practices with specific learning outcomes.

Each of the partner universities were required to identify three or four teaching areas where the institution could identify, and would benefit from, a specific case study examination of WIL practice. As such, Flinders University identified the following case studies:

- Business – *Developing a WIL curriculum and pedagogy at Flinders Business School*
- Medicine – *Integrating workplace-based learning and continuity through the first clinical year of the graduate entry medical program*
- Social Work – *Preparing international social work students for practice*
- Tourism – *Evaluating the learning outcomes of the Tourism WIL program*

Each case study provided an opportunity to analyse a very different approach to WIL in terms of its discipline, outcomes, requirements and modes of delivery. WIL is a mandatory element due to professional accreditation requirements in Medicine and Social Work, a mandatory element by virtue of the institutionally-approved course structure in Tourism, and an elective element by virtue of the institutionally-approved course structure in Business. The particular emphasis of each project also varied considerably: preparing international students for practice (Social Work); establishing WIL as a new component (Business); delivering WIL in a variety of means (Tourism); and exploring an alternative approach to integrating workplace-based learning (Medicine), thereby providing the opportunity to learn from a variety of different practices and experiences. As a consequence of contributing to the objectives of the Fellowship project, Flinders University also identified the following as key objectives upon completion of these case studies:

- Developing an innovative, cross-faculty approach to collaboration in WIL;
- Comparing WIL-related outcomes across a diverse range of disciplines to identify potential commonalities;
- Considering these outcomes in the potential development of models of good practice;
- Considering how these models could be used to inform/support new and existing WIL practice across the University; and

- Identifying key challenges that need to be overcome to maximise the delivery of effective WIL across the University.

Four Flinders Case Studies

The four case studies and their key findings can be summarised as follows:

Business – *Developing a WIL curriculum and pedagogy at Flinders Business School*

This case study explored the challenges faced by the Flinders Business School (FBS) in developing a WIL program. FBS began the case study from a starting point of no WIL within the School, and considered some of the major issues that it faced in implementing an effective program of WIL. The study concentrated on the Skilled Migration Internship Program–Accounting (SMIP-A) as an initial vehicle for the delivery of WIL in determining issues that needed to be addressed.

Key findings

By engaging with the SMIP-A program as an introduction to the delivery of WIL, the FBS considered: the development and ownership of relevant coursework; the perception and understanding of WIL development and delivery by School staff; the capacity to source, monitor and manage student placement opportunities; and how to develop integrated partnerships with partner industries and organisations. The outcomes of this analysis led to the following conclusions:

- Developing a clear definition of WIL and its purpose is essential in promoting effective delivery;
- In light of this, there is a need to 'educate the educators' to promote a common understanding of the potential and legitimacy of WIL; and
- Further, that WIL activities inherently are cultural activities. Therefore, issues of culture and culture shock need to be recognised and anticipated. This cultural aspect applies to students and staff, and is particularly acute in programs involving students who have limited experience of Australian (workplace) culture.

Medicine – *Integrating workplace-based learning and continuity through the first clinical year of the graduate entry medical program*

The use of case-based discussion groups were explored within this case study, as an innovative approach towards integrating student learning outcomes associated with WIL in the form of traditional block placements. Student feedback, collected via survey forms and individual interviews, was used to determine whether discussion groups helped address a lack of integration across discipline-based block rotations. The study also looked at whether the use of these groups would promote educational continuity.

Key findings

The key findings from this case study centred on: the relationships between students and supervisors; responsibility for constructing authentic learning opportunities; types of learning opportunities available within the workplace; and student self-awareness as a learner. As such, this encompassed the preparatory, implementation and reflective components of WIL in the form of block placements, and led to the following conclusions:

- Students need to be prepared for and understand the workplace culture, prior to the commencement of WIL;
- Students need to be aware of the need to engage in WIL as a learning opportunity, and actively seek authentic learning experiences;
- Students are 'time jealous' as well as time poor. By this we mean the students feel they have insufficient time to achieve all of the things they feel valuable and therefore

struggle to justify their use of time, feeling pressured by the competing commitments they could be doing and as such end up feeling jealous about their use of time. As such, there is a need for students' to recognise and reconcile a time balance between focusing on theory and/or clinical practice;

- There is a need for students to engage in reflective dialogue throughout the WIL process;
- Consideration needs to be given to sequencing and integration of learning across discipline-based blocks; and
- The case-based discussion groups offered one forum for reflective dialogue and integration, although participants found that it would be more suited to a more broadly mixed rotational group.

Social Work – Preparing international social work students for practice

This case study investigated how useful a series of seven, two-hour workshops, designed specifically for international students, were in preparing these students for practice. Students that participated in the workshops were surveyed on completion of these sessions, to find out whether they found these workshops useful in improving their confidence and future ability to successfully undertake WIL in the form of work placements, with the results forming part of an evaluative group discussion with the students in their final workshop.

Key findings

In terms of their current position, the students were surveyed regarding their cultural background, age, levels of English literacy, length of time in Australia, previous social work experience, living arrangements and cultural expectations. The evaluation exercise looked at whether the workshops had helped address any perceived problems arising from these issues. The general consensus was that these workshops had certainly helped, particularly as a forum for exchanging experiences, determining cultural expectations and course expectations, and providing international students with a sense of being listened to and cared for, by the University. From a University perspective, these results raised questions in terms of:

- Whether international students are adequately prepared to commence a placement, in most cases, one semester after arriving in Australia;
- Whether resources and support mechanisms provided by the University for international students were adequate;
- The implications of this in light of steadily increasing numbers of international students; and
- How we, as a University, prepare and protect international students from racial discrimination in the workplace.

Tourism – Evaluating the learning outcomes of the Tourism WIL program

The Flinders University Tourism program offers WIL in the form of placements (160 hours), research activities and projects (combining elements of placement and research activities). The purpose of this case study was to consider student perceptions of the learning outcomes of each of these forms of WIL via a quantitative survey, to help determine whether one form is more effective than the other from a Tourism perspective.

Key findings

A significant finding of this case study was that Tourism WIL programs were highly valued by students. After completing these programs, the majority of students were clearly able to identify how, in general, their WIL experience helped them in linking theory and practice. Students also reported gains in knowledge, communication skills, confidence,

industry contacts and, ultimately, potential employability. A lack of adequate preparation was identified as a significant limiting factor where learning opportunities had not been maximised through WIL. In terms of specific forms of WIL (i.e. placements, research or projects), the study found that each offered different learning outcomes, and as such, none were perceived as being 'better' than the others. These results led to the development of the following conclusions and recommendations:

- Placements are not the only effective form of WIL. Whilst they provide the potential for significant learning opportunities, so too do non-placement activities. As such, there is a strong argument for the inclusion of non-placement activities in the delivery of WIL;
- Adequate preparation is fundamental in maximising the effectiveness of WIL. Examples include pre-placement seminars and attending presentations by past students that have completed a placement.

The key findings above relate specifically to the four individual studies, and therefore vary considerably in terms of their emphasis and focus.

Themes across the Flinders case studies

A number of broad themes emerged from each of these case studies and are loosely summarised as follows:

- *Preparation is essential prior to the commencement of WIL*
This includes the preparation of staff as well as students. In response to the need for in-depth orientation in occupational health and safety issues and general knowledge about workplace rights, Flinders developed a learning module and quiz, (currently available to a specific group of students, but about to be incorporated into a wider on-line preparatory program) which students work through and complete on-line in their own time. In addition, increased attention is given to ensure students recognise that WIL incorporates the need to take (some) responsibility for their own learning and to become agentic in their own learning.
- *Students need to be adequately supported whilst on placement*
Support needs to be led by the University, but delivered in partnership with the host organisation. Engaging with students during the WIL process is critical in maximising the effectiveness of the activity.
- *Reflection plays a critical role in maximising learning potential*
Reflection can take the form of an individual paper or report, but learning is enhanced if an opportunity is created for a group-based de-brief and reflective discussion about the WIL experience.
- *WIL is highly valued by students*
In each of the four case studies, students clearly enjoyed and appreciated the opportunity to gain work-related experience and to gain credit for WIL towards their degrees.
- *Non-placement WIL can be just as effective as placements*
Different forms of WIL offer different learning opportunities for the student, just as different forms of placements provide a variety of learning outcomes. Hence, depending on the desired learning outcome, assessment activities designed to simulate authentic workplace activities or requirements, including research activities and workplace-related projects, are appropriate and acceptable in place of, or in addition to, placements.
- *The particular requirements of international students need to be recognised and met*
In the case of studies with a focus on international students, it was clear that most staff overestimate international students' knowledge and understanding of the Australian

workplace. Students required extensive briefings and discussion of workplaces and the way they work—before, during and after WIL.

- *Successful delivery of WIL is enhanced by a common understanding amongst all staff involved in its development and delivery*

This includes the development of a clear definition of WIL, in terms of its purpose and application.

- *WIL activities must be adequately recognised and resourced by the University*

Each case study identified some common resource needs which could and should be supplied centrally in order to avoid unnecessary doubling up across schools. Examples of such resources are the occupational health and safety quiz and standardised policies. Each case also confirmed, again, the resource intensiveness of providing WIL and highlighted the importance of incorporating financial resources and recognition of staff commitment (in terms of time and opportunities for professional development) in meeting the need to deliver a curriculum that supports WIL.

These findings were discussed in detail during a Flinders-based seminar to disseminate the results of the case studies across the wider WIL community at Flinders University. During the discussion and proceeding workshop session, it became clear that these themes were common to some extent in all of the case studies, and significantly, were reflected in the practice of the majority of WIL practitioners across the University.

Implications for WIL at Flinders

As previously identified in this paper, WIL is recognised as a key educational priority at Flinders, but how could the findings of these four case studies and ensuing discussions, impact upon its provision within the University?

Supporting Institution-Level Priorities

The recently-approved Work-Integrated Learning Policy (Flinders University, 2010) clearly defines the University's intention to provide a systematic and comprehensive framework in developing and implementing WIL, to maximise learning outcomes. Three distinct phases of WIL are identified as being essential components in all programs;

- *Preparatory phase*: the activities undertaken prior to a student's commencement at the site of the work-integrated learning placement, when the objectives, intentions and approaches are set, the placement is negotiated and students are provided with required information concerning the placement,
- *Placement phase*: the activities during the time at the work-integrated learning placement site, when the approach is applied in practice, and the outcomes are observed, evaluated and reflected upon,
- *Retrospective phase*: those activities logically following the previous phase, especially reflective learning from the placement, ideally through some form of report or presentation.

The first three themes (see page 32), identified as emerging from the case studies, clearly fall within these three phases. This tells us that the Flinders WIL policy, designed as a strategic, enabling document in promoting effective WIL, meets ground-level requirements identified across four very diverse WIL programs. This reinforces the need for the policy as WIL becomes a feature across the University.

Developing Models of Good Practice

All four case studies represent a diverse approach to WIL: incorporating a new approach within a traditional field, to meet specific needs (Medicine and Social Work); analysing

the effectiveness of a range of activities (Tourism); and considering an approach towards implementing a new program of activities (Business). However, the fact that each identified a series of complementary findings demonstrates the potential for the development of a series of models of good practice. This would have significant benefits in assisting the University in improving current practice and inform the development of new WIL topics. This will also greatly assist in rolling out the new WIL policy across all University Faculties.

Promoting WIL as an Effective Tool in Maximising Learning Opportunities

Becoming actively involved in the Fellowship project, and subsequently disseminating its Flinders-level findings internally, generated a large degree of interest in WIL as a concept. Involvement in the project required buy-in at a senior level. The seminar held specifically to disseminate the outcomes of the four case studies was well attended, attracting both the existing WIL community at Flinders, and a new cohort of interested stakeholders. Attendance reflected both the senior-level commitment to the project, and the cross-faculty nature of the case studies; something that had not been offered in the past. The forum itself generated further discussion and interest in the strategic management of WIL via a workshop. It also provided an opportunity to emphasise WIL as a strategic educational priority and engage with staff in how to provide a practical approach in its implementation.

Identifying Challenges

Each of the case studies identified a number of significant challenges in the delivery of WIL. Two significant issues are resourcing and recognising the value of WIL, and meeting the specific needs of international students. These are key issues which must be addressed to help ensure the sustainable delivery of WIL.

Developing Systems of Management

One of the most significant findings of these case studies is that students value WIL. However, whilst there is a clear demand, WIL must be delivered effectively to maximise its potential in providing a meaningful and truly integrated student learning experience. This includes ensuring that Flinders University, in attempting to maximise the meaningfulness of WIL, incorporates systems of management, or control, to assist in the implementation, coordination, intelligence, and overall direction of the University in relation to its delivery (Beer, 1981).

Conclusion

The Fellowship project provided Flinders University with a unique opportunity to consider four very different forms of WIL in detail, with the aim of supporting the institution-level development and distribution of models exemplifying different approaches to work-integrated learning. In addition to meeting the requirements of the Fellowship project, the intention was to utilise the findings of these case studies to encourage the roll-out of fit-for-purpose work-integrated learning activities that are effective, sustainable and address the needs of all parties involved. The case studies also provided a rich learning experience for all staff involved in the Fellowship project, who are keen to write up their case studies in more depth than in the current publication. There is also opportunity to follow through with further research about issues that were raised and emerged during the project including: comparing the learning outcomes of placement versus non-placement WIL; addressing the needs of international students in relating to WIL; analysing the benefits of WIL and its impact on student learning in more depth; collating findings from the different disciplines; and identifying general ways to enrich student learning from WIL.

Whilst the project focussed on only a very limited number of approaches to WIL across a very diverse field of activities, it provided an opportunity to draw interesting conclusions based on a number of significant findings across each of the case studies. These findings have helped inform current practice, helped raised awareness of the benefits and key challenges in the implementation of WIL, and provided invaluable research in developing a strategic, institutional approach to its implementation.

References

- Beer, S. (1981). *The Brain of the Firm* (2nd ed.). Chichester, UK: Wiley.
- Boud, D., Cressey, P., & Docherty, P. (Eds.) (2006). *Productive Reflection at Work: Learning for changing organisations*. London: Routledge.
- Cantor, J. A. (1997). *Experiential Learning in Higher Education: Linking Classroom and Community*. ERIC Digest.
- Gillard, The Hon Julia MP (2009). *Address to the DEEWR International Education Roundtable*. Retrieved from http://www.deewr.gov.au/Ministers/Gillard/Media/Speeches/Pages/Article_090316_124529.aspx.
- Harvey, L., Geall, V., Moon, S., Aston, J., Bowes, L., & Blackwell, A. (1998). *Work Experience: expanding opportunities for undergraduates*. Birmingham: University of Central England.
- Kaufman, D. M. (2003). ABC of Learning and Teaching in Medicine: Applying Educational Theory in Practice. *BMJ* 326; 213-216
- Patrick, C.J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL [Work Integrated Learning] report: A national scoping study*. Brisbane: Queensland University of Technology.
- Smigiel, H.M., & Macleod, C.A. (2008). Linking work and learning: pedagogical implications. *E-Proceedings of the World Association of Co-operative Education Asia Pacific 2008 Conference on Work Integrated Learning (WIL): Transforming Futures, Practice... Pedagogy...Partnerships*. Brisbane: Australian Collaborative Education Network.
- Smigiel, H., & Macleod, C. (2010). Maintaining the Momentum. Paper presented to the 2010 ACEN Conference, Perth, Australia, 29 September-1 October.
- Flinders University. (2010). *Work-Integrated Learning Policy*. Retrieved from http://www.flinders.edu.au/compserv/committees/SENATE/public/2010/2010SENATEpapers_Doc_AS_136_10.pdf

Macleod, C, Sweet, L, Angele, A, Fanning, C, Mills, D & Oliphant, J 2011, 'Learning and Leading: An innovative approach towards maximising the effectiveness of work-integrated learning at Flinders University', *ergo*, vol. 2, no. 2, pp. 27-35.

† Corresponding author: ceri.macleod@flinders.edu.au