Designing, developing and delivering work integrated learning to large student cohorts

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Embedding work integrated learning (WIL) activities into the curriculum can be particularly challenging in units of study with large student cohorts (enrolments >100 students). The aim of this study was to determine the major operational and pedagogical challenges involved in designing, developing and delivering WIL to large student cohorts and to determine the strategies used, or recommended, by academics to address these challenges. This qualitative study used purposive sampling to explore the practice of academics who co-ordinated units of study with WIL. Sixteen, in-depth, semi-structured, face-to-face interviews were conducted. All interviewees valued WIL. Preliminary analysis showed that they faced numerous challenges in embedding it into their units, the most important being high workload and limited funding. The number and complexity of challenges increased as student numbers rose and as the student cohorts became more heterogeneous - particularly in terms of their abilities, learning strategies, preparedness for higher education, levels of engagement and chosen career path. Interviewees forwarded a range of strategies to overcome these challenges, including employing WIL-dedicated staff, increasing academic workload allocations, keeping WIL projects and assessment percentages small, replacing WIL with simulations, assessing students in teams, and automating marking. The findings may inform university management and academics about improved approaches to implementing WIL to large student cohorts.

Keywords: WIL; experiential learning, large student numbers, high enrolments, student diversity.

Introduction

In response to employer demands (Business Council of Australia, 2011), universities have increasingly employed experiential learning approaches to prepare students for their careers. One approach, Work Integrated Learning (WIL) involves activities such as placements, industry and community projects and simulated learning environments. Studies have illustrated the benefits and challenges of WIL (Patrick, et al., 2009). However, as Orrell (2011) notes, few have focused on the needs of marginalised students or difficulties associated with large student cohorts. Victoria University (VU), through its Learning in the Workplace and Community Policy (2008), allocates 25% of its curriculum to WIL. Implementing such an ambitious policy in the current Higher Education (HE) sector has been challenging, particularly as VU has a high rate of economically-disadvantaged students.

The aim of this study was to determine the major operational and pedagogical challenges involved in designing, developing and delivering WIL to large student cohorts (enrolments >100 students) and to determine the strategies used, or recommended, by academics to address these challenges.

Methods

This qualitative study (VU Human Ethics Committee # 10/237) used purposive sampling. Sixteen, in-depth, semi-structured, face-to-face interviews were conducted with academics who co-ordinated WIL units in either Nursing, Paramedicine, Biomedical Science, Engineering, Education, Sports Management, Psychology, Communication, Law, Business, Management or Accounting. Interview questions included unit of study and course demographics; description of WIL; type of industry or community involvement; type of assessment; challenges encountered in the designing, developing and delivering of WIL; strategies adopted to overcome the challenges; and recommendations for academics and university management. Interviews, which lasted 30-90 minutes, were transcribed and analysed into themes. Data were analysed using Excel.

Results

The 16 interviewees co-ordinated 37 units with an enrolment of 271 ± 498 (mean ± SD, range 21-2,831) and WIL worth 68 ± 38% (range 0-100). Individual units contributed to a single course or up to 10 different courses, were taught in one or both semesters, and were run on one campus in Australia or up to 9 campuses in 3
different countries. Of the interviewees, 13 co-ordinated WIL units with at least 80 students, indicating that they were well informed about the challenges of, and approaches to, embedding WIL into units with large student cohorts. All interviewees valued WIL, as it enhanced classroom-based theoretical learning by applying it to work-based scenarios; fostered learning that was active, student-centred, experiential and problem-solving; and provided opportunities for the development of generic employment skills.

**Large student cohorts: challenges of WIL**

Preliminary analysis showed that interviewees considered the major operational and pedagogical challenges encountered in designing, developing and delivering WIL in units with large student cohorts were, in descending priority (Figure 1): 1. high academic workload and limited funding, 2. difficulty establishing and maintaining industry links, 3. low student capability, 4. problems with developing high quality WIL, 5. difficulties related to assessments, and 6. additional unit co-ordination responsibilities, such as occupational health and safety (OH&S). All interviewees commented that the number and complexity of challenges increased as student numbers rose and as student cohorts became more heterogeneous. Students in large cohorts often differed markedly in their abilities, learning strategies, preparedness for higher education, levels of engagement and chosen career path. Many of the challenges reported are highlighted by the following comments:

It was all a challenge! …Time and money … are the two biggest ones.

What’s demanding is that you have to form a relationship with industry … to design projects which are appropriate WIL activities and to get those industry people to agree.

Where students go is just luck of the draw … a bunch of not so academically-prepared students in one place and thus you’ve got to spend a lot of time there.

Just because you send someone out into the workplace or community it doesn’t mean that they’re actually learning.

Assessment and Progress Policy states that, if the assignment is worth more than 25%, it has to be double marked … 200 assignments!

The biggest challenge … massive student numbers … it’s just not workable.

![Figure 1: % of interviewees reporting challenges encountered in designing, developing and delivering WIL in units with large student cohorts.](image)

**Large student cohorts: strategies for WIL**
Strategies recommended (Table 1) to address the 6 major challenges ranged from institution-based support to on-the-ground pragmatic initiatives. With regard to workload and funding, all interviewees commented that the university should either employ more WIL-dedicated staff or increase WIL workload allocations to academics. Interviewees suggested that the strategy of employing WIL-dedicated staff to source work placements be incorporated for all courses, not just those tied to accreditation (e.g. Education, Nursing). Interviewees also stated that embedding WIL in units with large student cohorts should be rewarded and resourced (e.g. promotion, funding for simulation laboratories). Most interviewees commented that the VU requirement of 25% high quality WIL was unsustainable, given the unmet need for resources, and should be reduced (Table 1). Many of the comments about workload and funding are highlighted by:

Give people time, recognition and workload points for curriculum development and networking.

It has to be formalised, supported and operationalised at School level. There have to be discretionary budgets, and you can’t centralise those.

**Table 1: Strategies to overcome the extra challenges of WIL presented by large student cohorts.**

<table>
<thead>
<tr>
<th>WIL Strategies for Large Student Cohorts</th>
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<tr>
<td><strong>1. Workload and funding</strong></td>
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<tr>
<td>Employ WIL-dedicated and administrative staff.</td>
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<td>Increase academic workload allocations.</td>
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<td>Recognise, reward and resource academics.</td>
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<td>Reduce VU WIL policy requirement from 25%.</td>
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<td><strong>2. Industry links</strong></td>
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<td>Register of companies.</td>
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<tr>
<td>Source one large partner (e.g. industry association).</td>
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<tr>
<td>Use alumni to establish industry links.</td>
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<td>Keep projects small.</td>
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<td>Replace projects with simulations.</td>
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<td>Entice industry representatives to campus.</td>
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<td>Provide videos for absent students.</td>
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<td>Prefer community organisations over companies.</td>
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<tr>
<td>Ensure industry’s involvement is for altruistic reasons.</td>
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<tr>
<td>Link projects to established work placement schemes.</td>
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<tr>
<td>Share industry projects with other academics.</td>
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<td>Link projects to students’ part-time employment.</td>
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<td><strong>3. Student capability</strong></td>
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<td>Design projects appropriate for students’ skill base.</td>
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<td>Engage learning support services.</td>
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<tr>
<td>Be aware of cultural differences.</td>
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<td>Accommodate to socio-economic limitations.</td>
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Many interviewees saw their role as teaching HE, not in networking and negotiating industry links, and suggested that there be registers of companies willing to be involved in WIL (Table 1). Others, very protective of their existing links, suggested that the university should reduce the pressure to share. Many interviewees commented on the need to maintain and nurture industry links without overburdening the companies, thus ensuring the sustainability of the WIL. When dealing with large student cohorts, some interviewees suggested working only with selected large companies; others preferred many companies, particularly those sourced via alumni, as shown by the following comments:

The big 1,000 student units … proactively manage some big, key players in industry … industry associations, engage them … small businesses just do not have the capacity … to deal with students.

Keep working the field, maintain your contacts, stay close to industry, make it worth their while.

Interviewees indicated that additional resources were vital for sourcing and maintaining links with industry and community partners. If resources were inadequate, some interviewees responded by limiting the industry involvement via simulated environments, case studies, guest lecturers, and pre-recorded interviews. Others
reduced the number of organisations with which students could engage, required students to find their own industry partner, or engaged WIL-dedicated staff to source companies (Figure 2).

![Sourcing of WIL Companies](image)

**Figure 2: Responsibility for sourcing companies for 37 units and mean % WIL in those units.**

When large cohorts had many students with low capability - particularly as related to English-as-a-second language (ESL), international origin, pathway entry (e.g. Technical & Further Education), low socio-economic background and low university entrance score (e.g. ATAR) - interviewees recommended that considerably more WIL resources were required. Interviewees reported that low student engagement in WIL was linked to low capability, as evidenced by students unwilling to engage because WIL was often team-based, required extra effort or was not seen as relevant. Where low student capability was a significant issue, interviewees adopted strategies such as directing students to ESL and learning support and replacing industry projects with simulations (Table 1). Interviewees commented that these strategies illustrate how time pressures frequently and adversely influence the pedagogy of WIL.

The quality of the WIL learning experience was considered by many interviewees to be diminished by limited time and funding. Interviewees recognised the importance of mapping WIL at a course level and scaffolding the learning from year to year, thus avoiding repetition (e.g. interviewing an industry representative in numerous units or at each year level). Most recommended that the university’s policies emphasise the quality of WIL, rather than the prescribed quantity of 25%, ensuring that it be worthwhile, embedded, reflective, experiential, and that it integrates theory and practice (Table 1), as highlighted by comments such as:

Embed WIL into a course, rather than making it an add-on.

There’s no benefit to the workplace experience if they’re not reflecting on it.

Students must understand how their theory has application.

Strategies for reducing difficulties related to WIL assessments included ensuring that they were appropriate to the learning activity, allocated fairly across team members, not subject to plagiarism, comparable across markers, and returned with timely and constructive feedback. Many interviewees commented that, because resources were inadequate, they had adopted less than optimal strategies to cope with the marking workload in large student cohorts (Table 1). In units where co-ordinators did not have assistance from WIL-dedicated staff, the percentage of WIL declined as number of students increased (Figure 3).
Figure 3: Mean % WIL in units of study (excluding those with WIL-dedicated staff) and number of students.

Many interviewees adopted strategies to cope with the added demands of unit co-ordination, when WIL was embedded in units with large student cohorts (Table 1). These included giving detailed instructions to sessional staff and students, organising registers for legal requirements (e.g. OH&S), and being extremely well-organised, yet flexible.

Discussion

This paper aims to understand the impact on academics of combining large student cohorts and WIL. Interviewees’ comments fell into broad areas: venting frustration, showcasing good practice, adopting coping strategies, and making recommendations. Our findings substantiate earlier work which showed that academics are required to adopt numerous strategies to overcome the challenges of large student cohorts (Mulryan-Kyne, 2010; Burnett and Krause, 2009; Heppner, 2007; Chalmers, 2003; Habeshaw, et al., 1992) and of WIL (Levin et al., 2010; Woodley and Johnston, 2010). For decades, teaching large classes has been challenging but, when it is coupled with providing experiential work-based learning, the challenges are manifold.

All interviewees commented that the number and complexity of challenges increased either with a rise in student numbers or an increase in student diversity. These results suggest that academic challenges were cumulative when WIL was combined with large student cohorts or with high student heterogeneity. However, high levels of frustration were expressed when WIL was combined with both large and heterogeneous student cohorts, suggesting that the challenges were then synergistic, rather than cumulative.

The degree of dedication to teaching and learning was outstanding in the group of academics interviewed. They exhibited a sound understanding of good practice and applied it where possible. However, our results showed that, for the majority of academics, workloads became overwhelming and disheartening when WIL was embedded in units with large and heterogeneous student cohorts. Academics found that considerably more time was needed to source and maintain industry partners, deal with disengaged and undisciplined students, negotiate and timetable quality projects, design and mark assessments, and co-ordinate and amend units of study. Consequently, interviewees, especially those with extensive experience in dealing with large student cohorts, were pragmatic in the strategies that they used to overcome these challenges. These pragmatic approaches were usually recognised as being less than optimal.

All interviewees believed that VU had not made adequate provision for the higher workload demands, either by appointing sufficient WIL-dedicated support staff or increasing workload allocations to academics. Furthermore, inadequate provision of resources raised issues of fairness, equity of workload and sustainability of quality WIL. When the VU WIL policy (2008) was introduced, an independent costing exercise identified the need for additional funding and there was the suggestion that extra resources would be made available (Kay et al., 2010). However, when resources were less than anticipated (VU, Strategic Plan 2011), academics felt extremely pressured and unsupported in their endeavour to implement the very ambitious WIL policy of 25% of...
Consequently, despite their best intentions, efforts and professional integrity, academics have not always been able to facilitate optimal engagement with industry and community for their students. The changing funding environment, combined with a comprehensive internal review of learning and teaching policies and practices, may redefine WIL at VU.

Our findings of a synergistic relationship among WIL, large cohorts and student heterogeneity may impact on institutional policy and governance. Currently, the Australian government aims to lift participation rates in undergraduate courses, particularly of students from low socio-economic backgrounds. This, combined with the government’s desire to engage industries and the community, may be unrealistic given the inadequate resourcing and, in turn, may affect the future skill base and productivity of Australia (Business Council of Australia, 2011).

Conclusion

The findings of this qualitative study confirm that academics value WIL as a tool to enhance students’ learning and career prospects. However, offering WIL to large student cohorts, particularly when they have multiple diversity factors, presents numerous challenges to academics. Most of these challenges stem from the need to resource the extra time and effort required to effectively design, develop and deliver WIL. Academics used a range of strategies to overcome these challenges. However, due to inadequate funding, these were often pragmatic, less than optimal solutions. Our findings may influence the implementation of VU’s very ambitious WIL policy and strengthen the broader community’s request for more funding to the HE sector in Australia.

References


