The Building Consultancy – a case study of collaborative multi-disciplinary approaches to work integrated learning

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Abstract

Victoria University (VU) has implemented a university-wide strategic initiative to ensure all of its courses across higher education, vocational and further education include a range of work-integrated learning (WIL) activities for its students. This paper showcases the ‘Building Consultancy’ project, a collaborative WIL approach developed by the Faculty of Technical and Trades Innovation. This case study explores the challenges, successes and outcomes, of a multi-disciplinary WIL project involving the design and construction of a fully functioning Building Consultancy. This initiative brought together students and staff from across a range of courses to work on a live project which is supported by industry. The project took place over an 18 month period and involved mainly trades courses at apprenticeship level as well as a number of higher AQF level courses. Preliminary evaluation of this project has identified a range of outcomes and challenges for all stakeholders, which will be followed up in the comprehensive evaluation. For many students, the project provided an authentic learning experience on a ‘real live’ project that enhanced their team work, problem solving and communication skills. Although faced with some significant curriculum and logistical challenges the majority of staff embraced the multi-disciplinary project model. Industry and university partnerships were developed and strengthened and students became more familiar with industry products and different ways of working.

Keywords: multi-discipline work integrated learning, student engagement

Introduction

This paper explores a multi-discipline Practice Firm project that the Faculty of Technical and Trades Innovation at Victoria University (VU) embarked upon throughout 2009 and 2010, in response to the university’s strategic initiative to provide all students with a Work Integrated Learning (WIL) experience. Using a case study approach to inform preliminary evaluation, this paper identifies a range of outcomes for staff and students involved in a live work collaborative project.

In 2007, VU commenced a strategic whole-of-university journey which aimed to place students’ needs at the centre of all its activity. A key component of this initiative focussed on student employability which was underpinned by the inclusion of WIL into all VU courses. In 2008, VU’s Pro-Vice Chancellor (Teaching and Learning) Belinda McLennan, suggested that embedding WIL in the curriculum in a way that produces good quality learning outcomes which address graduate attributes and employability skills is a significant challenge and requires a sophisticated understanding of the field (McLennan, 2008 p11). Over the past five years, VU has experienced the numerous challenges and successes commonly associated with WIL implementation. It has continued to focus on utilising workplace or community settings as a context where students can learn in and through work, rather than just learning about work. Cooper et al (2010 p31) commented on the VU approach to WIL, stating ‘this whole of institution initiative is in its early stages and not without challenges and challengers.’ Teaching staff strongly supported the notion that workplaces, as learning environments, provide students with the opportunity to integrate theory and practice and experience the world of work while gaining a cultural awareness of their discipline (Patrick et al, 2009).

The Building Consultancy Practice Firm

For many years the School of Construction Industries has built made-to-order, full size transportable buildings as part of the pre-apprenticeship course in Carpentry. These buildings are built to a set, limited number of designs and have traditionally employed outside trades’ people for plumbing, electrical, painting and other services to complete the building. The construction of the transportable buildings had the potential to incorporate all the elements of designing, planning, costing, building and installation with involvement of over
13 qualifications across the trades’ areas. A successful grant application provided the opportunity to realise this potential. This 18 month project evolved into a complex and multi-faceted WIL activity for numerous students and teachers, supported by industry involvement. The Building Consultancy Practice Firm was purpose built as a transportable primarily to be used by VU students as a fully operational office, offering building consultancy services to clients. The building is also available for university and community activities, including trade fairs and open days. It has been built using green technology and materials that are not commonly available to students in the usual course of their learning due to cost and availability.

Preliminary Evaluation

As the Practice Firm project commenced, it was agreed that preliminary evaluation would provide some understanding of the impact of the project on students, staff and industry and go some way to informing a more comprehensive evaluation of WIL practices for the future. Cooper, Orrell and Bowden (2010 p35) suggest that “evaluation is often overlooked in work integrated learning”, and where evaluation does exist, it is generally too reliant on student feedback alone, and that the information which is gathered is then underutilised by universities. The project team wanted to collect feedback and explore perceptions from all stakeholders, so a mixed approach of surveys and interviews was utilised. At the time of writing this paper 15 students and 10 staff have been formally surveyed and interviewed. Due to limitations regarding access to some industry contacts, only anecdotal industry responses have been collected so far.

Staff

A small sample of teachers was selected for interview, based upon the extent of their involvement in the project. All surveyed and interviewed staff mentioned the improved and valued communication and engagement with industry, students and other staff (including teaching and management). Comments including the different experiences and opportunities for building rapport with students in ways that had not been done before were prominent. For example some staff would have ‘smoko’ with the students on the building site instead of heading off to the staff room. This provided time and space to professionally reflect on their work, plan for future tasks and get to know each other as tradespeople on a work site. Staff enjoyed the interaction with students who were fully engaged, resourceful, keen to learn and showed interest in other students, the work and their teachers. All staff noted that the collaboration between staff significantly increased, with some noting that they enjoyed getting to know teachers from other disciplines and that they would continue to work on other projects together. Many of the trades’ teachers have long established relationships with industry and staff commented that this project provided an opportunity to showcase the importance and appreciation of having industry involved in student learning and trades projects.

Students

Many students exhibited professional trades’ skills and behaviours, showing initiative and enthusiasm in task completion. One teacher commented that the students took the job seriously without too much mucking around and they took pride in what they were doing. Feedback received to date from the students via survey with open ended questions indicates strong agreement that working on the Practice Firm project provided them with opportunities to use and improve their planning, organising and problem solving skills. In addition, some students commented that it was satisfying to work on a real project rather than something that was to be pulled apart at the end of the learning. They also mentioned the opportunity to develop their ability to work in teams, improve their communication and trade skills, and better understand the links between classroom learning and practical hands-on tasks.

Industry

Industry suppliers donated goods and/or materials free of cost or at cost in support of this project. Acknowledgement of their participation in the project included company plaques being displayed in the Practice Firm building and company logos on signage on the outside of the building. At the opening event, industry participants were acknowledged publicly and thanked for their contributions. Teaching staff positively reported that the project enabled numerous opportunities to genuinely engage with industry partners and consolidate relationships. Industry partners reported that they were pleased to have their products displayed and be able to provide the university staff and students with different types of products that due to high costs, they would not typically work with.
Challenges and successes

Billet (2009 p835) suggests that 'both practice and academic settings provide particular kinds of experiences and potential contributions to students’ learning. Each of these settings affords particular potentials for the learning of occupational practice.' The opportunity for a broad range of students from across different disciplines, being able to collaboratively experience a workplace project from beginning to completion, facing commercial realities and deadlines was very beneficial for all stakeholders.

As expected, coordinating and operationalizing such a complex project resulted in a range of challenging situations. Just like any other building project the weather, delivery of materials, and availability of staff and students when and where they were needed, all impacted on the project. Transporting students from their campuses to the transportable building site was difficult especially when working with students under 18 years of age, as car-pooling and parental permission was required.

As the Practice Firm project involved a range of disciplines working together in a workplace environment, many learning and assessment activities needed to be redesigned to ensure flexible sequencing and integrated experiences. This approach supports Yorke’s (2010 p10) comment that “a commitment to the development of graduate attributes or employability implies, for many subject disciplines, a preparedness to rethink curriculum, pedagogy and assessment.” In some of the trades courses, students predominantly learn and practice through simulated learning and assessment activities and have been doing so for many years in a similar fashion to their teachers’ experience of Trades’ school 25 years ago. The Practice Firm project required teaching staff to rethink what and how they teach and assess and how their students learn and experience a live project as compared to classroom and simulated workplace environments. For some staff, the requirement to redesign their curriculum was a significant challenge requiring professional development and support, a change of culture and an increased workload.

For some staff this was a welcome challenge, enabling them to do things differently and explore different avenues to engage with students. The modification of the trades’ curriculum to meet the needs of live work coincided with the Skills Victoria policy of competency based completions for apprenticeships. Being involved in the Practice Firm project and seeing how students can forge ahead with their learning in an applied learning environment became a key motivator to completely redesign the apprenticeship curriculum within the Faculty.

Some students were consistently exhibiting challenging behaviours in the classroom and disrupting others. Once placed into a live work situation, these students engaged in the tasks and the learning, supported each other and according to one staff member showed respect for others and behaved in a professional tradesman-like manner. This change in behaviour where students engage more intently when involved in real work activities is commonly noted throughout the WIL literature (e.g. Billet 2009; Patrick et al 2009; Yorke 2010, Cooper, et al 2010).

Conclusion

Designing and constructing the Building Consultancy Practice Firm was a significant undertaking for the School of Construction Industries. This multi-disciplinary collaborative project provided numerous challenges and varied work-integrated learning experiences for students and staff, resulting in motivated and engaged teaching and learning. The next stage involves relocating the building to the new Technical and Trades complex where the facility will predominantly operate as a commercial venture with the Building, Surveying and Design students providing services to clients from the community. A comprehensive evaluation of the project will also be undertaken.
References


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