The Journal of Teaching and Learning for Graduate Employability

ISSN: 1838-3815 (online) Journal Homepage: https://ojs.deakin.edu.au/index.php/jtlge/

Creating group work-integrated learning experiences for non-clinical health degrees: A practitioner reflection

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Abstract

Work-Integrated Learning (WIL) experiences, integral for equipping students with the skills and knowledge crucial for employment and success in their chosen careers, have traditionally been associated with accreditation requirements in professional programs. More recently, acknowledging the importance of WIL experiences in non-professional programs has grown. In this reflective paper, the experiences of the practitioner tasked with developing a new WIL capstone course for students in Health and Biomedical Science degrees are described. Grounded in social exchange theory, where interactions are viewed as exchanges aimed at maximising rewards while minimising costs, the intent was for student groups to engage with a range of authentic project experiences offered by industry, community, and academic staff (the WIL partners). Critical elements were the active involvement of a diverse array of partners and the importance of relationship building for the long-term sustainability of the project experiences. I discuss and reflect on the specific strategies employed to engage the WIL partners, inspiring them to collaborate and develop meaningful projects suitable for students pursuing various career paths. Additionally, I reflect on the invaluable experiences and feedback provided by our partners.

Keywords

Work-integrated learning, WIL, employability, career readiness, career development, career skills, partnerships

Introduction

Traditional Work-Integrated Learning (WIL) experiences have played a pivotal role in cultivating the skills and knowledge necessary for students to thrive in their chosen careers. Often involving in-person workplace or work-related experiences, they have historically been aligned with accreditation prerequisites in professional programs (Ferns & Arsenault, 2023; Penman et al., 2023; Hobbs & Vincent, 2023). In contemporary educational landscapes, there has been a notable shift in acknowledging the value of WIL experiences beyond professional domains, extending their significance to non-professional programs that deliver more diverse career options (Jackson et al., 2023; Lloyd et al., 2023). The Australian Government introduced funding in 2020 as part of the Job-ready Graduates package of reforms to higher education whereby grants are allocated to universities to promote innovative approaches to WIL. It defines WIL as 'student experiences of work within

curriculum (or as co-curricular), undertaken in partnership, through engagement with authentic and genuine activities with and for industry, business or community partners, and which are credit-bearing and assessed' (Department of Education, Skills and Employment (DESE), 2021, p. 20). This commitment underscores the expanding recognition of WIL as a versatile and impactful pedagogical approach to enhance career readiness across a broader spectrum of academic programs (Jackson & Dean, 2023).

Within this context, I was tasked with developing and convening an appropriate WIL capstone course for Bachelor of Biomedical Science and Bachelor of Health Science students, both non-professional programs offering diverse career outcomes including a range of health care settings and health related industries, medical research institutes, technical sales, environmental health and post-graduate studies in medicine and allied health. The course, designed around project-based learning, aimed to challenge student groups with authentic problems, issues, and case studies presented by industry, community entities, government organisations, and academic staff to identify innovative solutions and generate deliverables for assessment.

Despite my enthusiasm, I was aware of the complexities in developing this new course. Although I had successfully integrated a creative, employability-focused project into a First Year Course of these programs (Colson et al., 2022), this endeavour required the development of a diverse WIL partner community to provide authentic projects. This was solely my responsibility, presenting a steep learning curve for an academic unfamiliar with this domain.

The Challenges

How does one cultivate a diverse community of partners willing to work with students on distinct WIL projects leveraging students' learning and development throughout non-professional degrees? Moreover, how does one promote the mutual benefits to potential partners? What types of projects align with our students' capabilities, foster meaningful learning experiences, and meet partners' needs? Additionally, how do I negotiate projects, especially in discipline areas where my knowledge is limited? Strategic alignment of students with projects that complement their skills poses another challenge. Equally important, how can one guarantee the sustainability of projects and cultivate enduring interest from partners?

The following account serves as a personal reflection on my venture into pracademia (Hollweck et al., 2022), where my goal was to establish a collaborative space bridging practice, policy, and education to support a new WIL course aligned with the definition provided by DESE.

The Course

BioHealth Projects is a final year Trimester 2 course delivered to Bachelor of Biomedical Science and the Bachelor of Health Science students at Griffith University, Australia over 12 weeks. Collaborating with the course development team (Learning and Teaching Consultants, Learning Designers) we created the learning outcomes, curriculum with integrated career development learning (Bridgstock et al., 2019), and assessment strategy (Table 1).

Table 1. BioHealth Projects Course Structure

Learning Outcomes	1. Integrate and apply knowledge, understanding, and skills gained throughout a bachelor degree program to investigate a problem, issue, challenge, or case study proposed by industry, community, government organisations, students or academic staff. 2. Evaluate and interpret information and/or data to investigate a problem, issue, challenge, or case study. 3. Effectively and creatively communicate the outcomes and outputs of the investigation with peers, academic staff and/or industry 4. Critically reflect on your readiness for future employment including the achievement of each of the Griffith Graduate Attributes
Coursework and Activities	
Project	Students apply for specific projects which are allocated in week 2. Students work in groups on the project with their industry partner until week 11.
Workshops	Week 2. Evidencing and Articulating your Skills and Networking for your Professional Future Week 3. Building an Entrepreneurial Career
Online Modules	1. Risk, Failure & Rejection 2. Navigating Team Environments & Conflict Resolution 3. Getting Things Done & Feedback 4. Knowing Your Audience & Translation
Weekly Drop-in	Drop-in sessions where students can discuss any aspects of their project and course with me, the course convenor
Assessment Strategy	
Assessment 1 Due week 6	Part 1. Project Proposal and Plan (Group Task Submission) Graded by Partner and Course Convenor Part 2. Personal Growth Goals (Individual Task Submission) Graded by Course Convenor
Assessment 2 Due week 11	Part 1. Final Group Product (Group Task Submission) Graded by Partner and Course Convenor Part 2. Peer Assessment and Self-Assessment (Individual Task Submission) Graded by Course Convenor
Assessment 3 Due week 12	Individual Project Portfolio of critical reflections and self-assessment on online modules, workshops & Graduate Attributes. Graded by Course Convenor

Reciprocity

My strategy to develop WIL partnerships was strongly influenced by Social Exchange Theory. It describes interactions based on the principle of reciprocity, where individuals engage in relationships with the expectation of mutual benefit. Accordingly, people weigh the rewards and costs associated with a relationship, aiming to maximise positive outcomes while minimising negative consequences (Cropanzano & Mitchell, 2005). This was demonstrated in a 2019 meta-analysis which examined allied health placement impacts on clinician productivity and time, suggesting positive or neutral effects (Bourne et al., 2019). More recently, Kemp et al. (2021) applied a Social Exchange Theory lens

to examine dietetic students undergoing placements, revealing a reciprocity of benefits. They suggested that their findings may extend to other WIL settings (Kemp et al., 2021).

Appreciating the diverse skills showcased by our students in first year, where they generated multimedia and other creative outcomes (Colson et al., 2022), I aimed to inspire potential partners to envision how our students could assist their organisation in a collaborative project leveraging students' skills, knowledge and broader creative capabilities within health, biomedicine, and environmental health disciplines. Concomitantly, the projects could deliver a unique and authentic WIL experience for our students, which has been shown to improve student satisfaction and development of employability skills (Hart & Bone, 2022). To convey a transparent and mutually beneficial intent, I created project information flyers for partners (Table 2), emphasising that projects could be tailored for the specific needs of the partner, including ownership of the outcome, whilst fostering collaborative and advantageous engagement for students.

Table 2. Content of Flyers to Potential Partners

Introduction Our new BioHealth Projects Capstone course aims to provide a mutually beneficial exchange of knowledge and resources between industry and community and final year Health and Biomedical Science students by engagement in authentic learning experiences.
We would like to invite our industry partners to mentor final year students in a broad range of projects which focus on creative problem-solving. Projects can be developed to suit a specific need of the partner or alternatively, the partner may prefer to take on a more advisory role on a student-led project. Industry led projects will be covered under an IP agreement which allows use of resources developed. Projects will run over 8 weeks from July to September each year. Projects will be completed remotely although onsite experiences will also be welcomed.
Project Development Together we can develop a project for your specific needs (industry-led) for students to work on under your mentorship OR (included in staff flyers) You can engage as an expert mentor on a student-led project
Your time commitment • Negotiated contact over 8 weeks to suit the project • Pass/Fail examination of the project deliverable using specific marking criteria
Benefits to you • Students can work on small projects to produce a practical deliverable which you can use • Students bring a fresh perspective • You will engage with a talent pool for future recruitment • The rewarding experience of giving back through mentoring
Benefits to students • Students will engage in authentic opportunities to develop and demonstrate their knowledge and skills and build their professional networks

Initial Engagement with Partners

Networking with Industry and Staff

I considered those involved in the Health, Environmental Health, Biomedicine and Biotechnology Industries as potential partners. I approached contacts at networking events and university careers

fairs, and I appealed to faculty colleagues for potential partners. Overcoming partners' pre-conception that I wanted to negotiate traditional student placements was challenging. I found myself frequently making on the spot suggestions to potential partners about the type of projects that students could work on and the type of deliverables they could produce. I quickly developed a set of prompts that guided conversations about potential project ideas (Figure 1).

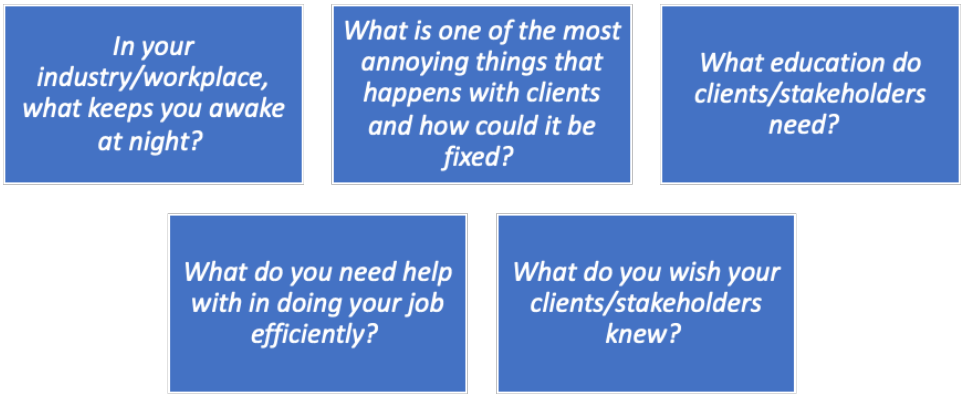

Figure 1. Prompts to lead Conversations with Potential Partners

Another excellent source of potential partners was our Health faculty staff including academics, pracademics, clinicians, and professionals, many of whom worked in clinical practice, policy, and/or collaborated with industry partners. I pitched the opportunity to all Health staff in two calls for Expressions of Interest. Within the emails I included the Information Flyers and suggestions of appropriate projects with the understanding that a broad range of innovative project ideas were welcomed.

Those who expressed interest were invited to a meeting where I described the opportunity and course, including assessments, their commitment, and provided an opportunity to ask questions. Individual meetings followed with all who were interested. Potential partners were asked to complete the details of their proposed project, as outlined in Table 3.

Table 3. Details Requested from Potential Partners Following Initial Meeting

Please describe your project idea. This might be a well-developed idea, or some thoughts on what might work. Please consider Aims, Scope and Deliverables. If you would prefer students to come up with their own idea in your area of expertise, please let us know. This will provide information for us to work with you to develop your project as required.
Please describe how your proposed project will help students to achieve the course learning outcomes (Described in Table 1.)
What resources will the students need to complete your project e.g., access to data, statistics help, design tools etc.?
What skills would be important for students to have, or develop to work on your project?
Please provide a brief Bio for the students to read when pitching for your project. Include any links to university pages, LinkedIn etc. so that they can get a good idea of you and your expertise.
What is your preferred method of contact for your students and how frequently can students contact you?
Will there be any data confidentiality or ethics issues with your project? Is there anything else you would like to tell us to facilitate a great experience for you and your group of students?

Negotiating Projects

The Power of Communication and Facilitation

My initial concerns about my knowledge deficits across some health and biomedical disciplines impeding the collaborative development of projects were not realised. I focused on ensuring that projects incorporated discipline knowledge within the students' programs, broader employability skills and the shaping of student dispositions. While some were outside my direct discipline area, with a good understanding of the project aims, scope and deliverables, my background as an educator enabled me to define appropriate project size and expectations, and whether they required special resources such as software and technology. Those that were incomplete, unrealistic, or required unavailable resources, unique skills or discipline knowledge were discussed and renegotiated. Certain projects were broad and flexible, allowing for real-time negotiation and development by students. Some followed a sustainable model, where groundwork laid by previous student groups could be built on by future groups. I actively negotiated appropriate projects to follow this model.

The Final Projects

In the initial course offering, tailored for an expected 20-30 students, 15 distinct projects were introduced which spanned disciplines within Health, Environmental Health, and Biomedical Science. They included health resource development for medical and allied health professions, creating a first aid invention for a community organisation, novel nutrition product innovation, development of multimedia outreach materials for a research institute (including branding), formulating an information asset management strategy for the biotechnology industry, content creation for an environmental health consultancy, developing a pilot study to assess university student musculoskeletal health, and science communication.

Sustainability

Recognising the pivotal role of partnership sustainability in project sustainability, I prioritised strategies that centred on cultivating committed long-term partnerships, aligning with the principles described by Australian Collaborative Education Network (2020), where commitment is demonstrated at multiple levels. I embraced a mindset described by Kay et al. (2019) that surpasses the notion of reciprocity, emphasising a more intricate and engaged interaction. At the core of this approach lies the paramount importance of clearly articulating and negotiating the scope and purpose of the partnership.

Underlining commitment to the partnership, I engaged partners in discussions about course structure and assessment strategy and actively sought feedback throughout the project. Ensuring the adaptability of students to partners' schedules and preferences, I set realistic engagement expectations and ensured that students were flexible in accommodating these schedules and preferences. I ensured that the negotiated projects aligned with each partner's stated goals and that students were thoughtfully assigned to appropriate projects. This process involved students selecting their top three projects, justifying their choices, delineating the skills and knowledge that they could contribute, and expressing their learning expectations. This approach ensured that projects requiring unique skill sets, such as video or media production, or specific discipline knowledge, were matched with student groups where one or more members possessed the necessary knowledge/expertise and if possible, others with a desire to develop those skills. Students underwent thorough briefings, and roles and expectations were communicated. The course structure incorporated opportunities to address emerging issues with students in weekly drop-in sessions with me as the course convenor.

The Partners' Experiences

Having collaborated with partners to formulate 15 meaningful projects, I recognised that the genuine measure of success would only become apparent once our students had engaged with and undertaken these projects.

For the first course delivery, 5 of the 15 projects were chosen by student groups. Partners whose projects were not chosen were thanked for their involvement and encouraged to put forward their project for the following year. At the end of the course, the 5 partners were invited to complete a short anonymous survey about their experience with results summarised in Table 4. The Griffith University Human Research Ethics Committee approved this research, GU Ref No: 2022/459.

Table 4. Results of Post Project Survey of Partners

Question	Responses
How would you rate your overall experience working with BioHealth project students? (star rating)	3 gave 3 out of 5 stars and 2 gave 5 out of 5 stars; average 3.8/5 stars
Did the students produce an outcome that may be usable, or built on for the future?	3 answered 'Yes', 1 answered 'No' and 1 answered 'Unsure'
Were the expectations of you as a mentor clearly explained?	All answered 'Yes'.
Would you be interested in being a mentor next year?	All answered 'Yes'

Reflections on Partner Conversations and Feedback

Feedback and conversations with partners provided some valuable insights. One partner noted that while the student group was professional and engaged, one group member appeared to be doing most of the work. This was also revealed in the peer assessment activity. Another partner commented that students lacked original and creative thinking regarding product development, tending to be more conservative in their recommendations, which did not fit their business model. From further discussions, I learned that that their team of product innovators placed more value on critical/creative thinking abilities rather than technical knowledge for their project. While aligning to our approach of fostering the development of graduate capabilities (transferrable skills and dispositions), a greater focus on creativity in this project may push students beyond their comfort zone. From partner feedback I discovered that one group of project students lacked motivation and put little effort into the final product, which was of little value.

The political nature of group work may explain inconsistencies in student motivation and workload observed by partners. For future iterations, I plan to introduce short individual surveys and weekly team progress reports to monitor team dynamics and project progress as described by Linford et al. (2022). These strategies should quickly identify issues with group politics, motivation, and progress. Going forward, I need to facilitate early, transparent communication between the partner and students to expedite shared goals and expectations and to support students to feel confident expressing their broader transferrable skills such as creativity in this potentially transformative journey.

Creating open communication channels with industry partners throughout the project has been essential for valuing perspectives/ideas and developing shared understandings and mutual project and course goals with partners. Communication forms included initial project information flyers outlining broad expectations, project parameters and intellectual property agreement, email communication at strategic time points, invitations for regular phone/video call conversations and

feedback opportunities. Looking back, establishing reciprocity and parity with partners was key for building trust and enabling effective partnerships, as purported by O'Dwyer et al. (2023).

Conclusion

Networking, communication, and facilitation skills have been crucial to establish a community of WIL partners, and the negotiation and development of appropriate projects underpinned by the theory of social exchange. As demonstrated in the project outcomes, both students and partners can be valuable assets providing reciprocal benefits with interdisciplinary possibilities. This is enhanced by establishing clear project goals and communicating them explicitly to students. Future challenges around sustainability (partner involvement) need to be carefully managed by ensuring reciprocity and parity with partners, and by continuing to acknowledge the evolving nature of the partner community.

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