

Responding to COVID-19: Enriching students' responsible leadership through an online work-integrated learning project

LAURA ROOK¹

University of Wollongong, Wollongong, Australia

LISA MCMANUS

Queensland University of Technology, Brisbane, Australia

This paper describes the design, implementation and impact of a non-placement WIL project, focusing on the development of students' responsible leadership competencies through a third-year undergraduate unit – Responsible Leadership. In response to the COVID-19 pandemic the WIL project pivoted from face to face delivery to online. The WIL project was designed to provide engagement with a local non-government organization and enable the co-development of authentic learning experiences with the industry partner. Findings from the comparison of pre- and post-semester CARL (Competency Assessment of Responsible Leadership) online surveys of 107 students showed increases in the development of ethics and values; self-awareness and systems understanding as well as an increase in their knowledge and attitude action domains. With industry support to implement a systems approach to a non-placement WIL project, an impactful transition to the online environment was achieved.

Keywords: COVID-19, undergraduates, responsible leadership, non-placement WIL, online delivery

In a strongly connected and integrated world, the impacts of COVID-19 are being felt beyond the health sector. The disease is affecting the functioning of global supply chains (McKibbin & Fernando, 2020), business models (Ritter & Pedderson, 2020) and the way people live and work. For the education sector COVID-19 has forced many universities to cancel or postpone campus events such as workshops, teaching, conferences and other activities. While online teaching is not a new mode of delivery for many academics and students, the shift from face-to-face to solely online has been a steep learning curve. The transition to online has raised questions about the capability of some staff to deal with existing technology (Lee, 2020). It has also highlighted gaps in university infrastructure and resources to support online teaching with immediate effect (Dill et al., 2020), as well as putting added pressure on those students who do not have access to computers or internet services at home (Sahu, 2020). In addition to these operational challenges, some scholars and experts are predicting that COVID-19 will have a negative effect on the mental and psychological health of students and university staff (Sahu, 2020). Given that research has found mental health to be part of a person's wellbeing and is closely connected to the academic success of students (Dalky & Gharaibeh, 2018), the flow on effect from COVID-19 may have an even greater negative impact on the academic success of students. As such there are calls to strengthen the teaching practices in the curriculum to make it more responsive to the learning needs of students (Toquero, 2020).

The higher education sector is facing unprecedented challenges in the way it teaches, researches and engages with stakeholders. While COVID-19 began to spread across each country, more and more organizations including universities have responded by way of changing their products, services or approaches to operating. This paper presents an approach to a non-placement work-integrated learning (WIL) embedded project in a third year undergraduate unit, *Responsible Leadership*. The approach developed to embed the non-placement WIL project, enabled a smooth transition for the

¹ Corresponding author: Laura Rook, lrook@uow.edu.au

delivery of the unit from pre-COVID-19 (face-to-face delivery) to the COVID-19 context (online delivery). The approach adopted follows a student centred strategy, is grounded in the principles of connectivism (Siemens, 2014) and considers guidelines for designing teaching and learning in a digital age (Bates, 2018).

LITERATURE REVIEW

Responsible Leadership

A responsible leader is a person who reconciles “the idea of effectiveness with the idea of corporate responsibility by being an active citizen and promoting active citizenship inside and outside the organization” (Pless, 2007, p. 450). Responsible leadership has been advocated as a response to the perceived deficiencies in existing leadership frameworks and theories, to individual, organizational and systemic scandals, and to new and emerging social, ethical and environmental challenges (Maak & Pless, 2006). Pless (2007) defines responsible leadership as:

Values-based and thorough ethical principles-driven relationship between leaders and stakeholders who are connected through a shared sense of meaning and purpose through which they raise one another to higher levels of motivation and commitment for achieving sustainable values creation and social change (p. 438).

While definitions of responsible leadership differ, scholars do agree that the nature of responsible leadership shifts views of the goals of an organization from a ‘profit centred’ or ‘shareholder’ perspective to an approach which considers all possible stakeholders and the common good (Maak & Pless, 2006; Voegtlin et al., 2012).

Previous research has identified several benefits to a responsible leadership approach including building social capital, sustainable business practice, and consideration of the common good through the creation of value networks (Maak, 2007), while also playing a critical role in the retention of employees (Doh et al., 2011). The findings of previous research (Haque et al., 2017) suggest that organizations should consider responsible leadership capability building of managers in order to better motivate their employees, lower turnover intentions and increase organizational commitment.

Given the potential in responsible leadership approaches, organizations, managers and trainers began to look at management scholars for a way of translating the concept and approach into practice. Muff et al. (2020) consolidated the discourse on responsible leadership into an operationalised definition and an online tool for testing a person’s responsible leadership competencies. This tool can be used for “systematically analysing and developing responsible leadership competencies for individuals, groups, both in business and educational practices” (Muff et al., 2020, p. 1). The author’s review of the literature identified five competency dimensions of responsible leadership: (1) creating, managing and securing good relations with multiple stakeholders; (2) ethically correct and values-based behaviour; (3) a continuously developed self-awareness; (4) good understanding of the interdependencies of a larger system; and (5) the ability to lead change and innovation towards sustainable development.

These competencies were then developed into a two dimensional framework by considering the question: what are the relevant domains of action? while also intersecting with the work of Datar et al. (2010) who identified three action domains: knowing, doing and being (Muff et al., 2020). Muff et al. (2020) developed the responsible leadership grid which after prototyping and further review of literature, resulted in 15 aspects of responsible leadership overall, and three identified sub-

competencies of each of the 15 aspects, that resulted in 45 sub-competencies across the whole responsible leadership grid (Muff et al., 2020). In an effort to reduce social desirability concerns, the authors used smart technology to turn these 45 sub-competencies into 45 questions carefully selected to measure each of the competencies and action domains and to provide a comprehensive report outlining mastery levels ranging from (1) competency is underdeveloped and there is significant opportunity for improvement to (4) competency appears very mature and well developed (Muff et al., 2020). This report provides respondents with an indication of their levels of mastery and areas of improvement. In an educational context, this report can enable students to assess and self-generate their responsible leadership profile before and after a course or intervention, and provide educators with the ability to generate responsible leadership profiles and development progress at multiple intervals for students across courses, programs or entire degrees (Muff et al., 2020).

Moral Imagination

One of the challenges faced by responsible leaders is the balancing of societal, corporate and personal values. To navigate this challenge and find a balance between these three sometimes different values, it is suggested that *moral imagination* can be used by responsible leaders. Moral imagination is the capacity to 'think outside the box', challenge one's operative mental models of the world and develop new ways of framing ethical problems (Johnson, 1993; Maak & Pless, 2006; Werhane, 1999).

The concept of moral imagination is not new but has received new scholarly interest for its capacity to develop more responsible leaders. Werhane (1999) proposes a three stage process for developing moral imagination which includes: reproductive imagination, an awareness of the situation and personal mental models (stage 1); productive imagination, assessing and challenging existing mental models (stage 2) and finally, creative imagination (stage 3) which is concerned with free reflection in order to enable one to "envision and actualize novel, morally justifiable possibilities" and to answer moral questions (p. 105). Essentially being a morally imaginative person includes the capacity and willingness to self-reflect about oneself and one's situation, being capable in imagining new possibilities, the ability to evaluate the original context, one's dominating mental models, and the new possibilities from a moral point of view (Werhane, 2008). In an educational context, Popa and Enlow (2007) argue that fostering moral imagination in leadership students "requires re-conceptualizing and applying ethical theory and leadership practice with curriculum that does not merely attach ethics as a mere appendage to leadership development, but with critical thinking content and practice opportunities that become the very essence of leadership" (p. 2). As such it is important to embed these three concepts (responsible leadership, moral imagination and ethics) within leadership courses as well as a focus on developing practice opportunities for skill development.

Non-Placement Work-Integrated Learning Model

WIL is an umbrella term for a range of approaches that aim to connect the theory and practice of work within the curriculum (Patrick et al., 2008). There are a number of variables that can be considered when classifying WIL activities. Variables can include location (on or off campus), length of the activity (placement hours), whether academic credit is given for participation, the extent of community or industry engagement, or the purpose of the activity (Rowe et al., 2012). More broadly, WIL models and structures can be categorised into 'placement' and 'non-placement WIL'. WIL placements include activities such as internships and practicums where a student gains experience in a workplace setting. Non-placement WIL includes simulations and industry based projects where a student connects with industry in an authentic learning experience in a campus setting (Jackson et al.,

2017). Both aim to increase a student's employability through the development of a professional repertoire of skills or capabilities (Jackson et al., 2017; Pilgrim, 2012).

With a number of universities increasing their commitment to WIL, augmented by the national strategy for WIL (Universities Australia & Australian Collaborative Education Network, 2015), "the percentage of students afforded the opportunity of placement remains relatively low" (Kaider et al., 2017, p. 154). Some disciplines such as medicine, law and education have a strong tradition of offering placements, however for other disciplines such as business, fewer or no such opportunities exist (Hains-Wessen & Campbell, 2014; Kaider et al., 2017). Therefore, alternative models to the traditional WIL placement approach are gaining appeal. Alternative non-placement WIL activities can cater for different student motivations and capabilities and different university resourcing priorities (Pilgrim, 2012). It is anticipated that non-placement WIL approaches will become ever more common in light of the recent COVID-19 crisis and the resourcing constraints placed on universities. However, the need for capable and adaptable graduates with the skills to "hit the ground running" upon graduation will still be needed by organizations.

One of the concerns of practitioners with this shift to non-placement WIL models is the importance of ensuring that non placement WIL experiences are 'authentic'. According to Kaider et al. (2017) authenticity is about ensuring that the learning and assessment of learning are transformed into tasks that closely reflect real world tasks. Some of the characteristics of authentic assessment found to be common include: real world problems that mimic the work of professionals, open ended inquiry and thinking skills, engaging students in discourse and social learning, and empowering students through choice to direct their own learning (Rule, 2006). In addition, the use of reflective practice in WIL has been found to be integral to developing employability skills (Moon, 2013; Ryan, 2013). In support of the above arguments, a national study on the impact of WIL on employability conducted by Ferns et al. (2014) identified several key factors as essential to obtaining quality outcomes in WIL. These factors include: authenticity of the WIL activity; preparation and induction processes for both students and hosts; access to and quality of supervision through the WIL activity; alignment of WIL activity and assessments to WIL appropriate learning outcomes with scaffolded skill development and robust feedback; and a facilitated debriefing session for students that enables reflection on the experience and an opportunity to consider areas of strength and areas for further development (Ferns et al., 2014). Each of these factors together with the embedding of responsible leadership, ethics and moral imagination were fundamental to the development of the non-placement WIL experience in the third year unit which forms the focus of this research.

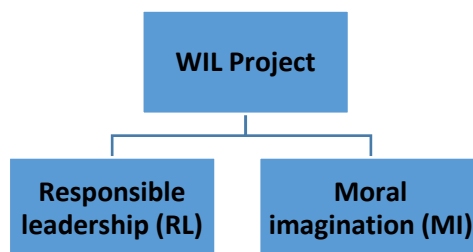
CONTEXT AND BACKGROUND

Designing the Curriculum to Embed Work-Integrated Learning

The unit, *Responsible Leadership*, is a third year undergraduate unit offered at the University of Wollongong. Two significantly important leadership concepts (responsible leadership and moral imagination) were brought together to provide students with the opportunity to develop these areas through a non-placement WIL industry project. The teaching approach has been influenced by Popa and Enlow's (2007) recommendations of embedding critical thinking content with practice opportunities by bringing industry into the classroom in a collaborative embedded non placement WIL project. To achieve this process, a model was developed for visualising and implementing the approach whereby the WIL project was viewed as the linchpin that provided students the opportunity to develop

and enact responsible leadership and moral imagination competencies. This visualisation is presented in Figure 1.

FIGURE 1: Teaching approach pre-COVID- 19



The WIL industry project has been developed on principles of 'authenticity', reflection and feedback (Ferns et al., 2014; Kaider et al., 2017; Ryan, 2013). The assessment was authentic in that it required students to apply their disciplinary learning, act as professional consultants on a project for a real host organization and industry partner. Students were given a real-world inquiry problem and had to use their higher order thinking skills to research, reflect, analyse and synthesise data to solve a problem for the host organization. Students were provided access to the industry partner by way of live zoom sessions that also facilitated the feedback process through a debriefing session enabling further reflection on their experience (Ferns et al., 2014; Kaider et al., 2017; Ryan, 2013). Reflection was not only built into the specific WIL industry project but also through each of the live tutorial sessions, peer evaluations and group work. The original method for teaching the unit was face-to-face lectures (2 hours) and a tutorial (1 hour) each week. In line with the university framework for WIL (Dean et al., 2019) the project fitted with the embedded WIL project approach by working with an industry partner to develop an industry project. Initially, plans were made for the industry representative to attend one lecture to present relevant information about their organization and programs they offer. This was followed by instruction to students on the industry based project report to be completed for assessment task two.

Formative assessment was embedded throughout the course through short summaries of the key points in each session, analysing and responding to written discussion board questions, and via strategic questioning in live tutorials. There were three formal summative assessment tasks aligned with the learning outcomes of the unit. The second assessment task, worth 30% of the final grade of the unit was developed as an industry based project. The assessment task, titled 'Responsible Leadership in Action', involved a team of students working together and acting as a consultant to the host organization by conducting research and in the process of doing so developed their responsible leadership skills. Each of the organization's programs address an underlying social, economic and or environmental cause of health inequality. With an understanding of the United Nations 17 Sustainable Development Goals (introduced in the unit content) students were tasked with conducting an analysis on the ways in which their chosen program (choice of 3) contributed to the targets identified within the sustainable development goals. In addition to this analysis students were also asked to make recommendations on how the organization could continue to enhance responsible leadership through social innovation, basing their response on theories introduced in the unit, to support their recommendations.

The following sections describe the methods used to pivot the unit to online delivery and the tool used to measure the cohorts development of responsible leadership competencies.

METHOD

Critical Reflection

Reflection in education is important for both teachers' and students' learning. For lecturers, critical reflection can provide links between what is to be taught and achieved, and what is needed to improve student learning. Donald Schon (1983) argues that effective practitioners continually reflect on experiences and learn from them. Referring to this approach as 'reflection in action' the author argues reflection develops practitioners as researchers in practice where reflection takes place on time so that there is still time to benefit and change the situation (Schon, 1983). This process has been recognised in the learning teaching literature as good pedagogical practice for professional development. When COVID-19 impacted on the face-to-face delivery of this unit, considerable time was spent on reflecting what would be best for all stakeholders with an online delivery. The Competency Assessment for Responsible Leadership (CARL survey) assisted in this process of reflection. The CARL survey results provided information about the cohort's gaps in knowledge, skills and attitudes. Following what Schon (1983) calls 'reflection in action', content relevant to filling these gaps was embedded so that students could benefit from, and have opportunities to develop, their responsible leadership competencies. Thus, by critically reflecting upon the results of the CARL survey and how the current crisis might affect the learning process, the system was designed for adapting the WIL project to the online environment. The process of adapting to online delivery and engaging students is described further in the Findings section under *Adapting to Online WIL*.

The CARL Survey

To examine the impact of the embedded non-placement WIL project on students' responsible leadership competencies, the CARL (Competency Assessment for Responsible Leadership) survey (Muff et al., 2020) was adopted to assess students' pre- and post-WIL project responsible leadership competencies. Ethics approval was obtained to survey the student cohort (reference number is 2020/70). After a comprehensive review of the corporate social responsibility and leadership literature, the authors developed a two-dimensional framework of responsible leadership with five competency dimensions. These dimensions include: creating, managing and securing good relations with multiple stakeholders; ethically correct and values-based behavior;; continuously developed self-awareness; good understanding of the interdependencies of a larger system, and the ability to lead change and innovation towards sustainable development. These are combined with three action-domains: knowing, doing and being (Muff et al., 2020, p. 8). Each competency dimension, for each action-domain, incorporates three sub-competencies that provide an overall responsible leadership grid of 45 sub-competencies (Muff, 2016). These 45 sub competencies are described in detail in Table 8 of Muff et al.'s (2020) paper on how to apply responsible leadership theory in practice. After prototyping, testing, expert review and beta-testing for calibration, the responsible leadership framework was operationalised in an online questionnaire called the CARL survey. The CARL survey was adopted as it was a comprehensive tool that was found after a thorough literature and internet search that provided an overall assessment of responsible leadership and had also been robustly tested and calibrated.

The CARL survey provides responses on each sub-competency (five competencies by three sub-competencies each) scaled for each three action-domains, with each action-domain of knowing, doing and being, represented on a scale of "mature" (scale = 4), "developed" (scale = 3), "in development" (scale = 2), "underdeveloped" (scale = 1) and "missing" (scale = 0).

The maximum raw overall responsible leadership score across all competencies is 60 (15 times maximum score of 4). The total maximum calibrated overall score is 100 (minimum = 0), as each of the three action-domain scores are weighted: "knowing" action domain is weighted by 1.25, "doing" action domain is weighted by 1.65, and "being" action domain is weighted by 2.10. An example of the result of the adjustment and calibrations is provided in Table 1.

TABLE 1: Competency and domain scaling for CARL survey

<i>Degree of mastery (columns)</i> Competency dimensions (rows)	Knowing (Knowledge)	Doing (Skills)	Being (Attitudes)
Stakeholder relations	4	4	4
Ethics and values	4	4	4
Self-awareness	4	4	4
Systems understanding	4	4	4
Change and innovation	4	4	4
	20	20	20
Weighting:	x 1.25	x 1.65	x 2.1
Adjusted score:	25	33	42
CARL score: 100			

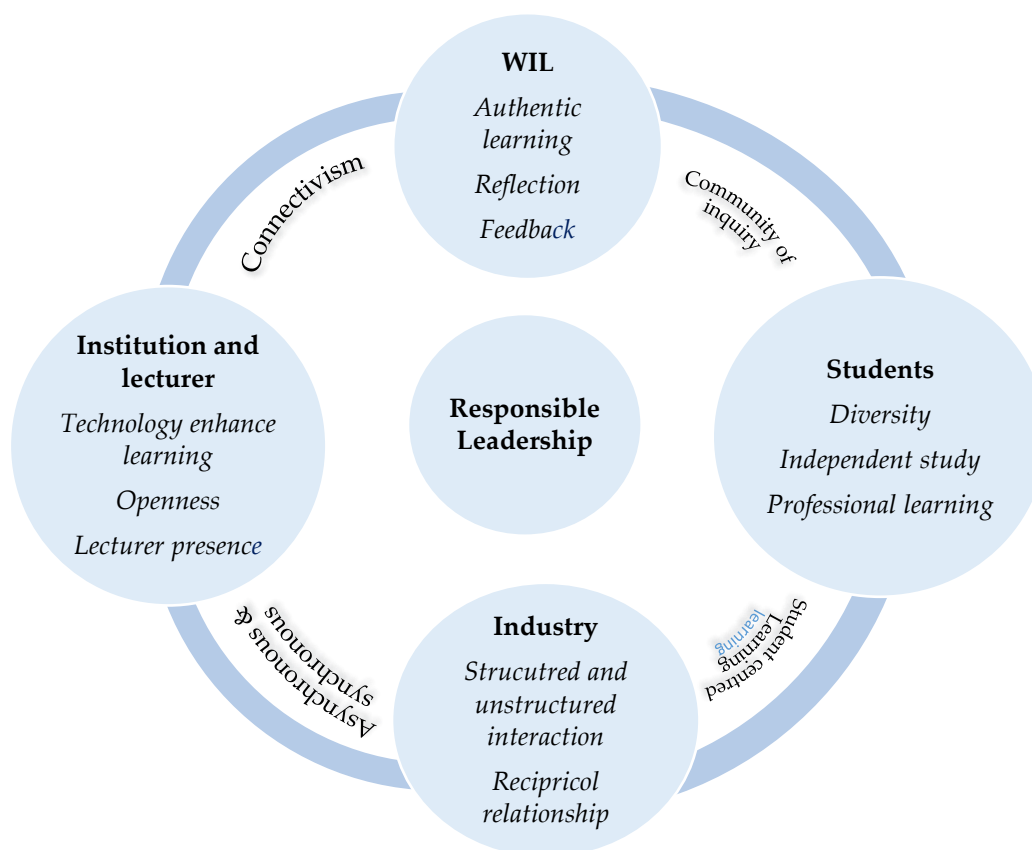
The CARL survey allows individuals to self-generate their own responsible leadership profile as well as generate a cohort profile of any specific group of individuals. The CARL survey was used to enable individual students' to generate their own responsible leadership profile before the start, and at completion, of the unit. It also was used to provide a cohort profile of the entire class responsible leadership competencies both pre- and post the non-placement WIL activity. Students were provided with a group code so that all responses were collated into an overall profile that enabled an understanding of the cohorts' competencies. There were a total of 113 students enrolled after census date, comprising 92 domestic students and 21 international students, enrolled at several campus locations including Bega, Southern Sydney, South Western Sydney and Wollongong. A total of 107 students completed the CARL survey which equates to a 94% response rate. A summary of the students' overall cohort scores was emailed to the lead author at the completion of the pre-test and then again at the completion of the post-test survey.

ADAPTING TO ONLINE WORK-INTEGRATED LEARNING

The following analysis is the lead author's process of adapting for online delivery and engaging students. Hence it is written in first person. When COVID-19 began to significantly impact on my capacity to teach face-to-face I was able to pivot my approach to the online environment. This required not only more online resources and time for students, the lecturer and the industry partner, but it required me to rethink my approach to teaching so as to ensure that in an uncertain climate I could foster real connections between all three vital parties (university, student and industry). Given that COVID-19 had not only impacted upon my way of working, I recognised that COVID-19 was changing both people's way of life and also students' motivation. It was challenging our work life balance with

many people working from home and for many students I knew this would result in incurring financial and potential mental health distress (Sahu, 2020). I, therefore, decided that the new approach to this unit would be founded on the principles of a student centred approach, connectivism and building a community of inquiry. This enabled me to view the teaching approach as a system through which feedback with the environment would evolve with the changes occurring. This shifted my initial view of the WIL project as the linchpin bringing together the concepts of responsible leadership and moral imagination to a perspective that the whole system would be the linchpin creating an enabling environment for student success. In order to adapt to the changed environment and pivoting the embedded WIL project, my new approach was conceptualised and is presented in Figure 2. This visualisation was used to guide my practice throughout the semester.

FIGURE 2: A systems student-centred approach to non-placement WIL.



Student-Centred Learning

Given the uncertainty that COVID-19 was placing on teaching and learning practice, I believed it was important to create a comfortable and interactive learning environment where students were able to engage with the unit material, and are given the time and tools to learn and make meaning, while also providing a didactic transmission of knowledge and information (Zhang, 2004). Aligning with the traditional theories of cognitivism and constructivism, I support the view that we learn and make meaning of the world around us through interactions and experiences with others (constructivism), and that when the teaching is 'student centred' students can take on what is being passed to them so that they are building on prior knowledge and internally assimilating the new information

(cognitivism). A student centred learning approach aligns with experiential learning principles, which also underpin WIL approaches so it was important to design activities and assessments for students to take an active role in planning their learning (self-paced), and organising their activities to meet the objectives of learning (Kim & Davies, 2014). The unit therefore provided opportunities for learning through reflection and critical questions (Popa & Enlow, 2007), and this was reinforced through authentic assessment design which asks students to engage in higher order thinking skills, application and analysis (Kim & Davies, 2014). The semester content included: the state of the planet and the need for action (session 1); developing responsible minds (session 2); leadership theories (session 3); what is responsible leadership? (Session 4); frameworks of responsible leadership (session 5); responsible leadership and ethics (session 6); responsible leadership, corporate social responsibility and sustainability (session 7); responsible leadership and social innovation (session 8); creating value for all, a stakeholder approach (session 9); communication in responsible businesses (session 10); and responsible leadership to responsible business practice (session 11). Activities are described further in Table 2.

Connectivism

The concept of connectivism has emerged recently and is relevant to living in a digital society. There are many critics of this concept as it is still being refined and developed (Bates, 2018). According to Siemens (2014) connectivism is a theory for the digital age and is founded on the premise that the internet changes the essential nature of knowledge. Siemens (2014) argues that knowledge is created beyond the level of individual human participants and is constantly shifting and changing as nodes come and go and as information flows across networks that themselves are inter-connected with a myriad of other networks. Creating this connection at first instance with students, both face-to-face and using online tools, builds a network. The key principles of connectivism embedded into my teaching practice included: learning and knowledge rests in diversity of opinions (diverse group formation); learning is a process of connecting nodes or information sources (connections made between concepts, with industry, with each other); nurturing and maintaining connections is needed to facilitate continual learning (weekly live connection tutorials and individual sessions available), and the ability to see connections between fields, ideas and concepts is a core skill (purposeful linking of concepts, ideas, different disciplines each session) (Siemens 2014). The activities related to this principle are also detailed in Table 2.

Asynchronous and Synchronous Communication

With COVID-19 restricting academic and student presence on campus it was important to maintain connection with students so that the transition to moving the unit wholly online had clear direction and ran smoothly. Contact with students was originally organised for face-to-face delivery via a two hour lecture and a one hour tutorial each week, with students being divided into groups of 25 per tutorial. I wanted to sustain some of this connection with students so I opted for providing both asynchronous (recorded) and synchronous (live) learning opportunities. Asynchronous technologies enable information to be pre-recorded thus enabling students to access the information at different points of time, usually at a time and place of their choice (Bates, 2018). Synchronous technologies enable students to communicate live, participating together at the same time but not necessarily in the same place (Bates, 2018). To enhance students' experiences and alleviate some of the worry being felt by the cohort (received through feedback) I pre-recorded all of the lecture content well in advance, in the two week break provided by the university to pivot to online learning. This meant that by week three of the semester students had access to all of the lecture content and recordings so that they could self-pace

allowing flexibility and control of their own learning. This approach is supported by Means et al. (2009) who found students did better in a blended learning approach as they were able to spend more time on the task because the materials were always available. Other activities are described in Table 3. Embedded in the learning management system (Moodle) was a consistent structure whereby content and student tasks were clearly detailed in a step by step task list with content embedded in folders set up as sessions. This was different to previous versions of the unit where students relied solely on a downloadable unit outline document and other downloadable PDF documents.

Community of Inquiry

Through combining the WIL principles of reflection, feedback and authentic real world assessment along with my connectivist approach and using both a combination of synchronous and asynchronous (blended learning) delivery the foundations for a community of inquiry were built. Garrison et al. (2000) define a community of inquiry as “a group of individuals who collaboratively engage in purposeful critical discourse and reflection to construct personal meaning and confirm mutual understanding” (p. 2). In the context of this unit it required developing a relationship with students so they could communicate purposefully in a trusting environment and develop inter-personal relationships by way of projecting their personalities (Garrison et al., 2000). This was achieved through increased teacher presence and discussion opportunities, allowing students to apply the content to current events including encouraging students to discuss matters of contention focusing on leadership decisions in the context of the COVID-19 pandemic. Reflection questions were a large part of the weekly activities that students were encouraged to engage with prior to their online class so that they could construct and confirm their own understanding through the discourse and feedback in the live sessions (Garrison et al., 2000).

Table 2 summarises all of the principles embedded in my teaching practice aligned with the specific activities and delivery methods.

FINDINGS AND DISCUSSION

Operating in an environment of strong uncertainty has created many challenges for the delivery of education, with some universities having to consider cancelling or postponing campus events including classes. Despite concerns raised by Lee (2020) about the capability of some staff to deal with existing technology, the transition of the third year undergraduate responsible leadership subject including the non-placement WIL project to the online environment was considered to be successful. With support from the industry partner, the non-placement WIL project was developed as a systems student-centred approach to ensure that students engaged in assessment tasks and activities deemed ‘authentic’ (Kaider et al., 2017). In keeping with Rule (2006), this entailed open ended inquiry and thinking skills achieved in the unit through structured and unstructured interaction with industry, reflective practice (Moon, 2013; Ryan, 2013), feedback and an environment of connectivism and reciprocal relationship building. The model developed and used to transition the unit followed the principles of student centred learning, connectivism, asynchronous and synchronous communication enabled the development of a community of inquiry, thus providing a much needed holistic framework to account for the inherent complexity of WIL (Zegwaard & Rowe, 2019).

TABLE 2: Activities within the systems student centred approach to non-placement WIL.

Teaching Principle	Delivery Methods and Activity
Student centred learning	• Weekly (13 weeks) pre-recorded mini lecture and online zoom sessions • Reflection activities (professional & personal focussed) • Tutorial activities focused on the development of students' competencies of responsible leadership, moral imagination and moral decision making • Self-paced learning: all material available from week three.
Connectivism	• Inclusivity and diversity: all students grouped as one cohort • Focus on connecting networks and feedback: lecturer, student and industry partner connected via live zoom sessions (three across the semester) • Connections between core concepts and ideas were reinforced, e.g. responsible leadership, ethics and moral imagination, challenging mental model exercises • Technology enhanced learning: e.g., multimedia to represent real world problems, online video cases, podcasts, industry partner videos, concept explanation videos and reflection question with help from platforms such as "Ethics Unwrapped".
Asynchronous and synchronous communication	• A 'special event' lecture as described by Bates (2018) where a summary of recent research was provided or an elaboration and clarification on a concept or a way of taking stock and dealing with common difficulties. • Asynchronous online discussion forums, messaging tools for groups, videos and questions including professional and personal reflection questions, videos of client briefing on WIL project, self-reflection survey tasks to measure competencies and assess students' progress. • Synchronous weekly tutorials (minimum of one hour per week)
Community of inquiry	• Increased lecturer presence in the learning management system (moodle) • Clear guidelines on purpose of discussion and the appropriate use of technology • Communication of concise goals for each session both live and pre-recorded • Expansion of topics into current COVID-19 context, e.g., responsible leadership in the context of COVID-19: what does this look like? • Monitoring the participation of individual learners (Bates 2018) via course online analytic tools • Consistent communication and strong articulation of connection between discussion topics and assessment

The pre-test CARL survey results are presented in Table 3.. The survey was completed prior to the commencement of the embedded online non-placement WIL program and the cohort of students had a total CARL score of 67 at this time.

TABLE 3: Competency Assessment of responsible leadership (CARL): Before course scores.

<i>Degree of mastery (columns)</i> Competency dimensions (rows)	Knowing (Knowledge)	Doing (Skills)	Being (Attitudes)	% of max*
Stakeholder relations	2	3	3	69
Ethics and values	1	3	2	52
Self-awareness	3	3	2	65
Systems understanding	3	2	3	67
Change and innovation	3	4	3	83
% of max*	60	75	65	

CARL score: 67

Where: scores represent "0" = missing; "1" = underdeveloped; "2" = in development; "3" = developed; and "4" = mature.

*% of max = percentage of total possible score for each competency and action-domain, for example total possible "knowing/knowledge" domain score is 20 (5 competency scores x 4 maximum score) and actual score of 15 (2+1+3+3+3) is 60% of total possible score on this domain.

The most underdeveloped competency for the student cohort was ethics and values (% of maximum score of 52%) and specifically the knowing/knowledge domain was identified as requiring significant improvement (average score of "1" = underdeveloped). The knowing/knowledge domain in the ethics and values dimension comprises the sub-competencies of understanding dilemmas, in addition to knowing what is right and wrong, and knowing your own values (Muff et al., 2020). The doing/skills domain in the ethics and value dimension comprises sub-competencies of being able to critically question and adapt your own values, act according to ethics and own values, and being a role model (Muff et al., 2020). Lastly, the being/attitudes domain is grouped with three sub-competencies of: being honest and integer, seeking fairness, and being responsible towards society and sustainability (serving the common good) (Muff et al., 2020). Upon receiving these results, Popa and Enlow's (2007) approach of embedding the concepts of moral imagination and ethics throughout the course was followed. As argued by Popa and Enlow (2007) ethics was not merely attached to the student's leadership development but students were given opportunities to think critically through the WIL project and through a deliberate moral imagination exercise based on Werhane's (1999) process of developing moral imagination. Ensuring that ethics became a large focus in the unit was achieved through lectures and live discussions about the philosophical foundations and application of ethics in both a professional and personal context, examining ethical dilemmas where students were encouraged to consider all perspectives and solutions, as well as focussed activities on developing their moral imagination throughout the process.

The second most underdeveloped area was identified as self-awareness (% of maximum score of 65%), followed by systems understanding (% of maximum score of 67%), and stakeholder relations (% of maximum score of 69%). The most developed area was change and innovation (% of maximum score of 83%). Prior to receiving the pre-test CARL survey results, several topics addressing change and innovation in the context of responsible leadership were included in the restructured unit. The pre-test survey results provided a snapshot at one point in time identifying any responsible leadership

competencies and sub-competencies that the cohort maybe underdeveloped in and had capacity for improvement. These findings provided direction and support to focus the unit more deeply on ethics and values and as well as providing opportunities for students to develop their self-awareness. Thus, moral imagination was integrated into the subject as the vehicle for developing student's ethics and values and self-awareness (Pope & Enlow, 2007).

In relation to the action-domain findings of the pre-test CARL survey, the most underdeveloped domain was knowing/knowledge (60%), followed by being/attitudes (65%) and then doing/skills (75%). This suggests that students lacked overall knowledge in regard to responsible leadership competencies, however were capable of doing or applying what knowledge they had. This knowledge and action had not yet become part of the fabric of who they were or had developed into a habit. This supported my decision to embed both a theoretical and practical element to the unit (WIL industry project) that encouraged students to explore responsible leadership in practice.

At the end of the semester students were asked to complete the CARL survey again, in order to assess any improvements gained from their learnings in the unit and the embedded non-placement WIL program. The results of the post-test survey are presented in Table 4.

TABLE 4: Competency assessment of responsible leadership (CARL): After course scores.

<i>Degree of mastery (columns)</i>	Knowing (Knowledge)	Doing (Skills)	Being (Attitudes)	% of max
Competency dimensions (rows)				
Stakeholder relations	2	3	2	58
Ethics and values	3	3	3	75
Self-awareness	4	3	4	92
Systems understanding	3	3	4	86
Change and innovation	4	3	3	81
% of max	80	75	80	

CARL score: 78

Where: scores represent "0" = missing; "1" = underdeveloped; "2" = in development; "3" = developed; and "4" = mature.

*% of max = percentage of total possible score for each competency and action-domain, for example total possible "knowing/knowledge" domain score is 20 (5 competency scores x 4 maximum score) and the actual score of 16 (2+3+4+3+4) is 80% of total possible score on this domain.

The results in Table 4 identify an overall improvement in the cohort across a number of responsible leadership competencies and action-domains from the before course pre-test survey (CARL score pre-test of 67 to post-test score of 78). The percentage of maximum scores increased for the competency dimensions of self-awareness (+ 27%), ethics and values (+ 23%) and systems understanding (+ 19%), while the percentage scores for stakeholder relations (- 11%) and change and innovation (- 2%) decreased. Across the three action-domains, the percentage of maximum scores increased for knowing/knowledge (+ 20%) and being/attitudes (+ 15%) while doing/skills remained constant from pre- to post-test.

Overall the CARL survey scores for the student cohort suggests that the embedded non-placement WIL program had improved student responsible leadership competencies from the commencement of the unit (CARL score: 67) to the conclusion of the unit (CARL score: 78). At the beginning of the semester

the most underdeveloped competency for the student cohort was *ethics and values*, specifically the *knowing/knowledge* degree of mastery was identified as requiring significant improvement. This domain comprises knowing what is right and wrong, and knowing your own values. At the end of semester the greatest improvement in the student cohort's competencies was in the dimensions of *self-awareness* and *ethics and values*, and the degree of mastery of *knowing/knowledge* and *being/attitudes*. These results suggest that the online non-placement WIL program appears to have had an impact on the cohort's knowledge of responsible leadership competencies as well as their ethics, values and self-awareness in relation to responsible leadership. The results also show less of an impact on *stakeholder relations* and *change and innovation*.

An implication of the findings of the CARL surveys, is the suggestion there is value in understanding the student cohort responsible leadership competencies and skills prior to new unit content being delivered in order to uncover any knowledge or skills requiring significant improvement, thus providing guidance to the lecturer developing the curriculum. Following this approach would enable the lecturer the opportunity to strengthen their teaching practices to make them more responsive to the learning needs of students as identified as important by Toquero (2020). Through uncovering the significant underdevelopment of the competency of *ethics and values* a particular focus on ethics was integrated into the curriculum and the non-placement WIL program, thus increasing opportunities for students to deepen their knowledge, and consider and apply their learnings. Adopting this strategy requires the lecturer to be flexible in their approach and more finely tune their WIL program and/or teaching materials after reflecting upon the CARL survey report of their student cohort.

CONCLUSION

This paper examines the design, implementation and impact of an embedded non-placement WIL project, in a third-year undergraduate unit – Responsible Leadership, which was pivoted to the online environment in response to COVID-19 restrictions. The model which was developed to guide the unit and teaching practices throughout the semester included a collaborative approach between the institution/lecturer, students and the industry partner. This approach was achieved through careful consideration of the principles of connectivism, asynchronous and synchronous communication tools and student centred self-paced learning opportunities, which built a community of inquiry. The process adopted for this project, supported by the project results, may benefit other practitioners who are also seeking to review how to effectively pivot their non-placement WIL projects to an online platform while still maintaining the connection and engagement of students.

As with any project or study, there are limitations that should be considered. The results of the CARL survey should be carefully interpreted or incorrect conclusions could be arrived at. For example, even though the student cohort improved in their ethics and values, self-awareness and systems understanding competencies, their post-survey identified a reduction in their scores for the stakeholder relations and change and innovation competencies. This may not signal a reduction in their actual competency in these areas but could be due to an increased knowledge and better understanding of what the stakeholder relations and change and innovation competencies involve. Therefore, after their learnings from the unit they may view their skills and attitudes to these competencies lower than before when they did not have a good understanding of these responsible leadership competencies. Additionally, in adopting the pedagogical approach as outlined and implemented in the teaching of this unit and the online non-placement WIL program to other student cohorts, with another lecturer and in a different context, may not be as successful and provide the student learnings as has been

evidenced in this project. This is due to each individual lecturer and student bringing different skills, abilities and prior learning experiences to the classroom.

Despite the many benefits that WIL programs offer, research reports WIL as resource intensive, having workload implications for academics and administrative staff who design, teach, administer and support WIL courses when compared to traditional classroom-based courses (Patrick et al., 2008; Clark et al., 2016). The pivoting of this unit in response to COVID-19 took considerable time on the part of the lecturer and industry partner who worked closely to organise the WIL based industry project and online connections throughout the semester. In addition, it was important that in doing so consideration was given to the impact on students learning and ensure that every part of the unit focused on student centred self-paced learning which offered added flexibility. While the effort and time required to not only embed a non-placement WIL program in the unit, but also to pivot from face-to-face to online delivery was time and resource intensive, the learnings and experience that students and the lecturer gained from this effort was extremely beneficial.

ACKNOWLEDGEMENTS

The authors would like to thank CEO of Healthy Cities Illawarra, Kelly Andrews for her support throughout the project and Dr Katrin Muff for her assistance with the CARL survey reports.

REFERENCES

- Bates, A. T. (2018). *Teaching in a digital age: Guidelines for designing teaching and learning*. <https://open.umn.edu/opentextbooks/textbooks/221>
- Clark, L., Rowe, A., Cantori, A., Bilgin A., & Mukuria, V. (2016). The power dynamics and politics of survey design: Measuring workload associated with teaching, administering and supporting work-integrated learning courses. *Studies in Higher Education*, 41(6), 1055–73. <https://doi.org/10.1080/03075079.2014.966071>
- Dalky, H. F., & Gharaibeh, A. (2018). Depression, anxiety, and stress among college students in Jordan and their need for mental health services. *Nursing Forum*, 1-8. <https://doi.org/10.1111/nuf.12316>
- Datar, S. M., Garvin, D. A., & Cullen, P. G. (2010). *Rethinking the MBA. business education at the crossroads*. Harvard Business Press.
- Dean, B., Eady, M., Glover- Chambers, T., Moroney, T., O'Donnell, N., & Yanamamdram, V. (2019). *WIL@UOW: WIL Pedagogy Overview*. University of Wollongong. <https://documents.uow.edu.au/content/groups/public/@web/@dvce/documents/doc/uow259307.pdf>
- Dill, E., Fischer, K., McMurtie, B., & Supiano, B. (2020). As coronavirus spreads, the decision to move classes online is the first step. What comes next? *The Chronicle of Higher Education*. <https://www.chronicle.com/article/As-Coronavirus-Spreads-the/248200>
- Doh, J. P., Stumpf, S. A., & Tymon, W. G. (2011). Responsible leadership helps retain talent in India. *Journal of Business Ethics*, 98, 85-100. <https://doi.org/10.1007/s10551-011-1018-3>
- Ferns, S., Smith, C., & Russell, L. (2014). Complex problem complex research design: Researching the impact of WIL on employability. In *WACE 10th International Symposium on Cooperative and Work-integrated Education Conference Proceedings*. [http://www.waceinc.org/uwest2014/proceedings/Australia/Sonia Ferns-Australia.pdf](http://www.waceinc.org/uwest2014/proceedings/Australia/Sonia%20Ferns-Australia.pdf)
- Garrison, R., Anderson, A., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(3). [https://doi.org/10.1016/S1096-7516\(00\)00016-6](https://doi.org/10.1016/S1096-7516(00)00016-6)
- Hains-Wesson, R., & Campbell, A. (2014). Balancing risk? First year performing arts students' experience of a community arts event. *Issues in Educational Research*, 24(3), 320-342.
- Haque, A., Fernando, M., & Caputi, P. (2017). The relationship between responsible leadership and organizational commitment and the mediating effect of employee turnover intentions: An empirical study with Australian employees. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-017-3575-6>
- Jackson, D., Rowbottom, D., Ferns, S., & McLaren, D. (2017). Employer understanding of work-integrated learning and the challenges of engaging in work placement opportunities. *Studies in Continuing Education*, 39(1), 35-51. <https://doi.org/10.1080/0158037X.2016.1228624>
- Johnson, M. (1993). *Moral imagination*. University of Chicago Press.
- Kaider, F., Hains-Wesson, R., & Young, K. (2017). Practical typology of authentic work-integrated learning activities and assessments. *Asia-Pacific Journal of Cooperative Education*, 18(2), 153-165.

- Kim, A. K., & Davies, J. (2014). A teacher's perspective on student centred learning: Towards the development of best practice in an undergraduate tourism course. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 14, 6-14.
- Lee, K. (2020). Coronavirus: Universities are shifting classes online but it is not as easy as it sounds. *The Conversation*. <https://theconversation.com/coronavirus-universities-are-shifting-classes-online-but-its-not-as-easy-as-it-sounds-133030>
- Maak, T., & Pless, N. (Eds.). (2006). *Responsible leadership*. Routledge.
- Maak, T. (2007). Responsible leadership, stakeholder engagement, and the emergence of social capital. *Journal of Business Ethics*, 74(4), 329-343. <https://doi.org/10.1007/s10551-007-9510-5>
- McKibbin, W., & Fernando, R. (2020, February 19). *The global macroeconomic impacts of COVID-19: seven scenarios* (working paper). Centre for Applied Macroeconomic Analysis.
- Means, B., Yukie, T., Murphy, R., Bakia, M., & Jones, K. (2009). *Evaluation of evidence-based practices in online learning; a meta-analysis and review of online learning studies*. US Department of Education. <https://files.eric.ed.gov/fulltext/ED505824.pdf>
- Moon, J. A. (2013). *Reflection in learning and professional development: Theory and practice*. Routledge.
- Muff, K. (2016). The collaboratory: A common transformative space for individual, organizational and societal transformation. *Journal Corporate Citizenship*, 18(2), 91-108. <https://doi.org/10.9774/GLEAF.4700.2016.ju.000012>
- Muff, K., Liechti, A., & Dyllick, T. (2020). How to apply responsible leadership theory in practice: A competency tool to collaborate on the sustainable development goals. *Corporate Social Responsibility and Environmental Management*, 2020, 1-16. <https://doi.org/10.1002/csr.1962>
- Patrick, C. J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL (Work Integrated Learning) report: a national scoping study*. Queensland University of Technology. <https://eprints.qut.edu.au/44065/1/WIL-Report-grants-project-jan09.pdf>
- Pilgrim, C. (2012). Industry and university perspectives of work integrated learning programs in ICT degrees. In *Proceedings of the 23rd Australasian Conference on Information Systems*. <http://hdl.handle.net/10536/DRO/DU:30049068>
- Popa, A., & Enlow, B. (2007). *Fostering moral imagination in leadership students*. <https://www.leadershipeducators.org/Resources/Documents/Conferences/FortWorth/Popa.pdf>
- Pless, N. (2007). Understanding responsible leadership: Role identity and motivational drivers: the case of Dame Anita Roddick, Founder of The Body Shop. *Journal of Business Ethics*, 74(4), 437-457. <https://doi.org/10.1007/s10551-007-9518-x>
- Ritter, T., & Pedersen, C. L. (2020). Assessing the coronavirus's impact on your business model. *Harvard Business Review*. <https://hbr.org/2020/04/assessing-coronaviruss-impact-on-your-business-model?ab=hero-subleft-2>
- Rowe, A., Winchester-Seeto, T., & Mackaway, J. (2012). That's not really WIL!—Building a typology of WIL and related activities. In *Australian Collaborative Education Network National Conference*, 246 – 252 <http://acen.edu.au/wp-content/uploads/2015/09/ACEN-2012-National-Conference-Proceedings.pdf?x41943#page=246>
- Rule, A. C. (2006). The components of authentic learning. *Journal of Authentic Learning*, 3(1), 110. <http://hdl.handle.net/1951/35263>
- Ryan, M. (2013). The pedagogical balancing act: Teaching reflection in higher education. *Teaching in Higher Education*, 18(2), 144-155. <https://doi.org/10.1080/13562517.2012.694104>
- Sahu, P. (2020). Closure of universities due to coronavirus disease 2019 (COVID-19): Impact on education and mental health of students and academic staff. *Cureus*, 12(4), e7541. <https://doi.org/10.7759/cureus.7541>
- Schon, D. (1983). *The Reflective Practitioner*. Basic Books.
- Siemens, G. (2014). *Connectivism: A learning theory for the digital age*. http://er.dut.ac.za/bitstream/handle/123456789/69/Siemens_2005_Connectivism_A_learning_theory_for_the_digital_age.pdf
- Toquero, C. (2020). Challenges and opportunities for higher education amid the COVID-19 Pandemic: The Philippine context. *Pedagogical Research*, 5(4). <https://doi.org/10.29333/pr/7947>
- Universities Australia, & Australian Collaborative Education Network. (2015). *National strategy on workintegrated learning in university education*. <http://cdn1.acen.edu.au/wpcontent/uploads/2015/03/National-WIL-Strategy-in-university-education-032015.pdf>
- Voegtlin, C., Patzer, M., & Scherer, A. G. (2012). Responsible leadership in global business: A new approach to leadership and its multi-level outcomes. *Journal of Business Ethics*, 105(1), 1-16. <https://doi.org/10.1007/s10551-011-0952-4>
- Werhane, P. H. (1999). *Moral imagination and management decision making*. Oxford University Press.
- Werhane, P. H. (2008). Mental models, moral imagination and system thinking in the age of globalization. *Journal of Business Ethics*, 78(3), 463-474. <https://doi.org/10.1007/s10551-006-9338-4>
- Zhang, L. F. (2004). Do university students' thinking styles matter in their preferred teaching approaches? *Personality and Individual Differences*, 37(8), 1551-1564. <https://doi.org/10.1016/j.paid.2004.02.012>
- Zegwaard, K., & Rowe, A. (2019). Research-informed curriculum and advancing innovative practice in work-integrated learning. *International Journal of Work-integrated Learning*, 20(4), 323-334. <https://hdl.handle.net/10289/13435>

The International Journal of Work-Integrated
Learning gratefully thanks the sponsors of this Special
Issue on the impact of COVID-19



Work-Integrated Learning New Zealand

Tuia te ako, tuia te mahi, tuia te ara whaihua e



UNIVERSITY OF
WATERLOO

WORK LEARN
INSTITUTE



**AUSTRALIAN COLLABORATIVE
EDUCATION NETWORK LIMITED**



THE UNIVERSITY OF
WAIKATO

Te Whare Wānanga o Waikato



About the Journal

The International Journal of Work-Integrated Learning (IJWIL) publishes double-blind peer-reviewed original research and topical issues dealing with Work-Integrated Learning (WIL). IJWIL first published in 2000 under the name of Asia-Pacific Journal of Cooperative Education (APJCE). Since then the readership and authorship has become more international and terminology usage in the literature has favored the broader term of WIL, in 2018 the journal name was changed to the International Journal of Work-Integrated Learning.

In this Journal, WIL is defined as "*an educational approach that uses relevant work-based experiences to allow students to integrate theory with the meaningful practice of work as an intentional component of the curriculum. Defining elements of this educational approach requires that students engage in authentic and meaningful work-related task, and must involve three stakeholders; the student, the university, and the workplace*". Examples of practice include off-campus, workplace immersion activities such as work placements, internships, practicum, service learning, and cooperative education (Co-op), and on-campus activities such as work-related projects/competitions, entrepreneurship, student-led enterprise, etc. WIL is related to, but not the same as, the fields of experiential learning, work-based learning, and vocational education and training.

The Journal's main aim is to enable specialists working in WIL to disseminate research findings and share knowledge to the benefit of institutions, students, co-op/WIL practitioners, and researchers. The Journal desires to encourage quality research and explorative critical discussion that leads to the advancement of effective practices, development of further understanding of WIL, and promote further research.

The Journal is ongoing financially supported by the Work-Integrated Learning New Zealand (WILNZ), www.nzace.ac.nz and the University of Waikato, New Zealand, and received periodic sponsorship from the Australian Collaborative Education Network (ACEN) and the World Association of Cooperative Education (WACE).

Types of Manuscripts Sought by the Journal

Types of manuscripts sought by IJWIL is primarily of two forms; 1) *research publications* describing research into aspects of work-integrated learning and, 2) *topical discussion* articles that review relevant literature and provide critical explorative discussion around a topical issue. The journal will, on occasions, consider best practice submissions.

Research publications should contain; an introduction that describes relevant literature and sets the context of the inquiry. A detailed 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 to current established literature, implications for practitioners and researchers, whilst remaining mindful of the limitations of the data, and a conclusion preferably including suggestions for further research.

Topical discussion articles should contain a clear statement of the topic or issue under discussion, reference to relevant literature, critical and scholarly discussion on the importance of the issues, critical insights to how to advance the issue further, and implications for other researchers and practitioners.

Best practice and program description papers. On occasions, the Journal also seeks manuscripts describing a practice of WIL as an example of best practice, however, only if it presents a particularly unique or innovative practice or was situated in an unusual context. There must be a clear contribution of new knowledge to the established literature. Manuscripts describing what is essentially 'typical', 'common' or 'known' practices will be encouraged to rewrite the focus of the manuscript to a significant educational issue or will be encouraged to publish their work via another avenue that seeks such content.

By negotiation with the Editor-in-Chief, the Journal also accepts a small number of *Book Reviews* of relevant and recently published books.



EDITORIAL BOARD

Editor-in-Chief

Dr. Karsten Zegwaard

University of Waikato, New Zealand

Associate Editors

Dr. Judene Pretti

University of Waterloo, Canada

Dr. Anna Rowe

University of New South Wales, Australia

Senior Editorial Board Members

Assoc. Prof. Sonia Ferns

Curtin University, Australia

Dr. Phil Gardner

Michigan State University, United States

Assoc. Prof. Denise Jackson

Edith Cowan University, Australia

Prof. Janice Orrell

Flinders University, Australia

Emeritus Prof. Neil I. Ward

University of Surrey, United Kingdom

Copy Editors

Yvonne Milbank

International Journal of Work-Integrated Learning

Diana Bushell

International Journal of Work-Integrated Learning

Editorial Board Members

Assoc. Prof. Erik Alanson

University of Cincinnati, United States

Prof. Dawn Bennett

Curtin University, Australia

Mr. Matthew Campbell

Queensland University of Technology, Australia

Dr. Craig Cameron

Griffith University, Australia

Dr. Sarojni Choy

Griffith University, Australia

Dr. Bonnie Dean

University of Wollongong, Australia

Prof. Leigh Deves

Charles Darwin University, Australia

Mr. David Drewery

University of Waterloo, Canada

Assoc. Prof. Michelle Eady

University of Wollongong, Australia

Assoc. Prof. Chris Eames

University of Waikato, New Zealand

Dr. Jenny Fleming

Auckland University of Technology, New Zealand

Assoc. Prof. Wendy Fox-Turnbull

University of Waikato, New Zealand

Dr. Nigel Gribble

Curtin University, Australia

Dr. Thomas Groenewald

University of South Africa, South Africa

Assoc. Prof. Kathryn Hay

Massey University, New Zealand

Ms. Katharine Hoskyn

Auckland University of Technology, New Zealand

Dr. Sharleen Howison

Otago Polytechnic, New Zealand

Dr. Nancy Johnston

Simon Fraser University, Canada

Dr. Patricia Lucas

Auckland University of Technology, New Zealand

Dr. Jaqueline Mackaway

Macquarie University, Australia

Dr. Kath McLachlan

Macquarie University, Australia

Prof. Andy Martin

Massey University, New Zealand

Dr. Norah McRae

University of Waterloo, Canada

Dr. Laura Rook

University of Wollongong, Australia

Assoc. Prof. Philip Rose

Hannam University, South Korea

Dr. Leoni Russell

RMIT, Australia

Dr. Jen Ruskin

Macquarie University, Australia

Dr. Andrea Sator

Simon Fraser University, Canada

Dr. David Skelton

Eastern Institute of Technology, New Zealand

Assoc. Prof. Calvin Smith

University of Queensland, Australia

Assoc. Prof. Judith Smith

Queensland University of Technology, Australia

Dr. Raymond Smith

Griffith University, Australia

Prof. Sally Smith

Edinburgh Napier University, United Kingdom

Dr. Ashly Stirling

University of Toronto, Canada

Prof. Yasushi Tanaka

Kyoto Sangyo University, Japan

Prof. Neil Taylor

University of New England, Australia

Assoc. Prof. Franziska Trede

Charles Sturt University, Australia

Dr. Karen Vaughan

Education Consultant, Independent Director, New Zealand

Ms. Genevieve Watson

Elysium Associates Pty, Australia

Dr. Nick Wempe

Primary Industry Training Organization, New Zealand

Dr. Theresa Winchester-Seeto

University of New South Wales, Australia

Publisher: Work-Integrated Learning New Zealand (WILNZ)

www.wilnz.nz