Connecting work-integrated learning and career development in virtual environments: An analysis of the UVic Leading Edge

JOY ANDREWS KARIMA RAMJI¹ *University of Victoria,* Victoria, Canada.

While the fields of work-integrated learning (WIL) and career development share common goals, WIL literature tends to focus on student employability more than students' ability to manage their careers. The Leading Edge program at a Canadian institution, the University of Victoria, brings together these two disciplines as it draws from theory and methodology in WIL and career development to strengthen student experiential learning and prepare students for meaningful careers. Four reflective questions form the core of the program, and support students to become pro-active experiential learners, embrace diversity and become career-ready during their academic journey. The authors present the theoretical underpinnings in career development, WIL and experiential learning that inform the program development, and analyse its strengths and challenges. The paper concludes with an exploration of how the Leading Edge, an online program, can support learners to navigate the challenges of the current labour market conditions created by COVID-19.

Keywords: COVID-19, Career development, experiential learning, work-integrated learning, reflection, assessment

While Canadian institutions adapt to the world of remote delivery of education necessitated by the impact of COVID-19, their commitment to career development, work-integrated learning (WIL) and experiential education has remained strong. Professional associations such as Co-operative Education and Work-Integrated Learning Canada (CEWIL Canada), Canadian Education and Research Institute for Counselling (CERIC) and Canadian Career Development Foundation (CCDF, have responded to the global pandemic by working collaboratively with employers, governments and students, to enable continued engagement of all stakeholders in WIL, with the goal of minimizing the impact of students' ability to participate in quality co-operative education and WIL programming. The Canadian government has responded by making funding available to students, employers have adapted by providing remote co-operative education and WIL opportunities for students, and institutions have introduced flexibilities with their program requirements, with the support of CEWIL, that do not compromise on the quality of WIL experiences nor their status as CEWIL accredited programs (CEWIL Canada, 2020).

Regardless of the mode of delivery, the goals of WIL programs, per CEWIL Canada's mission, remains intact: to "develop future-ready students and graduates through quality WIL" (CEWIL Canada, n.d.) Employability continues to be an important outcome that WIL programs aim for, in order to meet the needs of the labour market, and educational institutions continue to help students develop skills and attributes employers are seeking in graduates. A University of Waterloo study (2019) found that interpersonal skills, technical skills, organizational fit, learning potential, interest in the job/role, and self-direction are high on employers' list of expectations of new hires (University of Waterloo, 2019). The National Association of Colleges and Employers (NACE, 2015) found that employers actively sought competencies such as a strong work ethic, critical thinking, problem-solving, communication skills, collaboration, technological aptitude, and leadership, when hiring recent graduates.

¹ Corresponding author: Karima Ramji, <u>ramjik@uvic.ca</u>

The questions what will the future look like? and what does future-ready mean for the post-COVID world? warrant consideration. Pre-COVID, the Royal Bank of Canada's (RBC) Humans Wanted report (2018), highlighted that more than 25% of Canadian jobs would be impacted by technology, and that 2.4 million new jobs, requiring new skill sets, will be added to the Canadian economy. Their research showed an increasing demand for foundational skills such as digital literacy, judgement and decision making, the ability to manage people and resources, and global competencies like cultural awareness, language and adaptability. It suggests that in order to thrive in this skills economy, employers should recruit with a view to hire graduates from a lens of foundational skills that employees have to offer, rather than credentials for specific jobs. This will enable employee mobility between jobs in occupational clusters (solvers, providers, facilitators, technicians, crafters, and doers), based on foundational skills required for these clusters, enabling organizations and employees to meet the demands of the skills economy (RBC, 2018). Career development literature acknowledges the need for employee mobility and also the need to support students to navigate the work world and build meaningful and rewarding careers. Pryor and Bright (2011) use chaos theory to examine career development and acknowledge that students are constructing their own career path in a complex and changing environment. Krumboltz (2009) states the "lack of ultimate control or predictability opens up the opportunity for individuals to become active participants in the creation of their futures rather than pawns in a rigidly deterministic system of cause and effect" (p. 164).

The foundational skills that the RBC report proposes, align well with the core skills that WIL programs equip students with, and with the clusters that RBC has proposed to meet the demands of the skills economy. The question "What if all post-secondary institutions agreed to a national goal of exposing 100 percent of undergraduate students to meaningful work-integrated learning placements?" (p. 4), in the report is a testament to the confidence that exists for WIL programs to help meet the needs of the skills economy. Post-COVID, RBC's thought leadership report titled, *After the Crisis* (RBC, 2020) also cites internships and other forms of WIL as possible solutions for the post COVID world, with digital forms of WIL as a prominent feature of how COVID has impacted the world of WIL and the world of education in general (RBC, 2020).

The WIL literature cited above focusses on the needs of employers who also expect their employees to manage their own career development and prepare themselves to contribute to their organizations' constantly changing needs. However, it is career development literature, as cited in this paper, that supports students to understand how to manage their careers successfully and balance their professional success with their overall life goals. This paper presents an experiential learning program at UVic that integrates WIL and career development theories to facilitate student success during and beyond their academic career.

EXPERIENTIAL LEARNING AT THE UNIVERSITY OF VICTORIA

Like most post-secondary institutions around the world, Canadian post-secondary institutions have pivoted to innovative forms of career development and WIL programming to address the challenges that COVID-19 has posed. The importance of WIL and experiential learning has long been recognized at the University of Victoria (UVic), where co-operative education has an almost five decade history, with 50% of the eligible student population participating in the program (UVic Co-op & Career, 2020). This continues to be the primary form of WIL that students engage in, with others participating in internships, practica and other forms of WIL. In keeping with its strategic priorities (University of Victoria, 2020) and coincidentally, RBC's aspiration of all undergraduate students having exposure to WIL, UVic is moving toward offering 100% access to experiential learning for all students.

It is clear that in addition to developing the skills necessary for the skills economy of the 21st century, students must be adaptable, flexible and develop a strong sense of self in relation to the world (Savickas, 2012). In 2017, UVic's Co-operative Education Program and Career Services (UVic Co-op & Career) designed the Leading Edge program to complement existing programs and support this level of career readiness in students. A powerful reflective tool, the Leading Edge supports learners to engage virtually in reflecting on their WIL and other experiential learning.

UVIC LEADING EDGE: A TOOL FOR REFLECTION

The Framework

The UVic Leading Edge supports students to build career development self efficacy, become agents of their own experiential learning (Hodges et al., 2014) and thrive personally and professionally in the twenty first century (Soffel, 2016). Four philosophical questions form the core of the Leading Edge Framework:

- What do you love?
- What are you great at?
- What does the world need?
- What can you be paid for?

These questions first appear in use as a career exploration tool (Vileseca, 2013; Zuzunaga, 2011;) and then, to represent the life philosophy, Ikigai (Garcia & Miralles, 2016; Winn, 2014). At UVic, these universal philosophical questions have been re-interpreted to create an innovative curricular approach to experiential learning and career development. Barnett (2012) suggests the way forward in preparing our students for the unknown future lies in ensuring that learning is understood in terms of human qualities and dispositions, i.e. human *being*, rather than in terms of skills and knowledge; that higher order learning looks to "human being and becoming that offer the wherewithal for standing up to the world and engaging with it meaningfully and purposefully" (p. 76). The authors submit that the four leading edge questions attempt to engage students at this level.

Each of the four Leading Edge questions is presented with an associated learning outcome, as outlined in Figure 1. The learning objective for the question "What do you love?" is that students will know what motivates them, what they're passionate about, and how their interests align with possible career paths. This question engages them to reflect at a deeper level to tap into their passion and intrinsic motivations to engage them in learning and achieve academic success (Ibrahim & Jaaffar, 2017). Encouraging students to understand *what they are great at* aims to help them recognize their strengths so that they can clearly explain the knowledge and skills that they have gained through their education and experience. These strengths are developed through participation in career development and WIL programs as will be explained later. The question "What does the world need?" addresses the gap that Barnett identifies exists between one's self-awareness and "the need to act in the world." (Barnett, 2012, p. 76). In reflecting on this question, students will understand the importance of contributing to society and through their academic journey, learn how to connect with communities to understand what is needed so as to find opportunities where they can make a purposeful, vital impact. Finally, by engaging with the question, "What can you be paid for?" students will understand how to align their skill set with employment opportunities and how they can engage in a productive work search.

The philosophical underpinnings of the four questions, then, may in fact help students become subjects in their own career story rather than being actors in that journey. Engaging in reflection on their experiences through these questions emphasizes "a sense of purpose that coherently explains the continuity and change in oneself across time" (Savickas, 2002, p. 152). To this end, these questions are posed to students as they reflect on curricular and co-curricular experiences during their academic journey. As they engage in these experiences and reflections, they develop the abilities described in the learning outcomes for each question, and become career ready.

The circle in the centre represents the cycle of reflective experiential learning and transformational career development. Opportunities that enable students to develop the skills necessary to succeed and contribute to a diverse world are offered. The goal is to empower students to become career ready, while at the same time developing a sense of purpose that will guide them as they navigate their academic career and beyond; hence the word *purpose* in the centre of the framework. As they develop this sense of purpose, students discover their Leading Edge, which offers them "the wherewithal for standing up to the world and engaging with it meaningfully and purposefully" (Barnett, 2012, p. 76).

FIGURE 1: The Leading Edge Framework.



Note. Copyright 2017 by University of Victoria Co-operative Education Program & Career Services. <u>https://www.uvic.ca/coopandcareer/career/leadingedge/index.php</u>. Reprinted with permission.

The Leading Edge Curriculum

The goals for the Leading Edge are to encourage all UVic students to take part in hands-on learning, help students reflect on their UVic experiences to develop a strong purpose and prepare for their lives and careers. The program objectives are to develop career-ready graduates who embrace diversity and life-long learning, further distinguish UVic for its focus on dynamic learning, vital impact and extraordinary environment and increase student awareness of and participation in the services and resources offered by UVic Co-op and Career. The program was designed to lead students to choose, participate in and reflect upon a variety of experiences guided by the following themes:

Hands-on-Learning: Curricular and Co-Curricular Experiences

Experiential learning is at the core of the Leading Edge program. If students are to graduate with the ability to navigate the skills economy of the twenty first century successfully they must become strong experiential learners engaging in ongoing cycles of experience and reflection which enables them to construct a meaningful future (Kolb, 1984). The curriculum engages students in two types of experiential learning: curricular and co-curricular.

The University offers over 700 curricular experiential learning options, catalogued using the Association for Experiential Education's definition of experiential learning (University of Victoria, 2020) and the criteria shown in Table 1 (Johnston et al., 2016; McRae & Johnston, 2016). These include international academic exchanges, field schools and multiple forms of WIL opportunities such as community service learning courses (CSL), co-operative education (co-op) work terms, internships and practica offered at UVic. In keeping with the requirements of a quality WIL program, each of these are meaningful experiences that have clearly outlined learning outcomes which align with institutional learning outcomes. They also include assessment and reflection mechanisms that are key to a quality WIL program and meaningfully support student learning (McRae et al., n.d).

TABLE 1: Key attributes of experiential learning

Experience	Curriculum integration	Student outcomes	Reflection
Direct, hands-on	Learning outcomes	Skills, knowledge and	Ongoing and
involvement	(competencies)	attributes	meaningful
Meaningful and	Assessment	Capacity to contribute	
substantial	Reconnect experience		
Linked to curriculum	to program		

Note. Adapted from "The development of a proposed global work-integrated learning framework", by N. McRae and N. Johnston, 2016, *Asia-Pacific Journal of Cooperative Education*, 17(4), p.341. Adapted with permission.

Co-curricular experiences take place outside students' academic program and help them contribute to their communities, gain valuable experiences and discover their strengths. At UVic, these include community leaders, mentors, orientation leaders, recreation leaders, research assistants and student clubs. These experiences are assessed using UVic Co-op and Career's core competencies which are aligned with the University's learning outcomes.

These courses and programs provide dynamic, hands-on learning. They take place in the classroom, in the community, in research settings and in the workplace. In addition to the learning outcomes outlined by each of these programs, students explore the four Leading Edge questions as a further opportunity to reflect on their learning.

Embrace Diversity

Workplaces all over the world are becoming increasingly diverse. As such, students need to develop a key capability – that of engaging effectively with diverse others (British Council, 2013). While current conditions disallow international travel, remote models of experiential learning and WIL also require this skill as students engage virtually with colleagues and supervisors in workplaces across borders.

In response to this need, and inspired by an earlier research project demonstrating an increase in cultural intelligence of students participating in an international exchange program (McRae et al., 2016), UVic Co-op & Career developed it's Intercultural Competency Development Curriculum (ICDC)

(McRae & Ramji, 2017). The ICDC is based on cultural intelligence theory where students develop their motivational, meta-cognitive, cognitive and behavioural capabilities as they learn to relate and work effectively with individuals from diverse cultural contexts (Earley & Ang, 2003; McRae & Ramji, 2011; McRae & Ramji, 2017). The ICDC is embedded in the pedagogical programming for the co-operative education program at UVic, providing students the opportunity to develop their ability to work effectively in diverse cultural settings. UVic offers many additional opportunities to help students become stronger global citizens and make positive contributions to the world around them. Samples include academic courses relating to gender, power and difference, diversity and inclusion workshops, student advisory council participation, international exchange programs, international work experiences (co-operative education work terms, internships), Indigenous program experiences such as the LE,NO<u>N</u>ET Program for Indigenous students (Hunt et al., 2010), and part-time or summer work experiences that support and engage with diverse individuals.

Career Readiness

Through reflection on WIL and other forms of experiential learning, the Leading Edge program develops career-readiness as described in the learning outcomes. The career-readiness theme invites students to participate in an additional career education experience to support the development of all four outcomes. For example, a student may have developed strong employability skills through their WIL experience and reflection but may lack clarity on a career direction and can benefit from career education. In this way, the Leading Edge bridges that gap that WIL students may experience in terms of their career management skills.

Career development literature has evolved to respond to the 21st century work world. Constructivist career theory emphasizes the importance of supporting individuals to develop agency in their career decisions and transitions (Peavey, 1992; Savickas, 2005). Such an approach supports individuals to construct, deconstruct and reconstruct their own career and life story through narrating their experiences to develop their identity as a means to navigating the constant change of the 21st century work world (Savickas, 2012). A range of UVic programs, courses and experiences help students develop the skills and confidence to manage their career and personal development. These include capstone and other career-focused courses, career coaching with a career educator, career curiosity workshops offered by UVic Counselling Services, career workshops such as résumé, interview and LinkedIn labs, professional development workshops for on-campus volunteers, career exploration and work search programs and Introduction to Professional Practice courses that prepare students for WIL programs.

UVic Co-op and Career developed a set of career-ready competency statements based on the National Association for Colleges and Employers' definition of career management (NACE, 2020). These competencies are presented to participants to help them self-assess their career-readiness and to identify suitable career-ready experiences. This approach is intended to develop the agency of individuals as "self-organized authors of their own lives - always within specific historical and cultural contexts" (Peavey, 1992, p. 220). The Leading Edge encourages students to "take actions to achieve more satisfying career and personal lives - not to make a single career decision" (Krumboltz, 2009, p. 141).

Reflection in the Leading Edge

Inspired by Dewey's statement "We do not learn from experience. We learn from reflection on experience" (Dewey, 1933, p. 78), the Leading Edge program has at its core a guided reflection for each

of the four experiences. Developers chose Borton's (1970) framework, "what, so what? now what?" as cited in Rolfe et.al. (2011), for its simplicity to support reflection, not simply on experience but also in experience as described by Schön, (1983). They also posed additional cue questions to deepen reflection as suggested by Rolfe, et.al. (2011). In this way, the Leading Edge program provides an additional layer of self-reflection and resultant self-clarity (Niles et al., 2010, p. 103).

Once students have completed all four experiences and reflections, the program offers a a final reflection on the four Leading Edge questions. These reflections provide an opportunity for participants to make meaning of their unique experiences beyond the planned learning outcomes, or "intended learning" of their chosen experiential education options (Hodges et al., 2014). According to Billett (2009)," ultimately, curriculum is something experienced by learners. Its value is in what is constructed from those experiences" (p. 835). In the Leading Edge, students further reflect on their experience of the curriculum and express what value they construct from it.

It could be argued that even the selection of the thematic experiences is part of the reflective process. An array of experiences is presented to students within the framework of the four questions and the program themes: curricular, co-curricular, diversity and career-readiness. A student may either encounter the framework before, during or after participating in an experience, at which time they will then either choose an experience they wish to participate in for each of the themes, or will identify an experience they have already participated in. Depending on this timing, they may use the four questions toward reflection in action, or reflection on action (Schön, 1983).

Program Assessment

The Leading Edge is designed as a self-directed program supported, as needed, by a career educator. Once students have completed all four experiences and reflections plus the final reflection, they participate in two forms of assessment.

The first is a reflective, summative assessment. Upon completion of the three aspects of Leading Edge (hands-on learning, embrace diversity and career readiness), students complete a final reflection on the four questions that constitutes their Leading Edge statement. Students use mind mapping, and an action plan exercise to analyze and synthesize all they learned about their experience in relation to the four questions and express it in either a written or spoken short statement of their Leading Edge learnings. Once completed, students are asked to submit their Leading Edge statements to a career educator, who reviews the final reflection for evidence of the achievement of the learning outcomes. If the evidence demonstrates achievement of the learning outcomes, the participant earns a Leading Edge certificate. If there is a gap in achievement of the learning outcomes, the career educator invites the student to participate in coaching based in narrative and constructivist career development practice to support further development in the area identified. This provides an opportunity for the student to participate in other career-ready opportunities to ensure that they are able to use what they have learned through their experience and reflection to build a meaningful future and to navigate current and future career transitions.

The second assessment is a retrospective self assessment, called a post-pre assessment. Heibert and Magnussen,(2014) introduce this tool as a method of overcoming a limitation of self-assessment: learners do not know what they do not know. The post-pre assessment seeks to avoid this limitation by asking learners to assess their progress at the end of the program when they will have a better understanding of what they did not know at the beginning. In this assessment, students rate their

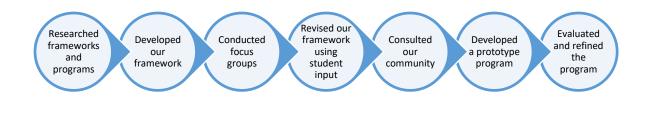
learning outcomes using a five-point scale from unfamiliar to confident. This gives the students an understanding of their achievements and provides evaluative data for the program.

The assessments developed for this program deliberately included reflective techniques. The selfdirected nature of the program and the assessments allows for students to engage in deep reflection without the discomfort of disclosure, which has been shown to be a hindrance in some studies (Doel, 2009). As well, such reflective assessment has the potential to transform knowledge gained into learning that can be assessed (Howard, 2009).

LEADING EDGE CURRICULUM DEVELOPMENT.

As mentioned in the introduction, UVic has prioritized experiential learning in its curricular planning and goals. Since 2013, UVic Co-op and Career has researched co-curricular programming across Canada and started a UVic co-curricular record program and has completed a project of mapping all curricular experiences. The Leading Edge team conducted an environmental scan to learn about related WIL programs in Canada and internationally. They then drew upon their learnings and UVic's strong cooperative education program, career services and diversity initiatives to develop a program that could motivate students to engage in WIL and to reflect on these experiences to become career-ready and start to explore their sense of purpose. The curriculum development process is outlined below, in Figure 2.

FIGURE 2: Program Development Process for the Leading Edge.



Note. Copyright 2017 by University of Victoria Co-operative Education Program & Career Services. <u>https://www.uvic.ca/coopandcareer/career/leadingedge/index.php</u> Reprinted with permission.

Framework Development

As a first step, a concept and framework was explored to package the various experiential learning and career development opportunities offered at UVic. Discovery of the four philosophical questions as a career exploration tool (Winn, 2014, 2017; Zuzunaga, 2011) provided the stimulus for the Leading Edge framework, where the questions were re-interpreted within the curricular context. It was determined that these questions would deeply engage students to think about their career journey through a philosophical perspective, and reflect on the four questions to increase their career development self-efficacy (Betz, 2000) while also developing awareness of their "human qualities and dispositions" (Barnett, 2012, p. 65). This deep reflection is symbolized by the circle in the centre of the framework (Figure 1), which was inspired by the ouroboros, an ancient symbol depicting a serpent or dragon eating its own tail (Wikipedia, 2020). This metaphor was proposed by a design team member, (J. Fagan, personal communication, June 2, 2016) during a career educators retreat. The team reflected on how UVic's career development programs are intended to engage students in transformative learning

where, like the ouroboros, they continue to re-invent themselves as they progress through their academic journey.

Three key principles guided the development of the program: it must be deliverable with existing resources, it must be scalable to support the institution's goal of 100% access to experiential learning and it must allow students to complete all activities in a self-directed manner, on-line if they so choose. The designers used an iterative approach to designing the program described by Caffarella and Dafron (2013) as the "Interactive Program Planning Model" that recognizes that program development is not a linear process but rather an interactive process of constructing a program by and for diverse stakeholders in various and changing contexts . Inspiration was gained from the design thinking model of approaching program development as a design project in which a prototype is designed, tested and re-designed (Dunne, 2018). Using such an approach, the team consulted with a variety of stakeholders throughout the design process, created prototypes, tested them and redesigned accordingly. Ethics approval was obtained to publish data captured during this phase of program development (UVic Ethics Protocol #20-0291).

Stakeholder Consultation

Once this framework was developed, focus groups were held to test the framework. The developers recruited twenty students from various programs at various levels of study who were intrigued by the four questions. One hundred percent of students who participated in the focus groups engaged in reflection when presented with the framework, and several expressed hope that they could develop a career path that allows them to balance their needs as represented by these four questions. Three key employers representing small, medium and large organizations were also consulted. They recognized the potential it offers for students to articulate the value they bring to an organization.

Students, faculty and staff contributed to the development of the Leading Edge at each stage. These consultations led to some of the most effective aspects of the program. For example, an Indigenous student provided feedback about the name the developers had assigned to the diversity theme, namely, the Global Edge. This participant shared that the term did not feel inclusive of her experiences as an Indigenous person through which she had developed intercultural competencies but that did not involve international travel. This input inspired the developers to rename the theme "Embrace Diversity" to reflect powerful experiences that provide learners with insights into cultural diversity in all its possible forms.

Faculty insights also strengthened the program. When presented with the first prototype of the Leading Edge framework and program, faculty members provided feedback and were supportive. Several, referred students to the pilot and asked for further information to share with their departments. Through consultation with faculty, we also learned that further work is needed on identifying experiential learning options offered by faculties. The feedback from faculty members encouraged next steps in curriculum development.

The developers also consulted a group of staff, co-curricular record validators, who supervise students in co-curricular experiences and assess and validate competencies developed. This group was able to offer detailed input on the design of the program and the use of the software because, in addition to supervising student experiences they were familiar with using the portal on which the co-curricular activities and Leading Edge are delivered. This group's interest in the program was instrumental in aligning the Leading Edge program with the needs of students involved in co-curricular experiences and all faculty and staff who offer and supervise these experiences.

Pilot Program

Once consultations were completed, and the program refined, a pilot was launched, which provided further opportunity to obtain student input. An invitation was sent to students engaged in co-op and co-curricular experiences, as well as senior undergraduate students participating in a career service. 167 students participated in the orientation, 35 participated in at least one reflection and 10 completed the full program during the period of the pilot. In order to engage students involved in co-curricular activities on campus, the developers partnered with UVic co-curricular validators. Specialized orientations were provided to these students, which led to their engagement in the pilot program. Student responses to the summative self assessment showed increased ability in the learning outcomes for 9 out of the 10 students who completed the full program. While students reported benefits from participating, they also indicated that the reflections were too repetitive and the content of the reflections demonstrated a low level of reflection in many cases. The reflections were refined based on feedback and observation of student reflections in the pilot.

Developers noted that the coaching hours required to develop the learning outcomes was higher than expected. The self-directed virtual program was not producing the intended outcomes. The developers re-examined the on-line reflections, consulted with faculty and professionals in UVic's Learning and Teaching Support and Innovation centre. Each of the reflections for curricular, co-curricular, diversity and career-ready experiences was revised to include different reflective questions, and a section of curriculum was added to support identification and articulation of strengths and development of adaptable action plans (Niles et al., 2010). This resulted in stronger outcomes, fewer coaching interventions required and positive student feedback:

"I stopped looking at myself from the microscopic view that everything I will be working on will only be coding and scripting. I discovered that there are better ways in which I can contribute and put my skills to good use as an Engineer" (Leading Edge participant).

This process used here to refine assessments is consistent with Ajjawi et al's (2020) findings.

"If we do not understand how students construct alignment during WIL placement assessment, we risk disrupting authentic experiences through distraction and instrumentalism, which can undermine the contribution of WIL assessment to students' professional expertise and identity development" (p. 305).

ANALYSIS OF THE PROGRAM

The Leading Edge program is showing promise as a tool for reflection that supports the integration of experiential learning including WIL, and career development for all stakeholders at UVic. To support students' career development self-efficacy the program includes "couplings of pedagogy, curriculum and personal epistemologies" (Billett, 2009, p. 829), and supports student choice. Students are presented with a menu of experiential learning opportunities and asked to choose experiences that align with their educational, career and life goals. This enables students to be co-creators of their curriculum and owners of their learning as they develop their ability to be "self-organizing, proactive, self-regulating, and self-reflecting" (Bandura, 2006, p. 164). This has been a key strength of the program. The self-directed nature of the program that is complemented with support from a career

educator as needed is another strength. The clear process which also provides choices, allows students to construct a custom program of experiences and reflection that lead to meaningful learning and career development outcomes, and shows potential to increase the impact of existing career educator resources.

The interactive development of the framework and program ensured that all stakeholders were included in the design. Students, faculty, staff and employers were consulted, resulting in a program that is strongly grounded in theory relating to program, curriculum and assessment design as referenced in this paper. The Leading Edge offers students the opportunity to engage in this cyclical reflection on activities of their choosing, with clear guidance on achieving the learning outcomes and ultimately their Leading Edge certificate. The Leading Edge reflections have proven particularly effective for reflection "on experience" following experience as demonstrated by this student's evaluation of the program:

This program brought together everything that I already had an idea of and everything that I have accomplished throughout my degree into one concrete area. It made me take the time to really understand my values, skills and my career options for the future. It was a fantastic way to wrap up all of my co-op work terms and my university undergraduate career. I feel more prepared now for my future. (Leading Edge participant).

The program was developed in response to the movement to expand WIL and ensure that all students have access to quality WIL experiences to support them in mobilizing their knowledge in their personal and professional lives. The program has the potential to be a resource to all institutional stakeholders and serve as an experiential learning inventory, and a one-stop shop for students wishing to explore experiential learning opportunities available on campus. The curricular mapping exercise is a good start toward this end.

Although the experience catalogue developed as a result of the curricular mapping exercise in 2014 is a strength of the program, it is also an area of vulnerability. As with all institutions, curricular changes present a maintenance challenge to ensure that the curricular catalogue is up to date. System wide integrated digital options to identify and flag experiential learning opportunities in the academic calendar are currently being considered. In the meantime, the program continues to take the opportunity to consult with faculty members on experiential learning courses offered at UVic. Students are also a valuable source of this information, as they are encouraged to provide information on curricular experiences they wish to use for the Leading Edge, which may not be listed on the catalogue. These are then assessed to determine eligibility for the Leading Edge.

Despite constant efforts to ensure that technology supported the goals and objectives of the Leading Edge program (Caferella & Dafron, 2013) rather than hinder it, our investment in a single on-line platform as the primary delivery tool created a reliance on the technology which ultimately created a barrier to progress when development of tools was delayed. While the program was quickly replicated to an online learning system, the delay in the development of the intended online platform has prevented a full launch of the program. Work continues on the technological development with the goal to launch the program to the entire student body. In retrospect, one solution could have been to recruit a small group of students to participate in a fully supported program in which facilitators guided the students through each step. This could have provided developers with data on how outcomes were impacted by that form of delivery; in turn, this could also inform a stronger virtual program.

Finally, the Leading Edge demonstrates how institutions can bring together recognition of students' experiential learning under the auspices of a single program, much like other institutions have done, but with a holistic approach to career development that challenges students to think beyond employability to how they can make a difference in the world using the knowledge and skills they will gain during their academic career.

IMPLICATIONS AND CONCLUSION

In many cases virtual or remote WIL has replaced traditional WIL models during the COVID-19 pandemic as health and safety have become the top agenda for individuals, families, workplaces, cities and countries. Students' ability to work effectively not only across cultural borders, but virtually across cultural borders amidst rapidly changing circumstances, has been tested by COVID-19. In this new context, a program such as the Leading Edge does not disrupt student reflections on experiential learning as it is equally applicable to virtual WIL. As well, students who are unable to engage in WIL or other experiential learning opportunities due to COVID-19 can use the platform to reflect on past experiences and engage with the four questions to think about how their experiences have prepared them for the world of today.

While students adapt their plans in response to the global pandemic, the Leading Edge reflections can help guide them in decision-making so that they actively create their own future rather than be victimized by the "rigidly deterministic system of cause and effect" that COVID-19 has imposed upon us (Krumboltz, 2009, p. 164). Students can use these reflections to weigh the different options available to them, such as whether to delay their planned gap year travel due to COVID-19, engage in academic courses instead of entering the labour market, volunteering or take training resulting in micro-credentials that would assist with their career development. The Leading Edge can help guide students to capture the invaluable skills, including resilience, developed through the experience of adapting to the global pandemic.

The Leading Edge has been a unique initiative that brings together career development and experiential learning theories to enhance student learning, and builds a bridge between these fields which traditionally have operated independently. It has also been an opportunity for career development professionals and WIL professionals to work together to create a program that combines the benefits of both fields of practice. The unique design of the Leading Edge also recognizes, and is inclusive of, students' diverse experiences, and provides students the opportunity to deepen their self-awareness with respect to their purpose and enhance their career readiness. The philosophical questions used in the Leading Edge are especially relevant in this context of a global pandemic where uncertainties in the economic sector have contributed to dramatic changes in unemployment rates the world over, yet generosity of individuals and governments has been tremendous. Deep societal issues have also come to the forefront in the midst of a global crisis. The questions that the Leading Edge poses are especially relevant in this context. "What do I love?" and "What does the world need" are, perhaps more than ever before, equally as important as "What am I great at?" and "What can I be paid for?" as students explore what these questions mean for them in relation to their future careers and lives in the post-COVID world.

ACKNOWLEDGEMENTS

The authors would like to acknowledge the Leading Edge framework development team at the University of Victoria: Allison Benner, John Fagan, Richard Myers, Jeremy Pearce, Joy Poliquin, and Bev Stephens, and the previous leadership by Norah McRae.

REFERENCES

- Ajjawi, R., Tai, J., Tran Le Huu, N, Boud, D., Johnson, L., & Patrick, C. J. (2020). Aligning assessment with the needs of workintegrated learning: The challenges of authentic assessment in a complex context. Assessment & Evaluation in Higher Education, 45 (2), 304-316. <u>https://doi.org/10.1080/02602938.2019.1639613</u>
- Bandura, A. (2006). Toward a psychology of human agency. Perspectives on Psychological Science, 1(2), 164-180.
- Barnett, R. (2012). Learning for an unknown future. *Higher Education, Research & Development, 31*(1), 65-77. https://doi.org/10.1080/07294360.2012.642841
- Betz, N. E. (2000). Self-efficacy theory as a basis for career assessment. Journal of Career Assessment, 8(3), 205-222.
- Billett, S. (2009). Realizing the educational worth of integrating work experiences in higher education. *Studies in Higher Education*, 34(7), 827-843. <u>https://doi.org/10.1080/03075070802706561</u>
- British Council. (2013, June). Culture at work: The value of intercultural skills in the workplace. https://www.britishcouncil.org/research-policy-insight/policy-reports/culture-work-intercultural-skills-workplace
- Caffarella, R. S. and Dafron, S. R. (2013). Planning programs for adult learners: A practical guide. Josey Bass.
- CEWIL [Co-operative Education and Work-Integrated Learning Canada]. (n.d.). About us: CEWIL Canada's Mission. https://www.cewilcanada.ca/mission-vision.html.
- CEWIL [Co-operative Education and Work-Integrated Learning Canada]. (2020, June 23). Canada Accreditation Council: The impact of COVID-19 on accredited co-op programs. <u>https://www.cewilcanada.ca/cgi/page.cgi/_article.html/News/CEWIL_Canada_Accreditation_Council_the_impact_of_</u>

<u>COVID-19 on accredited co-op programs</u>

- Dewey, J. (1933). How we think: A restatement of the relation of reflective thinking to the educative process. Henry Regnery.
- Doel, S. (2009). Fostering student reflection during engineering internships. Asia Pacific Journal of Cooperative Education, 10(3), 163-177.
- Dunne, D. (2018). Design thinking at work: How innovative organizations are embracing design. University of Toronto Press.
- Earley, P. C. & Ang, S. (2003). Cultural intelligence: Individual interactions across cultures. Stanford University Press.
- Garcia, H. & Miralles, F. (2016). Ikigai: The Japanese secret to a long and happy life. Penguin.
- Gibbs, G. (1988). Learning by doing: A guide to learning and teaching methods. Oxford Polytechnic Educational Unit.
- Heibert, B., & Magnusson, K. (2014). Demonstrating the value of career development services. In B. C. Shepard & P. S. Mani (Eds.), *Career development practice in Canada: Perspectives, principles and professionalism*. CERIC.
- Hodges, D., Eames, C., & Coll, R. (2014). Theoretical perspectives on assessment in cooperative education placements. Asia-Pacific Journal for Cooperative Education, 15(3), 189-207
- Hunt, S., Lalonde, C. E. & Rondeau, Y. (2010). Supporting Aboriginal student success: Report of the LE,NONET research project. University of Victoria.
- Ibrahim, H. I., & Jaaffar, A. H. (2017). Investigating post-work integrated learning (WIL) effects on motivation for learning: An empirical evidence from Malaysian public universities. *Business and Society*, *18*(1), 13-32.
- Johnston, N., McRae, N., & Maclean, C. (2016). The development of a comparative matrix of forms of work-integrated learning and work-integrated education (WIL/WIE) within the province of BC Canada. In K. E. Zegwaard, M. Ford, & N. McRae (Eds.), *Refereed proceedings of the 2nd International Research Symposium on Cooperative and Work-Integrated Education* (pp. 77-84). University of Waikato
- Kolb, D. (1984). Experiential learning as the science of learning and development. Prentice Hall.
- Krumboltz, J. D. (2009). The happenstance learning theory. *Journal of Career Assessment*, 17 (2), 135-154. https://doi.org/10.1177/1069072708328861
- McRae, N., & Johnston, N. (2016). The development of a proposed global work-integrated learning framework. *Asia-Pacific Journal of Cooperative Education*, 17(4), 337-348.
- McRae, N., Pretti, T. J., & Church, D. (n.d.). WIL quality framework. WATCACE. <u>https://uwaterloo.ca/centre-advancement-co-operative-education/research-publications/wil-quality-framework</u>
- McRae, N., & Ramji, K. (2011). Enhancing cultural intelligence through cooperative and work-integrated education. In R. Coll & K. Zegwaard (Eds.), International handbook for cooperative and work-integrated education (2nd ed., pp.347-353). World Association for Cooperative Education.
- McRae, N., & Ramji, K. (2017). Intercultural competency development curriculum: A strategy for internationalizing workintegrated learning for the 21st century global village. In M. Drysdale & T. Bowen (Eds.), Work-integrated learning for the 21st century global village: International perspectives on education and society (pp. 129-143). Emerald.
- McRae, N., Ramji, K., Lu, L., & Lesperance, M. (2016). Developing global ready graduates: The CANEU-COOP experience. [Special issue] *Asia-Pacific Journal of Cooperative Education*, 17(4), 377-386.
- NACE [National Association of Colleges and Employers]. (2015). Career readiness competencies: employer survey results.
- https://www.naceweb.org/knowledge/career-readiness-employer-survey-results.aspx?terms=employer%20survey. NACE [National Association of Colleges and Employers]. (2020). Career readiness defined. <u>http://www.naceweb.org/career-readiness/competencies/career-readiness-defined/</u>

- Niles, S. G., Yoon, H. J., Bahn, E., & Amundsen, N. E. (2010). Using a hope-centered model of career development in challenging times. *Turkish Psychological Counseling and Guidance Journal*, 4(104), 101-108.
- Oroborous. (2020, June 30). In Wikipedia. https://en.wikipedia.org/wiki/Ouroboros
- Peavey, R. V. (1992). A constructivist model of training for career counselors. *Journal of Career Development, 18*(3), 215-228. Pryor, R., & Bright, J. (2011) *The chaos theory of careers, A new perspective of working in the twenty-first century*. Routledge. Rolfe, G., Jasper, M., & Freshwater, D. (2011). *Critical reflection in practice: Generating knowledge for care*. Palgrave MacMillan.

RBC [Royal Bank of Canada]. (2018, July 3). *Humans wanted: How Canadian youth can thrive in the age of disruption*. www.rbc.com/humanswanted

- RBC [Royal Bank of Canada]. (2020, May 22). After the crisis: 8 ways COVID will transform the economy and disrupt every business. http://www.rbc.com/economics/latest-reports/index.html
- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development* and counseling: Putting theory and research to work (pp. 42–70). John Wiley & Sons.
- Savickas, M. L. (2012). Life design: A paradigm for career intervention in the 21st century. *Journal of Counseling & Development*, 90(1), 13-19.

Schön, D. (1983). The reflective practitioner. Jossey-Bass.

Soffel, J. (2016, March 10). What are the 21st century skills every student needs? World Economic Forum. https://www.weforum.org/agenda/2016/03/21st-century-skills-future-jobs-students

UVic Co-op & Career [University of Victoria Co-operative Education Program & Career Services]. (2020). Academic experiences Detailed glossary. <u>https://www.uvic.ca/coopandcareer/hands-on-learning/program/index.php</u>

University of Waterloo. (2019). Are you ready to manage the workforce of the future? https://tinyurl.com/yy5feebk

Vilaseca, B. (2013). Qué harías si no tuvieras miedo? [What would you do if you weren't afraid?] Mondadori; Random House.

Winn, M. (2014, May 14). What is your Ikigai? The View Inside Me. http://theviewinside.me/what-is-your-ikigai

Winn, M. (2017, October 25). Meme seeding. The View Inside Me. https://theviewinside.me/meme-seeding/

Zuzunaga, A. (2011) Proposito. Cosmograma. https://www.cosmograma.com/proposito.php

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







AUSTRALIAN COLLABORATIVE EDUCATION NETWORK LIMITED







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, entrepreneurships, 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), <u>www.nzace.ac.nz</u> 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 Associate Editors Dr. Judene Pretti Dr. Anna Rowe Senior Editorial Board Members Assoc. Prof. Sonia Ferns Dr. Phil Gardner Assoc. Prof. Denise Jackson Prof. Janice Orrell Emeritus Prof. Neil I. Ward Copy Editors Yvonne Milbank Diana Bushell Editorial Board Members Assoc. Prof. Erik Alanson Prof. Dawn Bennett Mr. Matthew Campbell Dr. Craig Cameron Dr. Sarojni Choy Dr. Bonnie Dean Prof. Leigh Deves Mr. David Drewery Assoc. Prof. Michelle Eady Assoc. Prof. Chris Eames Dr. Jenny Fleming Assoc. Prof. Wendy Fox-Turnbull Dr. Nigel Gribble Dr. Thomas Groenewald Assoc. Prof. Kathryn Hay Ms. Katharine Hoskyn Dr. Sharleen Howison Dr. Nancy Johnston Dr. Patricia Lucas Dr. Jaqueline Mackaway Dr. Kath McLachlan Prof. Andv Martin Dr. Norah McRae Dr. Laura Rook Assoc. Prof. Philip Rose Dr. Leoni Russell Dr. Jen Ruskin Dr. Andrea Sator Dr. David Skelton Assoc. Prof. Calvin Smith Assoc. Prof. Judith Smith Dr. Raymond Smith Prof. Sally Smith Dr. Ashly Stirling Prof. Yasushi Tanaka Prof. Neil Taylor Assoc. Prof. Franziska Trede Dr. Karen Vaughan Ms. Genevieve Watson Dr. Nick Wempe Dr. Theresa Winchester-Seeto

University of Waikato, New Zealand

University of Waterloo, Canada University of New South Wales, Australia

Curtin University, Australia Michigan State University, United States Edith Cowan University, Australia Flinders University, Australia University of Surrey, United Kingdom

International Journal of Work-Integrated Learning International Journal of Work-Integrated Learning

University of Cincinnati, United States Curtin University, Australia Queensland University of Technology, Australia Griffith University, Australia Griffith University, Australia University of Wollongong, Australia Charles Darwin University, Australia University of Waterloo, Canada University of Wollongong, Australia University of Waikato, New Zealand Auckland University of Technology, New Zealand University of Waikato, New Zealand Curtin University, Australia University of South Africa, South Africa Massey University, New Zealand Auckland University of Technology, New Zealand Otago Polytechnic, New Zealand Simon Fraser University, Canada Auckland University of Technology, New Zealand Macquarie University, Australia Macquarie University, Australia Massey University, New Zealand University of Waterloo, Canada University of Wollongong, Australia Hannam University, South Korea RMIT, Australia Macquarie University, Australia Simon Fraser University, Canada Eastern Institute of Technology, New Zealand University of Queensland, Australia Queensland University of Technology, Australia Griffith University, Australia Edinburgh Napier University, United Kingdom University of Toronto, Canada Kyoto Sangyo University, Japan University of New England, Australia Charles Sturt University, Australia Education Consultant, Independent Director, New Zealand Elysium Associates Pty, Australia Primary Industry Training Organization, New Zealand University of New South Wales, Australia

Publisher: Work-Integrated Learning New Zealand (WILNZ) www.wilnz.nz