



UNIVERSITY OF CALGARY | Taylor Institute for Teaching and Learning

EXPERIENTIAL LEARNING PLAN FOR THE UNIVERSITY OF CALGARY (2020-25)

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INTRODUCTION

I believe the powerful thing about experiential learning is the ownership that it gives the students in their own learning.

Robin Larsen, Master of Architecture, 2019

The plan for experiential learning (EL) at the University of Calgary (UCalgary) presented in this document was informed by campus consultations throughout 2018-19, an environmental scan of EL at UCalgary, and engagement with educational leaders in EL. This plan is intended to guide our work over the next five years, building on a strong foundation for EL across graduate and undergraduate programs. A bold commitment to EL positions UCalgary to be a leader in Canada, making learning-by-doing a cornerstone of the UCalgary experience. This plan provides a framework that includes a definition, criteria for EL experience and categories of EL that allow us to effectively describe and promote EL opportunities to students and partners. A common framework also allows us to measure our progress, recognize EL efforts and to collaborate across units and disciplines to build capacity and shift culture. The following definition emerged at UCalgary through broad campus consultation:

Experiential learning (EL) is learning-by-doing that bridges knowledge and experience through critical reflection. EL activities are intentionally designed and assessed. As such, they empower learners to enhance individual and collaborative skills such as complex problem solving, professional practice skills, and teamwork. Reflecting critically on these activities helps individuals develop higher order thinking to challenge and advance their perspectives. The EL process prepares students to take on roles as active citizens and thrive in an increasingly complex world.

Through this plan, we identify two aspirational targets for student participation in EL: **by 2025, all undergraduate students will participate in at least two EL opportunities and all graduate students in a degree program will have the opportunity to participate in at least one EL opportunity before graduation.** Achieving these targets will require a community approach that draws on the diverse strengths and expertise existing across campus. The new Office of Experiential Learning, housed in the Taylor Institute for Teaching and Learning, is intended to act as a central hub to connect and support EL practitioners, develop resources for educators, students and partners, and amplify the work already happening at UCalgary. By 2025, we seek to expand and enhance EL at UCalgary via pursuing three priorities: (1) Expanding capacity and reducing barriers; (2) Increasing student opportunities and (3) Tracking and ensuring high-quality EL.

Making EL a core element of the UCalgary experience requires commitment from the entire campus community, and our partners. There are five key stakeholder groups that currently contribute to the EL landscape at UCalgary: Academic Units; Support Units; Students and Alumni; Community and Industry Partners; and the Office of Experiential Learning. Their collective expertise and unique strengths are indispensable to enhance and build anew this exciting work across campus. It is only within a community

approach that we can reach the goals outlined here.

In the spirit of community, it was important that an institutional EL plan include voices from all of these groups. As such, data collected from consultation sessions over the last year and a half was distilled and clustered into major themes, from which our three key priorities emerged. These priorities are laid out in the following sections and direct our work ahead of us.

Going forward from this plan, we commit our engagement with staff, students, community and industry partners, and other postsecondary institutions about EL across Canada.

BACKGROUND

I originally came into this thinking I wanted to do rural-mixed practice. Now I will probably specialize in surgery. The hands on components of my degree program have changed my entire career plan.

Hannah Pope, Doctor of Veterinary Medicine, 2020

Experiential Learning (EL) has long been in our sights as an institutional focus and viewed as a valuable component to a student's educational journey. This awareness is recognized in the University of Calgary's (UCalgary) strategic vision, *Eyes High*, with emphasis on the importance of hands-on learning experiences and community engagement as foundational to the student experience. *Eyes High* (2011) identified three principal commitments: sharpen focus on research and scholarship; enrich the quality and breadth of learning; and integrate the university within the community. In 2016, UCalgary invited the campus community to an extensive consultation process to reenergize its strategic vision. From these consultations, *Eyes High* added two themes, *student experience* and *campus culture*, across each foundational pillar. Further commitment to EL emerged in the *2018-23 Academic Plan*, where the university committed to creating a unit to help expand EL. The Office of Experiential Learning, established in the spring of 2018, is situated in the Taylor Institute for Teaching and Learning with the mandate to support, connect, and enhance EL across campus.

At UCalgary, students have a wide variety of curricular and co-curricular EL opportunities across their programs of study. These opportunities exist in every academic unit and are designed to provide relevant, meaningful learning experiences that cultivate disciplinary excellence, critical thought, and skills development. Some opportunities are long-embedded in a discipline's history, whereas others are more recent developments that embody active, learner-centered, and evidence-based teaching and learning practices. In a 2018 environmental scan, survey respondents at UCalgary described over 137 unique EL activities on campus, both curricular and co-curricular (Braun, Kaipainen & Usman, 2018). Each consultation revealed additional opportunities available to students. A comprehensive map of curricular and co-curricular EL opportunities would be required to understand the depth and breadth of these opportunities available across campus. Mapping EL at UCalgary would provide baseline data for the number of students currently engaged in these activities and provide a starting place of opportunities to communicate to students. In this plan, we categorize EL into five groups, which are further described in this document. In the table below, we describe examples of EL opportunities across campus using the EL categories.

Examples of EL at the University of Calgary

Co-curricular EL	Community-engaged EL (CEL)	Curriculum-integrated EL	Research-based EL	Work-integrated Learning (WIL)
<i>International Genetically Engineered Machine (iGEM) Competition</i> Competition with multi-faculty teams using synthetic biology to solve real-world problems	<i>ENGL 520 - Community Engagement Through Literature</i> Undergraduate English course connecting classroom and community-based learning in partnership with the Calgary Public Library	<i>Simulation learning in Nursing</i> Students engage with simulation labs, high-fidelity manikins, and standardized patients to recreate real-world nurse training scenarios	<i>Summer Undergraduate Research Experience (SURE)</i> Undergraduate students create a summer research project applying disciplinary learning to the field of Veterinary Medicine	<i>ENGG Design Capstone Projects</i> A year-long assignment where students seek solutions to industry challenges or create their own invention
<i>Service-Learning Placements in Education</i> Opportunities to work with children and youth while applying disciplinary learning, earning a co-curricular credit, and expanding professional networks	<i>BSEN 449 – Haskayne Wilderness Retreat</i> A wilderness intensive retreat combining experiential outdoor activities, personal growth challenges, and ceremonies guided by Indigenous Knowledge Keepers	<i>EVDS 620 – Urban Design Studio</i> Graduate students develop skills in conceptualization and visualization in a studio setting focused on contemporary urban design issues	<i>SOWK 664 – Field and Research Integration Seminar</i> Graduate students develop their capacity to engage in research and evaluation, and integrate these models into Social Work practice	<i>LAW 674A & B BLG Business Venture Clinic</i> Students work closely with start-ups for one year, providing legal information to clients while under the mentorship of a practicing lawyer
<i>Camp LEAD</i> Undergraduate program offering a weekend of community building and leadership development at an outdoor education facility	<i>CORE 583 – Community Development in Community Rehabilitation</i> Students engage with management, practice, and leadership issues for professionals working in community development	<i>KNES 331 – Foundations of Coaching</i> Students develop and practice components of an athletic training program, and enhance their work via peer feedback	<i>ECOL 417 – Aquatic Community Ecosystems</i> Students learn federal biomonitoring protocols and apply them to studying the ecosystem health of the Elbow River	<i>Transformative Talent Internship</i> Graduate students supplement their skills by exploring career options and gaining practical hands-on experience to enhance their personal and academic career goals

In May 2018, the Vice-Provost (Teaching and Learning) and members of the newly formed EL team consulted with campus leaders and program administrators on expanding EL across the institution. In September of that year, the Experiential Learning Working Group (ELWG) was formed to develop recommendations on common language for EL, including a definition, criteria and a list of recognized activities. In April 2019, this common language was brought to members of the campus community in a facilitated retreat focused on building a vision and priorities for EL at UCalgary and generating feedback on the ELWG's work. These diverse consultations had two significant impacts: the creation of a framework for EL at UCalgary (Appendix A) and the drafting of this institutional plan for EL. Delegates at the retreat repeatedly advocated that amplifying EL requires a culture shift, guided by an institutional plan to identify, communicate, and support the diverse EL work happening across campus.

The benefits of 'learning through experience' are as diverse as the activities encompassed under the umbrella of EL. These benefits are well documented in the literature, and noted by UCalgary students involved with EL. For learners, EL is associated with enhanced student engagement, increased career readiness after graduation, and an improved civic consciousness (Eyler, 2009; Kuh, 2008; McRae, 2015). Further benefits include increased academic, professional and interpersonal skill development, enhanced personal learning habits, greater employability, and self-concept (Freestone, Thompson & Williams, 2006; Drysdale & McBeath, 2012). These experiences support students in discovering a sense of purpose (personally, professionally and academically) and prepare students to make meaningful contributions to their field and communities.

Since 1998, the National Survey on Student Engagement (NSSE) has recognized several EL activities (service-learning, internships, capstone courses, study abroad and undergraduate research) as high-impact practices associated with student engagement and deep learning. These high-impact practices support students' career development, while fostering their abilities to integrate and transfer their learning to new settings (Kuh, 2008). Our own data from the 2014 NSSE survey indicated fourth year students wanted more opportunities for "hands-on learning", and they expected the institution to do more to promote them early in degree programs (Arguera, 2016). NSSE advocates for undergraduate student participation in at least two high-impact practices during their program.

The Experiential Learning Plan provides an overview of the trend toward universal access to EL across the country, from a federal, provincial and local perspective. On a more local scale, we look at EL at UCalgary in 2019, and what this will encompass in the future. Last, drawing on consultations with the campus community, the plan outlines priorities for UCalgary in scaling EL so that all students (undergraduate and graduate) have access to EL opportunities as part of their UCalgary experience by the year 2025.

A GROWING PRIORITY

Reflecting on my experience, classroom learning is similar to working on individual skills, learning bits and pieces at a time, analogous with practicing dribbling, shooting or passing in basketball. EL programs glued all those pieces together, analogous with playing an actual game itself where all the pieces come into play, all at the same time.

Peter Le Hoang, Bachelor of Science, 2017; Bachelor of Education, 2020

National, Provincial and Local Contexts

Increasingly over the last five years, governments and interest groups have been calling for 100% of students in post-secondary programs to participate in at least one EL or work-integrated learning (WIL) opportunity before graduation (Premier's Highly Skilled Workforce Expert Panel, 2016; BHER, 2018, p. 5). Provincial and federal governments have focused on EL as a promising practice to support the economy, ensure Canada is producing the talent it needs, and equip graduates with the skills they need to account for changes in the workforce. This shift to universal EL coincides with public critique of universities to pivot in order to match the demand for future-ready, highly skilled graduates who enter the workforce with relevant experience. These conversations are especially active in regard to the growing number of PhDs employed outside of the academy. Though over 60% of Canada's PhDs are employed outside of academia, initial transitions to careers to industry can be challenging (Edge & Munro, 2015). Other reports point to shortages of skilled graduates in Canada and disruption in the workforce due to automation (RBC, 2018; Sado, Cannon & Jenkins, 2017; Premier's Highly Skilled Workforce Expert Panel, 2016).

National. In 2018, the Canadian government announced \$225M over four years and \$75M each year thereafter for two initiatives, the Future Skills Council and the Future Skills Centre (FSC). The complementary projects focus on economic trends, testing new approaches to skills development and sharing best practices (Government of Canada, 2019b). The University of Calgary has since engaged with two FSC-funded demonstration projects partnering with other Canadian universities (FUSION Innovation Network) and other regional partners (EDGE Up). In 2019, Employment and Social Development Canada committed \$798M to WIL, including \$17M to the Business and Higher Education Roundtable (BHER). The intention is to create 44,000 net new WIL placements for Canadian postsecondary students and create a national platform for WIL to match students with opportunities (Government of Canada, 2019). In 2017, recognizing the momentum behind all forms of WIL, membership of the Canadian Association for Cooperative Education (CAFCE) voted to expand their mandate after 44 years (CEWIL, n.d.). The new organization, Cooperative Education and Work-Integrated Learning Canada (CEWIL), works across sectors to enhance nine distinctive WIL activities including cooperative education, internship and practica (CEWIL, 2018). In parallel to BHER, CEWIL has also strongly advocated for WIL with the federal government and convened national conversations on WIL bringing together government, industry and higher education.

Provincial. Since the arrival of cooperative education in Canada in 1957, universities have increasingly promoted WIL. Campuses have also promoted other EL activities such as study abroad, internships, capstone projects, undergraduate research, and service-learning. In recent years, provincial governments have convened task forces exploring issues related to the economy and exploring the potential of EL to reduce out-migration of skilled graduates in the Atlantic provinces (New Brunswick 2016; Transition Task Force 2016), and adapting to anticipated changes to careers in a “knowledge-driven technology economy” (Premier’s Highly Skilled Workforce Expert Panel, 2016, p2). Subsequently, several provinces have launched programs to support EL. In 2015, the Alberta government took bold steps to support a new vision for graduate education by funding four years of graduate student skills-internships at the University of Alberta and University of Calgary, resulting in the first skills-internship programs for Canadian graduate students. In 2016, the Province of Ontario released, *A Shared Responsibility: Building the Workforce of Tomorrow*, initiating a province-wide mandate that 100% of all high school and undergraduate students have at least one EL experience before graduation (Premier’s Highly Skilled Workforce Expert Panel, 2016). Today, after two years of Career Ready funding, EL is one of the key metrics attached to funding for Ontario colleges and universities as they shift toward outcomes-based funding (Ministry of Advanced Education and Skills Development, 2018; Law, 2018). In 2018, the Atlantic provinces launched various programs to support WIL such as a wage subsidy program in Nova Scotia for employers hiring students in internship and cooperative education programs and \$5M in New Brunswick (and an additional \$500K for Indigenous learners) to create the “Experiential Learning Fund” (Province of Nova Scotia, n.d; University of New Brunswick Students’ Union, 2018). This year, British Columbia made its largest commitment to cooperative education in the last twenty years, promising \$9M to support underrepresented students in participating in WIL (Crighton, 2019).

Local. Calgary Economic Development (CED)’s *Calgary in the New Economy: The Economic Strategy for Calgary* (2018) highlights the importance of WIL as an immediate priority. Based on a report from Oxford Economics, CED warns that 50% of current jobs in the city are susceptible to automation within the next 20 years, (2019). Over the next five years, the plan seeks to expand WIL programs in order to create Canada’s largest talent accelerator, to emphasize creativity and innovation from kindergarten to university, and to grow WIL partnerships for science, technology, engineering, the arts, and mathematics (STEAM) careers (CED, 2018, p.16-17).

Strategies for Postsecondary Institutions

Postsecondary institutions have responded to the recent momentum behind EL by increasingly integrating EL into their strategic planning. An environmental scan of EL across Canadian postsecondary institutions, in 2018 indicated that twelve of Canada’s U15 members (and several institutions beyond the U15) have explicitly integrated EL into their strategic planning activities in the last five years, including UCalgary. Across institutions, EL activities and initiatives were commonly led by University Leadership (e.g., Provosts), Administration & Business Units (e.g., Student Services), and teaching and learning centres. Findings indicate that these institutional EL goals commonly seek to increase student access to existing EL activities and to create new initiatives to enrich student engagement. At the time of the study, the three institutions with the most explicit EL-related goals were, the University of Waterloo, the University of Victoria, and Brock University. These institutions had similar success indicators for expanding the number and diversity of EL activities available but applied these indicators to different spheres of impact: globally (University of Waterloo), nationally (University of Victoria), and locally (Brock University) (Braun,

Kaipainen, Usman, 2018, p.7-9. See also: University of Waterloo, 2013, p.16, University of Victoria, 2018, p.2, and Brock University, 2017, p.1).

A number of Canadian postsecondary institutions have also launched new EL initiatives and leadership roles. Notable examples include a ten-year endowment from the Royal Bank of Canada for Western University to significantly expand their support for community engaged learning (Hayne & Wakely, 2019). In 2014, Western University identified providing “a community-based experiential learning opportunity, an international learning opportunity, or a research learning opportunity to all undergraduates who wish to pursue one as part of their degree” as a measurement of success for their institutional strategic plan (Western University, 2014, p.13). In 2016, the University of Victoria’s *Strategic Research Plan 2016-2021* maintained its commitment to EL by embedding it in the priority, “Enhancing the integration of research and education” (2016, p. 29). In 2017, Brock University became Canada’s first postsecondary institution to have an EL definition and typology approved by the University Senate (Dakin, 2017; Law, Howe, Lathrop, Boese & Grose, n.d.). In 2018, the University of Waterloo appointed Canadian WIL scholar, Dr. Norah McRae as their first Associate Provost Co-operative and Experiential Education (University of Waterloo, n.d.). This year, Niagara College, Georgian College, and Brock University partnered to create an open source toolkit for designing, delivering, and evaluating EL in postsecondary education (Niagara College Canada, 2019).

FRAMING EL AT UCALGARY

As nursing students, experience is key to our learning. Being able to apply the theories and skills taught in class with real people is both awkward and exciting. We learn to embrace that feeling of awkwardness in our simulations and placements, reflect on them and use those experiences to focus our efforts and sharpen our skills.

Greg Mulzer, Bachelor of Nursing, 2021

Creating a UCalgary Definition

Common language for EL will support our efforts to accurately report on student participation and communicate with various stakeholders about the varied EL opportunities at UCalgary. The *Experiential Learning Framework* (Appendix A) builds on the current activities in EL across UCalgary. It is a synthesis of the ELWG's recommendations for common language and the campus consultations in April 2019. The ELWG group explored definitions and typologies of EL activities at other postsecondary institutions before developing a definition and categories reflective of the UCalgary EL context. ELWG sought to align our common language for EL with national typologies, specifically BHER and CEWIL's categories for WIL (BHER, 4-5; CEWIL, 2018). After broad campus consultation, the following UCalgary EL definition emerged:

Experiential learning (EL) is learning-by-doing that bridges knowledge and experience through critical reflection. EL activities are intentionally designed and assessed. As such, they empower learners to enhance individual and collaborative skills such as complex problem solving, professional practice skills, and teamwork. Reflecting critically on these activities helps individuals develop higher order thinking to challenge and advance their perspectives. The EL process prepares students to take on roles as active citizens and thrive in an increasingly complex world.

As conversations about the nature of EL began to address increasing the quantity of EL activities, considerations about the quality of these opportunities also emerged. Post-secondary institutions strive for excellence and want to provide the highest quality learning experiences to their students and identify meaningful ways to connect with community. Finding ways to assess the quality of learning activities is an on-going process for many post-secondary institutions that takes into consideration diverse elements of student engagement (Coates, 2006). Consequentially, high-quality EL activities require quality assessment, and intentional integration into the timeline and curriculum of a degree program. As EL theorist and scholar John Dewey has long advocated, not all experiences are educative and in fact, some could be mis-educative without properly and intentionally designed assignments and effective assessments (Dewey, 1938).

Outlining a UCalgary Framework

Throughout campus consultations and the ELWG's work, twenty-nine EL activities at UCalgary were identified and organized into five categories (Figure 1). The inclusion of a broad range of EL activities in the *Experiential Learning Framework* ensures UCalgary EL opportunities support the impact and student experience value propositions of the institution.

Co-curricular EL. Co-curricular EL activities are university-organized experience occurring outside of the curriculum. This category includes activities such as co-curricular internships, immersive personal development programs, and supported volunteer experiences.

Community-engaged learning (CEL). Whether curricular or co-curricular, CEL activities seek to cultivate a sense of civic consciousness, address social issues, and contribute to the public good. Our framing of CEL builds on the definition of Community Engagement (CE) used in the Carnegie Classification to describe public outreach, scholarship and teaching and learning. Community-Engaged Learning activities are mutually beneficial, designed in partnership with community organizations, and address a community-identified need (adapted from Brown University, 2019).

Curriculum-integrated EL. Curriculum integrated EL takes place in academic courses. This includes a broad range of activities that empower learners to practice and enhance their disciplinary learning and skill development (adapted from University of Guelph, n.d.) as part of course activities. This category includes such activities as case studies, field schools, and laboratories.

Research-based EL. Research-based EL supports students in developing skills and capacities for creativity, innovation, and discovery by leading or contributing to a research project. This category is made up of three activities: course-based research, individual research projects/studentships, and research assistantships.

Work-integrated learning (WIL). Although EL and WIL are often used interchangeably and are both priorities for UCalgary, they are not the same. WIL is a category of EL activities completed as part of an academic program in a work-like setting, such as cooperative education, internships, and practica. The ELWG adapted Cooperative Education Work-Integrated Learning (CEWIL) Canada's definition of WIL is as follows:

Work-integrated learning (WIL) is a model and process of curricular EL which integrates a student's academic studies in a workplace/practice setting. WIL includes a partnership of an academic institution, a host organization, and a student. WIL can occur at the course or program level and includes learning outcomes related to employability, personal agency, and life-long learning (CEWIL, n.d.; Experiential Learning Working Group, 2019).

Identifying broad categories helps with developing common language as well as tracking and promoting types of experiences. However, it is important to recognize that some EL activities overlap with multiple categories. For example, Research-Based EL may take place in an academic course and therefore also be tagged as a Curriculum Integrated EL activity or a Co-Curricular EL activity.

Figure 1: Categories for Experiential Learning at UCalgary.



Ensuring High-Quality

Expanding EL opportunities to all students and ensuring quality learning within these experiences is evident in conversations at other postsecondary institutions. This challenge is the basis of the quality framework model for work-integrated learning (WIL) by McRae, Pretti & Church (2018). The model identifies four attributes required of quality WIL, framed as P.E.A.R: Pedagogy, Experience, Assessment, Reflection (McRae, Pretti & Church, 2018, p.6). Identifying quality EL experiences is an important distinction because an *experience* may or may not support an individual's goals, whereas an *integrated-learning experience* is more likely to. As such, PEAR is incorporated into UCalgary's EL Framework. The activities described in our framework become EL when they involve all four of these elements:

- **Pedagogy (P):** EL activities are intentionally integrated in the program curriculum with consideration of when they will occur, for how long, and who will teach them. These activities have learning outcomes that support students in connecting their learning from experience to their disciplinary, personal, and/or career directions.
- **Experience (E):** Hands-on experiences that directly involve students in achieving learning outcomes, contributing to their discipline or host organization, and developing their capabilities in ways that are relevant to their personal, academic, and/or career goals.
- **Assessment (A):** Students' learning is assessed throughout the EL activity using the learning outcomes. Because these learning outcomes are intentionally integrated in the program curriculum, students can use this feedback to continuously develop their skills, construct new meaning, and challenge their attitudes and beliefs relative to their disciplinary, personal, and/or career interests.
- **Reflection (R):** Learners engage in and are supported through meaningful and ongoing reflection to harvest learning from experience, to grapple with concepts, and to connect their learning to other experiences, disciplinary knowledge, and/or career aspirations.

BOLD DIRECTIONS FOR EL AT UCALGARY

The diversity of experiences I had made me realize that my life and career path are not linear. I will come across many various opportunities, and it's okay if I try out different activities. From time to time, I will change my life's direction as I follow my sense of purpose.

Celina Pablo, Bachelor of Commerce, 2019

A Strong Foundation

UCalgary takes a comprehensive approach to the student experience, encompassing curricular and co-curricular programs and promising a student experience that “supports and promotes the intellectual, social, emotional, mental and physical growth and development” (2018-23 Academic & Research Plans). Students in our professional programs already learn through multiple EL opportunities, and students in arts, science, engineering and business programs have the option to complete an internship or a cooperative education placement. Many thesis-based graduate projects lend themselves to learning-by-doing. Additionally, graduate students may work as research assistants or pursue a Transformative Talent Internship to connect skills developed during their graduate degree and explore opportunities beyond academia. UCalgary also offers a broad range of non-credit activities that contribute to students’ personal, career and professional development, such as the Program for Undergraduate Research Experience (PURE), ucalgarycares programs and the Falling Walls competition. In our significantly shifting global economy, hands-on work experience that is integrated with academic study is critical. Similarly, a complex and changing world requires graduates with advanced skills in inquiry, problem solving, collaboration and communication.

UCalgary is a hub for entrepreneurial thinking and innovation. Entrepreneurial thinking is one of the critical skillsets our students can develop by engaging in a wide range of authentic and relevant hands-on EL experiences such as competitions, consulting or research projects, or internships. Experiential learning requires our students to grapple with messy problems, sort through different perspectives and develop new ways of thinking and doing. Experiential Learning also offers important opportunities for students to engage with our Indigenization, internationalization, sustainability and campus mental health strategies. The embedded certificates in Sustainability Studies and Mental Wellbeing and Resilience both require a capstone project in partnership with a community organization. These courses enable students to make connections across disciplines and engage with issues of global relevance and great importance to our communities. All of these actions across the institution, are what we call ‘a strong foundation’.

Areas for Growth

The areas for growth in this section are reflective of our consultations to date, including the EL Planning Retreat in April 2019. A portion of this retreat focused on understanding challenges to strengthening EL at UCalgary and brainstorming potential solutions to overcome existing barriers. Participants' insights around strategies to address the challenges listed below have informed the priorities identified in the next section. The challenges identified by the campus community are grouped into six themes: Resources, saturation, recognition, connection, student engagement and awareness, and processes.

Resources. A lack of resources emerged as the most common barrier to doing EL or doing more EL. Given the resource-intensive nature of high-quality EL, this feedback was not surprising. The types of resources referenced by participants varied, but the most precious resource was time. Participants were vocal in expressing that the expectation of making EL universal is beyond the realistic capabilities of the number of staff currently in place to administer and support EL programs. Other challenges under this category included the need for a centralized platform for connecting students with EL opportunities, lack of sustainable funding to cover the instructional and support costs of EL, a desire for flexible or bookable space for teaching using EL and a gap in training to do EL meaningfully. Here, increased training referenced both pedagogical development facilitating EL and preparation for students in working effectively within an EL program (e.g. development of core skills such as collaboration, communication, conflict resolution and time management).

Saturation. Significant concern about "community saturation" and "volunteer fatigue" were raised at the EL Planning Retreat. These concerns were also heard through presentations to departments and the General Faculties Council in December 2018. Programs, especially those with required practicum or field placement experiences, report a critical shortage of meaningful placements for students. As such, they express concern around a 100% target for EL given the current competition amongst UCalgary programs for placements. In addition to internal competition for paid or unpaid positions, there is competition with postsecondary institutions in Calgary and in Alberta as well as other Canadian postsecondary institutions.

Recognition. Academic staff acknowledged the tremendous value of this type of learning and teaching. They also raised concerns around how EL activities are captured and recognized in merit, promotion and tenure processes. Ensuring recognition is imperative for expansion of these activities.

Connection. One of the primary motivations for an enterprise platform for EL is to make visible the varied opportunities for students at opportune times throughout their program of study. Part of the challenge is that we lack an institution-wide inventory of EL opportunities and partners (and an institution-wide mechanism for collecting reliable data on unique student participation in EL). Relatedly, community members consulted for this plan remarked that they lacked an understanding of who is doing what and where, and that gaps existed in communication between departments, staff, and students with regard to available opportunities. Many participants commented on the siloed nature of this work and the lack of connections and community across units involved with EL.

Student Engagement and Awareness. To achieve full participation in EL, UCalgary needs to develop education and communication resources for students about the benefits of EL, and improve how and when they hear about EL. At Queen's University, advising staff use experiential major maps to help

students identify opportune moments to consider EL programs (EAB, 2018; Queen's University n.d.). Across multiple consultations, we also heard about the challenges in finding opportunities, and the lack of a clear understanding of available EL options for students.

Processes. The final theme that emerged through consultation was a lack of clear processes to support EL such as risk management, legal services and ethics approval. Put simply, a centralized office for EL needs to reduce the barriers and perceived barriers to doing EL.

Priorities for Expanding EL

Honing my skills, building connections, and developing self-confidence through these experiential learning opportunities has helped me find my “why.” I am a helper, a people person, a student, a learner, a peer, and an educator.

Helen Pethrick, Bachelor of Health Sciences and Bachelor of Arts, 2019

Priority #1: Expand Capacity and Reduce Barriers

As outlined in the *2018-23 Academic Plan*, the Office of Experiential Learning will serve as a central hub dedicated to expanding and enhancing EL at UCalgary. Embedded within the TI and working in partnership with the campus community, the Office will develop pedagogical resources, connect EL educators, help Academic and Support Units track EL activities occurring in their programs, support reporting and program evaluation of EL initiatives, and strengthen the scholarship, research, and dissemination activities related to EL. This centralized office will also work in partnership with student groups and campus units to understand and reduce barriers to student participation in EL.

In order to build capacity and reduce barriers to EL, it is critical to acknowledge that EL activities are resource-intensive and relational. Considering this, we recognize each of our stakeholder groups will have varied needs and will contribute differently to amplifying EL at UCalgary, and supporting the EL priorities presented here. Further focus groups and discussions are required to understand these needs and opportunities fully, however we have captured some high-level prerequisites for institutional success:

Academic Units. As UCalgary shifts to ensuring 100% students have engaged in EL opportunities before graduation, academic staff will require support (administrative and pedagogical) and recognition for this work. Educators also require support for developing these activities, including assistance developing campus-community relationships, designing EL activities using evidence-based teaching practices, and empowering students to learn from these experiences. Additional resources will be required to expand, implement and manage EL opportunities for students.

Support Units. Universal EL represents a shift in culture and practice at UCalgary. As such, we require tools and resources to communicate EL to our various stakeholders, and to simplify the process for these partnerships to form. We will also need clear processes for understanding when an opportunity requires approval or input from the Research Ethics Board, Risk Management, and/or Legal Services. Like the academic units, support units will require additional resources to expand opportunities for students.

Current Students and Alumni. The learning curve associated with EL can be steep for students. Students require support to learn from experience and connect their learning to future academic, personal, and career interests. As we scale up EL, we will need clear and meaningful messages on the benefits and availability of opportunities, particularly regarding accessibility for students from equity-seeking groups. Guidance from our student leaders and student groups will be essential. Our recent graduates, especially those who benefited from EL, can be champions and partners for this work.

Community and Industry Partners. Preparing new community and industry partners to work with students will take considerable engagement and education, including communication on mutual benefits and expectations. A centralized UCalgary contact is crucial for administration and management, and for reducing the barriers our partners have faced in the past. Across the institution, UCalgary works with a number of long-standing partners. Celebrating these partners while continuing to strengthen relationships for EL will be critical.

Priority #2: Increase Student Opportunities

By 2025, all UCalgary students will participate in EL, regardless of their program of study. We will build capacity to ensure all undergraduate students participate in at least two EL opportunities and all graduate students in a degree program have the opportunity to participate in at least one EL opportunity. By 2025, all students should have options throughout their degree programs to pursue EL opportunities relevant to their interests and future pursuits. Where it is not already available, EL should be woven throughout our academic programs. To achieve these ambitious targets, we have significant work to do to increase the visibility of existing opportunities, communicate the value to students, increase the number of flexible options for students, and enhance the accessibility of EL for students from equity-seeking groups.

Increasing opportunities for students will require a community effort. Collectively, there are a number of actions that we can do across the stakeholder groups to facilitate universal EL. This list is not exhaustive and will shift as opportunities develop and the EL plan comes into place:

- Integrate EL into the Curriculum Review process, and ensure EL opportunities are included as part of proposals for new programs of study
- Examine barriers to participation in EL for students from equity-seeking groups, and explore best practices for fostering accessibility in EL
- Develop advising and recruitment resources to identify clear student pathways for EL by discipline
- Explore development of a flexible WIL program as an option for students who are ineligible for, or unable to extend their program of study to complete a cooperative education program
- Explore a micro-credential to offer formal recognition for EL and skills development
- Identify areas for collaboration such as exploring partnership development, curriculum for WIL or processes for Community-Engaged Learning
- Cultivate new and meaningful community and industry partners that can offer or support EL

Priority #3: Track and Ensure High Quality EL

With *Impact* and *Student Experience* as the core value propositions of the University, ensuring our programs offer high-quality EL is of critical importance. Creating quality measures and practices (such as following the P.E.A.R. model for EL) will ensure that our EL activities are meaningful and sustainable, and that the resources directed to them are effective in meeting institutional, student, community, and industry goals (McRae, Pretti & Church, 2018, p.2-4). Widespread promotion, tracking and assessment of

EL requires us to adopt the *Experiential Learning Framework (Appendix A)* and utilize a EL management platform as a central resource.

McRae, Petti & Church (2018) acknowledge that EL activities are particularly benefitted by quality measures in how they create common language. This promotes an institution's ability to communicate the value of EL activities, which ultimately increase potential success in funding applications, tracking statistical data, and setting benchmarks for the diverse depth and breadth of EL activities happening across campus.

A new EL platform will be implemented in 2020 to manage, track, and promote EL opportunities. This platform builds on our EL framework and will allow students to search and apply for diverse experiences related to their personal, academic and professional goals. It will also provide one central place for community and industry partners to post EL positions. By connecting stakeholders and managing opportunities, a centralized platform will support scaling up EL across campus and assessing high quality EL.

In 2019-20, the Office of Experiential Learning will lead an inventory of curricular EL opportunities. In 2020-21, a second inventory will capture co-curricular engagement. Together, these projects will provide a baseline of student participation in EL at UCalgary. We will also work closely with the Office of Institutional Analysis to develop a dashboard for EL metrics. Beyond tracking participation, we commit to exploring and promoting high quality activities, and understanding the impact of EL (on students, on community and on industry). The Office of Experiential Learning will also encourage scholarly inquiry of university teaching and learning focused on EL and create pedagogical supports. In partnership with educators, administrators and community, we intend to review current and new models for community-campus relationships. This includes creating resources and supports for new partners, especially for non-profit organizations and small and medium sized enterprises.

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APPENDIX A: EXPERIENTIAL LEARNING FRAMEWORK FOR THE UNIVERSITY OF CALGARY

EL Definition

Experiential Learning (EL) is learning-by-doing that bridges knowledge and experience through critical reflection. EL activities are intentionally designed and assessed. As such, they empower learners to enhance individual and collaborative skills such as complex problem solving, professional practice skills and teamwork. Reflecting critically on these activities helps individuals develop higher order thinking to challenge and advance their perspectives. The EL process prepares students to take on roles as active citizens and thrive in an increasingly complex world (EL Working Group, 2019).

Criteria for High-Quality EL

The learning activities listed below have strong pedagogical value. Drawing on the work of McRae, Pretti & Church (2017), learning activities become EL when they involve all four elements of the Pedagogy, Experience, Assessment, Reflection (PEAR) Framework:

- **Pedagogy (P):** EL activities are intentionally integrated in the program curriculum with consideration of when they will occur, for how long, and who will teach them. These activities have learning outcomes that support students in connecting their learning from experience to their disciplinary, personal, and/or career directions.
- **Experience (E):** Hands-on experiences that directly involve students in achieving learning outcomes, contributing to their discipline or host organization, and developing their capabilities in ways that are relevant to their personal, academic, and/or career goals.
- **Assessment (A):** Students' learning is assessed throughout the EL activity using the learning outcomes. Because these learning outcomes are intentionally integrated in the program curriculum, students can use this feedback to continuously develop their skills, construct new meaning, and challenge their attitudes and beliefs relative to their disciplinary, personal, and/or career interests.
- **Reflection (R):** Learners engage in and are supported through meaningful and ongoing reflection to harvest learning from experience, to grapple with concepts, and to connect their learning to other experiences, disciplinary knowledge, and/or career aspirations.

EL Categories and Activities

Co-curricular EL	Community-engaged Learning (CEL)	Curriculum-integrated EL	Research-based EL	Work-integrated Learning (WIL)
Accelerators	Co-curricular CEL	Case Studies	Course-Based Research Projects	Capstone Projects
Co-curricular Internships	Community-Engaged Research	Creative Performance / Exhibits	Individual Research Projects / Studentships	Consulting Projects
Competitions	Curricular CEL Projects / Placements	Design / Project-Based Learning	Research Assistantships	Cooperative Education
Hackathons	Knowledge-Keeper Guided Learning	Field Schools		Internships
Immersive Personal Development Programs	Land-Based Education	International / Cross-Cultural Learning		Professional / Clinical Practice / Field Experience / Practica
Paraprofessional Placements / On-campus Employment		Laboratories		
Supported Volunteer Experiences		Pitch Competitions		
		Simulations		
		Studios		

EL Activity Descriptions and Examples

CO-CURRICULAR EL

Co-curricular EL activities are university-organized experiences occurring outside the curriculum.

Accelerators	Leverage resources, space, mentorship and/or funding to develop a business start-up or to advance ideas that address local or global challenges, e.g., Summer Incubator Program @ The Inc. (adapted from CEWIL, n.d.).
Co-curricular Internships	Participate in a supervised and structured work term. An internship may be paid or unpaid. The length of internship varies by program, e.g., Transformative Talent Internships for Graduate Students.
Competitions	Compete to address new audiences and global challenges using curiosity, creativity, and innovation. Students gain practical experience, presentation and collaboration skills, and networking opportunities, e.g., Energy New Venture Competition; international Genetically Engineered Machine (iGEM) competition, (adapted from Concordia University, n.d.a).
Hackathons	A short and intensive challenge where teams of students collaborate to develop a solution to a real-life problem, e.g., Computer Science Undergraduate Society CalgaryHacks, Innovation 4 Health's Health Hack Competition.
Immersive Personal Development Programs	Structured, university-organized experiences that support learners' personal development and skill acquisition. They typically involve a cohort of students, e.g. Camp LEAD.
Paraprofessional Placements / On-campus Employment	Students are placed or employed on-campus and mentored by Staff or Faculty. These roles are designed to contribute to the campus community while furthering students' professional development, e.g. Project Assistant or Peer Helper with a Student Services office; elected official with the Students' Union or Graduate Students' Association (adapted from University of Guelph, n.d.).
Supported Volunteer Experiences	Learn accountability to the community while applying and reflecting on other experiences, disciplinary knowledge, or career directions through university-supported volunteer experiences, e.g., volunteering for the Students' Union Food Bank (adapted from Concordia University, n.d.a).

COMMUNITY-ENGAGED LEARNING (CEL)

CEL activities are designed in partnership with community organizations to address a community-identified need. They seek to cultivate a sense of civic consciousness, to address social issues, and to contribute to the public good (adapted from Brown University, 2019).

Co-Curricular CEL	Explore a societal issue in-depth within a community and reflect on personal experiences, disciplinary learning or career directions while supporting the mission of a community organization, e.g. ucalgarycares programs (adapted from the University of Guelph, n.d.a).
Community-Engaged Research	Research projects developed in collaboration with a community organization, e.g., research projects through the Urban Alliance.
Curricular CEL Projects / Placements	Connect disciplinary learning, skill development, and theoretical concepts through activities designed with a community organization to achieve mutually beneficial outcomes, e.g., ENGL 520: Community Engagement Through Literature (adapted from the University of Guelph, n.d.c).
Knowledge-Keeper Guided Learning	Listen and engage with traditions, knowledge, practices and cultural processes in a learning experience (such as a ceremony) guided by a traditional knowledge keeper. These experiences honour and strengthen Indigenous ways of knowing by fostering meaningful learning, active listening and reflective dialogue. Experiences may be offered for credit, or as part of a co-curricular program, e.g., Exploring Indigenous Ways of Knowing with knowledge-keepers in Indigenous Relations Training Certificate.
Land-Based Education	Re-establish a sense of connection with the land and others through this Indigenous pedagogy that honours traditional ways of knowing. Often led by a traditional-knowledge keeper, land-based learning typically involves story-telling, a re-introduction to the land, and knowledge exchange across generations. Land-based learning experiences may be part of an academic course or offered as part of a co-curricular program e.g., optional field trip to Writing on Stone Provincial Park for B.Ed. students.

CURRICULUM-INTEGRATED EL

Curriculum-integrated EL includes a broad range of academic activities that empower learners to practice and enhance their disciplinary learning and skill development (adapted from University of Guelph, n.d.).

Case Studies	Put learning into action by applying theory to real-world or simulated cases, e.g., MGST 359: Selected Topics in Management (Business Case Studies) (adapted from Concordia University, n.d.b).
Creative Performance / Exhibits	Produce, manage, curate or participate in a dramatic, artistic, dance or musical performance or exhibit for an audience, virtual or live, e.g., DRAM 365: Theatre for Young Audiences I (adapted from Brock University, 2016).
Design / Project-Based Learning	Apply and develop complex problem-solving and teamwork skills by engaging with a real-world challenge in a course setting, typically with mentorship from an instructor (adapted from David, 2008, 80).
Field Schools	Engage in hands-on investigation and analysis in a field location, e.g., GEOG 391 Geographic Field Studies (adapted from University of Guelph, n.d.c).
International / Cross-Cultural Learning	International and cross-cultural experiences such as exchanges, group study programs, study abroad, and collaborative online intercultural learning, e.g., exchanges and other programs at partner universities around the world.
Laboratories	Observe, test and apply course concepts in a controlled setting specialized for small group learning e.g., KNES 460 Laboratory Practicum (Anatomy) (adapted from Brock University, 2016).
Pitch Competitions	As part of an academic course, students prepare and deliver a compelling idea for a product or solution to an expert panel of judges.
Simulations	Engage in hands-on, structured scenarios or activities that mimic actual events. Simulations are typically case-based and may include one or more of the following: human simulation, virtual simulation, augmented reality, virtual reality, game simulation or standardized patient actors, e.g., high-fidelity simulations in Nursing education; ENTI 559.6 Tech Commercialization.
Studios	Apply theory to practice in a studio setting to demonstrate disciplinary learning and to reflect on the process and products of one's work, e.g., EVDS 620 Urban Design Studio.

RESEARCH-BASED EL

In research-based EL, students develop essential skills and techniques and enhance their capacity for creativity, innovation, and discovery by leading or contributing to a research project.

Course-based Research	Research activities occurring within a course setting for academic credit, e.g., UNIV 201 – Global Challenges Inquiry I, HSOC 408 – Health Research Methods & Research Practicum.
Individual Research Projects / Studentships	Research projects led by students and supported by faculty, e.g. Program for Undergraduate Research Experience (PURE) Award, Summer Undergraduate Research Experience (SURE) in Veterinary Medicine.
Research Assistantships	Build academic experience and hone inquiry skills by assisting with a faculty-led research project, e.g., research assistantship on a University of Calgary Teaching and Learning Grant project.

WORK-INTEGRATED LEARNING (WIL)

Work-integrated learning (WIL) is a model and process of curricular EL which integrates a student's academic studies in a workplace/practice setting. WIL includes a partnership of an academic institution, a host organization, and a student. WIL can occur at the course or program level and includes learning outcomes related to employability, personal agency, and life-long learning (adapted from CEWIL, n.d.).

Capstone Projects	A senior culminating experience to draw upon the knowledge, skills, and abilities students developed through a degree program. Capstones often engage external organizations or industry partners, e.g., Engineering Design Capstone Projects.
Consulting Projects	Interact with a client to identify and analyze issues or opportunities within the organization and develop a solution or strategy for moving forward (adapted from Brock University, 2016).
Cooperative Education	Formally integrate academic study with paid work experience in co-operating employer organizations, e.g., Faculty of Arts Co-operative Education Program.
Internships	Participate in a discipline-specific, supervised, and structured work term. An internship may be paid or unpaid. The length of internship varies by program, e.g., Computer Science Internship Program.
Professional / Clinical Practice / Field Experience / Practica	Work under the supervision of a professional in the field. In some cases, these placements are required for professional certification,

e.g., SOWK 412 Practicum, EDUC 465 Field Experience II, NURS 402 Community Health Practice.

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APPENDIX B: CONSULTATIONS 2018-19

- Executive Leadership Team – June 2018
- Teaching and Learning Leaders’ Network – June 2018
- Campus EL survey – September 2018
- Provost Team Meeting – October 2018
- Teaching and Learning Committee, General Faculties Council – October 2018
- Extended Deans’ Council – October 2018
- Executive Leadership Team – November 2018
- General Faculties Council Executive Committee – November 2018
- General Faculties Council – December 2018
- Research & Scholarship Committee, General Faculties’ Council – December 2018
- Board of Governors – December 2018
- Orbis Community of Practice – December 2018
- Student Enrolment Services Leadership Council – January 2019
- Campus Career Consortium – February 2019
- First Year Council – February 2019
- Students’ Advisory Council – March 2019
- Experiential Learning Retreat – April 2019
- Teaching and Learning Committee, General Faculties Council – April 2019
- Conference on Postsecondary Learning and Teaching, workshop – April 2019
- Provost Team Meeting – May 2019
- Provost Team Meeting – October 2019
- Deans’ Council – October 2019
- Academic Planning and Priorities Committee – October 2019
- Students’ Legislative Council – October 2019
- Teaching and Learning Committee – October 2019
- University of Calgary Advising Network – October 2019
- General Faculties Council – November 2019
- Faculty of Graduate Studies – November 2019
- General Faculties Council (for approval) – December 2019
- Board of Governors – December 2019