**AGENDA ITEM NO: 11.1**

**UNIVERSITY COUNCIL**

**TEACHING, LEARNING AND ACADEMIC RESOURCES COMMITTEE**

**FOR INFORMATION ONLY**

---

**PRESENTED BY:** Aaron Phoenix, Chair, TLARC

**DATE OF MEETING:** February 27, 2014

**SUBJECT:** Item for Information: Experiential Learning Concept Paper

**COUNCIL ACTION:** For information only

In January of 2013, the Teaching, Learning and Academic Resources Committee (known then as the Teaching and Learning Committee) commissioned a concept paper on experiential learning in support of the implementation of the Third Integrated Plan, Promise and Potential.

Colleagues from the Gwenna Moss Centre for Teaching Effectiveness and the Research and Projects Officer from the Provost's Office collaborated on the concept paper that is being circulated to members of University Council for information.

The Experiential Learning concept paper was designed to create greater understanding of experiential learning as a pedagogical approach and a powerful learning opportunity.

The paper includes a brief background and history of experiential learning followed by an articulation of what experiential learning is (and what it is not). The primary forms of curricular-based experiential learning are examined with consideration given to best practices in delivery (using case examples from U15 comparators) as well as benefits achieved for students.

Work on the concept paper intersected with the Experiential Learning Inventory Project that was undertaken by the University Learning Centre in the winter and spring of 2013. Specifically, the ULC worked with a team of students to conduct interviews with department heads and undergraduate programs chairs. Interviewees were asked about the options available to students, how experiential learning fits within their respective programs and what new and innovative ideas they had to augment current activities. Accordingly, it was possible to include numeric metrics of current experiential learning activity as part of the concept paper.

The paper ends with a set of recommendations that are intended to facilitate decision making around program planning and the allocation of resources. Together, the concept paper alongside the benchmark data on activity and the resulting recommendations are designed to advance the implementation of the IP3 goal to increase the number of students involved in experiential learning by 20% over the next few years.

ATTACHMENT:
"Moving toward a Future State in Experiential Learning at the University of Saskatchewan" Concept Paper December 2013

# Moving toward a Future State in Experiential Learning at the University of Saskatchewan

## Concept Paper

**December, 2013**

Drafting Team (alphabetical order):
Frank Bulk
Jim Greer
Laura McNaughton
Brad Wuetherick

## Executive Summary

- The high impact practice of experiential learning has been repeatedly highlighted in foundational and planning documents at the University of Saskatchewan. Specifically, the desire to increase our activity in this area has been articulated in the Outreach and Engagement Foundational Document (2006), the Teaching and Learning Foundational Document (2008), the Learning Charter (2010), and most recently in the Third Integrated Plan, *Promise and Potential* (2012).

- Experiential learning (or experiential education) is a philosophy and methodology in which educators plan to engage learners purposefully in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, and apply prior learning.

- At the University of Saskatchewan, we have identified five primary forms of experiential learning for undergraduate students including: (1) undergraduate research, (2) practicums, internships and cooperative education, (3) Study or courses taught abroad, (4) Community engaged learning and community service learning, and (5) Field-based instruction.

- Hundreds of courses, from every corner of our campus, match one of the primary types of experiential learning as defined above. The vast majority of students on campus can access at least one type of experiential learning course in many, if not all, of our undergraduate programs of study.

- The most recent data collected indicates that 173 courses offer one of the five primary forms of experiential learning.

- An implementation plan will be required in order to realize the 20% increase in experiential learning activity in the next three years (*see Promise and Potential*). This plan will need to consider matters of measurement and benchmarks, the maintenance of existing programming, the creation of new programming and the necessary support to achieve sustainable success. Recommendations are divided into sections to address the areas of address students, faculty, departments, the university and external partners. Highlights include:
    - Developing an assessment strategy to judge whether planned increases in activity are realized and whether student learning / student experience is improved.
    - Categorizing experiential learning into required and value-add opportunities and identifying places where experiential learning becomes part of the curriculum plan at a program level to afford greater sustainability of programming.
    - Developing an experiential learning website and add resources to support faculty.
    - Implementing strategies that will build awareness of opportunities for students (e.g., modifying the online course calendar attributes to include an "experiential" tag).

## Moving toward a Future State in Experiential Learning at the University of Saskatchewan

The high impact practice of experiential learning has been repeatedly highlighted in foundational and planning documents at the University of Saskatchewan. To begin, the Outreach and Engagement document (2006) pointed to service learning (a form of experiential learning) as a priority area for strategy development that would distinguish the university.

> *Students already expect, and increasingly demand, that their experience of university education be engaged with the world beyond the classroom, the library, the laboratory, or the studio. Students want meaningful learning experiences that will prepare them for full participation in the world in which they live*. (Outreach and Engagement, Foundational Document, 2006, p. 14)

A short time later, experiential learning emerged within the Teaching and Learning Foundational document (2008), with a call for the campus to: (1) build experiential learning programs of all types more deliberately into curricular offerings, and (2) engage students in community-based learning and experiential learning. The view articulated was that, "…experiential learning not only makes the world real to the student by giving them an academically relevant experience in the community, but also makes the university real to the outside public by inviting the community into the university more systematically" (Teaching and Learning, Foundational Document, 2008, p. 29). Experiential learning was highlighted as a desirable way to achieve hands-on learning, with a focus on practical problems, leading to deeper understanding and integrative thinking. Although the more contemporary term of "work-integrated learning" was not used five years ago, the Teaching and Learning document nevertheless pointed to the valuable connection between more formalized experiential learning activity (e.g., internships) and career/professional development. Not surprisingly, the corresponding development of the University of Saskatchewan Learning Charter (2010) included experiential learning as part of the aspirational learning vision and core learning goals in the area of discovery (http://www.usask.ca/learning_charter/our-learning-vision/index.php).

Our most recent call to action emerged from the University's Third Integrated Plan, *Promise and Potential*. Within the focal area of Innovation in Academic Programs and Services, we find evidence that students seek more innovative opportunities at the University of Saskatchewan alongside the strategy of working, "…to provide increased opportunities for experiential learning for our students through their academic programs." Success in this regard is articulated as a 20% increase in the number of students engaging in experiential learning by 2016.

The present concept paper was designed to create greater understanding of experiential learning as a pedagogical approach and a powerful learning opportunity. To this end, the paper begins with a brief background and history of experiential learning followed by an articulation of what experiential learning is (and what it is not). The primary forms of curricular-based experiential learning are examined with consideration given to best practices in delivery (using case examples from U15 comparators) as well as benefits achieved for students. Information is presented on current experiential learning activity at the University of Saskatchewan before turning to a set of recommendations that are

intended to facilitate decision making around program planning and the allocation of resources with the ultimate goal of increasing experiential learning opportunities.

## Background and Brief History of Experiential Learning

> The belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally educative. Experience and education cannot be directly equated to each other. For some experiences are mis-educative. Any experience is mis-educative that has the effect of arresting or distorting the growth of further experience. (Dewey, 1938, p. 25)

Curricular-based experiential learning/education is an instructor's thoughtful organization of a specific, intentional, interactive and authentic learning experience for students. While it can be argued that experiential learning has always been part of higher learning, and underpins learning in many contexts (formal or not), in the educational literature it goes back to the pragmatist writings of the early 20th Century, including, most notably, John Dewey (for example, see 1938). Current conceptions of experiential learning, however, have been strongly influenced by a number of authors writing from progressivist, constructivist, humanist and radical/critical philosophical orientations over the past sixty or more years, including Piaget (1966), Freire (1970), Vygotsky (1978), Schon (1987), Mezirow (1991), and many others.[1]

There are a number of key, related literatures that are directly connected to an understanding of experiential learning. One such related area is what has been called 'authentic learning', or learning that "focuses on real-world, complex problems and their solutions" (Lombardi, 2007, p. 2). Experiential learning, in its various forms, has also been called a 'high-impact educational practice', though there are more high-impact practices than are included in any single definition of experiential learning (Kuh, 2008). High-impact practices are deemed 'high-impact' because they:

- demand considerable time on 'purposeful' and 'effortful' activities
- demand that students interact with faculty and peers about substantive matters
- increase the likelihood students will experience diversity through connections with diverse communities
- receive frequent formative feedback about their performance
- provide opportunities to explore the application of their learning (knowledge, skills and values) in various settings, and
- have often been described as 'life-changing' or 'transformational' (Kuh, 2008)

The process of experiential learning usually follows a cycle of 'hands-on' activity (or action) and reflection (what has been called by many 'praxis'). Kolb's (1984) four-step experiential learning model (ELM) is one of the most commonly cited models to conceptualize experiential learning.

[1] For more information on the theoretical underpinnings of experiential learning, see Fenwick (2001) and Beaudin and Quick (1995).

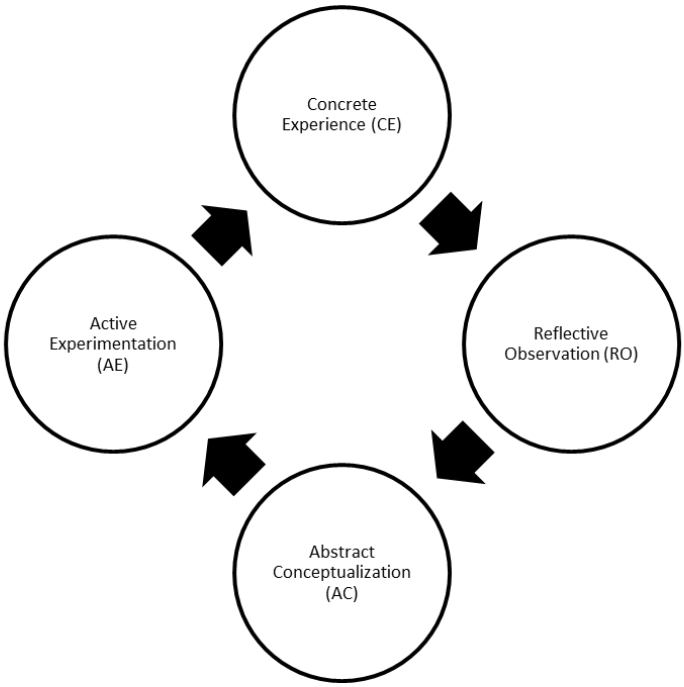


**Figure 1 Kolb's Experiential Learning Model**

Within the ELM model, Kolb (1984) argues that in order to gain what he has called 'genuine' knowledge from an experience, certain abilities are required:

- The learner must be willing to be actively involved in the 'lived' experience (CE);
- The learner must be able to reflect on the experience (RO);
- The learner must possess and use analytical skills to conceptualize the experience (AC); and
- The learner must possess decision-making and problem solving skills in order to use the new ideas gained from the experience (AE).

There are several other models in the literature for conceptualizing experiential learning, including those articulated by Boud and Walker (1991), Joplin (1981), Burnard (1989), and many others. Although there are some commonalities across various authors, there are also some key differences. For example Joplin (1981) follows a similar "action-reflection" process to Kolb, though there are three additional stages. The five stages are: *focus* (defining the task to be completed and focusing the learners attention on that task); *action* (where that student must become involved with the subject matter in a physical, mental, or emotional manner); *informed support* (throughout the learning experience from the instructor or from peers); *feedback* (which should be present throughout the learning experience, and again from the instructor or peers), and *debrief* (where the learners and facilitator reflect on the implications of the experience). Instructors and instructional designers contemplating the integration of experiential learning into courses should be aware of literature beyond the popular foundations of Kolb, including discipline-specific interpretations of these theoretical approaches.

## Defining Experiential Learning: Isn't all Learning Experiential?

The fundamental objective of teaching students is to facilitate a learning experience. Learning experiences occur constantly, in both formal (e.g., structured with hierarchy) and informal (e.g., daily environment) settings. One might even say that all learning is experiential. Yet when we attempt to define and delimit experiential learning, we seek to focus on those learning situations where experiences are highly authentic, realistic, impactful, and purposeful. Many interactive learning experiences, whether a classroom discussion, a laboratory experiment, or even a stimulating lecture can be experiential, but for the purposes of this concept paper, and for the University's common definition, experiential learning needs to be something more.

The Association for Experiential Education defines experiential education as:

> *A philosophy and methodology in which educators plan to engage learners purposefully in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, apply prior learning, and develop capacity to contribute to their communities.*
>
> The principles of experiential education practice are:
>
> - Experiential learning occurs when carefully chosen experiences are supported by reflection, critical analysis and synthesis.
> - Experiences are structured to require the learner to take initiative, make decisions and be accountable for results.
> - Throughout the experiential learning process, the learner is actively engaged in posing questions, investigating, experimenting, being curious, solving problems, assuming responsibility, being creative, and constructing meaning.
> - Learners are engaged intellectually, emotionally, socially, soulfully and/or physically. This involvement produces a perception that the learning task is authentic.
> - The results of the learning are personal and form the basis for future experience and learning.
> - Relationships are developed and nurtured: learner to self, learner to others and learner to the world at large.
> - The educator and learner may experience success, failure, adventure, risk-taking and uncertainty, because the outcomes of experience cannot totally be predicted.
> - Opportunities are nurtured for learners and educators to explore and examine their own values.
> - The educator's primary roles include setting suitable experiences, posing problems, setting boundaries, supporting learners, insuring physical and emotional safety, and facilitating the learning process.
> - The educator recognizes and encourages spontaneous opportunities for learning.
> - Educators strive to be aware of their biases, judgments and pre-conceptions, and how these influence the learner.

- The design of the learning experience includes the possibility to learn from natural consequences, mistakes and successes.

http://www.aee.org/about/whatIsEE

At the University of Saskatchewan, we hold that

*Experiential Learning refers to learning opportunities where activities are consciously and deliberately created to address specific course or program goals, where the activities involve interactive and authentic learning experience for students, and where the activities go beyond what might normally be found in a traditional university classroom or laboratory.*

This is not to imply that traditional university classrooms or laboratories have lesser value or cannot be places of deep and inspiring learning activities, but rather we wish to convey that by going beyond the confines of the traditional classroom or laboratory, we can offer students learning opportunities that enrich and deepen their learning.

Experiential learning as defined here is not economical; it often costs more than traditional classroom-based learning. Experiential learning may be more effortful than traditional classroom-based learning for both learner and instructor, spending more time to engage more deeply and to reflect more thoroughly. Deep and transformative experiential learning opportunities could be thought of as "nuggets" of educational gold strategically dispersed within the curriculum. Appendix A contains a set of principles of good practice for experiential learning.

At the University of Saskatchewan, we have internally identified five primary forms of experiential learning for undergraduate students:

1. Undergraduate research
2. Practicums, internships and cooperative education
3. Study or courses taught abroad
4. Community engaged learning and community service learning
5. Field-based instruction

**Additional Forms of Experiential Learning**. In such a compact introduction to experiential learning it is inevitable to leave out forms of experiential learning that some people and some disciplines might include under the experiential learning umbrella. If the learning activity in question meets some of the ways in which experiential learning is conceptualized (through, for example, a cycle of action and reflection resulting in deep learning) it would be appropriate to include these experiences as part of the umbrella of experiential learning undertaken on our campus and across higher education. These 'other' forms of experiential learning might include (under certain circumstances) immersive role plays and simulations (including through technology), case based teaching, lab-based or studio-based experiences, cross cultural experiences, and more. Yet, it is important to note that laboratory work or case learning can also be delivered in ways that are not deeply experiential. Although the focus of this concept paper is on experiential learning that is tied to curricula, it is necessary to note that co-curricular experiential learning led by students (e.g., Engineers without Borders) and staff (e.g., Formula SAE – Engineering) is also part of the University of Saskatchewan environment.

In the sections that follow, we consider each of the primary forms of curricular experiential learning. A description of the experiential approach is provided alongside information about best practices and benefits for students. We examine good examples of operations and practices for these forms of experiential learning within Canadian universities by using case examples from U15 comparator universities. This section is not intended to be either comprehensive or exhaustive but rather to provide important highlights within experiential approaches and showcase Canadian leaders in each area that offered high quality and publicly available information.

A review of public web information reveals that experiential learning (of the forms defined herein) is a valued pedagogical approach that is promoted across the U15 as evidenced, at least in part, by its presence in strategic planning documents. Depending on the nature of the learning activity, the emphasis on experiential learning is often supported by the office of the Vice-President Academic or Provost, the Vice-President Research, and the Teaching and Learning Centre. In some cases additional units have been established to support and promote a certain form of experiential learning, such as the Co-operative Education & Career Action (CECA) unit at the University of Waterloo https://uwaterloo.ca/co-operative-education/ or the Undergraduate Research Initiative at the University of Alberta http://www.uri.ualberta.ca/. This approach of consolidating resources and support structures allows institutions to move forward with what is also a common goal of "enhancing the student experience" across the campus and can foster greater interdisciplinary activity.

## Undergraduate Research

Undergraduate research has received a great deal of attention across the 15 top Canadian universities (U15) and elsewhere. As post-secondary institutions embrace the nexus of teaching and research, opportunities for undergraduate research and creative activity will certainly grow. Applicable to a broad range of disciplines, this approach to active learning can provide students with a deeper understanding of their field of study and develops their skill in inquiry, observation, and writing.

There have been repeated calls for universities (particularly research intensive universities) to improve students' access to these research based opportunities (Boyer Commission, 1998). This growing consensus around undergraduate research and inquiry is grounded in the argument that students must graduate with higher order skills that prepare them for today's increasingly super-complex society and economy; skills that are developed particularly well through research and inquiry-based learning opportunities (Barnett, 2005). Indeed, students' involvement with research and discovery might indeed help to define that which makes higher education 'higher' (Healey and Jenkins, 2009).

Conversations about undergraduate research experiences for all students inevitably result in definitional challenges associated with what is meant by 'research'. Brew and Boud (1995) provide an effective way to conceptualize undergraduate research and inquiry as an inquiry or investigation into the *'commonly known'* (topics new to the students, but commonly known to faculty across the discipline), the *'commonly unknown'* (topics new to the student and most faculty across the discipline, except for a few faculty for whom that topic is part of their particular specialty), or the *'totally unknown'* (topics new not only to the student but new to the discipline as a whole). A number of other attempts to define (or provide frameworks to help conceptualize) undergraduate research have been made (for a

summary, see Brew, 2013). The University of Alberta adopts a straightforward approach to the definition of undergraduate research by emphasizing **"…**a process that involves asking questions and using the methods of our discipline to advance our knowledge and understanding of the subject**."** (http://www.uri.ualberta.ca/en/DefiningUndergraduateResearch.aspx)

The benefits of undergraduate research include: increased confidence, cognitive and technical skill development, problem-solving and critical thinking development, clarification of future career or educational opportunities, an understanding of how knowledge is created, and an increased understanding of disciplinary ways of thinking and practicing (Brew, 2006; Hunter, Laursen, & Seymour, 2007; Hunter, Laursen, Seymour, Thiry, & Melton, 2010).

While students' awareness of research has been shown to be high, the proportion of students who report experiencing research as a key component of their educational experience remains low (Healey, Jordan, Pell, & Short, 2010; Turner, Wuetherick, & Healey, 2008; Wuetherick and McLaughlin, 2011). A high proportion of students, however, indicate that they learn best when involved in some form of research or inquiry activity. Increasing student involvement in one-to-one mentorship is a common approach, with additional funding being targeted to support student summer employment under the direction of faculty. The Undergraduate Research Initiative office at the University of Alberta is a great example of a comprehensive approach to supporting the involvement of their undergraduate students in research activity. In addition to providing information on available funding, this Centre offers programs to support student success in writing research proposals, seeking research funding, learning research skills and reporting on results. (http://www.uri.ualberta.ca/)

The challenge is that for undergraduate research and inquiry to have impact on a significant number of learners, the experiences offered must move beyond familiar one-to-one mentored experiences (such as summer research assistantships), as impactful as those might be, to embedding research experiences within courses and curricula. Many research-intensive universities point to curricular innovation in programs to increase the number courses that contain a research component, and thereby allow a greater percentage of their undergraduate students to participate. For example, a recent institutional vision document from McMaster University states, "Research-intensity is fundamental to our pedagogical model, which seeks to embed the process of discovery and interdisciplinary collaboration at all levels of the learning process." (http://www.mcmaster.ca/vpacademic/documents/McMasterUniversitySMA28_09_12.pdf retrieved from the web May 24.13). In an effort to build research opportunity and research skill acquisition into all levels of the undergraduate curriculum, a developmental approach is required. One tool that might be used to help facilitate this developmental approach is the research skills development (RSD) framework created in Australia (Willison, 2009). The RSD framework contemplates the "facet of inquiry" (i.e., embarking and clarifying, finding using appropriate methodology, evaluating and reflecting, organizing and managing, analyzing and synthesizing, communicating) and considers these activities at differing levels of student autonomy.

Beyond curriculum and one-to-one mentorship, dissemination of research findings is an important component of the undergraduate research experience. Undergraduate research journals are common across the U15, as is local conference activity such as the Multidisciplinary Undergraduate Research Conference at UBC, http://murc.ubc.ca/, or the

undergraduate poster competition at the University of Manitoba, http://www.umanitoba.ca/postercompetition/.

## Internships, Practica, and Cooperative Education

Internships, practica and cooperative education (or what has also been called workplace learning) represent a cluster of experiential learning activities that is commonly implemented. Internships and practica have been particularly successful as a required component in areas such as the health sciences and education. An internship or practicum has been defined as *"a supervised discipline-related work experience [involving] an intentional experiential learning strategy, an emphasis on professional development, performance assessments, and reflection and acknowledgment."* (Kuh, 2008). There is an ongoing discussion about the interchangeability of the two terms – internship and practicum – and whether or not one of these (internship) is normally defined by whether or not the student is paid for their time in the organization hosting them.

The intention in most internship or practicum experiences is to provide students with direct experience in a *w*ork setting, usually related to their discipline and their particular career interests, and to give them the benefit of mentorship from professionals in that particular field. While some of these experiences may be co-curricular in nature (for example, through a structured summer employment program that is outside of the official program for the students), the majority of internship are taken for credit within programs where students often complete an approved project or paper that is submitted to their university in addition to meeting any work requirements as set out by the organization hosting the student (Kuh, 2008).

Internships can serve a number of purposes for different students. These can include clarifying career paths, applying what they are learning in their programs to "real world" workplace settings, gaining more substantial professional experience, and beginning to develop a network of people in fields that interest them (O'Neill, 2010). Research has shown that an internship or practicum experience is more likely to be "high impact" for students when:

- the experience is intentionally organized around particular learning outcomes;
- students apply their learning to work contexts, reflect on these experiences, and receive formative feedback from both faculty and workplace professionals;
- students build mentoring relationships with supervisors, faculty, and peers;
- students are exposed to diverse people and ways of thinking; and
- students are asked to reflect on their workplace experiences to clarify their values, interests, and personal goals particularly as related to their careers (O'Neill, 2010).

The University of Waterloo has the most extensive co-op program in the world. In the 2012 – 2013 academic year, Waterloo often had nearly 100 employers giving presentations to potential coop students in a month. The university offers 120 distinct co-operative education programs to its students. Waterloo has gone through an accreditation process with the Canadian Association for Cooperative Education (CACE), which ensures that the university's programs comply with best practices in coop education as laid out by the CACE. For example, students must be engaged in productive work in their co-op placement rather than just observing and students must be receiving some form of remuneration for their work (https://uwaterloo.ca/co-operative-education/about-co-operative-education). The

program is operated through a central unit – Co-operative Education and Career Action – that operates under a set of goals, mission and vision statements. Appendix B contains additional resources for the delivery of the University of Waterloo's co-operative education.

Just up the road from the University of Waterloo, Wilfrid Laurier University (WLU) is also committed to providing coop opportunities for many of their undergraduate students. For many programs at WLU, work terms are staggered throughout the four year program and can occur in all three of the terms; fall, winter and summer. It is interesting to point out, however, that WLU offers coop opportunities inside Arts degree programs that allow students to complete coop placements during the summer months. Of additional note, WLU provides a notable example of how universities can partner with government to create internships program options so that students gain valuable business skills and small to medium companies benefit from the presence of students with technical knowledge (http://wlu.ca/news_detail.php?grp_id=0&nws_id=10883).

## Study Abroad

Study abroad refers to a wide range of credit-granting programs, courses and learning experiences that take place internationally – including reciprocal exchange agreements (our students going to a partner who in turn sends students back), semester or summer abroad experiences (which may be at a university or other organization), and as courses taught abroad (where U of S instructors lead a course taught in an international context to U of S students). Because study abroad takes place outside of Canada, special considerations need to be made with respect to cost, safety, transfer credit, pre-departure and re-entry sessions, and the development of international partnership agreements (in many cases). The options for studying abroad are increasing around the world and can manifest as a variety of types of experiential learning. Thus, other forms of experiential learning such as community-service learning, undergraduate research, internships and practica, and fieldwork that take place internationally can be viewed to fall under the term 'study abroad'.

The learning value of study abroad depends to a great extent upon a well-guided student self-reflection on their experience, relevance of the experience to a student's degree, major or career aspirations, the depth of foreign language and/or inter-cultural immersion, and the length of the program (including preparation and re-entry) (Brewer and Cunningham, 2009; Lewin, 2009). The inclusion of study abroad in a program or course of study has many perceived benefits, including: providing the opportunity for students to experience their discipline-specific interests in contexts that broaden their knowledge and skills; developing their cross-cultural communication skills and intercultural competencies (though research has shown that poorly facilitated experiences can have the opposite effect); and providing student learning experiences that foster an understanding of, and commitment to, global citizenship (Brewer and Cunningham, 2009; Lewin, 2009; Trilokekar, Jones, & Shubert, 2009; Vande Berg, 2012).

As one leader in the Canadian study abroad landscape, the University of British Columbia (UBC) has an extensive array of international opportunities for its students. All of the information regarding these opportunities as well as the support services for students is available on the 'Go Global' website (http://www.students.ubc.ca/global/index.cfm). This site also houses information and existing supports for international students. The international opportunities available to UBC students include: online courses from seven

international universities; research abroad; international service learning; an exchange program; and, group study programs.

Focusing on study abroad leads to examination of exchange programs and group study programs. A student involved in an exchange program chooses a course or set of courses he or she wishes to attend at one of UBC's 150 partner institutions. Most courses taken are eligible for transfer credit to the student's program at the home institution. The group study programs are 'taught abroad' programs where a UBC course is taught abroad by a member of the UBC faculty. Group study programs involve students travelling to a new country with a faculty member to complete one course over a term. In the 2012 – 2013 academic year there were nearly forty courses taught in nearly a dozen countries in Asia, Africa, Europe and South America. See Appendix C for supporting resources linked to study abroad.

## Community Engaged and Community Service Learning

Another common way experiential learning is implemented in higher education is through community engaged learning. Community engaged learning is often used to denote a range of learning activities where students engage with community partners (government, community organizations, industry) as part of that experience, whether local or global. It can, depending on the institution or author, include everything from both co-curricular and curricular community service learning through to practica and internships in the community.

Successful community engaged learning has several key characteristics, including: the meaningfulness of the activity to the community (where community is involved in planning, implementing, and evaluating the activities; the activity helps address a need that the community has identified, in a way in which the community appreciates); the meaningfulness of the activity to faculty teaching and pedagogy (where there is evidence that the partnership will enhance student learning, and, that the activity links to the faculty member's teaching program); ideally, the meaningfulness of the partnership to faculty scholarship (there is evidence that the activity links directly to a faculty member's program of research or program of artistic work); and the appropriateness of the pedagogy to the desired learning outcomes (where the community-based activity does not compromise student needs with respect to the stated learning outcomes of the academic course).

For purposes of this concept paper, the way community engaged learning manifests most often in the learning environment focuses on course-based, curricular or academic community service learning (CSL). Bringle and Hatcher (2009) argue that course-based, or curricular, community service learning provides educational experiences that allow students to both participate in an organized service activity that meets identified community needs and reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility. This reciprocal relationship is key to successful community engaged learning

Curricular (or academic) community service learning can take several form ranging from traditional CSL where the service learning experience is focused on individuals and organizations (and may be more in line with what might be considered structured volunteerism) through to what has been termed 'critical' CSL, where the service learning experience is focused more on service for an ideal (and may be more in line with global

citizenship and social justice; Mitchell, 2008). In these experiences, faculty facilitate student experiences and critical self-reflection about their experiences, including:

- what they have learned about the situation they confronted and about themselves
- the role their own assumptions and values played in their 'action'
- the systemic, root causes of the issues with which they were involved

The benefits of community engaged learning include: the validation of personal experience and the development of individual confidence; the development of socio-political understanding and an understanding of the place of activism; the development of critical thinking and open-mindedness; making connections between course material and the political/social context within which it is embedded; and helping students to recognize how they can become active agents for political and social change in all fields (Butin, 2003; Eyler, Giles, and Astin, 1999).

To consider a solid case example, the University of Ottawa has a strong commitment to experiential learning. President Alan Rock indicated in a recent Globe & Mail article his university's goal is to have every student involved in an experiential learning opportunity of some sort. ("Class of 2013 demands more from universities: help us find jobs" Globe & Mail, May 17, 2013; http://www.theglobeandmail.com/news/national/education/class-of-2013-demands-more-from-universities-help-us-find-jobs/article12006916/)

The University of Ottawa's Centre for Global and Community Engagement houses all the information and support services for students, instructors and community partners interested in being involved in community service learning (CSL). During the 2012 – 2013 academic year 130 professors and 1,800 students were involved in CSL projects with 281 community organizations. According to the same Globe & Mail article, the Centre "connects more than 2,600 students to volunteer opportunities and community partnerships." The Centre has created extensive and comprehensive handbooks for each partner – students, instructors and community organizations. The description of community service learning offered on the University of Ottawa website clearly articulates CSL for the uninitiated (http://www.servingothers.uottawa.ca/csl.html). This articulation describes the best practices followed by the University of Ottawa in its delivery of these programs. Appendix D provides additional resource material created to support community service learning.

## Field-Based Learning and Field Courses

In field-based learning, teaching is extended to a site outside of the classroom or laboratory, exposing students to a 'real-world' setting. The goal of field-based learning is for students to apply practical, research, or workplace skills developed within the context of the discipline in which they are studying. These experiences often manifest as authentic learning related to their particular disciplinary context – collecting soil samples in the Soil Sciences, engaging in archival work in History, or interviewing people in a community organization in Sociology.

Studies have shown that field-based learning experiences for students can result in: enhanced student motivation; improved ability to retain core disciplinary concepts and skills; enhanced student learning experience through a broadening of their knowledge base; and opportunity to focus on skills or 'multiple intelligences' that are underrepresented in

classroom settings (Curtis, 2001; Gardner, 1983; Kozar and Marcketti, 2008; Lisowski and Disinger, 1991).

Field-based learning is generally chosen because the experience provides an opportunity to present materials, objects or phenomena that are not accessible otherwise to students in a way that enables direct contact and interaction. It also provides students with an opportunity to practice skills or techniques that cannot be carried out elsewhere. These experiences have been found to stimulate higher understanding and reinforcement of previously learned classroom material, and it also stimulates an appreciation for, concern or valuing of the visited environment (Lonergan & Andresen, 1988). It has been argued that "field experiences are most likely to be academically and intellectually valid if they are carefully planned and monitored, structured to serve specific learning goals, and preceded by orientation and preparation. Students also need ongoing opportunities to reflect actively and critically on what they are learning from the field experience and to assess the results" (Gross Davis, 1993, p.167).

Field courses have long been an important component of natural and social science as well as many other programs. Field schools require considerable preplanning to ensure appropriate risk management plans are in place and to arrange for many other logistics such as proper travel documentation, communications plans, and required field equipment and safety or medical supplies. Field course can be an extension of classroom learning, normally taken off campus to a relevant location or environment, but are more valuable when the student is engaged with activity that develops observational and data collection skills, followed by some analysis requirement. Field courses are typically offered under a cost recovery model and require additional fees be paid by students.

The University of Alberta has developed an innovative field experience course (RenR 299) that serves several degree programs within the Faculty of Agricultural, Life and Environmental Sciences. These programs (including Forestry, Environmental Sciences, and Environmental Studies, plus students from additional programs taking the course as elective) have students participate in a three-week course where they spend time as individual programs meeting key disciplinary field requirements for their degree program, and then working across programs to solve interdisciplinary problems as teams of diverse professionals. This model, which allows the institution to save money on logistics of organizing and delivering the field course through larger student numbers, also pushes the boundaries on interdisciplinary professional learning across programs.
http://www.ales.ualberta.ca/Courses/RRCourses/RENRCourses/RenR299.aspx

## The Current State: Experiential Learning at the University of Saskatchewan

Provision of experiential learning opportunities for University of Saskatchewan students belongs to our academic units. A significant number of courses, from every corner of our campus, match one of the primary types of experiential learning as defined above. The vast majority of students on campus can access at least one type of experiential learning course in many if not all of our undergraduate programs of study.

In an effort to inform the annual achievement report, an inventory of experiential learning curricular activity was assembled yearly for a four-year period (2008-2012). To obtain this

information, a survey was distributed to department and college administrators who were asked to supply a simple list of courses that were experiential in nature. While this list has been useful, it was never considered to be a complete picture and, thus, raised questions about the condition of experiential learning across the campus.

To gain better understanding of what experiential opportunities exist and to establish a much-needed baseline, an experiential learning inventory project was conducted in the spring of 2013 with the goal of obtaining more comprehensive information. To this end, 61 interviews were conducted with department heads and undergraduate program chairs to discuss the options that are available to their students, how experiential learning fits within their respective programs, what new and innovative ideas they might have to augment current activities, and a number of supplemental questions on topics ranging from engagement with community partners to student response to existing offerings (see Appendix E). In addition to the qualitative interviews, the experiential learning inventory project compiled data on items such as the number of students enrolled in each course, and whether experiential learning courses are chosen as electives or as a requirement of a program (See Appendix F).

Although the interview process concluded in May, ongoing data collection at the course level, and assessment of all data continued throughout the summer of 2013. Key findings from this work can be summarized as follows. To begin, there was general agreement with the definition of experiential learning employed at the U of S. Furthermore, there is interest within departments and colleges to provide *more* experiential opportunities for students. Not surprisingly, the main barrier to offering more is a perceived scarcity of resources with clear examples of demand outstripping available supports. From the student perspective lack of awareness of these opportunities, and costs associated with certain types of experiential learning, can be limiting factors. When differentiated on the basis of being a program requirement, experiential learning is more directly embedded in, and fundamental to, the Health Science programs than elsewhere. Importantly, there is a convergence between the university's planning (IP3) and the desire of campus units to increase experiential learning within academic programs.

In total, **173** courses offered during the 2012-13 academic year included one of the five main types of experiential learning. There were **11,522** seats in these experiential learning courses offered at the undergraduate level. Of these seats, 8637 (75%) were occupied leaving an unused capacity of 2885 seats (25%). The findings revealed that **3956** students participated in one or more experientially learning opportunity. The 2013 Inventory results illustrated that experiential learning activity can be divided into two major categories: (1) opportunities that are embedded within a program as a <u>requirement</u> for all graduates of that program (e.g., practicum requirements in Nursing, performance-based courses, thesis requirements), and (2) opportunities that are integrated intentionally into a course because they are considered to improve student learning or <u>add value</u> to the student experience. Category 1 – required activity - can be further divided into (a) the health sciences (Kinesiology, Medicine, Nursing, Pharmacy and Nutrition, WCVM), (b) the fine and performing arts (ART, DRAM, EMUS, MUAP, MUS) and (c) a catchall of the remaining required courses "other" (e.g., upper-year required courses, 4$^{th}$ year honours/capstone courses and the extended practicum in Education).

When considering our IP3 target of increasing by 20%, it is important to look individually at each of the categories and sub-categories. The factors that lead to increasing activity in the

number of "value-add" courses may be different from the "required" categories. Specifically, the primary way to increase activity in required experiential learning courses is to increase the enrolment in those programs, whereas increasing the number of students in value-add courses requires strategically building opportunities that will draw students. Table 1 provides a delineation of courses and students within each of the five main types of experiential learning. Courses and students are shown separately across required and value-add category distinctions. Table 2 provides information on how the five main types of experiential learning courses and the students within these courses are distributed across levels of study.

In general, the 2013 Inventory findings show that undergraduate research and community engaged learning are the most common forms of experiential learning. This tends to be true whether experiential learning is of a required nature or is added to an elective course, except in the case of required courses in the health sciences where community-engaged learning is not a "top 2" form. The frequency of internship/practicum and field-based instruction is very similar, generally falling in third or fourth position. One notable exception is that internships/practicum experiences are the most common form of experiential learning when it comes to required health science experiences. Regardless of whether the focus is on required or value-add courses, the inventory revealed that study abroad courses emerged as the least common form of experiential learning. It is important to note that because the 2013 Inventory is tied to courses offered by the UofS, it does not include international exchange programs in which students attend a different university taking courses from that institution. It should also be noted that some of the health science practicum activity involves working in an international setting.

**Table 1**
**Number of Courses and Students across Forms of Experiential Learning**

| | Study Abroad | | Undergrad Research | | Community Engaged Learning | | Internship Practicum | | Field-based Instruction | |
|---|---|---|---|---|---|---|---|---|---|---|
| | #C | #S | #C | #S | #C | #S | #C | #S | #C | #S |
| Health Science (Req) | 3 | 95 | 9 | 345 | 8 | 158 | 19 | 540 | 5 | 135 |
| Fine Arts - Perform (Req) | 0 | 0 | 15 | 155 | 9 | 111 | 0 | 0 | 1 | 2 |
| Other Required[a] | 1 | 14 | 29 | 1118 | 17 | 666 | 4 | 418 | 22 | 887 |
| Non-Required – Value Add | 3 | 5 | 34 | 471 | 35 | 864 | 21 | 168 | 15 | 292 |
| | | | | | | | | | | |
| Total | 7<br>3% | 114 | 87<br>35% | 1985 | 69<br>28% | 1738 | 44<br>18% | 1125 | 43<br>17% | 1302 |

*Note: [a] The "other" required – value add category includes such things as upper-year required courses, 4th year honours/capstone courses and the extended practicum in Education; #C = number of courses; #S=number of students.*
*Values in the table for courses and/or unique students sum to a number larger than the totals reported elsewhere in this document (N=173 courses; N=3956 students). This discrepancy is a function of the fact that some courses include more than one form of experiential learning and individual students can take more than one form of experiential learning in a given year.*

As might be predicted (see Table 2), the majority of our experiential learning courses are offered in the senior years (300- and 400-level). This patterning is extremely pronounced for required health sciences experiential learning where 93% of courses are at the 3rd or 4th year. By contrast, in the required experiential learning courses in the fine and performing arts, slightly less emphasis is placed on senior courses with more emphasis shifted to first and second year. Indeed, across categories of required work, the fine and performing arts show the most even distribution of courses across levels of study. Notably, experiential learning courses at the 500-level are only offered in the health science area.

**Table 2**
**Number of Experiential Learning Courses and Students by Year of Study.**

| | 100-level | | 200-level | | 300-level | | 400-level | | 500-level[b] | |
|---|---|---|---|---|---|---|---|---|---|---|
| | #C | #S | #C | #S | #C | #S | #C | #S | #C | #S |
| Health Science (Req) | 0 | 0 | 2 | 119 | 10 | 281 | 17 | 386 | 3 | 168 |
| Fine Arts - Perform (Req) | 6 | 110 | 3 | 70 | 6 | 74 | 8 | 42 | 0 | 0 |
| Other Required[a] | 2 | 498 | 10 | 340 | 19 | 494 | 19 | 608 | 0 | 0 |
| Non-Required – Value Add | 3 | 184 | 13 | 387 | 19 | 282 | 33 | 384 | 0 | 0 |
| | | | | | | | | | | |
| Total | 11<br>6% | 780 | 28<br>16% | 900 | 54<br>31% | 1051 | 77<br>45% | 1343 | 3<br>2% | 168 |

*Note: [a] The "other" required – value add category includes such things as upper-year required courses, 4th year honours/capstone courses, and the extended practicum in Education. [b]Pharmacy, Nutrition and Veterinary Medicine have 500-level undergraduate courses. #C = number of courses; #S=number of students.*
*Values in the table for students at each level sum to a number larger than the number of unique students reported elsewhere in this document (N=3956 students). This discrepancy is a function of the fact that students can take courses at more than one level of study in a given year.*

In order to achieve the IP3 target for experiential learning growth, departments and colleges must consider where best to integrate new opportunities into their curriculum, and rethink how current opportunities are designed and delivered. In part, support for this work and innovation is and will be made available through a number of central units including the University Learning Centre/Gwenna Moss Centre for Teaching Effectiveness (ULC/GMCTE), the Office of the Vice-President Research (OVPR), University Advancement and Community Engagement (UACE), Student and Enrolment Services (SESD), International Student and Study Abroad Centre (ISSAC), Student Employment and Career Centre (SECC), and others. The Provost's Committee on Integrated Planning (PCIP) has made an initial investment in growing activities by providing support for the Experiential Learning Fund overseen by the ULC, Community-Engaged Scholarship and Learning funding overseen by UACE and the Undergraduate Research funding overseen by the OVPR .

Undergraduate research is one exciting direction for experiential learning, fostered by joint commitments to increasing undergraduate research opportunities through both one-to-one

and curriculum-embedded initiatives (OVPR – lead) and towards the establishment of undergraduate research journal (ULC – lead). Furthermore, the USSU has been active in the promotion of undergraduate research via a well-received undergraduate research symposium.

With the recent establishment of the Community Outreach and Engagement (COE) Office, and the strong partnership between that office and other units on campus, a host of new curricular and co-curricular experiential opportunities are emerging that will connect student activity with community interests. The goal of COE programming will be to offer students a 'laddered' set of opportunities at every stage of the community-based activity; junior undergraduate research, senior undergraduate research and mentorship, graduate research, mentorship, and teaching.

Considering the numerous existing and newly developing opportunities for enhanced student experience at the University of Saskatchewan, we can be confident that the University is taking steps towards meeting the IP3 goals. However, more work is required. Continued and robust efforts must be put into raising the profile of Experiential Learning. Some efforts have paid off in this respect, for example, the establishment and growing interest in the ULC-sponsored Experiential Learning Expo, a forum for experiential learning curricular and co-curricular activities. Other activities, such as the Study Abroad Fair (Arts and Science), faculty development workshops (ULC), the Engaged Scholar Day (Advancement and Community Engagement), and ongoing website development will undoubtedly help increase the profile of experiential learning. Although not all of these efforts and activities will be offered each year, they are examples of successful models used in profiling experiential learning. The genesis of new, exciting, and relevant undergraduate experiential opportunities will largely remain dependent on a cadre of dedicated faculty and departmental champions, whose work we must continue to recognize, promote, encourage, and support. What follows are a set of recommendations for how the move toward increasing student activity level with experiential learning will be enhanced.

## Moving Forward

The target in moving forward is clear: we are looking for a 20% increase in experiential learning activity over the next three years. The centrality of experiential learning in our academic programs fits well within the U of S setting where the personality of the institution is defined as resourceful, collaborative and dynamic. Positioning our university to offer more experiential learning opportunities means that we continue to deliver on the offer of *connections* into communities and around the globe, *impact* through working together and the *support* to push boundaries (http://communications.usask.ca/documents/institutional_positioning_statement.pdf).

The results of the 2013 Inventory show that there is unused space available in our current offerings. We need to be using this existing capacity to increase activity in a fairly simple manner. Although funding for at least some experiential learning activity has been provided through the University Learning Centre, the hard work to increase activity will be done in academic units and accordingly, the resources must flow through to academic units. According to the 2013 Inventory, just over 75% of our experiential learning opportunities exist at the 300 and 400-level. Although this is not a surprising finding given the way programs are traditionally designed with increasing expectations of student competencies, it does suggest that there is work to do in creating opportunities for students in the earlier

years of study. Diversity of activity is important to draw students in and to match their interests, however, there is an argument to be made that the development of experiential learning activities could be tied to signature areas (i.e., Aboriginal Peoples, Agriculture - Food and Bioproducts, Energy and Mineral Resources, One Health, Water Security, Synchrotron Sciences). Given the university's (and province's) emphasis on international education, it makes sense to increase study abroad opportunities.

In cases where courses are required in the health sciences, the fine and performing arts or in other degree requirements, the addition of new students into programs will directly boost experiential learning activity. In the case of value-add opportunities, there is a challenge in sustaining these courses when activities require added resources where the activity itself is not required. In those cases in which experiential learning means doing "extra" on the part of students, many students will need to clearly see the added value that comes with their participation. For example, in the Engineering Professional Internship Program, hours spent as part of the internship are connected to a professional credential.

Different strategies will be needed to increase activity in the areas of undergraduate research, community-engaged learning, field-based instruction, study abroad, and internship/practicum. An implementation blueprint will be required in order to realize the 20% increase in experiential learning activity in the next three years (*Promise and Potential*, IP3). The tactics put in place must consider matters of measurement and benchmarks, the maintenance of existing programming, the creation of new programming and the necessary support to achieve sustainable success.

## Recommendations for Action: Developing Strategies

Increasing experiential learning activity in a strategic fashion will involve substantive influence on major groups including students, faculty, academic departments, the university, and external partners. The Vice-Provost, Teaching and Learning has been identified in Promise and Potential to lead this area of activity. As such, the following recommendations are offered to Vice-Provost for consideration and possible action.

### Students

1. If we believe that many of our students are seeking experiential learning opportunities and we aspire to greater student activity within this realm then it is imperative we make it simpler and easier for students to find courses and programs that include these opportunities. When students search for courses, existing and emerging experientially learning opportunities must be more readily apparent (e.g., enhanced browsability). This is an important step toward building awareness. **We recommend that steps be taken to modify the course catalogue attributes to include an "experiential" tag to better identify those courses with embedded experiential learning opportunities.**
2. Experiential learning opportunities (e.g., study abroad, field-based study) can easily involve an added financial burden for students. Therefore **we recommend that considerable effort be expended to increase awareness of existing support funding (i.e., the Experiential Learning Fund) and that when necessary, additional financial support be sought.**

**Colleges and Departments**

3. It is highly desirable to have a set of principles that guide our goal-setting in experiential learning (e.g., student access). For example, does it make the most sense to concentrate on working toward a single exposure for all students? Further, as has been discussed, it will make sense to partition our growth strategies along the categorical lines of: (1) opportunities that are embedded within a program as a requirement and (2) opportunities that are added to a course because they are considered to increase value. Similarly, there must be a common evaluation strategy to assess the effectiveness of our experiential learning initiatives including markers of student success that are both subjective (e.g., quality of student experience) and objective (e.g., student persistence in program). **We recommend that, under the leadership of the Vice-Provost, Teaching and Learning, a small working group be formed to further develop principles, tactics within categories, and an evaluation strategy.**
4. If we want students to embrace experiential learning opportunities, the expectations and learning outcomes must be explicit and clearly set out by instructors. Therefore **we recommend that departments be encouraged to make clear ties and connections between the learning outcomes for experiential learning courses and higher level program goals (or degree attributes).**
5. The research undertaken for this concept paper revealed challenges inherent in sustaining experiential learning programming. Specifically, innovative programs are often tied to individual faculty members and the passion of these individuals to do this work. When faculty members redirect their energies and efforts or go on leave or are simply assigned to teach something different, experiential learning within a given course can lose momentum or become unsustainable. It is important to strategically position experiential learning opportunities optimally in programs so that we get maximum impact for our efforts. **We recommend that experiential learning become part of the curriculum plan at a program/degree level in colleges so that the investments (human, financial) can be sustained.**

**University/Central Administration**

6. The 2013 Inventory revealed that faculty devoted to experiential learning are faculty with a passion for this work. This can mean that the important thing to do is simply get out of the way. In some cases, however, this work is done off the side of a faculty member's desk and becomes unsustainable. Faculty members using experiential learning approaches are likely to require support for curriculum planning and delivery as well as financial support. At present, some of these supports are already available but faculty members are not necessarily aware of what exists. Faculty members should be able to search the topic of experiential learning and be provided with, or pointed in the direction of, resources that already exist on campus to support their experiential learning goals. Similarly, students need ready access to information on what opportunities exist. The vision here is for a "central" site (through the Vice Provost, Teaching and Learning) that links in the work underway and resources available across campus. **We recommend that a website for experiential learning be created as a virtual hub.**

7. Different forms of experiential learning programming arguably require different approaches to coordination and support. It is highly unlikely that the University of Saskatchewan will be in a position to create separate central offices to address the needs of each program and/or college. Similarly, no single existing unit can be expected to oversee all of the experiential learning activity. It is important to learn what coordination structure would best meet the University's needs (e.g., centralized and decentralized approaches) and take into consideration how recent structural changes at the University (e.g., having the advancement and community engagement portfolios together) might lead to potential supports. **We recommend that under the leadership of the Vice-Provost, Teaching and Learning, a small working group be created to consider ways to facilitate the coordination of experiential learning activity**.
8. The *Experiential Learning Inventory Project* was time and labour intensive. Looking ahead, an assessment strategy will need to be in place to judge whether planned increases in activity are realized and whether related positive outcomes ensue. **We recommend that the same working group identified in recommendation #7 (above) also consider an evaluation of whether appropriate measurement criteria were employed and whether the methodological approach was the most appropriate**.

**External Partners**

**9.** The success of experiential learning opportunities rests in no small part on our investment in cultivating and maintaining partnerships with external partners including community agencies, industry, government, etc., with a particular focus on where students want to be to build on their academic work. The university needs to understand the level of interest and support within the city to build additional experiential learning opportunities. It also makes sense to understand the level of interest and support in other parts of the province where U of S students could (or already do) undertake experiential learning. If an examination of the interest in all five primary forms of experiential learning is not possible, it might make more sense to identify a subset of activities to explore (e.g., undergraduate research, community-engaged learning, internship/practicum). **We recommend that a feasibility study be undertaken to identify the level of interest and support in the province to build additional experiential learning opportunities that will be necessary to reach our goal of a 20% increase.**

**10.** With a view to creating opportunities and matching student demand, the university could focus attention on working with areas where there are overlapping provincial goals (see the Saskatchewan Plan for Growth Plan; http://gov.sk.ca/saskplanforgrowth). Examples of government support could include (but are not limited to) encouraging the growth of companies with roots in the prairies who also have international exposure and providing tax or other incentives for Saskatchewan businesses that employ students through the university's experiential learning initiatives. **We recommend that consideration be given to finding ways for the provincial government to support the university's experiential learning initiative.**

## References


Barnett R. (2005). Introduction. In R. Barnett (ed.), *Reshaping the University: New Relationship between Research, Scholarship and Teaching*. London: The Society for Research into Higher Education and the Open University Press, 1-8.

Beaudin, B. and D. Quick (1995). *Experiential Learning: Theoretical* Underpinnings. Fort Collins, CO: High Plains Intermountain Center for Agricultural Health and Safety.

Boud, D. and D. Walker (1991). *Experience and Learning: Reflection at Work*. Geelong, Victoria: Deakin University Press.

Boyer Commission (1998). *Reinventing Undergraduate Education: A Blueprint for America's Research Universities*. Stony Brook: Carnegie Foundation for University Teaching.

Brew, A. (2006). *Research and Teaching: Beyond the Divide*. New York: Palgrave-MacMillan.

Brew, A. (2013). Understanding the scope of undergraduate research: a framework for curricular and pedagogical decision-making. *Higher Education.* DOI 10.1007/s10734-013-9624-x

Brew, A. & Boud, D. (1995). Teaching and research: establishing the vital link with learning, *Higher Education*, 29 (3), 261-273.

Brewer, E. & Cunningham, K. (Eds.) (2009). *Integrating study abroad into the curriculum: Theory and practice across the disciplines.* Sterling, VA: Stylus Press.

Bringle, R. and J. Hatcher. (2009). "Innovative Practices in Service-Learning and Curricular Engagement." *New Directions for Higher Education* no. 147, (Fall): 37-46.

Burnard, P. (1989). *Teaching interpersonal skills: A handbook of experiential learning for health professionals.* London: Chapman & Hall

Butin, D. (2003). Of what use is it? Multiple conceptualizations of service learning within education. *Teachers College Record*, 105 (9),1674-1692.

Curtis, D. (2001). *Project-based learning: Real-world issues motivate students*. Retrieved from Edutopia at http://www.edutopia.org/project-based-learning-student-motivation.

Dean, G. J. (1993). Developing experiential learning activities for adult learners. *American Association for Adult and Continuing Education National Conference*, Dallas, TX.

Dewey, J. (1938). *Experience and Education*. New York: Collier Books.

Eyler, J., D. Giles and A. Astin. (1999). *Where is the Learning in Service Learning?* San Francisco: Jossey-Bass.

Fenwick, T. (2001). *Experiential learning: A critical review of theory and practice*. ERIC Clearinghouse on Adult, Career, and Vocational Education, Information Series No. 385. Columbus Ohio: ERIC.

Freire, P. (1970). *The Pedagogy of the Oppressed*. New York: Continuum.

Gardner, H. (2000). *Intelligence Reframed: Multiple Intelligences for the 21st Century*. New York: Basic Books.

Gross Davis, B. (1993). Fieldwork. In *Tools for teaching* (pp.166-174). San Francisco: Jossey-Bass.

Healey, M. and A. Jenkins. (2009). *Undergraduate Research and Inquiry*. York: Higher Education Academy.

Healey M., Jordan F., Pell B., and Short C. (2010). The Research-Teaching Nexus: A case study of students' awareness, experiences and perceptions of research. *Innovations in Education and Teaching International*.

Hunter A-B., Laursen S., and Seymour E. (2007). Becoming a Scientist: the role of undergraduate research in students' cognitive, personal and professional development. *Science Education*. 91, 36-74.

Hunter A-B., Laursen S., Seymour E., Thiry H., and Melton G. (2010). *Summer Scientists: Establishing the value of shared research for science faculty and their students*. San Francisco: Jossey-Bass (in press).

Joplin, L. (1981). On defining experiential education. *The Journal of Experiential Education*, 4 (1), 17-20.

Kolb, D. (1984). *Experiential Learning: Experience as the source of learning and development*. Englewood Cliffs: Prentice-Hall.

Kozar, J. and Marcketti, S. (2008). Utilizing field-based instruction as an effective teaching strategy. *College Student Journal*, 42(2): 305-311.

Kuh G. (2008). *High-Impact Educational Practices: What they are, who has access to them, and why they matter.* Washington, DC. Association of American Colleges and Universities.

Lewin, R. (Ed.) (2009). *The handbook of practice and research in study abroad: Higher education and the quest for global citizenship.*

Lisowski, M. and Disinger, J. (1991). The effect of field-based instruction on student understandings of ecological concepts. *Journal of Environmental Education*, 23(1): 19-23.

Lombardi, M. (2007). *Authentic Learning for the 21st Century: An Overview.* Washington, DC: Educause Learning Initiative.

Lonergan, N. and L. Andresen (1988). Field-based education: some theoretical considerations. *Higher Education Research & Development*, 7 (1) 63-77.)

Mezirow, J. (1991). *Transformative Dimensions of Adult Learning*. San Francisco: Jossey-Bass.

Mitchell, T. (2008). Traditional vs. Critical Service-Learning: Engaging the Literature to Differentiate Two Models. *Michigan Journal of Community Service Learning*. (Spring), p. 50-65.

O'Neill, N. (2010). Internships as a High-Impact Practice: Some Reflections on Quality. *Peer Review*. 12 (4).

Piaget, J. (1966). *The Psychology of Intelligence*. Totown, NJ: Littlefield, Adams and Co.

Schon, D. (1987). *Educating the Reflective Practitioner*. New York: Basic Books.

Trilokekar, R., Jones, G., and Shubert, A. (Eds). (2009). *Canada's universities go global.* Toronto, ON: James Lorimer & Company.

Turner, N., Wuetherick, B., and Healey, M. (2008). International perspectives on student awareness, experiences and perceptions of research. *International Journal for Academic Development*, 13(3), 199-211.

Vande Berg, M. (Ed.) (2012). *Student learning abroad: What our students are learning, what they're not, and what we can do about it.* Sterling, VA: Stylus Publishing, LLC.

Vygotsky, L. (1978). *Mind and Society: The Development of Higher Physchological Processes*. Cambridge, MA: Harvard University Press.

Willison J. (2009). Multiple Contexts, Multiple Outcomes, One Conceptual Framework for Research Skill Development in the Undergraduate Curriculum. *CUR Quarterly*, 29 (3) (Spring), 10-14.

Wuetherick, B., & McLaughlin, M. (2011). Exploring student perceptions of research in the learning environment: A partnership to enhance our understanding of the undergraduate student experience. In S. Little (Ed.). *Staff-Student Partnerships in Higher Education*. London, UK: Continuum International Publishing Group.

## Appendix A
## Standards of Practice: Eight Principles of Good Practice for All Experiential Learning Activities

Regardless of the experiential learning activity, both the experience and the learning are fundamental. In the learning process and in the relationship between the learner and any facilitator(s) of learning, there is a mutual responsibility. All parties are empowered to achieve the principles which follow. Yet, at the same time, the facilitator(s) of learning are expected to take the lead in ensuring both the quality of the learning experience and of the work produced, and in supporting the learner to use the principles, which underlie the pedagogy of experiential education.

*1. Intention:* All parties must be clear from the outset why experience is the chosen approach to the learning that is to take place and to the knowledge that will be demonstrated, applied or result from it. Intention represents the purposefulness that enables experience to become knowledge and, as such, is deeper than the goals, objectives, and activities that define the experience.

*2. Preparedness and Planning:* Participants must ensure that they enter the experience with sufficient foundation to support a successful experience. They must also focus from the earliest stages of the experience/program on the identified intentions, adhering to them as goals, objectives and activities are defined. The resulting plan should include those intentions and be referred to on a regular basis by all parties. At the same time, it should be flexible enough to allow for adaptations as the experience unfolds.

*3. Authenticity:* The experience must have a real world context and/or be useful and meaningful in reference to an applied setting or situation. This means that is should be designed in concert with those who will be affected by or use it, or in response to a real situation.

*4. Reflection:* Reflection is the element that transforms simple experience to a learning experience. For knowledge to be discovered and internalized the learner must test assumptions and hypotheses about the outcomes of decisions and actions taken, then weigh the outcomes against past learning and future implications. This reflective process is integral to all phases of experiential learning, from identifying intention and choosing the experience, to considering preconceptions and observing how they change as the experience unfolds. Reflection is also an essential tool for adjusting the experience and measuring outcomes.

*5. Orientation and Training:* For the full value of the experience to be accessible to both the learner and the learning facilitator(s), and to any involved organizational partners, it is essential that they be prepared with important background information about each other and about the context and environment in which the experience will operate. Once that baseline of knowledge is addressed, ongoing structured development opportunities should also be included to expand the learner's appreciation of the context and skill requirements of her/his work.

*6. Monitoring and Continuous Improvement:* Any learning activity will be dynamic and changing, and the parties involved all bear responsibility for ensuring that the experience, as it is in process, continues to provide the richest learning possible, while affirming the learner. It is important that there be a feedback loop related to learning intentions and quality objectives and that the structure of the experience be sufficiently flexible to permit change in response to

what that feedback suggests. While reflection provides input for new hypotheses and knowledge based in documented experience, other strategies for observing progress against intentions and objectives should also be in place. Monitoring and continuous improvement represent the formative evaluation tools.

*7. Assessment and Evaluation:* Outcomes and processes should be systematically documented with regard to initial intentions and quality outcomes. Assessment is a means to develop and refine the specific learning goals and quality objectives identified during the planning stages of the experience, while evaluation provides comprehensive data about the experiential process as a whole and whether it has met the intentions which suggested it.

*8. Acknowledgment:* Recognition of learning and impact occur throughout the experience by way of the reflective and monitoring processes and through reporting, documentation and sharing of accomplishments. All parties to the experience should be included in the recognition of progress and accomplishment. Culminating documentation and celebration of learning and impact help provide closure and sustainability to the experience.

Source: National Society for Experiential Education. Presented at the 1998 Annual Meeting, Norfolk, VA

## Appendix B
## Resources for Co-operative Education

Links to University of Waterloo's Co-operative Education Resources

1. Main site for University of Waterloo co-op education programs and philosophy:

   https://uwaterloo.ca/co-operative-education/about-co-operative-education

2. Site hosting specific information regarding University of Waterloo co-op education programs:

   https://uwaterloo.ca/co-operative-education/about-co-operative-education/our-programs

## Appendix C
## Resources for Study Abroad Programming

Links to University of British Columbia's Study Abroad Resources

Main site for Go Global, UBC's one-stop shop for international students and students interested in international opportunities:
http://www.students.ubc.ca/global/index.cfm

Information regarding UBC exchanges programs:
http://www.students.ubc.ca/global/learning-abroad/exchange/

Information regarding UBC group study abroad programs:
http://www.students.ubc.ca/global/learning-abroad/group-study-programs/

Information regarding UBC international service learning opportunities:
http://www.students.ubc.ca/global/learning-abroad/international-service-learning/

Information regarding UBC research abroad:
http://www.students.ubc.ca/global/learning-abroad/research-abroad/

Information regarding UBC special programs, in particular opportunities for an international education experience in Vancouver:
http://www.students.ubc.ca/global/learning-abroad/special-programs/

## Appendix D
## Resources for Community Service Learning

Links to University of Ottawa's Community Service Resources

1. Contact and general information regarding community service learning and the university's co-curricular record:

   http://www.els-sae.uottawa.ca/els/index.php

2. Main page for the Centre for Global and Community Engagement (CGCE):
   http://www.servingothers.uottawa.ca/dev/csl.html

3. Community Service Learning Student Handbook:

   http://www.servingothers.uottawa.ca/pdfs/csl-student-handbook.pdf

4. Community Service Learning Professor Handbook:

   http://www.servingothers.uottawa.ca/pdfs/csl-professor-handbook.pdf

5. Community Service Learning Community Partner Handbook:

   http://www.servingothers.uottawa.ca/pdfs/csl-community-partner-handbook.pdf

6. To be a successful CSL component in a classroom, three main characteristics have to be present:
   A. A quality placement with a community organization that serves the interest of the community and also of the student and professor;
   B. A volunteer experience that will contribute to enhance classroom teachings and;
   C. A volunteer experience that will create or increase social awareness and responsibility. This is achieved through a meaningful self-reflection element integrated into the CSL course.
   http://www.servingothers.uottawa.ca/csl.html

## Appendix E
## *Experiential Learning Inventory Project*: Department Head Interview

Interview Questions

1) Describe your understanding of opportunities for students in your department to engage in experiential learning. How is it working?
2) Are you satisfied with the amount of experiential learning opportunities that your College/department offers?
3) Can you address the department's offerings in the areas of;

   *Community engagement
   * Study abroad programming
   * Field experience
   * Practical placements
   * Undergrad research
   Are the college/department's offerings in these areas working well? (if they exist)
   How are they offered? Which are involved?

4) Do these categories accurately reflect on the experiential learning opportunities your College/department offers? Do you offer courses that don't really fit these categories?
5) Describe the process through which these offerings are generated and implemented. ***Are they conceived through individual instructors? Or, at the program level?***
6) What could be done to enhance and support experiential learning in your department?
7) What else would you like to be doing in your program? What can you imagine as valuable new activity?
8) To what extent does your department engage in community partnerships/relationships to enhance experiential learning?
9) In your opinion, are the relationships between the community partners and your college/department mutually beneficial?
10) What resources (facility, equipment, programs) does your department use to enhance experiential learning opportunities?
11) What, if any, extensions to the department offerings are offered? Does your department have any experiential learning opportunities for students outside of current course offerings?
12) From your perspective, how do feel students have responded to these programs? Do you feel that there is demand for e.l.o in their department from students? Is the department currently looking/planning to increase e.l.o. or just maintain the ones they have?

## Appendix F
## *Experiential Learning Inventory Project*: Quantitative Data Gathering Protocol

Experiential Learning at the U of S

**This project, carried out in partnership by the Gwenna Moss Centre for Teaching Effectiveness, the University Learning Centre, the Special Advisor for Outreach and Engagement, the USSU and the Vice Provost of Teaching and Learning's Office, aims to establish an inventory of curricular and co-curricular experiential learning opportunities offered across all Colleges and departments on campus. As part of the data collection process, our team had previously interviewed the associate dean/department head/undergrad chair of your college/department and your course has been identified by your department/college as being one that offers experiential learning.Please complete this brief survey on experiential learning with regards to the course identified in your unit.**

**What is the course number and name?**

For example, SOC 111.3 - Foundations in Sociology: Society, Structure, Process

**What type(s) of Experiential Learning is/are offered in this course? *Check all that apply***

- ☐ Study Abroad
- ☐ Community-Engaged Learning
- ☐ Field-based Instruction
- ☐ Internship and Practica
- ☐ Undergraduate Research and Inquiry
- ☐ Experiential Learning in Labs
- ☐ Role-plays and Simulations
- ☐ Cross-cultural Learning
- ☐ Using Technology for Experiential Learning
- ☐ Other, please specify... _____

**What percentage of the course grade is based on students' participation in the experiential learning component(s)?**

For example: If grades for the course are based solely on participation in the experiential learning component, the percent of experiential learning in course grade would be 100%;If the experiential learning component is voluntary andnot considered in the course grade, the percent of experiential learning in course grade would be 0%If your course ispass/fail and

the experiential learning component is a required component of the course, please select 100%

0% 100%

**What percent of the course grade is based on assessment(s) of the experiential learning component(s)?**

For example: If the percent of experiential learning in course grade is 40%, and includes 10% for participation and 30% for a graded student reflection paper, then the assessment weight percent would be 30%

0% 100%

**How many sections of this course offer an experiential learning component?**

**How many sections of the course are offered in total per academic year?**

**Is this course a program requirement?**

- ○ Yes
- ○ No

**Are students required to participate in the Experiential Learning component(s) of the course?**

i.e. is the experiential component of the class mandatory for students?

- ○ Yes
- ○ No

**Approximately, how many students are enrolled in the course each academic year?**

**Please identify the source of funding for the experiential learning component(s) of the course. *if applicable***

**Approximately, how much funding is provided?**

For example: $4,000 per year plus $8,000 startup money

**Is there a community partner(s) affiliated with the experiential learning component(s) of the course? If so, please identify the community partner(s).**

**What are the core topic(s) addressed in the Experiential Learning component(s) of the course?**

**Is the community partner(s) involved in the planning of the experiential learning component(s)?**

- ○ Yes
- ○ No

**Is the community partner(s) Involved in implementing the experiential learning component(s)?**

- ○ Yes
- ○ No

**Is the community partner(s) involved in the assessment of the experiential learning component(s)?**

- ○ Yes
- ○ No

**Are any graduate student(s) involved in the experiential learning component(s) of the course? If so, what is their role?**

- ○ No grad students are involved
- ○ Grad students are involved in the teaching of the experiential learning component
- ○ Grad students are involved in assessing the experiential learning component
- ○ Grad students are involved in both teaching and assessment

**Are there any additional comments you would like to make regarding experiential learning in your course?**