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Experiential Learning Assessment in Post-secondary Education

Abstract
This article shares results from the research project "Experiential Learning Assessment in Post-Secondary Education." The purpose of this research was to develop a further understanding of experiential learning assessment (EL) through an exploratory approach with university faculty and students. This article shares findings from the first part of a two-part research project examining the faculty experience of assessment in EL. A second research study is underway that provides the student perspective. The first phase of the research engaged University of Saskatchewan instructors with experience in experiential learning. Nine participants completed an online survey and six discussed their experiences and understanding in a focus group or an interview. Findings revealed that EL students were far more engaged with their learning than those in traditional courses. Participants applied their experience to expand upon current definitions and characteristics of EL assessment. They also shared differences with EL instruction and assessment as compared to traditional courses. Common themes identified by participants included a need for questioning and processes to integrate more EL assessment strategies into teaching and learning. Participants shared advice for those considering EL approaches in their own teachings. As EL continues to be a key area of growth for many universities and post-secondary institutions, this study contributes to the body of knowledge and appeals to faculty, designers, and others tasked with implementing effective EL.

Cet article présente les résultats du projet de recherche intitulé « Évaluation de l'apprentissage par l'expérience dans l'enseignement postsecondaire ». L'objectif de cette recherche était de développer une meilleure compréhension de l'évaluation de l'apprentissage par l'expérience par le biais d'une approche exploratoire avec le corps enseignant et les étudiants et les étudiantes de l'université. Cet article présente les résultats de la première partie d'un projet de recherche en deux parties examinant l'expérience du corps enseignant en matière d'évaluation de l'apprentissage expérientiel. Une deuxième étude est en cours pour donner le point de vue des étudiants et des étudiantes. La première phase de la recherche a impliqué des instructeurs et des instructrices de l'Université de la Saskatchewan ayant une expérience en matière d'apprentissage par l'expérience. Neuf participants et participantes ont répondu à une enquête en ligne et six ont discuté de leur expérience et de leur compréhension dans le cadre d'un groupe de discussion ou d'un entretien. Les résultats ont révélé que les étudiants et les étudiantes en apprentissage expérientiel étaient beaucoup plus impliqués dans leur apprentissage que ceux et celles qui suivaient des cours traditionnels. Les participants et les participantes ont mis à profit leur expérience pour développer les définitions et les caractéristiques actuelles de l'évaluation de l'apprentissage par l'expérience. Ils ont également fait part des différences entre l'enseignement et l'évaluation de l'apprentissage expérientiel et les cours traditionnels. Les thèmes communs identifiés par les participants et les participantes comprenaient le besoin de questionnement et de processus pour intégrer davantage de stratégies d'évaluation de l'apprentissage expérientiel dans l'enseignement et l'apprentissage. Les participants et les participantes ont donné des conseils à ceux et celles qui envisagent d'utiliser des méthodes d'apprentissage expérientiel dans leurs propres cours. Étant donné que l'apprentissage par l'expérience continue d'être un domaine clé de croissance pour de nombreuses universités et établissements postsecondaires, cette étude contribue à l'ensemble des connaissances et s'adresse aux professeurs et aux professeures, aux concepteurs aux conceptrices, ainsi qu'aux autres personnes chargées de mettre en œuvre un apprentissage par l'expérience efficace.

Keywords
assessment, experiential learning, faculty, higher education, innovative instruction; évaluation, apprentissage par l'expérience, faculté, enseignement supérieur, enseignement innovant

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Universities in Canada are looking to increase student engagement and provide an improved learning experience. One approach is to connect university learning more directly with the world outside of post-secondary education by more closely replicating or integrating authentic contexts (Smeltzer et al., 2021). This emphasis on creating deeper, more authentic learning is enhanced by the application of experiential learning (EL) principles. EL refers to a teaching approach resulting in more authentic, student centered, and hands-on classroom-based learning compared to traditional classroom experiences (Kolb & Kolb, 2005). EL subscribes to the long-standing notion that genuine education comes about through experience and reflection (Dewey, 1938).

Considerable previous research has demonstrated that EL is a high impact educational practice that is purposeful, effortful, and provides unique opportunities to students (Kuh, 2008). Due to its perceived effectiveness for learner success, EL is a popular option for instructors teaching at the postsecondary level. Additional research from Gavillet (2018) identified added benefits as a result of EL by describing how students make a difference in larger contexts, while also improving their ability to influence their communities. As a result, more universities are promoting EL teaching methods, but there are no generally accepted assessment guidelines for instructors using EL in their classes. There has been some research on EL assessment identifying commonly used methods, but as reported by Yates et al., (2015), this research could be classified as “an inventory” rather than an assessment of effectiveness.

All instructors need to accurately assess and evaluate student work in novel learning environments. It is our contention that innovative assessment specific to EL is more effective than solely using assessment methods employed in traditional or lecture-based learning. As well, with the rise in land-based education, a learning environment connected to the land and central to Indigenous teaching with known benefits to emotional and physical health (McDonald, 2023), post-secondary institutions may turn to land-based EL as a form of engaging students in more culturally relevant ways, and to address Reconciliation. We believe that for this to be successful instructors require a deeper understanding of how land-based learning can be assessed.

There is also a need for an assessment framework for EL. The lack of a specific EL assessment framework poses a problem for those wishing to share in the benefits of this form of instruction. As not enough is known about the factors important to effective assessment of EL and how these positively contribute to the achievement of student outcomes, this research study is conducted at a high level and is exploratory in nature. This study’s purpose is to learn the perspectives unpinning the use of EL and EL assessment through interaction with university faculty who make regular use of EL methodologies and associated assessment in land-based learning contexts and other. With this understanding, we can begin building a framework for EL assessment. As well, assessment is a key focus of study in the Scholarship of Teaching and Learning (SoTL) and this research hopes to add to a growing understanding of EL as a methodology (Dickson & Treml, 2013).

This study examines an area that needs increased research activity: Assessment practices in EL. A review of the literature found limited scholarship in assessment in EL. With sustained research in EL a comprehensive set of EL assessment options can be created for instructors and institutions to employ. Direct input from seasoned instructors who use EL methods in their teaching is important to the development of assessment options matched to the student experience and allow the instructor to unpack their method.

Literature Review

Defining Experiential Learning

When discussing the origins of experiential learning, as a concept and methodology, Dewey (1938) is most often credited with developing the concept. Dewey (1938) considered learning by experience to be a two-stage cycle that incorporates both experience and reflection. Kolb and Fry (1975) expanded Dewey's EL model to a four-stage cycle. Their revised approach included: concrete experience, observation and reflection, concept formation, and testing of concept in new situations. The model proposed by Kolb and Fry (1975) became the basis for or the confirmation of a range of EL concepts and methods such as experiential education (Breunig, 2005), service learning (Grossman et al., 2010), problem-based learning (Bethell & Morgan, 2011), and others such as action learning, inquiry-based learning, and case studies (Quinn & Shurville, 2009). We include in this land-based teaching, which happens in forms that range from outdoor group discussions on land-relevant skills and knowledge, to highly culturally directed engagement using the entire outdoors as a classroom (Aikenhead & Ogawa, 2007; Battiste, 2009), thus, is also a natural fit for EL concepts and teaching methods (Yates et al., 2015).

EL methods such as, for example, peer-to-peer (Nnodim, 1997), active learning (King, 1993) or reflection (Breunig, 2005) have been repeatedly recognized as more likely to result in better retention of knowledge and superior academic performance compared with traditional teaching methods. Much of the work in delivering EL-based experiences is in developing creative ways to put learners into a situation that is more authentic (Kuh, 2008). EL often uses context as the driver in choosing and the instructional methodology (Gobeil, 2022). However, there is a need to ensure use of an appropriate complementary assessment strategy (Wilson et al., 2018) as instruction often starts with defining outcomes, planning the assessment, and then selecting the appropriate method of instruction.

Assessing Experiential Learning

As noted above, many researchers have examined the positive impact of experiential teaching methods on student learning. Less research focuses on the choice of assessment method used to assess students in courses that use experiential teaching but there is research emerging (Chan, 2023). The primary purpose of assessment is to evaluate the impact of learning on student knowledge and skill levels (Quinn & Shurville, 2009; Dick, Carey, & Carey, 2005). Assessment frames student learning and may, in many cases, have more impact on the learning process than teaching (Gibbs, 2006). Traditional assessment, such as a multiple-choice test or essay, is often considered passive, discrete, and universal, but more importantly is thought to be separate from the actual teaching and learning that it is paired with (Anderson, 1998). The use of traditional methods of assessment has tended to perpetuate as most post-secondary instructors teach and assess based on their own experience (Quinn & Shurville, 2009) so traditional assessment methods in EL courses are commonly used due to their familiarity and ease of use (Murphy, 2006). Some research studies have identified a range of assessment methods in EL courses, but these studies also show EL teaching that primarily relies on traditional assessment formats such as tests and quizzes (Davis, 1988; Garvin & Ramsier, 2003; Breunig, 2005; Rhodes & Roessner, 2009). Yates et al. (2015) engaged in research to address the gap in the literature on the use of traditional type testing methods in EL courses. At a Canadian U15 university they found that traditional methods such as the essay were still commonly used in courses where EL delivery was a major component. In a subsequent

study (Wilson et al., 2018), it was noted that when not matching EL delivery to EL assessment, success achieving student learning outcomes could be compromised.

Breunig (2005) investigated multiple assessment methods for evaluating student performance, including use of journals and presentations and traditional assessment methods. They felt that a multiple-methods approach was necessary to address the varied style of learning and prior knowledge across the range of students. Qualters (2010) also recommended using mixed assessment methods and those that match experiential teaching. Their model for assessment was based on the assessment of student skills before, during and after the learning experience (Input, Experience, Output model: I-E-O). Qualters (2010) believed that each learning experience is intended to help students answer a key question directly relevant to successful achievement of the learning outcome(s). Qualters called this the "burning question" and that to develop meaningful assessment one must not lose sight of this question. An additional form of EL assessment is a debriefing exercise. Dennehy et al.'s (1998) use of debriefing connects Kolb's (1991) model of EL to the design of an exercise creating a match between experience and assessment. This activity looks to engage learners to reveal what they have taken away from their EL learning experience.

A key message from the existing literature is the importance of developing and using various methods of assessment that are compatible with the concept of deep learning and the use of EL methodology. Despite these examples there is a paucity of practical research on the appropriate types of assessment methods for EL courses. Most of the evidence to support the perceived need to match a form of EL assessment to EL delivery is through anecdotal reports from students or through course assessments. Research in EL is growing but more data-driven studies are required. The purpose of this study was to elicit via survey and first-hand discussion, the perceptions of and value placed in EL by experienced instructors, and how they reflect it in their practice.

Methodology

Before the research started, an application was made to the Social Sciences and Humanities Research Council (SSHRC) Insight Grant Program. The grant application was successful, and funding was provided to support the project. Once the funding news was received, a full ethics application was submitted for the proposed study. Ethics approval was granted by the University of Saskatchewan Research Ethics Board (#215) and a graduate student was hired to support the research.

Participant Identification and Data Collection

A convenience sample of EL instructors at a U15 Canadian university was used for this study. The initial contact with participants was based on those who the research team knew were involved in EL-based instruction. The selection of participants was further delimited based on the criteria that an instructor needed to be using a minimum of 50% course activity in experiential conditions such as field work, land-based, or other authentic contexts. Data were gathered through a review of course syllabi, an online survey, and group and individual interviews. The different sources provided a variety of lenses to answer the research questions. The online survey was designed by the research team with consultation from the university's internal research support unit. To ensure the depth and relevance of inquiries during subsequent focus group sessions, the course syllabi served as a foundational resource for crafting our research questions. The survey had

nine exploratory, open-ended questions and three demographic questions on gender, age, and years of teaching experience (Appendix A).

The online survey was distributed to the list of faculty known to teach EL based courses that fit the 50% EL criteria described above at the University of Saskatchewan (n = 14). Data were collected from January 15 to February 12, 2021, from a total of nine participants (response rate of 64%). Participant survey responses were explored a posteriori to let the main idea, or themes be developed inductively as described by Fraenkel et al. (2012). The participant survey responses were then uploaded into NVivo and coded based on the similarity of language and focus (Saldaña, 2016).

The data from the online survey were used to create the subsequent questions for the semi-structured focus group and individual interview (Appendix B). Of the nine survey respondents, five participated in a single focus group and one respondent was interviewed individually (due to a scheduling conflict with the focus group time). Each participant was encouraged to share their firsthand experiences with EL to surface as much insight as possible on assessment. The focus group and interview were digitally recorded using the Cisco WebEx platform (Cisco Systems, Inc., 2022). Original plans entailed using only audio capture for transcript creation, but safety procedures induced by COVID-19 safety guidelines transformed the group meeting into a virtual setup, which resulted in an additional video component. With participants' consent, the recorded data were only accessible to the researchers and the PhD student conducting the focus group. The video-audio combination was valuable in corroborating visual signals, participant interactions, and emotional responses in relation to EL and instruction. The presence of video data played an important role in ensuring the emphasis was correctly placed on topics and ideas the participants deemed important.

The design in this study acted as a safeguard against inaccuracies that could stem from the inability of survey only methods to shed light on information regarding individuals' attitudes, beliefs, motivations, or actions (Wong, 2008). By employing a qualitative data analysis method, the researcher could ascertain participants' knowledge, skills, and attitudes. Mack and Woodsong (2005, p. 1) stated that qualitative research "offers insights into the 'human' facet of a problem, i.e., the often-conflicting behaviors, beliefs, views, emotions, and relationships of individuals."

Data Analysis

The analytical approach in this study was qualitative where researchers examined both survey and focus group/interview data to answer the research questions. In addition to manually coding the data, NVivo software was used with both data sets. NVivo is software that aids in data coding, search, and retrieval of researcher codes and themes.

To begin, survey responses were analyzed and coded by the research team to identify emerging themes. The survey analysis plan involved examining participant experiences and applying a thematic analysis with an open-coding technique (Glaser, 2016). Researchers coded the responses based on content and grouped them into themes for further analysis. These themes served as the foundation for formulating focus group inquiries, which helped further explore the initial findings from the survey.

Limited demographic data were also collected in the online survey encompassing gender, age range, duration of teaching experience, and course levels taught. The researchers employed the in-built statistical tools in the Voxco Survey platform to descriptively analyze these variables. This data was used to create a demographic profile of the research participants.

The focus group and interview data were recorded and transcribed using Microsoft's built-in voice-to-text option. The output from the initial process was then reviewed line-by-line by one of the researchers and errors were corrected. Once a clean and accurate transcript was created, the data was shared with the rest of the research team. Each researcher independently reviewed the data, coded the transcripts, and generated themes. When each team member completed their analysis, the entire group met to discuss what they found and compare their results. This discussion process created confidence in the final themes as they were collectively reviewed and discussed. The process also led to a more refined and deeper understanding of the results.

Results

Demographics

In this study, participants were predominantly men (n = 6, 67%). One participant preferred not to respond regarding gender. All participants were 35 and older (44% were aged 35-54 while 56% were 55 or older). All participants had 10 or more years of experience instructing at the post-secondary level (44% 10-20 years, 56% more than 20 years).

The survey findings showed prior experience with EL in participants' educational journeys. Seven faculty participants experienced EL as part of their own education, which influenced how they approached their teaching. Some participants reflected on these experiences, and among those who did, the reflections were positive. There were others who integrated EL in their private as well as their professional lives: "It is embedded in my graduate student training philosophy and parenting as well." "I was taught in an experiential learning mode all my life." "Throughout my life, my own best learning experiences (formal or informal) were absolutely the ones outside."

The analysis of survey and focus group/interview data revealed four key themes: Uniqueness of Teaching in an Experiential Learning Context, How to Plan for Experiential Learning Assessment, Successful Experiential Learning Assessment Approaches, Faculty Questions/Concerns about Experiential Learning Assessment.

Uniqueness of Teaching in an Experiential Learning Context

Participants identified key positive differences of EL over traditional courses. They reported better student engagement, and increased student confidence. They described their courses as having value-added learning, and increased opportunities for students to "take control" of assessment. Reported benefits were not limited to the students but also experienced by the instructors themselves. These benefits included increased satisfaction with teaching and assessment practices and enhanced relationships with students. All participants discussed the positives of interacting with a student body that was far more engaged with their learning than what they have observed in traditional courses. The engagement did not occur based solely on course design or learning context, but required intentional focus on certain considerations while instructing EL courses by instructors: "Instructors need to be flexible." "Instructors need to balance objectivity with subjectivity." "Instructors need to allow time for students to work through problem solving and knowledge application in real-world settings." "Assessment must adapt to establish a comprehensive understanding of their students' success."

All participants reported positive experiences instructing in EL settings. EL as a methodology was discussed and nearly all participants described learning that took place in an authentic setting, whether that be in a lab, the field, communities, or the "real-world."

"Presenting students with real or simulated problems and allowing them to work through them including as many real-life steps as possible and keeping the environment they are working in as real-world as possible."

Another key finding was the inclusion of hands-on or practical components in all EL courses, not just being outside a traditional classroom but taking advantage of the rich resources available. "For me, experiential learning is all about putting the tools of the trade into the student's hand." There were also mentions of the application of knowledge and undertaking problem-solving strategies as a method of learning. For some, this meant applying theory, concepts, or framework. For others, it was more about the acquisition and application of skills.

Participants provided advice to instructors considering an EL teaching approach. Their message was overwhelmingly supportive of integrating or shifting to EL as a teaching and learning practice that "means the world to students."

It was also noted that instructors should experiment to find what works for them. One participant suggested it is acceptable to have time outside the field and laboratory learning contexts and deliver traditional lectures: "Don't spend all of your time in the field or laboratory. Some old-fashioned lecture and note taking is good and done well, is much appreciated by students as well."

Lastly, there were statements about the importance of taking time in EL courses. One suggested having small classes so that you have time to work with each student, while another emphasized that time with each student will be necessary as "experiential learning is not a one-size-fits-all approach." Another suggested that time is needed for "exploration, observation, and conversation."

How to Plan for Experiential Learning Assessment

While some participants facilitated assessment strategies set before the beginning of the class, others determined their assessment strategies ad hoc. This approach attempted to "meet the needs of their different student cohorts." However, one participant stated, "there are many good ways to develop evaluation [assessment] tools."

Successful EL assessment characteristics were identified, and considerable focus was placed on students deciding or constructing assessments specific to the activity. The co-construction of criteria was noted as being another way to synthesize multiple activities and convey meaning from firsthand experiences.

Participants shared that assessment in EL acts to focus students on the key content or activities in the course. Two participants mentioned specifically practical/field exams: "Having a formal assessment is needed to help focus students. I have experimented with not including an exam in a class and found that students treated the material overly casually. Including a practical exam encourages focus throughout the course." And, "Re: the field exam, gets them focused on learning the material rather than drifting along and coasting on their group members."

Another participant mentioned designing assessments that "hint at concepts [students] will encounter during the experiential learning gets them looking at the environment in different ways."

Successful Experiential Learning Assessment Approaches

Several participants suggested that students should decide how they are assessed, reflecting an interest in student-centered assessment methods.

One participant stated, "The students are more engaged because they are learning about questions that they have asked—in the courses I offer them the freedom to explore any research question they want; my role is to provide them with the means to explore that question."

Another participant elaborated on the value of doing so, but also noted that some students do not adjust well to this newfound responsibility:

> This allows them to convey what they have learned in a way that is meaningful for them, and usually this brings out their most creative tendencies. Unfortunately, a lot of students do not like this because they've been taught for years to adhere to a rigid way of completing coursework. It's more work on my end, but the students seem to get more out of the course.

Another suggested strategy was to allow for reflections to "synthesize multiple experiences" and to require students to submit additional observations outside of the requisite, outlined ones for the class. Other successful suggestions included practical exams for assessing skill acquisition and use of presentations, which incorporate broader concepts of the experience.

Group interactions were mentioned, but not necessarily as an assessment strategy but rather as a learning strategy.

Faculty Questions/Concerns about Experiential Learning Assessment

Participants were asked as part of the survey if they had questions or concerns about how EL is used as an assessment strategy. Specific concerns raised included balancing subjectivity with objectivity, that grades tend to skew high, that authentic assessment is still a gap, and that students are all entering with different base-levels of knowledge and skill and there must be a balance "between pushing the experience but not overextending." Several participants had no concerns. Other participants stated that "EL is not an assessment strategy". This finding demonstrates an area of growth in faculty EL knowledge and contributes to the belief that EL assessment is still uncommon because of a lack of faculty understanding (Yates et al., 2015).

Discussion

This section brings forward messages we saw in the data that impact assessment in EL. Based on the results, several key themes were developed from the experiences of the participants. Most of the participants were experienced educators which may mean they are more comfortable with the uncertainties of EL based on their prior experience. They may have developed strong interpersonal skills in working with students and had a greater range of instructional confidence, including more experience in course design. They also would have much more teaching experience leading to comfort with the flexibility, which is a part of teaching and assessment in an EL environment.

Addressing EL in general, all participants agreed that it improves the student learning experience. Some of the important ideas were increased benefits for students, including engagement, deeper understanding, and more control over their learning. Many participants

partook in EL opportunities in their schooling and the outcomes resonated with these participants at the time of the survey, suggesting potential longevity in the benefits of such courses. It also showed the influence of prior learning experiences on faculty teaching and assessment practices. Even so, the language the instructors used speaks to the fact that many EL practitioners are faculty who do not have an academic background in EL, using terms like "exploration" or "observation" instead of "concrete experience," "reflection," "concept formation," "concept testing" (Kolb and Fry, 1975).

Thinking in terms of the EL cycle, either as described by Dewey (1938) or Kolb (1984), the language of the participants was weighted toward experience, but less so toward reflection. Only one participant referred to reflection suggesting that the participants overall did not overtly guide their students through that stage or used it as a form of assessment. The lack of attention paid specifically to reflection may be a product of their prior learning experiences which, considering the ages of the participants, included a more traditional delivery mode. Institutions interested in using EL to improve achievement of learning outcomes and improve student experience may look to working with their instructors to develop and use teaching strategies that use guided reflection in the both the learning experience and as a means of assessment.

Specific themes related to assessment in EL were also discovered. The mention of problem solving and application in the data speaks to the need to take time for reflection and/or debriefing in EL contexts. It is quite likely that students are not aware of EL until after being introduced to its main concepts and have begun practicing the use of those methods. However, it also can indicate that they embraced EL methods because the teaching mode was unconsciously familiar to them.

There was the belief that many things need to be balanced in EL assessment. Subjectivity and objectivity must be balanced and differing base levels of student knowledge and skill accounted for. Practical exams should assess skill acquisition, while broader approaches such as reports and/or presentations can be used to assess knowledge, engagement, and extended learning. Co-construction of assessments at a course's start would also benefit students in an EL setting. While co-construction of assessment and its impact on student learning were not specifically addressed, it was clear from participant responses that co-construction was often used, and it was felt to be effective in terms of student learning and the student experience. This trend speaks to the need to provide EL activities that are structured and guided, so that the student experience is more consistent across the cohort and that desired learning outcomes are achieved. The subsequent strategy allows for additional experiences or experimentation, facilitated through co-construction of assessment, by students who try to go beyond the experience provided by the instructor.

More time for assessment is also important if students are to fully demonstrate their skills and knowledge. Reference to the importance of time was found throughout the participant responses. In our study, time referred to the allotted instructional time based on the class meeting times, time allotted to assessment, and the university requirements for student contact hours. Group activities necessitate the delivery of experiences where the additional time and resources required for EL are difficult to provide. Group activity is not a learning outcome unless that is one of the experience's purposes.

An area we wondered about was connection to EL programming and connections to Indigenous traditions and culture. In acknowledging the importance of including Indigenous perspectives in academic discourse, it is evident that our study lacks representation from Indigenous voices, and "more work is needed to unpack and rethink the assumptive values of our education systems" (Battiste, 2013, p. 70). Despite the diversity of Indigenous knowledge, historical marginalization and systemic biases have contributed to a gap in our understanding. The importance of integrating Indigenous knowledge into research in EL cannot be overstated, offering

unique perspectives that enhance the depth and authenticity of academic discussion. Our team hopes to move towards "a field which privileges Indigenous concerns, Indigenous practices, and Indigenous participation as researchers and researched" (Smith, 2021, p. 123).

Limitations

The research is intended to be exploratory and highlight areas not commonly examined in EL assessment. It is not intended to create a definitive understanding of faculty experience. Specific limitations included a small number of participants. The 14 participants provided rich data, but the number may not be viewed as fully comprehensive. A lack of access to all faculties at the host university meant that we could not access input from all disciplines. However, we felt that our participant data was sufficient to provide us with a snapshot into the activities of faculty and answer our questions. Future research should attempt to sample a broader range of participants.

Additionally, the study relied heavily on self-reported measures through the survey and interview. Such reporting in analyzing educational practices, while accepted as an acceptable research method, may be subject to instructor bias or social desirability effects (Quinio & Lam, 2021). Objective measures or observer ratings could provide additional insights into participant outcomes.

Lastly, the research was conducted within a single academic institution, potentially limiting the transferability of the findings to other education settings with different curricula, resources, and student populations. Addressing these limitations in future research endeavors would better inform EL assessment practices and policy decisions.

Conclusion

It was clear from our findings that instructors must be comfortable with a different instructional and assessment role when they incorporate EL. Traditional transmission and assessment of information and learning is less successful in EL contexts. When offering advice, participants suggested that instructors need to shift their role from lecturer to conversationalist. Instructors should see their role as guiding experiences but not dictating them. In EL, time must be taken to allow for deeper individual engagement with students to adequately assess each individually. However, participant responses indicated a greater focus on the specific EL activities and less on reflection activities. As it was suggested that teaching methods used by instructors are usually based on their own learning experiences, it may be that encouragement in the use of reflection in EL courses as a form of assessment is necessary and would realize the completion of EL cycle and potentially greater achievement of learning outcomes.

Future research should focus on identifying early career EL-based instructors who may have experienced EL as students. Learning from those who are new to the academy may help identify supports for other faculty who wish to add EL to their teaching approach but are not aware of the possibilities. A future focus in this area should include the study of unexamined cultural teaching and learning practices. In the syllabus review, survey, and interviews no specific mention was made about culturally motivated or supported instructional practices. This absence points to a need for a stronger focus on Indigenous ways of knowing and teaching and would add a missing component to our understanding. Despite this absence, the idea that assessment for EL should flex to the student cohort characteristics suggests that EL assessment designed with such flexibility would be best in supporting instructional practices that have a stronger focus on Indigenous ways of knowing and teaching.

Further to the application of an Indigenous knowledge lens to EL, more engagement with First Nations educators and Elders should take place to add an important cultural voice to EL research. This aspect of EL course development is focused on community service learning and student engagement, not on the field of assessment that is the focus of this research.

Lastly, any study of EL assessment must be based on what faculty know about good assessment in general. It was felt by participants that co-creation of assessment with students in all teaching and learning contexts often leads to more effective results. EL has a student-centered focus, and it appears that this needs to be expanded to include student-driven assessment. But what is the impact? Future EL assessment study could benefit from digging more deeply into faculty knowledge of assessment creation. Generating a baseline and then connecting current experience and knowledge to EL methodologies may be a true indication of instructor contribution to student progress or success.

References

Aikenhead, G., & Ogawa, M. (2007). Indigenous knowledge and science revisited. *Cultural Studies of Science Education, 2*(3), 539–620. https://doi.org/10.1007/s11422-007-9067-8

Anderson, R. S. (1998). Why talk about different ways to grade? The shift from traditional assessment to alternative assessment. *New Directions for Teaching and Learning, 1998*(74), 5–16. https://doi.org/10.1002/tl.7401

Battiste, M. A. (2013). *Decolonizing education: Nourishing the learning spirit*. UBC Press.

Battiste, M., & Henderson, J.Y. (2009). Naturalizing Indigenous knowledge in eurocentric education. *Canadian Journal of Native Education*, 32(1), 5–18. https://doi.org/10.14288/cjne.v32i1.196482

Bethell, S., & Morgan, K. (2011). Problem-based and experiential learning: Engaging students in an undergraduate physical education module. *Journal of Hospitality, Leisure, Sport & Tourism Education, 10*(1), 128–134. https://doi.org/10.3794/johlste.101.365

Breunig, M. (2005). Turning experiential education and critical pedagogy theory into Praxis. *Journal of Experiential Education, 28*(2), 106–122. https://doi.org/10.1177/105382590502800205

Chan, C. K. Y. (2023). *Assessment in experiential learning*. Routledge. https://doi.org/10.4324/9781003018391

Cisco Systems, Inc. (2022). Cisco Webex [Computer software]. https://www.webex.com/

Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist, 35*(2), 236–264. https://doi.org/10.1177/0011000006287390

Davis, D. R. (1988). *The effectiveness of the assessment of learning outcomes of students in experiential learning programs.* [Unpublished doctoral dissertation]. Southern Illinois University.

Dennehy, R. F., Sims, R. R., & Collins, H. E. (1998). Debriefing experiential learning exercises: A theoretical and practical guide for success. *Journal of Management Education, 22*, 9–25. https://doi.org/10.1177/105256299802200102

Dewey, J. (1938). *Experience and education*. Collier Books.

Dick, W., Carey, L., & Carey, J. O. (2005). *The systematic design of instruction* (6th ed.). Allyn and Bacon.

Dickson, K. L., & Treml, M. M. (2013). Using assessment and SoTL to enhance student learning. *New Directions for Teaching and Learning, 2013*(136), 7–16. https://doi.org/10.1002/tl.20072

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (8th ed.). McGraw-Hill.

Garvin, M.R., & Ramsier, R.D. (2003). Experiential learning at the university level: a US case study. *Education & Training, 45*(5), 280–285. https://doi.org/10.1108/00400910310484349

Gavillet, R. (2018). Experiential learning and its impact on college students. *Texas Education Review, 7*(1), 140–149. https://doi.org/10.26153/tsw/21

Gibbs, G. (2006). How assessment frames student learning. In C. Bryan & K. Klegg (Eds.), *Innovative assessment in higher education* (pp. 23–36). Routledge. https://doi.org/10.4324/9780203969670-13

Glaser, B. G. (2016). Open coding descriptions. *Grounded Theory Review, 15*(2), 108–110.

Gobeil, M. J. (2021). *The investigation and development of experiential learning theory in primary and secondary education*. [Doctoral dissertation, University of Saskatchewan]. Harvest. https://harvest.usask.ca/handle/10388/13740

Grossman, J. M., Patel, M., & Drinkwater, L. E. (2010). Enhancing undergraduate agro-ecological laboratory employment through experiential learning. *Journal of Natural Resource & Life Science Education, 9*, 31–39. https://doi.org/10.4195/jnrlse.2009.0017n

King, A. (1993). From sage on the stage to guide on the side. *College Teaching, 41*(1), 30–35. https://doi.org/10.1080/87567555.1993.9926781

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

Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education, 4*(2), 193–212. https://doi.org/10.5465/AMLE.2005.17268566

Kolb, D. A., & Fry, R. (1975). Toward an applied theory of experiential learning. In C. Cooper (Ed.), *Theories of Group Process* (pp. 33–57). John Wiley.

Kuh, G. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Association of American Colleges and Universities.

McDonald, M. (2023). *Indigenous land-based education in theory and practice. A yellow head institute special report*. Yellow Head Institute. https://yellowheadinstitute.org/land-based-education/

Mack, N., & Woodsong, C. (2005). *Qualitative research methods*.

Murphy, R. (2006). Evaluating new priorities for assessment in higher education. In C. Bryan & K. Klegg (Eds.), *Innovative Assessment in Higher Education* (pp. 23–36). Routledge. https://doi.org/10.4324/9780203969670-14

Nnodim, J. O. (1997). A controlled trial of peer-teaching in practical gross anatomy. *Clinical Anatomy, 117*(92), 112–117. https://doi.org/10.1002/(SICI)1098-2353(1997)10:2<112::AID-CA7>3.0.CO;2-X

Qualters, D. (2010). Bringing the outside in: Assessing experiential education. *New Directions for Teaching and Learning, 2010*(124), 55–62. https://doi.org/10.1002/tl.421

Quinio, A. E., & Lam, T. C. (2021). Methods and biases in measuring change with self-reports. In U. Luhanga, & A. G. Harbaugh (Eds.,. B*asic elements of survey research in education: Addressing the problems your advisor never told you about*, (pp. 193–217). IAP.

Quinn, D., & Shurville, S. (2009). From little things big things grow: scaling-up assessment of experiential learning. *Campus-Wide Information Systems, 26*(5), 329–344. https://doi.org/10.1108/10650740911004769

Rhodes, L., & Roessner, A. (2009). Teaching magazine publishing through experiential learning. *Journalism & Mass Communication Educator, 63*(4), 304–316. https://doi.org/10.1177/107769580806300403

Saldaña, J. M. (2016). *The coding manual for qualitative researcher*s (3rd ed.). SAGE Publications.

Smeltzer, S., Pieber, D., & Brooks, M. (2021). Experiential learning in the Canadian communications landscape. *Canadian Journal of Communication, 46*(3), 461–482. https://doi.org/10.22230/cjc.2021v46n3a4011

Smith, L. T. (2021). *Decolonizing methodologies: Research and Indigenous peoples* (3rd ed.).

Wilson, J., Yates, T., & Purton, K. (2018). Performance, preference, and perception in experiential learning assessment. The *Canadian Journal for the Scholarship of Teaching and Learning, 9*(2), 1–24. https://doi.org/10.5206/cjsotl-rcacea.2018.2.5

Wilson, J., & Schwier, R. (2009). *Authenticity in the process of learning about instructional design*. Paper presented at the annual conference of the American Educational Research Association, San Diego, CA. https://doi.org/10.21432/T2DS3S

Wong, L. P. (2008). Data analysis in qualitative research: A brief guide to using NVivo. *Malaysian Family Physician, 3*(1), 14.

Yates, T., Wilson, J., & Purton, K. (2015). Surveying assessment in experiential learning: A single campus study. *The Canadian Journal for the Scholarship of Teaching and Learning, 6*(3), 1–27. https://doi.org/10.5206/cjsotl-rcacea.2015.3.4

Appendix A
Online Survey Questions

1. Please describe your understanding of experiential learning.

2. What were the key differences you noticed or experienced in the experiential learning opportunity in your course(s) compared to other courses you have instructed? (for example, student engagement/reactions, instructional differences, learning outcomes, etc.).

3. What has been your experience with experiential learning prior to using it as an instructional method?

4. Describe your initial involvement in the different types of assessment in your experiential learning course(s).

5. What questions or concerns do you have about how experiential learning is used as a teaching strategy?

6. What questions or concerns do you have about how experiential learning is used as an assessment strategy?

7. In what ways have you noticed that experiential learning assessment supports the learning of your students?

8. What advice would you have for people who might be considering using an experiential learning approach?

9. What is your gender?
   Male
   Female
   Non-binary
   Prefer not to respond

10. What is your age?
    Under 25
    26-34
    35-54
    55 and older

11. How long have you been an instructor?
    0-5 years
    6-10 years
    10-20 years
    More than 20 years

12. We will be conducting follow-up focus groups on this topic. Would you be willing to be contacted to participate? (if you select yes now, you may opt out later).
    Yes
    No thank you.

Appendix B
Focus Group/Interview Questions

1. Discuss your motivation for teaching EL-based courses?
2. What engages your students in EL courses?
3. How do you develop EL assessment?
4. How do you engage students in the development of EL assessment?
5. How do you balance objectivity with subjectivity in assessing student work in EL courses?
6. Are the assessment methods you shared common across campus?