SSHRC Knowledge Synthesis Grant: New Ways of Learning

Final Report

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Bridging the Theory/Practice Divide:

Experiential Learning for a Critical, People-Centred Economy

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Bridging the Theory/Practice Divide:

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Key Messages

1. There is an <u>uneven disciplinary engagement</u> with experiential learning in the scholarship. In keeping with our original proposal, our synthesis focused on the nine professional fields associated with the Faculty of Community Services, Ryerson University: Child and Youth Care, Disability Studies, Early Childhood Studies, Midwifery, Nursing, Nutrition, Public and Occupational Health, Regional and Urban Planning, and Social Work. Of the fields listed here, only three (Nursing, Social Work and Midwifery) had engaged in systematic scholarship reviews of experiential learning.

2. There appears to be <u>no widely accepted operational definition of experiential learning</u>. As part of our synthesis, we searched the scholarship for the following types of teaching and learning experiences as well as associated terms: lab, field placement, practicum, internship, studio, co-op, and service learning.

3. There is an <u>overemphasis in research on a few methods</u> of experiential learning (e.g. simulations, problem-based learning, practice/field placements) despite the fact that there is a broader range of methods being discussed in the scholarship.

Bridging the Theory/Practice Divide:

Experiential Learning for a Critical, People-Centred Economy

Executive Summary

This report provides an overview and analysis of the current understanding of how "experiential learning" is conceptualized, implemented and evaluated in professional service fields of study. Better understanding of this educational approach will benefit educators as well as students. Experiential learning is an integral part of the authors' institutional culture: 90% of all undergraduate programs include an experiential learning component (Learning and Teaching Office, Ryerson University, 2015). Experiential learning is also rapidly expanding in other Ontario universities (Council of Ontario Universities, 2014). Despite its prevalent use, the field of experiential learning remains under-researched and the research that has been done is fragmented. There is a lack of evidence to support the extent to which this type of learning bridges the gap between theory and practice, broadens career prospects, and contributes to the development of students' critical thinking skills. This report focuses on the nine professional fields associated with the Faculty of Community Services, Ryerson University: Child and Youth Care, Disability Studies, Early Childhood Studies, Midwifery, Nursing, Nutrition, Public and Occupational Health, Regional and Urban Planning and Social work.

The methodological framework developed by Arskey and O'Malley (2005), was used to conduct a scoping review focused on experiential learning. This framework includes; 1) developing the research question, 2) searching for relevant studies, 3) selecting the relevant studies, 4) charting the data, 5) collating, summarizing, and reporting the results, and finally 6) consulting with stakeholders to better understand the findings (Arksey & O'Malley, 2005; Levac et al., 2010). This report includes a detailed description of the process and outcomes of research studies and grey documents that were uncovered and analyzed in the scoping review, followed by a discussion of the findings, areas for further research, and knowledge mobilization strategies and activities.

The results of the review include four key findings, 1) 'experiential learning' is a frequently used term used in undergraduate education; however, it is one that is often used without a definition. Or when a definition is used, there is not a common point of reference, 2) a number of methods identified as experiential learning opportunities were discussed in the articles analyzed in the departmental systematic reviews, 3) this knowledge synthesis focused on bridging the theory-practice gap because this gap is often tied to the use of experiential learning methods, and finally 4) amongst the 'community services' disciplines, there is an uneven disciplinary engagement in scholarly research about experiential learning.

Key messages from the review clearly illustrate an uneven disciplinary engagement with experiential learning in the scholarship, with only three of the above-mentioned schools, Nursing Social work and Midwifery, having engaged in systematic reviews of experiential learning. Furthermore, there appears to be a lack of a commonly-accepted operational definition of experiential learning. The review also highlights the disproportionate amount of research that focuses on a small number of types of experiential learning methods, including simulations, problem-based learning and practice/field placements, in spite of the fact that a broader range of methods are discussed in the scholarship.

The report concludes with the recommendation that further research be done with an emphasis on engaging relevant and interested stakeholders. It explicates the need for future research to enhance our knowledge of the impacts of "experiential learning" in general, as well as the need to bridge the theory-practice gap. Specifically, it is noted that further research needs to begin with the development of a consistent definition of 'experiential learning', as this will facilitate the comparison of various studies in order to inform the body of scholarship that explores this educational approach. It is also recommended that future research in the area of experiential learning shift attention from how we teach to focus on how students learn. It is proposed that this paradigm shift can be achieved through the engagement of key stakeholders, faculty development, analysis of student success, curriculum development and future research by professional practice disciplines.

Bridging the Theory/Practice Divide:

Experiential Learning for a Critical, People-Centred Economy

Key Findings

1.   Context

This knowledge synthesis sought to understand how experiential learning is conceptualized and implemented in professional service fields of study. Experiential learning has been described as a form of active, iterative, and hands-on learning, incorporating a process of ongoing reflection (Smith, 2010). It is also considered a form of unmediated learning, where the learner has a 'raw' experience, in contrast to mediated learning, a process in which material is synthesized and modified to shape the learning experience (Moon, 2004). Experiential learning is student-centred, leading to individual change as a result of reflection on an experience, as well as 'new abstractions and applications' (Itin, 1999). Yet, as will be discussed in this report, experiential learning definitions abound and there is a lack of consistency in how these methods are discussed in the scholarship.

Indeed, the scholarship tends to focus on descriptions of methods that can be associated with experiential learning. Experiential learning activities can include learning opportunities in and out of the classroom, such as placements, internships, field trips, international experience, extra-curricular workshops, guest lecturers, live actor simulation exercises, role play, video-making, and reflective activities (Schwartz, 2015; Wehbi, 2011; Moon, 2004). At our own institution, which has received national attention for its innovative learning approaches integrating entrepreneurship, social innovation, and applied learning, experiential learning is situated in programs such as the zone model of education, the most popular of which is Ryerson's Digital Media Zone, a "transdisciplinary workspace for young entrepreneurs" (Ryerson, 2011).

In fact, experiential learning is touted as an important teaching strategy within higher education. It can provide a bridge from the academy to the working world by giving students the opportunity to develop professional skills (Schwartz, 2015; Lu & Lambert, 2010; Bowen, 2008; Whitaker, 2004; Gault et al., 2000). It can also help develop socially responsible, civic-minded citizens with a strong sense of social justice (Buschlen & Goffnett, 2013; Ash & Clayton, 2004; Itin, 1999). However, the pedagogy supporting experiential learning outcomes is under-researched (Cronley et al., 2014). In particular, the connections between theory and practice require more extensive research (Wehbi, 2011; Cope et al., 2000). Students' reflections about their experiential learning opportunities are one source of evidence that researchers could use to evaluate learning outcomes (Ash & Clayton, 2004;

Baetz, 2011; Bowen, 2011; Bowen, 2008). But, as will be discussed in this report, more research is needed to bridge the gap between practice and experiential learning theory.

Our research synthesis explored this gap in knowledge in order to enhance student learning opportunities by focusing on how experiential learning is conceptualized in the scholarship and what we currently know about the outcomes of these teaching methods in bridging the theory/practice divide.

2.   Implications

Improving our understanding of experiential learning will assist the efforts of educators as well as students. Experiential learning is an integral part of our institution's pedagogical approach: 90% of all undergraduate programs include an experiential learning component (Learning and Teaching Office, 2015). It is a core feature of our professional degree programs here in the FCS (Nursing, Child and Youth Care, Disability Studies, Social Work, Nutrition, Midwifery, Urban and Regional Planning, and Occupational and Public Health). It is also rapidly expanding in other Ontario universities (Council of Ontario Universities, 2014). However, as noted earlier, the field of experiential learning remains under-researched and fragmented. For example, we have insufficient information about the extent to which experiential learning bridges the gap between theory and practice, broadens career prospects, and contributes to the development of students' critical thinking skills. In this knowledge synthesis, we explored these issues to help arrive at a shared understanding of the concept and outcomes of experiential learning that are evidence-informed.

Specifically, it is important to be aware of assumptions about experiential learning that have implications for learning and teaching (Moon, 2004). Providing a student with a "raw" learning experience or a chance to "learn by doing" does not necessarily mean the learning experience is an experiential learning opportunity. It is also important to explore how academic administrators select experiential learning opportunities, such as field placements. Ryerson's FCS consistently provides opportunities for experiential learning by sending students out into the field. However, with the exception of formal (i.e., field placement evaluations of student learning) and anecdotal feedback from students and field instructors, we have little information about the actual effects of these experiences. We particularly lack information about their efficacy in relation to bridging the theory-practice gap. Further, student participation in mandatory placements does not necessarily mean they are engaged in experiential learning. How do specific placements actualize the principles of experiential learning? Analyzing these learning experiences is further complicated because placement experience is often dependent on the strengths and interests of the educators and placement partners (Cope et al., 2000).

Additionally, curricula must be designed to accommodate the rapidly expanding experiential learning opportunities and the challenges associated with those opportunities (Jackson, 2015). In our experience, administrators and educators generally operate under the assumption that experiential learning is primarily about sending students out into the field, but they do not know the degree to which those students are engaged in experiential learning. Our project attempted to clarify the experiential learning process and address the assumptions and vagueness around this learning strategy, with the goal of improving current experiential practices and student learning.

This project is intended to make a scholarly contribution that will help institutions re-evaluate and redesign their curricula. The results should also provide social benefits for Canadians, by rigorously examining whether this rapidly expanding learning strategy actually addresses the theory-practice gap, contributes to career success and the development of critical thinking skills necessary for our knowledge economy, and the enhancement of the university learning experience. We also intend to contribute to enhanced educational policy by providing a "big picture" perspective on experiential learning in higher education. Our review has generated recommendations helpful for faculty development, student success, and curriculum development.

3.   Methodological approach

We conducted a scoping review of studies for this project. A scoping review is a systematic process for exploring the nature of the literature on a particular topic (Armstrong et al., 2011). Scoping studies, which "map" out the nature of the evidence in order to examine the breadth and depth of a field, often precede full systematic reviews or are completed when little is known about a topic (Arksey & O'Malley, 2005; Levac et al., 2010). We followed Arksey and O'Malley's (2005) framework in designing our scoping review. The components of this framework, as described by Arksey & O'Malley and Levac et al. (2010), included:

1)   Developing the research question;
2)   Searching for relevant studies;
3)   Selecting the relevant studies;
4)   Charting the data;
5)   Collating, summarizing and reporting the results; and
6)   Consulting with stakeholders to better understand the findings.

Research Question

In order to develop our scoping review research question, we developed a table outlining our Population of interest, Intervention, Comparison group and Outcomes (PICO). The research team met on three occasions in order to further refine the PICO criteria and develop the

following research question: "*How does experiential learning (field or classroom professional education) help prepare students or new graduates transition successfully into work/employment or bridge the gap between theory and practice*?" Our outcomes of interest were (1) to better understand the impact that experiential learning (intervention) had on bridging the theory /practice gap within the context of clinical/field placements for students and, (2) to better understand the impact of experiential learning (intervention) on fostering an easier transition to the workplace for new graduates.

Our population of interest was current undergraduate students and new graduates in the fields across the Ryerson University Faculty of Community Services, some of which include: Early Childhood Studies, Midwifery, Nursing, Nutrition, Occupational and Public Health, Social Work, Urban and Regional Planning. The articulated specificity of our research question makes our scoping review an improvement from Arksey and O'Malley's (2005) original recommendation, in that our research question is sufficiently broad to explicate the nature of the literature, but explicit enough that it defines the concept, target population and outcomes of interest so that an effective search strategy can be developed.

Search Strategy

In order to ensure that we were accessing potentially relevant literature, we sought the input of a health and social sciences librarian with extensive experience designing and carrying out search strategies for systematic and scoping reviews. We feel that this greatly enhanced our research team which included experts both in content and methodology. Unlike many scoping reviews, ours employed a rigorous search strategy involving six databases. We searched ERIC, Medline, CINAHL, Social Work Abstracts, Social Science Abstracts and Social Services Abstracts from 2008 to August 2015. The search combined subject heading and textword terms for experiential learning as per the parameters of our research questions. All searches were limited to English language studies. In addition, a supplemental search was conducted in Social Sciences Citation Index using the same parameters limited to the topic "urban planning." Due to the large number of recent systematic reviews on experiential learning for medical professionals, a decision was made to limit the searches in Medline and CINAHL to systematic reviews and meta-analyses.

In addition to electronic bibliographic database search, we conducted a hand search of 24 relevant journals as recommended by experts in the fields of interest from 2008-2015. This searching yielded 21,413 peer reviewed publications for initial consideration. After screening the reference sets for topic area relevance, all systematic or literature reviews were identified and screened. This approach was selected as a means of expediting the scoping review process. The majority of review articles found through this process were in the nursing domain, followed by social work and midwifery. Primary studies for the remaining fields of interest were also reviewed for the hand search.

Study Selection

Study selection involved an iterative process and two research assistants guided by members of the research team. These research assistants independently reviewed titles and abstracts and full text of articles using predetermined criteria. If disagreement occurred, the research assistants would discuss the issue until they could find a satisfactory resolution. When necessary, a third reviewer made the final decision if disagreement between the two reviewers could not be resolved. Before the list of inclusions were finalized, three core members of the research team completed a final screening using the inclusion criteria. Throughout study screening, the research team met weekly to review and discuss relevance screening and inclusion screening decisions in order to maintain consistency across reviewers. The overall screening process was managed using Distiller software. This software permitted the research team to upload the citations obtained from the search strategy, and manage the two-phase screening process. At the end of the screening process, we could identify which articles were included and which were excluded.
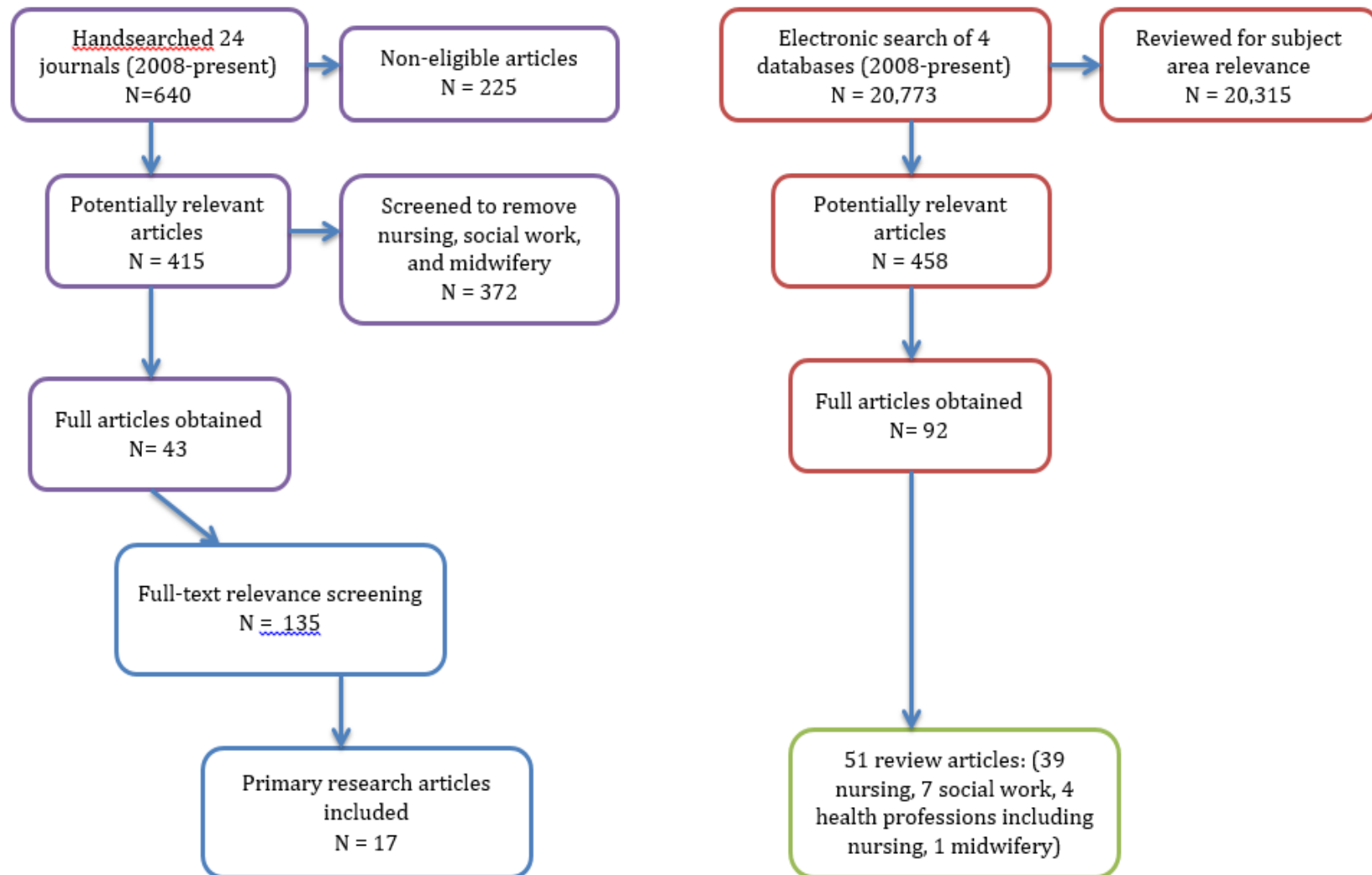
Two Phase Screening Process

Relevance Screening – all titles and abstracts were screened for potential relevance. The criteria guiding relevance screening of titles and abstracts were: English title/abstract, address one of the practiced fields under study, title/abstract reference to experiential learning, and title/abstract reference to undergraduate students or new graduates. If a title and abstract was deemed relevant, it moved to inclusion screening. All titles and abstracts that did not meet these criteria were excluded. Any titles and abstracts that were deemed to have uncertain relevance moved forward to inclusion screening.

Inclusion Screening – all relevant and uncertain titles and abstracts were reviewed for inclusion. Full text of the articles were examined using the following criteria: full text of article described experiential learning including an intervention, examined an experiential learning intervention for undergraduate students or new graduates, discussed how the study addressed the theory-practice gap in relation to one of the fields/disciplines that were a focus for this study. If the full text met the criteria, it was included. If there was uncertainty or disagreement, the two members of the research team discussed the article until a decision was made to include or exclude. A third reviewer was consulted when agreement could not be achieved. Any article that did not meet inclusion criteria was excluded.

Please see Figure 1 for a flow diagram that summarizes the screening process used in this research synthesis.

Figure 1: Peer-reviewed journal articles reviewed in the synthesis

Handsearched 24 journals (2008-present) N=640 → Non-eligible articles N = 225

Potentially relevant articles N = 415 → Screened to remove nursing, social work, and midwifery N = 372

Full articles obtained N= 43

Full-text relevance screening N = 135

Primary research articles included N = 17

Electronic search of 4 databases (2008-present) N = 20,773 → Reviewed for subject area relevance N = 20,315

Potentially relevant articles N = 458

Full articles obtained N= 92

51 review articles: (39 nursing, 7 social work, 4 health professions including nursing, 1 midwifery)

Grey Literature

As part of the scoping review, we examined grey literature in addition to published, empirical evidence. We began by searching for grey literature using Ryerson University's webpage dedicated to experiential learning (http://www.ryerson.ca/experiential/). Our research team also contacted Ryerson University's Learning and Teaching Office (LTO) and we met with a representative to identify additional grey literature relevant to our research question. We examined Ryerson's Learning and Teaching Enhancement Fund (LTEF) grant winners for potentially relevant grey literature (http://www.ryerson.ca/lt/grants/ltef/). We contacted key experts who suggested higher education websites for relevant reports, documents, published articles, and relevant grant projects. A search for websites related to Ryerson's approach to experiential learning produced results leading to the Ryerson Experiential Learning Office webpage where Ryerson's experiential learning model is described. This model was the subject of a report that was not included as part of the scoping review because it did not meet the inclusion criteria. The sidebar of this website gave links to articles of interest on experiential learning, co-operative learning education and service learning. Websites external to Ryerson that were considered for this study include Ontario's Ministry of Training, Colleges and Universities and Canadian and international higher education associations. Each external website had a publications section which was searched for potentially relevant reports and documents.

Data Extraction

Since scoping reviews do not involve quality appraisal (as do systematic reviews), we undertook data extraction. This is what Arksey & O'Malley would call "charting the data." In order to extract the data from each study, we created a "data-charting" form (Levac et al., 2010) for systematic review and primary studies (obtained from the electronic database search) and for grey literature. The types of data extracted were the discipline, definition of experiential learning, discussion of theory-practice gap, study design, population, intervention, length of follow up, outcomes, results, and research recommendations. One research assistant independently extracted data for the included studies.

Collating, Summarizing and Reporting Results

Once these data were extracted, we examined them for major themes, contextual information related to experiential learning, and differences across fields and types of learners (e.g. new graduate vs. current student). We also considered the meaning of the findings in relation to our study purpose and research question and examined how our findings impact future research, practice and policy.

<u>**Consultation**</u>

Upon completion of our scoping review, we will engage key experts in the area of experiential learning in a dialogue to review identified themes and determine any other insights beyond those determined by the literature. Please see section 7: Knowledge Mobilization for further discussion.

4.   Results

When this research project began, it had two goals:

> 1) to assess the quality, accuracy and rigour of the current state of knowledge about experiential learning in Canada (e.g., how experiential learning is defined and conceived by educators, and the assumptions that underlie the application of the term "experiential"); and

> 2) to identify knowledge gaps between theory and practice to help arrive at a shared understanding of experiential learning that is informed by empirical studies and outcomes.

The results from our 5 month research project demonstrate that these goals were accomplished, but our findings and implications were surprising.

Result #1: "Experiential learning" is a frequently used term in undergraduate education but it is one that is often used without a definition; further, when a definition is used, there isn't a common point of reference.

Of the 51 systematic reviews that we identified in our literature review, only three actually defined experiential learning. Importantly, two systematic reviews (Arveklev, Wigert, Berg, Burton, & Lepp, 2015; Rourke, Schmidt, & Garga, 2010) relied on the work of the educational theorist Kolb who defined experiential learning as "the process whereby knowledge is created through the transformation of experience" (Kolb, 1983, p. 38). One nursing systematic review (Popil, 2011) relied on the work of Thomas (2009), who offers this definition: "Experiential learning: engages students in both active processes and reflection on those processes. Experiential learning offers a multi-sensory, multi-modal environment that allows students to interact in real-life contexts, to construct individual meaning, and to engage in complex actions that mirror life outside school" (p. 94).

Other studies alluded to elements of experiential learning such as active learning or simulations, offering definitions of these methods. For example, Waltz, Jenkins and Han (2014) focus their nursing systematic review on active learning and offer the following definition: "For the purpose of this review, active learning was characterized as student/learner-based learning" (p. 392-393). Similarly, Stallwood and Groh (2011) in another nursing systematic review on service learning,

rely on a definition of active learning as a strategy that "engages students in a hands-on fashion in their own learning" (p. 298).

However, the majority of systematic review studies did not begin with an overarching definition or framework of experiential learning and instead, focused on describing specific methods (e.g. service learning, simulations, problem-based learning, team-based learning, action learning). The same conclusion can be drawn from the primary research articles we reviewed — only 1 of the 17 included had a formal definition of experiential learning. Examples of these methods and definitions will be given in Result #2.

Given the momentum behind experiential learning in undergraduate education in Canada, the dichotomy between experiential learning's popularity and the absence of its definition was surprising. Two implications emerge. First, our assumptions about the frequency of provision of experiential learning opportunities may be distorted. While many disciplines within the community services umbrella purport to offer experiential learning opportunities, we cannot conclude, based on our research, that these disciplines are offering comparable learning opportunities despite the fact that they use the same term. Without a definition, we run the risk of drawing broad and sweeping conclusions about disparate activities. Second, methodologically, we cannot presume to make meaningful or rigorous comparisons about experiential learning outcomes without first explicitly considering how experiential learning is defined and implemented to see if there is a legitimate basis of comparison. Without this certainty, comparative experiential learning research may be comparing "apples" to "oranges."

Result #2: A number of specific methods identified as experiential learning opportunities were included the articles reviewed within and across the reviewed systematic reviews. Specifically, of the 51 systematic reviews 27 articles focused on forms of simulation (high and low fidelity); 7 focused on problem-based learning; 5 focused on service-learning, 4 on field placements; 2 on use of technology. Less frequently found were methods including case studies, role-plays, Second Life, blogs and active learning. Definitions for those methods found most frequently in the systematic reviews are provided below.

Simulation: a) high fidelity patient simulation — "pre-developed patient scenarios utilizing computerized manikins that respond to intervention by providing instant feedback. It is proposed to be the highest level of realism offered with patient simulation" (Weaver, 2011, p. 38); human simulations capable of realistic physiological responses to learner intervention (Shearer, 2013). b) simulation strategies — guide students in learning those skills necessary for professional practice (e.g. games, models, games and multimedia presentations) (Rothgeb, 2008) teaching and learning activities, and their application to teach and assess skill acquisition through a simulated interactive experience" (Ricketts, 2011).

Problem-Based Learning: a student centred approach to learning wherein students work together in a collaborative manner to solve problems (Yuan, Williams & Fan, 2008); an

educational approach that encourages learners to identify and apply their own knowledge and skills to new situations (Shin & Kim, 2013); student-centred, inquiry-based method of instruction that fosters the development of critical thinking (Oja, 2011).

Service Learning: a teaching strategy that combines community service with direct teaching and student reflection. Intended to "enrich the learning experience, teach civic responsibility, and strengthen community" (Murray, 2013, p. 621); "equal and symbiotic relationship between academic study and service" (Stallwood & Groh, 2011, p. 297); experiential learning that relates real-life experiences to theoretical learning (Gillis & MacLellan, 2010).

Field/Placement Experiences: a) General Field/Placement work — a primary method of teaching and learning in helping students to perform their professional roles (Holden, Barker, Rosenberg, Kuppens & Ferrell, 2011); b) Rotational Field placements — "students systematically move between two or more field internships cites within a given year" (Gough, p. 90); c) International Field Work — provision of services at a global level and can also include social work practice with immigrant populations (Nuttman-Schwartz & Berger, 2012); d) Study Abroad Programs — no definition provided. Its purpose is to enhance students' self-efficacy and help them develop a global perspective with particular emphasis on building cultural competence (Edmonds, 2012).

Technology: a) Avatars and virtual worlds — "computer animations of a human or the projection people use to depict themselves… allowing educators to present an activity that would be difficult to read or demonstrate with a static picture" (Miller & Jensen, 2014); b) Mobile Technology — handheld platforms that incorporate hardware, software, and communication abilities" (O'Connor & Andrews, 2015, p. 138).

Result #3: Bridging the theory/practice gap was the focus of this knowledge synthesis as this gap is often tied to the use of experiential learning methods.

The majority of studies consulted in this synthesis emphasized the need to use experiential learning to bridge between the theories, skills, and values learned in class and in the workplace in increasingly complex fields of practice. As noted earlier, the most referenced method was that of simulations (which also included high fidelity simulations, and the use of standardized clients). It bears noting that most of these studies focused on the implementation of the selected method, rather than providing evidence of the efficacy of the method in bridging the theory/practice gap.

The use of simulations, as well as other methods such as problem-based learning, field education, in-service learning, and technology as experiential learning, to bridge the theory-practice gap centred on several outcomes described more amply below.

a) Student learning: experiential learning methods were linked to enhanced student learning, specifically the development and application of knowledge and skills. For example, a nursing systematic review of simulation-based learning noted that while this method does not necessarily

increase knowledge, it allows students to bridge the theory / practice gap through application of "knowledge to clinical contexts, narrowing the "know" vs. "do" gap (Cant & Cooper, 2010, p. 12). Similarly, Phillips (2011), in a social work systematic review, discusses service learning as a method that enhances student knowledge and skill development and allows for the application or integration of theory to practice.

b) Students' personal development: some of the studies in this synthesis focused on personal development in relation to bridging the theory / practice gap. Examining student development included a focus on: increased sense of self-efficacy (e.g. Oh, Jeon, & Koh, 2015); development of self-confidence (e.g. Neill & Wotton, 2011); greater feelings of preparedness for practice and transition to the workplace (e.g. Leigh, 2008); and an enhanced sense of competency (e.g. Nickless, 2011).

c) Enhancing patient safety and care: experiential learning methods were frequently discussed as powerful techniques through which to enhance student acquisition of competencies and skills necessary for practice that safeguards patient safety and care (e.g. Leigh; 2008; Mendenci, Solis, & de Moya, 2014; Norman, 2012;Yuan, Williams, Fang, & Yeo, 2012). A common thread in these discussions is the idea that methods such as simulations or case studies, for example, allow students to be confronted with real life scenarios that could prepare them for the complexity of field practice settings and allow them to gain the requisite skills, knowledge and competencies. In turn, this greater preparedness *prior* to joining the workforce helps them to develop an awareness of patient safety and care more quickly.

It is indeed encouraging that scholars attend to the question of bridging the theory/practice gap. However, as highlighted earlier, many of the studies reviewed do not address outcomes, but focus on describing experiential learning methods. Moreover, as many scholars note, there is a lack of, or insufficient evidence to support the claim that experiential learning does indeed assist in bridging the theory / practice gap (e.g. Garrity, Jones, VanderZwan, de la Rocha, & Epstein, 2014; Gelman & Tosone, 2010; Shin & Kim, 2013; Stallwood & Groh, 2011; Waltz, Jenkins, & Han, 2014).

Result #4: Amongst "community services" disciplines, there is uneven disciplinary engagement in scholarly research about experiential learning.

Our research focused on bridging theory / practice gaps through experiential learning in nursing, social work, nutrition, midwifery, occupational and public health, early childhood studies, disability studies, urban planning, and child and youth care (the Schools that comprise the Faculty of Community Services at Ryerson University). Of these nine schools, eight disciplines are professionally accredited (only disability studies is not). Their accreditation predisposes these disciplines to recognize the value of experiential learning, with its focus on hands-on, applied learning with outcomes that have implications for practice. It was our presumption about this predisposition that lead our research team to position our Knowledge Synthesis work the way we

did. We believed, from the outset, that there would be considerable breadth of scholarly work across the disciplines about experiential learning. And while, in the end, our results are drawn from 51 systematic reviews and 17 individual articles, we were surprised by the uneven disciplinary engagement in this type of outcomes-based research.

Of the 51 systematic reviews that met our inclusion criteria, 26 were from nursing, 8 were from social work, 6 were from other health care professions which explicitly included nursing, and 1 was from midwifery. At first blush it would seem that only three of the nine community services disciplines have scholarly research worthy of systematic review inclusion, however part of this is due to differences between these disciplines' research culture. The practice of using research review methods (e.g. systematic reviews, scoping reviews, metasynthesis and narrative reviews, among others — see Norman and Griffiths, 2014) is not widespread across community services disciplines or even within disciplines themselves. While these kinds of reviews have been common in nursing subfields with a health-science focus for the last 10 years (Norman and Griffiths, 2014), other nursing subfields such as mental health nursing are not widely engaged. In urban planning, the Journal of the American Planning Association, a top ranked urban planning journal, by contrast, only just announced in July 2015 (personal communication, 2015) that it would begin to accept review articles.

Our comprehensive title and abstract search was conducted on databases that extended beyond health science disciplines (see Section 3: Methodology). To further supplement these large database searches, we conducted hand searches of the most relevant journals in each of the Community Services disciplines in pursuit of experiential learning research that met our inclusion criteria.

5.   Additional resources

As noted in the methods section, our review of the scholarship on experiential learning also included an extensive search for grey literature from within and external to Ryerson University. This search identified websites and links to resources including key organizations; as well as key reports focusing on experiential learning.

<u>Relevant websites and links internal and external to Ryerson</u>
Internal:
- Ryerson Experiential Learning Office webpage:
  http://www.ryerson.ca/experiential/index.html
    - EL links: http://www.ryerson.ca/experiential/links/index.html
- Ryerson Learning and Teaching Office webpage: http://www.ryerson.ca/lt/
    - Past LTEF projects: http://www.ryerson.ca/lt/grants/ltef/past/index.html

External:

- [Ontario, Canada] Higher Education Quality Council of Ontario (HEQCO): http://www.heqco.ca/en-CA/Pages/Home.aspx
- [Ontario, Canada] Ministry of Training, Colleges and Universities: http://www.tcu.gov.on.ca/eng/
- [Canada] Society for Teaching and Learning in Higher Education (STHLE): http://www.stlhe.ca/
- [Canada] Canadian Society for the Study of Higher Education: csshe-scees.ca
- [US] Carnegie: http://www.carnegiefoundation.org/
- [UK] Staff and Educational Development Association (SEDA): http://www.seda.ac.uk/
- [AU] The Higher Education Research and Development Society of Australasia (HERDSA): http://www.herdsa.org.au/

Titles of key reports internal and external to Ryerson

One key document internal to Ryerson that was referred to early in the project was a report prepared by the Learning and Teaching Office on *Best Practices in Experiential Learnin*g. There were no other key reports internal to Ryerson that met this project's inclusion criteria. External to Ryerson, there were three reports from the Higher Education Quality Council of Ontario (HEQCO) that most closely met the inclusion criteria of reporting on the outcomes of experiential learning and emphasis on the theory-practice gap.

Internal to Ryerson:

- Penny, K., Frankel E., & Mothersill, G. (2011). Curriculum, climate and community: A model for experiential learning in higher education. Ryerson University.
- Schwartz, M. (2013). Best practices in experiential learning.

External to Ryerson:

- Sattler, P., and Peters, J. (2013). Work-Integrated Learning in Ontario's Postsecondary Sector: The Experience of Ontario Graduates.
- Peters, J., Sattler, P., & Kelland, J. (2014).Work-Integrated Learning in Ontario's Postsecondary Sector: The Pathways of Recent College and University Graduates.
- Lenton, R., Sidhu, R., Kaur, S., Conrad, M., Kennedy, B.,Munro, Y., & Smith, R. (2014).Community Service Learning and Community-Based Learning as Approaches to Enhancing University Service Learning.

When we began this research, we anticipated finding more relevant material about experiential learning both inside and outside of our University. Ultimately, we found less material than we expected because of the specificity of our inclusion criteria.

6.   Further research

As discussed above, there is a need for further research to enhance our knowledge of the impacts of experiential learning in general, and specifically in terms of bridging the theory/practice gap. Based on this research synthesis, we propose several areas of development for future research.

Throughout this report, we have emphasized the need for a more conceptual engagement with experiential learning, and for definitions of experiential learning. This is key as it impacts the quality of research and evidence to support the efficacy of experiential learning. It is difficult to rigorously assess the outcomes of experiential learning methods beyond a single study if the scholarship does not have a consistent definition of experiential learning and how it underpins these teaching methods. Put differently, we need to begin to develop more consistent ways of speaking about experiential learning so that we can grow a body of scholarship that explores this educational approach (beyond a collection of studies that each measure or assess a variety of related teaching methods).

This is not to say that we need to eschew diversity in how we discuss experiential learning. We understand the need for contextual and discipline-specific understandings of methods categorized under the umbrella of experiential learning. Indeed, there is a need for greater emphasis on the context within which experiential learning methods are situated (e.g. faculty/preceptor/student relationships, resources for implementation, and so forth). A better understanding of the diversity of contexts allows us to further understand the efficacy of experiential learning. However, we need to bear in mind that our understanding of these methods continues to be tempered with a lack of clear and consistent definitions. Hence, any broad claims about the efficacy of experiential learning need to take into account an understanding of the limitations of the scholarship and the contextuality of experiential learning.

Moreover, as Stallwood and Groh (2011) argue, reliable and valid measurements and standardized methods are also key to the development of research-based evidence regarding the efficacy and outcomes of experiential learning. Indeed, a greater emphasis on outcome driven research would further contribute to knowledge about whether these methods are actually contributing to student learning, and how they are doing so. In other words, increasing our focus on assessing outcomes would further enhance our understanding of the ways in which experiential strategies contribute to student learning, and would allow us to improve these strategies in curricula and teaching pedagogies.

Finally, future research should shift from a teaching to a learning paradigm. Kaakinen and Arwood (2009, p. 1) describe the difference between teaching focused experiential learning and learning focused approaches: "Teaching is what the educator provides the student in terms of goals, methods, objectives, and outcomes. Learning refers to the processes by which the student changes skills, knowledge, and dispositions through a planned experience." Speaking specifically about simulations, which we have noted is the area of greatest focus in experiential learning in the scholarship, the authors contend that scholars have primarily focused on teaching methods rather than theories about how students learn. Put differently, we need to shift our emphasis from what the educator does, to how the student learns if we are to better understand how experiential learning can provide the skills, values and knowledge to help bridge the theory/practice gap.

7.   Knowledge mobilization

The findings from our review of both research and grey documents have the potential to inform the work of a range of key education stakeholders by providing a comprehensive picture of experiential learning in higher education. Our review has generated recommendations helpful for faculty development, student success, curriculum development and future research in experiential learning within professional practice disciplines. As such, our knowledge mobilization strategies target education policy makers, curriculum developers, faculty members, researchers and students.

We will present our findings at local, provincial and international education-based conferences including but not restricted to the annual Ryerson University Conference, annual professional conferences such as the Council of Ontario University Programs in Nursing (COUPN), Canadian Association of Schools of Nursing (CASN), Canadian Association for Social Work Education, Association of Collegiate School of Planning, Society of Teaching and Learning in Higher Education (STLHE), and the International Society of the Scholarship of Teaching and Learning (ISSOTL).

Findings will also be discussed as a special session in the Ryerson Faculty of Community Services Faculty (FCS) Professional Development Program. FCS faculty, students, representatives from the Ryerson Learning and Teaching Office as well as members of the Ryerson Experiential Learning Committee will be invited to attend. This session will serve as a type of knowledge mobilization dialogue in that we will engage key stakeholders in a discussion about our findings with the goals of fostering knowledge dissemination and exchange, as well as exploring the implications of our findings for future initiatives and scholarship.

We will publish our findings in discipline-specific and interprofessional education-based journals such as the International Journal of Nursing Education Scholarship, Canadian Journal of Higher

Education, Social Work Education: The International Journal; Journal of Teaching in Social Work and the Journal of Planning Education and Research.

Finally, publications based on the findings of our review will be submitted to the Ryerson University Faculty of Community Services "Research Insights," a knowledge translation portal that highlights faculty research using plain language summary statements that identify a study's key messages, as well as its policy and practice implications.

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