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Student Engagement and Deep Learning in Higher Education: Reflections on Inquiry-Based Learning on Our Group Study Program Course in the UK

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Abstract

A group study program in the UK provides the setting for understanding deep learning in social work education through inquiry-based learning (IBL). Thirteen undergraduate and graduate students from a large university in Western Canada participated in a 15-day learning journey complete with a research methods conference and multiple exchanges with academics, service providers, and service users during their experiential inquiry. Two student coauthors and a faculty member discuss this unique active learning experience in this reflective essay using a constructivist lens to illustrate and make connections between IBL, student engagement, critical thinking, and deep learning. Students' deep-learning experiences are shared in relation to Sawyer's (2006) six deep-learning activities, adding to our knowledge about how IBL can support student learning preferences. Implications for consideration for social work education conclude the essay.

Keywords: inquiry-based learning, deep learning, social work education, group study program

This student and faculty reflection essay illustrates deep learning in social work education through the experiences and learnings of an undergraduate student, a graduate student, and an instructor in a social work course. We chose to write this essay following a 2-week Canadian group study program (GSP) course offered in the UK. Inquiry as a teaching method is one way we can explore student engagement in higher education in the broader learning environment. Specifically, student experiences and engagement with inquiry-based learning (IBL) can nurture deep learning (Sawyer, 2006). Deep learning occurs through interconnections of new and previous knowledge and experience (Friesen & Scott, 2013) while knowledge is constructed through active and deep learning (Brew, 2003; Fougner, 2012). Supporters of IBL credit this pedagogical approach with increased deep learning for students (Barron & Darling-Hammond, 2008; Sawyer, 2006), whereas Sawyer (2006) also identifies six pedagogical approaches to teaching that promote deep learning.

IBL is viewed as a constructivist process (Miller-Young & Yeo, 2015). During the inquiry process, students construct knowledge from new and former knowledge to create subjective realities. As a pedagogic tool, IBL can help students develop the necessary skills to explore and find answers to their central question. Hudspith and Jenkins (2007) have discovered an increase in student engagement while using IBL as a teaching method. Once engaged, students can develop deep learning utilizing IBL. Specific to social work, Yesudhas et al. (2014) suggested IBL as a learning strategy yet identified the need for some preparation prior to the development of a central question. Adding a preparatory component to our course provided students the necessary guidance to support their engagement and skill development that together nurtured

deep learning. Through our reflections on our GSP, this essay illustrates how deep learning emerged.

Our GSP occurred within an international context, and we therefore describe our context and make explicit the facilitation of our learning process through the application of an international social work education model (Zubaroglu & Popescu, 2015) for enhancing student learning. We then reflect on six activities (Sawyer, 2006) to illuminate the connection between pedagogical approaches and higher education student experiences with deep learning.

Literature Review

Student Engagement

Students' engagement in their learning has become a much more focused topic in the research literature. This increased focus is in part due to what Friesen and Scott (2013) note as students' current need for different skills, such as the ability to think critically, synthesize, analyze, collaborate, and communicate effectively. The increase in technology that has given rise to a more connected global economy requires employees who are creative and collaborative to respond to contemporary complexities (Friesen & Scott, 2013). Student engagement has been noted to increase when using IBL (Parsons & Taylor, 2011; Saunders-Stewart et al., 2012).

Dunleavy and Milton (2009) found that students identify three criteria for increasing their engagement in the learning environment: (1) learn from and with each other and others in their community, (2) connect with experts and expertise, and (3) have more opportunities for dialogue and conversation. These findings are consistent with Windham's (2005) recommendations that learners require educational curricula that include interaction, exploration, relevancy, multimedia, and instruction, if they are to engage in their learning. The findings suggest a very different focus of teaching, from teacher-centered to learner-centered.

Learner-centered approaches have been shown to increase student engagement (Harris, 2008). Using a phenomenographic methodology, Harris (2008) found that teachers experience their pedagogic interactions with students in five ways: information providing, instructing, facilitating, guided participation, and mentoring.

Together, these studies provide varied stakeholder input to inform important lessons for student engagement. A theme of connecting and relationship is noted as an integral and critical component for shaping the learning environment (Parsons & Taylor, 2011; Zepke & Leach, 2010). Through this relationship, engagement can no longer be assumed in the learning environment and instead must be negotiated between the instructor/facilitator and the learner (Zepke & Leach, 2010).

Inquiry-Based Learning

IBL is a learner-centered teaching strategy that facilitates active learning. Students are engaged in their learning through a self-directed, question-driven search for understanding that affords the opportunity to explore a subject and develop central questions through their exploration (Hudspith & Jenkins, 2007; Justice et al., 2007). Inquiry allows students to explore individual interests and develop critical thinking skills that lead to personal discovery and to deeper understanding of their central question. When used as a pedagogic tool, IBL is a process about discovery and systematically moving to higher and deeper levels of understanding. For example, in their recent report, the Alberta Ministry of Education linked IBL to the development of critical thinking skills (Alberta Education, 2010), while Hudspith and Jenkins (2007) have discovered an increase in student engagement while using IBL as a teaching method.

Within higher education, IBL has been explored in disciplines such as science (Apedoe & Reeves, 2006), math (Laursen et al., 2014), social work (Yesudhas et al., 2014), psychology (MacKinnon, 2017), and arts/humanities (Levy, 2012). The use of IBL in higher education has been found to produce generalist skill acquisition, including enhanced critical thinking (Aditomo et al., 2013; Hudspith & Jenkins, 2007; Woolf, 2017), problem solving (Justice et al., 2009, reflective practice (Gilardi & Lozza, 2009; Woolf, 2017), and collaboration skills (Justice et al., 2009). Specific skill acquisition has been noted as well, such as interviewing, active listening, writing, communication, and working independently (Woolf, 2017); research skills (Yesudhas et al., 2014); and improved information/technology literacy (Buckner & Kim, 2014; Gehring & Eastman, 2008; Levy, 2012; Little, 2010). Combined,

these generalist and specific skills reflect those sought after to help students become global citizens.

To contextualize our project, we highlight IBL writings within social work education. We found only four social work publications on IBL in academic journals and social work–related databases. First, Plowright and Watkins (2004) examined IBL within a UK social work program context. They differentiated IBL and problem-based learning (PBL) by situating IBL as exploratory, extending and promoting integrated professional understanding (Plowright & Watkins, 2004). Second, Braye et al. (2003) reported on an examination of IBL within social work law. Third, Yesudhas et al. (2014) reflected on the application of IBL outside the classroom in field education among social work students in Mumbai, India, noting the advantage of IBL as a teaching and learning strategy that permitted students to participate in the cocreation of knowledge. Despite this pedagogical advantage, the authors found that students require greater information literacy and more student engagement to fully take advantage of IBL (Yesudhas et al., 2014). Finally, IBL has been utilized in Germany by Zorn and Seelmeyer (2017) with information and communication technologies in a seminar course. These authors asserted that IBL as a pedagogical method is most appropriate for teaching technological literacy and preparing for future practice (Zorn & Seelmeyer, 2017). Student-centered learning in higher education requires the instructor to guide students to use the course concepts so that they might acquire critical thinking and problem-solving skills (Wright, 2011).

Hudspith and Jenkins (2007) help us to understand the relationship between student engagement, IBL, and critical thinking. They suggested that student engagement is a precursor to developing critical thinking skills, and critical thinking skills can be developed through using IBL. Accordingly, student engagement and IBL are integrated concepts that collectively nurture critical thinking. Learners require the development of deep learning and critical thinking skills, which appear to be nurtured by student engagement.

The application of IBL as a teaching strategy encourages further student engagement because students take ownership of their learning and thus utilize IBL strategies (Friesen & Scott, 2013). IBL engages students in active learning, ensuring that learners attend to the material in a meaningful way, which in turn fosters evolving understanding (Roy & Chi, 2005), producing transferable critical thinking skills (Hattie, 2009).

Dewey (1944) introduced and described experiential learning as a means to enable critical thinking, flexible problem-solving, and the transfer of skills and use of knowledge in new situations. He believed that these skills develop when students are afforded the opportunity to formulate problems related to their own experience through a process of inquiry, reflection, exploration, experimentation, and trial and error (Dewey, 1944). Similarly, Kolb and Kolb (2012) promoted experiential learning theory with the components concrete experience, reflection, conceptualization, and active experimentation. Deep learning occurs when these four modes of experiential learning (experiencing, reflection, thinking, acting) are integrated to respond to the learning situation (Kolb & Kolb, 2008).

Critique

The use of student-centered learning methods, such as IBL, can be challenging for both the student and the instructor. Traditional teaching methods expect little by way of student engagement (Wright, 2011). This dichotomy can create challenges in the classroom when students encounter student-centered learning. For example, students anticipate traditional decision-making by the instructor and can resist active engagement in the learning process, including decision making about their learning (Wright, 2011). Additionally, not all researchers have found IBL to increase student engagement, particularly when instruction provides minimal guidance (Kirschner et al., 2006), yet Hmelo-Silver et al. (2007) suggested that the methodological choices made by Kirschner et al. (2006) challenged the study's results regarding the level of guidance necessary for student engagement through IBL. Given the range of relevant constructs in the face of conceptual ambiguity and a lack of evidence guiding teaching, the current study identifies the intersection of these elements in a recent higher education course. The question addressed is, "In what ways does IBL and student engagement nurture deep learning for students on GSP?"

In the remainder of this essay we illustrate the connection between Hudspith and Jenkins's (2007) working definition of IBL (students are engaged in their learning through a self-directed, question-driven search for understanding that affords the opportunity to explore a subject and develop central questions through their exploration) through our presentation of the IBL GSP course design and content, with author reflections on the learning process that led to students' deep learning.

Facilitating the Learning Process (Our Context)

Advocating for social change is a fundamental principle in the profession of social work, particularly in pursuit of social justice (Canadian Association of Social Workers, 2005). Consistent with social work values, Friesen and Scott (2013) found that when using inquiry-based teaching strategies, students can become advocates for social change, as they have a degree of control over their learning and can develop their own perspective. The authors posit that the teacher's role therefore should be facilitator and guide (Friesen & Scott, 2013). Utilizing IBL, teacher guidance might include helping students generate questions, investigate, construct knowledge, and reflect (Friedman et al., 2010), achieving dramatic improvement on academic achievement (Friesen & Scott, 2013) by including authentic pedagogy and assessment (Newmann et al., 1996), authentic intellectual work (Newmann et al., 2001), and interactive instruction (Smith et al., 2001).

The Course Experience

The GSP course was designed to integrate IBL and student engagement, including prelearning and course-based inquiry. Recommended by Yesudhas et al. (2014) was the introduction of IBL to students prior to their IBL experience. Additionally, Friesen and Scott (2013) identified three key IBL strategies leading to deep learning: scaffolding; formative assessment; and powerful, critical, and essential questions. For our GSP, we incorporated these strategies into the course design. For example, an online module was developed for this project, along with some prereadings, to allow students an opportunity to gain a basic-level understanding of IBL prior to our departure. Additionally, scaffolding of assessment tasks and formative feedback were integrated. The development of powerful, critical, and essential questions, also known as the central question (Hudspith & Jenkins, 2007), was supported through the use of a structured controversy (Archer-Kuhn, 2013).

Thirteen undergraduate and graduate students from a large university in Western Canada participated in a 15-day GSP course that began in Glasgow, specifically for an international qualitative methods research conference. This provided students an opportunity to explore their substantive area of interest while also appreciating the linkages between research questions and the research process. The remaining stops of our GSP included universities in Edinburgh, Leeds, London, and Belfast. In addition to sessions with academics, we visited local social service agencies and engaged with service users, service providers, and others in each of our destination communities (what Dunleavy and Milton [2009] called connecting with experts and expertise). Learning opportunities included lectures, skill days, research seminars, visits to community agencies, and cultural tours.

Our GSP course included readings and the following four assessment tasks: (1) facilitation of a structured controversy (25%), (2) development of an inquiry question (15%), (3) reflective writings through three blog posts (25%) and two responses to colleagues' blog posts (10%), and (4) construction of an analysis paper (25%). Assessment tasks such as the structured controversy, development of an inquiry question, and reflective blog posts received formative feedback from colleagues and instructor. All assessment tasks received summative feedback from the instructor. Applying the international social work education model (Zubaroglu & Popescu, 2015) in three phases—preparation, knowledge building, and experiential learning (Figure 1)—supported an international context. Scaffolding of IBL (Figure 1) in the course included prelearning, knowledge building, and experiential learning. Figure 1 is not intended to suggest a linear nature to learning; for example, knowledge building continues to occur through experiential learning.

Preparation Phase

O'Mahony (2014) reported that study abroad learning experiences can only be realized when pedagogical practices receive attention. In careful preparation, a number of

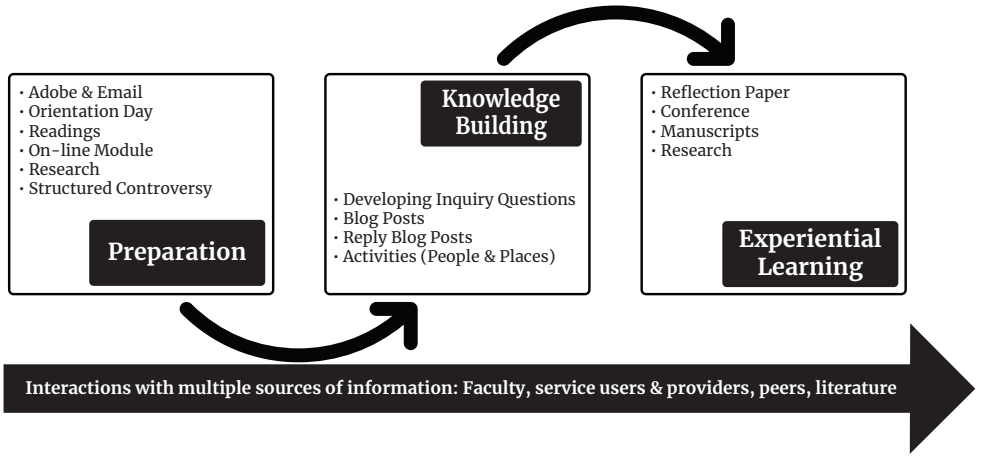

Figure 1. Application of International Social Work Education Model

activities occurred for students prior to their departure for the UK. Students were introduced to IBL through an online module and readings. They participated in orientation meetings (in person and online), including discussion of the course syllabus. Email and telephone calls addressed more challenging or complex questions. Participation in the instructor's formal research project about their experiences regarding IBL was optional for students.

Almost immediately after arrival students participated in a structured controversy based on a general theme of poverty and homelessness. This provided them an opportunity to debate a familiar, current, and meaningful social issue. In two large groups, students developed a thesis, then researched and presented compelling arguments through a critical assessment of the literature on their team's topic. This assessment activity provided opportunity for students to gain information, explore alternative perspectives, and prepare for the development of their inquiry question (Archer-Kuhn, 2013).

Knowledge-Building Phase

Inquiry questions are powerful and critical if they are important to the discipline, connect students to practice, reflect the outcomes of the course, and ask students to discern among options (Friesen & Scott, 2013). Inquiry questions are essential if they uncover the fundamentals of the subject (Friesen & Scott, 2013). On Day 2 of the GSP, students were asked to develop inquiry questions that were powerful, critical, and essential; these inquiry questions could be changed and developed throughout the course.

As we arrived in new countries and met with our hosts, the students engaged in dialogue through introductory sessions that included information about the country's history; social, economic, and political structure; social problems; and effects of globalization. For example, a half day at Toynbee Hall chronicled social welfare from the origins of community development and settlement houses; case work to clinical work; and a social welfare safety net to a neoliberal era. Students were able to make linkages of influence to our Canadian social welfare system and take the opportunity through their blog posts and peer reply posts to connect these active learning sessions to their inquiry question. Further knowledge-building opportunities occurred when students were introduced to new models of practice in the UK, whereby involvement of service users was expanded beyond the Canadian context to planning and service delivery, education of postsecondary students, and policy development. In this knowledge-building phase, students had opportunity to learn from and with each other in addition to connecting with experts and expertise (Dunleavy & Milton, 2009). The excerpt below reflects a student inquiry process: They consider the ways in which their self-directed question is leading them to further exploration, engaging with multiple sources of information, and refining and further exploring their inquiry question. In this example, discovery emerged less from seeking an answer and more from

exploring greater understanding.

> My inquiry process was ignited through integrating an inductive, critical reflectivity inquiry lens that propelled me to become engaged in purposeful, inquisitive interactions with scholarly professors, social workers, services users, and service providers. Additionally, the process of daily journaling often triggered further exploratory questions and I began to note several common themes, alternate thoughts, and opinions involved in understanding a problem. My curiosity unfolded by observing the intersections between theories, speakers and service users and I was challenged to reflect upon why those intersections occurred. The two meaningful tenets that challenged me to view how I was constructing my inquiry process were the use of language in asking questions to elicit further probing from others, and the use of client's voices to understand their experiences.

Another example of knowledge building occurred during a walk to the hotel, following a day of sessions at one of our host universities. Stopping at an outdoor café for a beverage and discussion, student reflections on the day's learnings led to an extensive dialogue about epistemology and theory, as the students began to integrate their knowledge into interrelated conceptual systems. They explored answers to their inquiry questions long after the "lesson" of the day and moved beyond surface learning into deeper conceptual discussions. This experience highlights that the classroom is but one learning environment, perhaps a nonoptimal one. Walking through communities provided a natural experiential environment for conversation and learning through being in context, critical reflection, and dialogue with peers.

Experiential Learning

This phase entails applied knowledge, contextualization and reflection, and knowledge sharing and dissemination. In the GSP, students appreciated the applied knowledge through the many opportunities to learn from community organization providers and service users. To assist with contextualization and reflection, the students had daily debriefings and peer feedback for knowledge application, skills building, and reflection that further enhanced their self-directed learning and search for understanding. Here, all three findings from Dunleavy and Milton (2009) are clear. Students not only connected with experts and expertise but also expanded their understanding about how knowledge is created. The following student quote illustrates this point.

> We visited Queens University (Belfast) where they were holding a conference on intergenerational trauma and the risk, resilience, and impact on children, families, and communities due to The Troubles in Northern Ireland that lasted from approximately 1968–1998. We later heard from service users from the Wave Trauma Center . . . about their experiences of trauma during The Troubles and the impact on their lives, as well as the impact on the lives of other intergenerational family members. These were just a glimpse into the stops made on this Group Study Program that contributed to my learning, the discussions with locals, other service providers, service users, students, and others all had a part to play as well in my inquiry-based learning journey.

Knowledge sharing emerged in many forms. Several of the students spoke of the ways in which they planned to share their learnings within their practice environment. This included a change in the way they perceived and wanted to practice social work. Dialogue with colleagues and reflection provided students multiple opportunities to consider their own understanding and process of learning, both of which were noted by Sawyer (2006) as requirements of deep learning. Upon our return to Canada, five students chose to participate in a major national social work education conference (Archer-Kuhn et al., 2016) to share their experiences of inquiry-based learning. Two students and the instructor then coauthored this article.

Application of Sawyer's Deep-Learning Activities

Beyond the enjoyment and passion for learning that emerged from the GSP, we sought to further understand IBL relative

to deep learning and the potential link to practice. Sawyer (2006) notes that learners need to engage in a number of activities to achieve deep learning. Accordingly, deep learning is gained when generalizing knowledge to broader contexts when the learning occurs within authentic, practical, and real-world settings (Sawyer, 2006). In the GSP, the authentic, practical and real-world experience was offered in a relational IBL context nurturing student engagement and critical thinking. These aspects of the IBL context emerged as components of deep learning for students.

Sawyer (2006) recognized six ways of achieving deep learning: (1) relating new ideas and concepts to previous knowledge experience, (2) integrating knowledge into interrelated conceptual systems; (3) seeking patterns and underlying principles; (4) evaluating new ideas and relating them to conclusions; (5) understanding the process of dialogue through which knowledge is created and examining the logic of an argument critically; and (6) reflecting on one's own understanding and process of learning. In the following section, we examine these six areas in relation to these students' experiences. This exploration aims to illustrate the ways in which IBL and student engagement have resulted in deeper learning in the GSP.

Learners Relate New Ideas and Concepts to Previous Knowledge Experience

Students' assumptions were challenged in a number of ways as they pursued their inquiry question. For example, one student experienced a challenge to their values while exploring an inquiry question and was able to relate new ideas to their previous knowledge about the etiology of poverty. As illustrated below, their understanding shifted.

> In receiving new learning [IBL], I often reflect on how new ideas and concepts [connect] to my previous knowledge and experience. This became clear to me on the Group Study Program when I attended the session at Toynbee Hall. I reflected on my belief system that poverty needs to be tackled from a systemic approach and not seen as an individual issue. I was challenged [through my inquiry question] to look deeper. To understand and mobilize changes to poverty I need to . . . challenge the view that the individual's poverty is a result of a moral shortcoming . . . to participate in meaningful social change.

Another student viewed IBL as congruent with their learning preference, the meshing hypothesis, according to Pashler et al. (2009). Through self-directed learning around a specific topic of student interest, this individual was able to explore new ideas and reflect on previous knowledge using the strength of interpersonal skills through dialogue with various sources.

> As a student with learning disabilities, IBL utilized my styles of learning in linking new ideas around sexual and gender diversity (SGD) to prior knowledge that I held within the Canadian context. Rather than acquiring knowledge, IBL enabled me to construct it by continuously examining my practice frameworks socially; seeking out answers to my inquiry within the UK, reflecting on those answers, and how I can integrate new information into my practice.

This reflection provides an opening for us to consider the ways in which IBL might be an important teaching and learning strategy to support students with learning disabilities, a topic not yet discussed in the IBL research literature.

Learners Integrate Their Knowledge into Interrelated Conceptual Systems

The students related their conceptual systems variably to social work practice. While pursuing their inquiry question, one student related their learning to the research process and subsequently to understanding others' perspectives in practice:

> As a learner, I integrate new knowledge, conceptualize and apply to other settings. . . . Attending the Qualitative Methods Conference in Glasgow Scotland provided me [the opportunity] to learn the deeper meaning of research; how inquiry into issues is brought about by being curious about a phenomenon. The key note speaker challenged me to gain deeper understanding of the phenomenon I am curious about . . .

> my task to understand is an inquiry task, which is in essence, a research task. Gaining deeper understanding of the person's experience is through authentically understanding their story.

Another student considered conceptual systems from the view of a particular population as they attended to their inquiry question. They explored sexual and gender diversity in the UK, as compared to Canada, in terms of acceptance of diversity:

> In the UK respect for diversity has naturally progressed in ways of offering services to the sexual and gender diversity (SGD) population, and creating legislation, that in itself creates equality. . . . I met with [name of service provider]. He was able to express that AOP (anti-oppressive practice) was commonly known, and that staff training sessions occur regularly to inform staff of how to operate from this framework.

Learners Look for Patterns and Underlying Principles

One student discovered through their self-directed learning the power of language as they engaged people in dialogue about their inquiry question. Their reflections illustrated deep learning as they developed awareness of the ways in which language can encourage and generate dialogue, yet can also frustrate discovery. Attention to these underlying principles allowed this individual to adapt language and further explore inquiry:

> Through critical reflection, I became mindful of the use and meaning of language in how I phrased my questions, as well as the importance of utilizing open-ended questions that may generate a deeper dialogue. Consequently, by deconstructing this important tenet of engagement, and how it contributes to the process of inquiry, communicating my questions to others while incorporating other perspectives has allowed my learning to progress.

A student discovered that they needed to shift their approach to learning. They came to understand that their learning was stifled when searching for similar patterns between the Canadian and UK contexts, yet their learning deepened when exploring differences in patterns. Further, they concluded that by directing their own learning, their topic was explored more deeply.

> Until I started inquiring about the differences that presented marked success in comparison, I felt that I was only learning what I already knew. In my research I was able to determine that London has a similar prevalence of SGD to that of Vancouver. I also learned that the law in the UK states that illegal sex acts exist regardless of sexual orientation, unlike Canada, which still does not have equality regardless of sexual orientation.

Learners Evaluate New Ideas and Relate Them to Conclusions

During the GSP course, students were encouraged to consider varied sources of information beyond the course reading materials to broaden understandings and application to practice. For one student, their self-directed learning helped them appreciate practice from a new perspective as they considered the social justice implications of poverty for people with palliative care needs. They came to realize that the inquiry process they were experiencing in the course could be applied in their practice relative to understanding of systemic barriers experienced by service users.

> One of our guest lecturers shared an experiential exercise on critical reflexivity. By embracing a critical reflective perspective, I will be asking multiple questions in my practice. . . . Framing the question matters. . . . The meaningful connection for me has come with the realization that all of the palliative people with whom I work, are caught in the poverty trap. The lack of fair and equitable resources to support their end of life choices are not present. . . . I am challenged to mobilize my learning when I return to my practice.

For another student, the inclusion of service users' voices was discovered through the exploration of their inquiry question. New learnings were further linked to how

service user voice could be incorporated significantly in Canadian social work practice.

> In what ways is work being done in the community alongside service users? In the UK, social workers were educating themselves on issues being faced by the SGD community, and working directly in the schools, organizations, and in the community. I have learned that being open about sexuality in the UK with professionals and trusted people, has allowed individuals to forego oppression, and in many cases eliminating consequences that are linked to sexual and gender oppression.

Learners Understand the Process of Dialogue Through Which Knowledge Is Created and Examine the Logic of an Argument Critically

One student's experience of deep learning involved critical reflection on multiple sources of information. Their self-directed learning helped them gain an appreciation of how dialogue shapes what we know, and that there is not always equal access to engagement in dialogue. Additionally, rumination was evident relative to the value of critical reflection with colleagues, peers, professionals, and service users, which helped them to engage in dialogue that in turn informed future inquiry:

> The process of engaging in dialogue is valuable for deep learning. It allows me to see and hear others' experiences and knowledge through a lens that is different then [sic] my own. . . . The dialogue with my colleagues provide a discourse that helps me to frame my viewpoints and pursue my curiosity; engaging in dialogue with our guest speakers, and service users, have provided deeper meaning into our understanding of transgenerational trauma, and the day to day challenges for persons with disabilities. Hearing the perspective of persons who are at the center of their experience, allows me to reflect on my understanding, and challenges me to critically consider another viewpoint.

Self-directed learning helped another student appreciate knowledge construction from multiple sources as they engaged in the community with service users, providers, and researchers, as we see in the following description:

> Rather than acquiring knowledge from instruction, the inquiry-based learning experience offered a way to construct new knowledge into a topic area of interest through dialog with professionals, service users, and the community at large. In the UK, I began a process of engagement in the community. With the ability to go into the community and exchange dialog face-to-face, new information lead [*sic*] to new lines of questioning. This is what the inquiry experience offers.

Deep learning for this student emerged as they engaged with multiple sources. They pursued their inquiry question utilizing research literature as one source as well as dialogue with multiple others to learn from their experiences. Ongoing consideration of what they knew provided opportunities for further questioning and critical reflection.

Learners Reflect on Their Own Understanding and Their Own Process of Learning

During this GSP course, a student learned both about themselves by exploring their inquiry question, and about their learning process through critical reflexivity. They identified important lessons from their self-directed learning during scheduled course events. This critically reflexive process facilitated deep learning, as is evident in the following passage:

> The opportunities are daily and rich. I began to search inward on how I am formulating my inquiry questions. . . . It is through the deeper process of inductive reflectivity that I have gained a broader perspective. . . . I construct my inquiry through the lens of my personal values, culture, gender, experiences, and assumptions. Making a conscious decision to be mindful of these provides the foundation for me to advance my inquiry.

Inquiry-based learning was perceived by this student as a facilitator to learning. In

the following excerpt, they discuss ways in which their self-directed learning has facilitated their ability to pursue their inquiry question, and how their learning preference was supported by self-directed learning.

> My style of learning is strongest in visual-spatial, kinesthetic, and social-interpersonal, and I found this Group Study Program certainly has complemented my ways of learning.
>
> I usually have assistive technology and note takers for lectures and did not have that available for this course. Unfortunately, my hearing aids also failed to work which made lectures extremely difficult and I often found myself in one on one communication with the lecturer after presentations; one contributing reason the Group Study Program was of value as opposed to regular learning . . . I would talk one-on-one with our guests and receive enough information to lead me in directions to seek answers at my own pace from various sources.

For this student, IBL enabled their learning in ways that they had not anticipated, and their reflections are an illustration of deep learning and the development of an awareness about the ways in which learning can be accommodated.

Reflections on Learnings

These student examples illustrate elements and benefits of IBL in the GSP course, such as flexibility in the learning process, an increase in critical thinking and critical reflexivity, and greater focus on social justice. IBL within the GSP provided opportunity to intensively think and interact with others, time for one-on-one interactions with instructors, real-life occasion to compare systems (Canada and UK), direct experience (experiential learning opportunities), and access to multiple sources of information. This experience exemplifies IBL in providing preparation, knowledge building, and experiential learning to allow for student engagement. The findings support the work of Zubaroglu and Popescu (2015) and contrast with Kirschner et al.'s (2006) assertion that IBL lacks sufficient student guidance for engagement. Here, one student speaks to both their decision about engagement and to how the use of IBL as a teaching and learning strategy has the capacity to nurture students in deep learning.

> I needed to be open, engaged, and active in my learning throughout this opportunity. I made the conscious decision to authentically hear experiences from others. . . . It was important from the onset of my studies to construct a personal goal for myself to become fully immersed in any learning opportunities that lay ahead of me. The course syllabus and required readings began to guide and contribute to my learning. The readings provided theoretical knowledge of critical reflective theory that would allow me to analyze how to construct a deeper meaning of the process of inquiry.

IBL further enhanced student interest in research, and for some, IBL accommodated students with disabilities. One student identified that this experiential learning and inquiry approach had particular relevance to their learning preference because of their specific learning (reading and writing) and physical (hearing and vision) challenges. The student's self-identified kinesthetic learning preference was supported through this experiential learning opportunity, augmenting the visual–spatial challenges and enriching social–interpersonal strengths. For example, there are multiple opportunities for one-on-one discussions with presenters, professionals, and colleagues, allowing the student to pursue inquiry utilizing self-directed learning. The student writes, "IBL enabled me to construct it [knowledge] by continuously examining my practice frameworks socially, seeking out answers to my inquiry within the UK." For other students, having the experience of excitement and enjoyment with research was viewed as novel, and reportedly enabled a greater understanding of the relevance of research to practice, which reflected less about the topic of discovery and more about how the learning process unfolded (Little, 2010).

This essay illustrates the experiences and reflections from the GSP course: one graduate and one undergraduate sharing the ways in which IBL facilitated a process for them of deep learning. Deep learning for these students, captured visually in Figure 2, shows the relational nature of the interac-

tions between the IBL process and student engagement, which further led to critical thinking skill development and resulted in deep learning. We are not claiming IBL as the only teaching strategy that can lead to deep learning but rather that for these students on GSP, IBL, student engagement, and critical thinking supported their deep learning as defined by Sawyer (2006).

Discussion

Sawyer's (2006) conception of deep learning appears to have been reflected in this IBL experience. Students credited IBL with deepening their learning experience. Observing the students during the GSP course, it is apparent that deep learning can happen in a relatively short period of intensive immersion. In this case, the days of learning, although relatively few, were long and stimulating. The "environments in between," or the times before and after scheduled sessions, provided students multiple opportunities for dialogue and debriefing about their inquiry, challenging their values and thought processes and spurring further curiosity. A critical component for students included checking their thinking with peers and faculty, corroborating Dunleavy and Milton's (2009) findings. Discussions often carried on during travel from one event to another, throughout mealtimes, and into the evenings. Self-directed learning meant that time for dialogue and reflection with peers was necessary after each session to allow space for critical reflection so that students could relate new learnings about their inquiry question to previous knowledge experience.

Students had frequent dialogue about their learning experiences and the implications of these experiences for their social work practice in Canada. Their social construction of new knowledge was evident in their deep learning of the service user model employed in the UK. Accordingly, student awareness was broadened through self-directed learning with IBL to include increased awareness of how knowledge is created and the implications for policy, practice, and research. Students clearly gained an appreciation for another way of knowing through their interactions with service users in different contexts. They were observed in dialogue about possibilities for their own social work

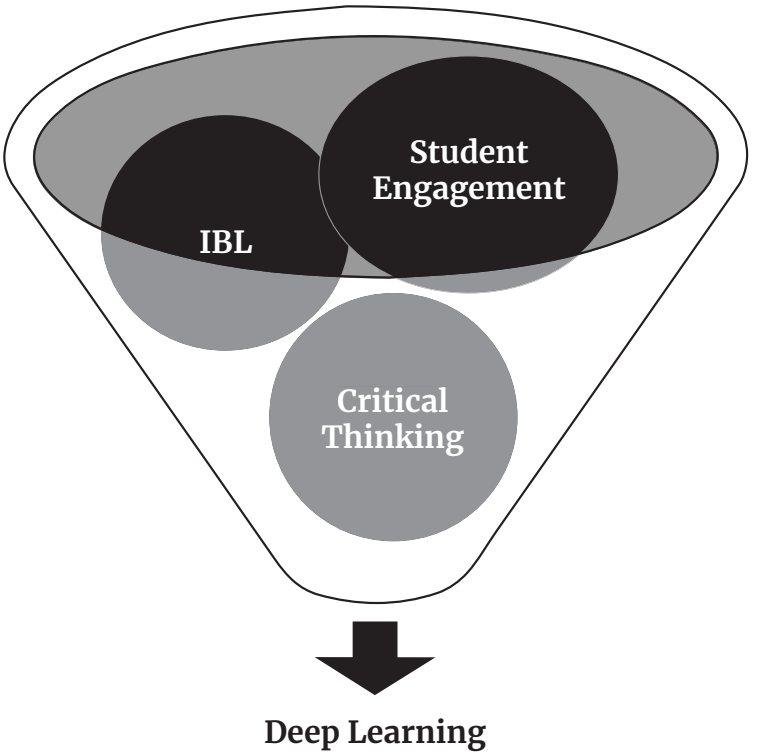

Figure 2. Deep Learning

practice, their shift in understanding about the use of language, and evaluating new ideas and relating them to conclusions. Already during the GSP, the students were making plans to influence policy within their organizations to include greater service user voice and participation in decision making; they considered multiple dissemination options and, importantly, developed knowledge and skills to support their lifelong learning. This is a reminder of the findings from Friesen and Scott (2013), which may not be relevant for all disciplines yet was for our students, that when using IBL students become advocates for social change, as they have a degree of control over their learning and can develop their own perspective, as is noted here by one student:

> I began to reflect on what social action needs to occur in order to reshape social policies to address the needs of the persons with whom I work. The voices of those who are marginalized should drive the agenda for social justice to provide fair and equitable resources for the end-of-life choices. The inquiry into understanding my questions takes on a broader context of the tenets that contribute to, and silence people who are marginalized in society.

Finally, experiential learning in the global context can provide deeper learning for students in a different way than discussions in Canadian classrooms, as students make linkages to global issues in their learning. Multiple examples were noted. For instance, the presenters from the WAVE Trauma Centre in Belfast, Northern Ireland, had an impact on the students in terms of connections related to transgenerational trauma in Northern Ireland as compared to Indigenous Peoples and immigrant populations in Canada.

It is difficult to know if these students would have been as engaged or would have experienced learning as deeply had they participated in IBL in a local context. It may be that their experiences are specific to the UK context. Given that we have largely reflected on the experiences of two students, we cannot generalize more broadly but rather acknowledge and consider potential implications for future research and education abroad. The authors' reflections on their experiences suggest that IBL has supported students to engage in their learning, and we argue that they have engaged in deep learning (Sawyer, 2006).

Implications for Higher Education

Higher education needs to reflect curriculum that provides students the necessary skills to prepare them as global citizens (Okech & Barner, 2014). These skills include critical thinking, problem solving, and the ability to synthesize, analyze, collaborate, and communicate effectively (Friesen & Scott, 2013; Parsons & Taylor, 2011; Saunders-Stewart et al., 2012). Learning activities need to be interesting and engaging and allow critical reflection and dialogue with peers and mentors. The student reflections in this article on deep learning suggest that IBL can support higher education students to increase their engagement in learning and practice skill development.

Some of the ways deep learning has been achieved in this GSP may transfer to a Canadian education context. For instance, we found that multiple sources of information (beyond textbooks, videos, and peer-reviewed articles) provided ways for students to interact with information (such as conferences; various lectures; and interactive sessions at postsecondary settings and community organizations with faculty, service users, providers, and peers): These approaches seemingly supported deep learning. Further, opportunities for reflection that can enhance deep learning included (1) individual reflections alone, verbally with others, and in writing and (2) peer reflections in dyads, small and large groups, and in writing to peers. Interactions with people and places within communities provided students with authentic learning experiences that allowed them to engage with and challenge their ways of knowing, being, and doing. These real-world activities provided opportunities for students to relate their learnings to their Canadian practice in authentic and deep ways.

We know IBL has shown benefits within some higher education disciplines such as science, math, and psychology. Little is yet known about the potential uses of inquiry-based teaching and learning in social work education, yet in this analysis IBL facilitated deep learning. Social work education along with other disciplines may benefit from further exploration of the ways in which

curriculum might include IBL as a teaching strategy to increase students' engagement in their learning. Although our experience includes an international learning experience, IBL similarly may be applied locally on campus and within the broader community. Indeed, we are currently exploring the ways in which IBL might support student learning within field practicum education.

We conclude with a few questions for reflection. Are we sufficiently utilizing inquiry as a teaching and learning strategy in higher education disciplines? Do our present teaching strategies ignite excitement and engagement in course material in ways that lead to deep learning? Finally, is there an appetite for how IBL can be more broadly applied in various disciplines, including social work education? The findings of this initiative clearly advocate for further engagement in this promising area of pedagogical innovation.

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References

Aditomo, A., Goodyear, P., Bliuc, A., & Ellis, R. A. (2013). Inquiry-based learning in higher education: Principal forms, educational objectives, and disciplinary variations. *Studies in Higher Education, 38*(9), 1239–1258. https://doi.org/10.1080/03075079.2011.616584

Alberta Education. (2010). *Inspiring education: A dialogue with Albertans*.

Apedoe, X. S., & Reeves, T. C. (2006). Inquiry-based learning and digital libraries in undergraduate science education. *Journal of Science Education and Technology, 15*(5/6), 321–330. https://doi.org/10.1007/s10956-006-9020-8

Archer-Kuhn, B. (2013). Structured controversy: Inquiry-based learning in place of traditional group presentations. *Teaching Innovations Projects, 3*(1), Article 14.

Archer-Kuhn, B., Degenhardt, C., Wiedeman, D., Chalifoux, J., Hernandez, W., & Andrews, H. (2016). Inquiry and experiential learning in the UK context: Social work student engagement on study tour. Canadian Association of Social Work Education, Calgary, AB. May 31-June 3.

Barron, B., & Darling-Hammond, L. (2008). Teaching for meaningful learning: A review of research on inquiry-based and cooperative learning [Book Excerpt]. Retrieved from http://www.edutopia.org/pdfs/edutopia-teaching-for-meaningful-learning.pdf

Braye, S., Lebacq, M., Mann, F., & Midwinter, E. (2003). Learning social work law: An enquiry-based approach to developing knowledge and skills. *Social Work Education, 22*(5), 479–492.

Brew, A. (2003). Teaching and research: New relationships and their implications for inquiry-based teaching and learning in higher education. *Higher Education Research & Development, 22*(1), 3–18.

Buckner, E., & Kim, P. (2014). Integrating technology and pedagogy for inquiry-based learning: The Stanford Mobile Inquiry-based Learning Environment (SMILE). *Prospects, 44*(1), 99–118. https://doi.org/10.1007/s11125-013-9269-7

Canadian Association of Social Workers. (2005). *Code of ethics*. https://www.casw-acts.ca/sites/casw-acts.ca/files/documents/casw_code_of_ethics.pdf

Dewey, J. (1944). *Democracy and education*. Free Press.

Dunleavy, J., & Milton, P. (2009). *What did you do in school today? Exploring the concept of student engagement and its implications for teaching and learning in Canada.* Canadian Education Association.

Fougner, A. (2012). Exploring knowledge through peer tutoring in a transitional learning community: An alternative way of teaching counseling skills to students in social work education. *Social Work Education, 31*(3), 287–301. https://doi.org/10.1080/02615479.2011.557431

Friedman, D., Crews, T., Caicedo, J., Besley, J., Weinberg, J., & Freeman, M. (2010). An exploration into inquiry-based learning by a multidisciplinary group of higher education faculty. *Higher Education, 59*(6), 765–783. https://doi.org/10.1007/s10734-009-9279-9

Friesen, S. & Scott, D. (2013). Inquiry-based learning: A review of the research literature. Paper prepared for the Alberta Ministry of Education. Retrieved from https://galileo.org/focus-on-inquiry-lit-review.pdf

Gehring, K. M., & Eastman, D. A. (2008). Information fluency for undergraduate biology majors: Applications of inquiry-based learning in a developmental biology course. *CBE Life Sciences Education, 7*(1), 54–63. https://doi.org/10.1187/cbe.07-10-0091

Gilardi, S., & Lozza, E. (2009). Inquiry-based learning and undergraduates' professional identity development: Assessment of a field research–based course. *Innovative Higher Education, 34*(4), 245–256.

Harris, L. R. (2008). A phenomenographic investigation of teacher conceptions of student engagement in learning. *The Australian Educational Researcher, 5*(1), 57–59.

Hattie, J. A. C. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.

Hmelo-Silver, C. E., Duncan, R. G., & Chinn, C. A. (2007). Scaffolding and achievement in problem-based and inquiry learning: A response to Kirschner, Sweller, & Clark (2006). *Educational Psychologist, 42*(2), 99–107.

Hudspith, B., & Jenkins, H. (2007). *Teaching the art of inquiry* (Green Guide No 3). Society for Teaching and Learning in Higher Education.

Justice, C., Rice, J., Roy, D., Hudspith, B., & Jenkins, H. (2009). Inquiry-based learning in higher education: Administrators' perspectives on integrating inquiry pedagogy into the curriculum. *Higher Education, 58*(6), 841-855. https://doi.org/10.1007/s10734-009-9228-7

Justice, C., Rice, J., Warry, W., Cuneo, C., Inglis, S., Miller, S., & Sammon, S. (2007). How we know inquiry makes a difference in the way students learn. In C. Knapper (Ed.), *Experiences with inquiry learning* (pp. 47-58). Centre for Leadership in Learning, McMaster University.

Kirschner, P., Sweller, J., & Clark, R. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist, 41*(2), 75–86.

Kolb, A. Y., & Kolb, D. A. (2008). Experiential learning theory: A dynamic, holistic approach to management learning, education and development. In, S. J. Armstrong & C. V. Fukami (Eds.), *The SAGE handbook of management learning, education and development* (pp. 42–68).

Kolb, A. Y., & Kolb, D. A. (2012). Experiential learning theory. *Encyclopedia of the sciences of learning*. https://doi.org/10.1007/978-1-4419-1428-6_227

Laursen, S., Hassi, M., Kogan, M., & Weston, T. (2014). Benefits for women and men of inquiry-based learning in college mathematics: A multi-institution study. *Journal for Research in Mathematics Education, 45*(4), 406-418.

Levy, P. (2012). Developing inquiry-guided learning in a research university in the United Kingdom. *New Directions for Teaching and Learning,* 129, 15-26. https://doi.org/10.1002/tl.20003

Little, S. (2010). *Inquiry-based learning in the social sciences: A meta-analytical study*. CILASS: Centre for Inquiry-based Learning in the Arts and Social Sciences, University of Sheffield. https://www.shef.ac.uk/polopoly_fs/1.122795!/file/IBL_in_SocSci-FINAL.pdf

MacKinnon, S. L. (2017). "The curiosity project": Re-igniting the desire to inquire through intrinsically-motivated learning and mentorship. *Journal of Transformative Learning, 4*(1), 4–21.

Miller-Young, J., & Yeo, M. (2015). Conceptualizing and communicating SoTL: A framework for the field. *Teaching & Learning Inquiry, 3*(2), 37–53.

Newmann, F., Bryk, A., & Nagaoka, J. (2001). *Authentic intellectual work and standardized tests: Conflict or coexistence*. Consortium on Chicago School Research.

Newmann, F., Marks, H., & Gamoran, A. (1996). Authentic pedagogy and student performance. *American Journal of Education, 104*(4), 280–312.

Okech, D., & Barner, J. (2014). MSW students' motivations for taking an international social work elective course. *Journal of Teaching in Social Work, 34*(2), 167–181.

O'Mahony, J. (2014). *Enhancing student learning and teacher development in transnational education*. The Higher Education Academy. https://www.heacademy.ac.uk/sites/default/files/resources/enhancingtne_final_080414.pdf

Parsons, J., & Taylor, L. (2011). Improving student engagement. *Current Issues in Education, 14*(1). http://cie.asu.edu/ojs/index.php/cieatasu/article/view/745

Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2009). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest, 9*(3), 105–119.

Plowright, D., & Watkins, M. (2004). There are no problems to be solved, only inquiries to be made, in social work education. *Innovations in Education and Teaching International, 41*(2), 185–206. https://doi.org/10.1080/1470329042000208701

Roy, M., & Chi, M. T. H. (2005). Self-explanation in a multi-media context. In R. E. Mayer (Ed.), *Cambridge handbook of multimedia learning* (pp. 271–286). Cambridge University Press.

Saunders-Stewart, K., Gyles, P., & Shore, B. (2012). Student outcomes in inquiry instruction: A literature-derived inventory. *Journal of Advanced Academics, 23*(1), 5–31.

Sawyer, K. (2006). *The Cambridge handbook of the learning sciences*. Cambridge University Press.

Smith, J., Lee, V., & Newman, F. (2001). *Instruction and achievement in Chicago elementary schools*. Consortium on Chicago School Research, University of Chicago.

Windham, C. (2005). The student's perspective. In D. Oblinger & J. Oblinger (Eds.), *Educating the Net generation* (pp. 5.1–5.16). EDUCAUSE. https://www.educause.edu/ir/library/PDF/pub7101.PDF

Woolf, J. (2017). An analytical autoethnographical account of using inquiry-based learning in a graduate research methods course. *Canadian Journal for the Scholarship of Teaching and Learning, 8*(1), Article 5. http://ir.lib.uwo.ca/cjsotl_rcacea/vol8/iss1/5

Wright, G. (2011). Student-centered learning in higher education. *International Journal of Teaching and Learning in Higher Education, 23*(3), 92–97.

Yesudhas, R., Lalit, P., Josy, A., & Impana, S. (2014). Water and sanitation in Mumbai's slums: Education through inquiry based learning in social work. *The Qualitative Report, 19*(45), 1–10. https://nsuworks.nova.edu/tqr/vol19/iss45/1

Zepke, N., & Leach, L. (2010). Improving student engagement: Ten proposals for action. *Active Learning in Higher Education, 11*(3), 167–177.

Zorn, I., & Seelmeyer, U. (2017). Inquiry-based learning about technologies in social work education. *Journal of Technology in Human Services, 35*(1), 49–62.

Zubaroglu, P., & Popescu, M. (2015). Preparing social work students for international interdisciplinary practice: A teaching model and its impact on self-efficacy. *Advances in Social Work, 16*(2), 214–232. https://doi.org/10.18060/18504