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Problems, Projects, and Promises: An Integrated Experiential Learning Capstone

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Problem-based learning, project-based learning and community service-learning belong to a family of active and experiential learning approaches. Some experiential educators represent these approaches as distinct models, pointing out their defining characteristics, unique histories, and prevalence within different disciplines (Savery, 2015). In this article, however, we are interested in articulating

common objectives and overlapping practices. We present the example of a 12-week capstone course for honours undergraduates in a sociology program oriented to critical analysis and social justice. The course provides a model for how the three experiential pedagogies may be combined.

We start with some shorthand definitions: Hmelo-Silver (2004) broadly defines problem-based learning as an instructional method enabling students to engage in facilitated problem-solving in small, self-directed groups, where the primary focus is on using inquiry and research skills to understand a complex problem. In many ways, project-based learning similarly emphasizes the creative implementation of a solution



to a problem in the form of a collaboratively designed project, typically leading to a practical product (Savery, 2015). Community service-learning refers to activities performed as part of a course that respond to a community need and, at the same time, enhance students' academic learning. The design of service-learning activities to achieve academic learning outcomes distinguishes service-learning from student volunteering or work placements (Mobley, 2007).

Comparing Experiential Learning Approaches

These experiential pedagogies have several common features. The most obvious is that they prioritize learning by doing within a student-centred learning environment.

Traditional instructional methods such as lecturing are

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replaced by practical learning activities, while the instructor acts more as a facilitator of learning and than as a subject matter authority. Students participate in collaborative group work, or develop relationships with community members in the case of service-learning,

further shifting the centrality of the instructor as the source and organizer of knowledge.

Experiential educators argue that these methods bring about content mastery at least as well as traditional methods, while also promoting self-directed learning and imparting a range of skills, most significantly, meta-cognitive skills developed through students' reflections on learning (Hmelo-Silver, 2004; English and Kitsantas, 2013). Learning tasks are more openended than in traditional pedagogies, so students have considerable choice and autonomy about what and how to study within the guidelines of the course or assignment.



Experiential learning is often interdisciplinary, appeals to many learning styles, and values serendipitous learning. Although some students are made anxious by this openendedness, preferring a more controlled and predictable learning environment, practitioners claim that most become more engaged and take more responsibility for learning over time (English and Kitsantas, 2013).

Problem-based, project-based and community servicelearning all take as a starting point a real world problem or need. In problem-based learning, students are initially presented with a "trigger" that beckons them to investigate a problem in depth. Problem-based learning problems are messy, lacking clear boundaries, and they are also "wicked," giving rise to imperfect solutions that generate new problems in turn (Wiek et al, 2014, p. 434). The work of defining such problems requires students to draw on and develop theory, while attempting to solve such problems helps students discover the limits to their knowledge. In project-based learning, the problem stimulates the design and creation of a practical solution. The real-world nature of the problem situates project-based learning within courses and programs that emphasize the application of knowledge, such as engineering and other professional studies (Mills & Treagust, 2003). The problem in community service-learning arises from the needs of community partners, with students working to support solutions proposed by community partners. Students do not necessarily act as problem-solvers in their own right, or even as helpers, but as collaborators seeking to learn from the lived experience of those closest to the problem. Community service-learning challenges students to explore how they can most effectively contribute their academic skills or expertise, and how they may need to revise their prior knowledge in light of what they learn about the problem from the point of view of those most affected.



Although many educational researchers have distinguished between problem- and project-based learning, there is no single distinction that is universally accepted (Stefanou et al., 2013). For English and Kitsantas (2013), the resemblance between the two approaches is so close that they identify

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both simply as "PBL" (p. 131). However, we acknowledge one contrast as particularly helpful in how we conceptualize the two variants of PBL: problem-based learning is more focused on the acquisition of knowledge whereas

project-based learning is more concerned with the application of knowledge (Mills & Treagust, 2003; Wiek et al, 2014). Community service-learning, we would add, is centred on praxis, the integration of theory and practice (Kajner et al, 2013). These minimal distinctions are recognizable in the design of SOCI 4P00, but, as we explain below, the course as a whole reflects a fluid integration of the three instructional methods.

An Integrated Experiential Capstone Course

Engaging the Sociological Imagination (SOCI 4P00) is the title of a capstone course for 50 to 60 honours sociology students at Brock University (Ontario, Canada). Offered in the final year of the program, the course is intended as a culminating experience in which students synthesize their learning over three years of content-rich, course-based study. In contrast with students' previous courses, the subject matter of SOCI 4P00 is not specified in the calendar description, which presents the course simply as an "integration of sociological theory, research and practice." This description is the students' first indicator that the course is animated by a student-centred



process of skill development, not an instructor-led delivery of pre-determined content.

Most students arrive in the course understanding the title as a reference to C. Wright Mills' canonical text, *The Sociological Imagination* (1959), which most read in first year. Mills' text introduces students to the discipline of sociology by famously urging them to situate personal troubles within public issues and thereby develop a sociological imagination – a way of analyzing how individual stories make sense within wider social patterns, institutions and histories.

In SOCI 4P00, a review of Mills' argument serves to introduce students to problem-based learning. The course starts with the presentation of a set of problems through the introduction of a story about a person or group that is experiencing a hardship. The story sparks the sociological imagination, a thought process leading to defining a problem as a sociologically complex issue with multi-layered origins and no simple solution.

SOCI 4P00 as Problem-based Learning

In the first two offerings of the course in 2015, students researched five broad problems that were receiving news media coverage at the time and that directly touched members of local communities:

- agricultural migrant workers in Ontario's Niagara Region;
- the funding and affordability of postsecondary education in Ontario;
- the policing of protests at the 2010 G20 Summit in Toronto;
- proposals for a basic income guarantee;



- Canada Post's 2013 plan to phase-out home mail delivery;
- Canada's response to the Syrian refugee crisis.

In every case, these topics were introduced by a story, or "trigger," such as a news article featuring a person affected by the issue. For example, students were introduced to the story of a migrant worker in the Niagara Region who was repatriated to Jamaica after suffering a permanently disabling injury on the job.

Students selected one of these topics, and their choices divided the class into seminar groups of ranging between 12 and 18. Smaller working groups of three to four students chose a dimension of the topic to examine in depth. For example, the students who researched the case of the injured migrant farm worker identified these dimensions for in-depth research:

- how Jamaica became a source of migrant labour for Ontario;
- Ontario's Workplace Safety and Insurance Board (WSIB) and its history, mandate and record of protecting injured workers, including migrant workers;
- the social invisibility and cultural isolation of migrant farm workers;
- the effectiveness of policies and regulations governing temporary migrant workers' and farm workers' health and safety.

The small groups reported to their peers in the seminar so that all became knowledgeable about the various dimensions of the problem.

Working collaboratively and in self-directed ways, students began an inquiry process. In the first exploratory stage, their task was to prepare a report about their collective prior



knowledge of the problem and gaps in that knowledge. As part of the report, they generated a guiding research question and formulated a plan for more intensive group research. In the second stage, students searched and summarized scholarly literature, read primary documents and analyzed relevant media to jointly write a literature review focused on their research question. A set of high quality scholarly sources and news articles had been assembled in advance to get students started. Throughout this phase, the instructor and TA provided guidance on how to search the literature, evaluate sources, structure a literature review, and so on, and also offered tools and coaching on how to work effectively in a small group.

SOCI 4P00 as Project-based Learning

The third phase of the course was most akin to project-based learning. In the same small groups, students embarked on a project to create an action plan for advocacy. Their task was to create a set of documents designed to inform and persuade. Each group presented its action plan to the entire class, including the small groups that had not studied their problem. On the basis of audience feedback, each group revised its plans. The final project resulted in a portfolio of advocacy documents, including a short manual explaining how and why the documents might be used in a campaign.

The action plan required students to think about the pragmatics of social change and to apply the knowledge they gained from their research in order to advocate for social justice. The outputs of the entire class exposed all students to a range of advocacy strategies including blogs, editorials, letters to the editor, open letters, petitions, policy briefs, press releases, workshop plans, poster campaigns, and



informational brochures, as well as audio-visual documents, such as a speech to city council, a video-recorded news parody and a podcast. This focus on social justice advocacy not only allowed students to engage the sociological imagination, but also enabled them to begin applying their understanding of social issues, or "problems," in ways that fostered practical solutions in their communities.

SOCI 4P00 as Community Service-Learning

Within the early weeks of the course, students began interacting with community members who were deeply invested in the problems they were researching. For most of the topics, community experts visited the class to speak with all the students. For example, in the case of the injured farm worker, members of the Migrant Worker Interest Group came to talk about this worker's story. At the end of the course, the guests returned to hear students present their action plans. Students were also required to search out and interview additional community resource people, such as prominent volunteers within local churches and charities, union organizers, civic leaders, and staff of non-profit social service agencies.

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Through these interactions, students had the opportunity to understand their coursework as community service. They could see their academic skills in research, interviewing, critical thinking, oral presentations and writing as potentially benefiting people who were

directly affected by the problem or working to address it. The creation of thoughtful, well-researched advocacy tools could be acted upon directly, shared with or passed along to other



community advocates. The form of 'service' within this service-learning model goes beyond charity toward individuals, has the potential to be responsive to community needs, and could catalyze change should students follow up at the conclusion of the course.

Limitations and Promise

This summary of SOCI 4P00 may have overstated the distinctions between the three instructional models the course incorporated. In actuality, the hybrid nature of the course was evident all the way through. Because of this integration, the course design was not overly complex; however, its goals were ambitious. The short timeframe of the course (12 weeks), in particular, imposed limitations on what we could accomplish.

The first limitation was the extent to which we were able to foster student-directed learning. In order for students to be effective, they needed to take charge of their learning and collaborate with their peers within their small research groups. We found that students struggled with adapting to the selfdirected roles required in the course, as these roles conflicted with ingrained habits students developed through more familiar classroom experiences. Some students said they felt lost and in need of firmer teacher direction. They expressed frustration, for example, about not being provided with learning resources such as reading lists. Whereas some enjoyed having the independence to select articles to use in the literature review assignment in the second phase of project-based learning, others mentioned during seminars that they were unsure as to where to find the right articles. In their final reflection papers, however, all students wrote about their process of developing independent learning abilities and skill in group work. These abilities emerged at different



paces and levels of comfort, and only after students gained motivation and confidence to learn autonomously.

The course was also limited in its ability to meet some community members' expectations that students' coursework could substantially support their causes. We were careful not to promise that students could be effective advocates, even if they had the motivation, because of the lack of time to develop requisite knowledge, skills and relationships. Another semester would be needed to fully realize the service-learning dimension of the course, allowing students more time to consult with community members, receive and incorporate feedback on their action plans, and meaningfully implement their projects. With more time, students could very well develop community-building and professional skills as a foundation for engaging in community-enriching relationships and advocacy for progressive social change. Twelve weeks was hardly enough.

Despite these limitations, the SOCI 4P00 course demonstrates how problem-based, project-based and community servicelearning are kindred experiential pedagogies that can be combined into a single course. In this course, students achieved learning outcomes common to all experiential pedagogies, especially enhanced self-directed learning. In addition, students tasted the satisfactions peculiar to each approach, such as building on previous knowledge to define and theorize a problem, applying creativity and problemsolving to complete a project, and responding to a real-world issue by contributing something of value to others. Because experiential learning practices are so grounded in real-world problems, they always come up against imperfect and unpredictable conditions for learning. In the end, these limitations are transformed into learning resources to the extent that students and instructors are able to critically reflect on their shortcomings, as we have attempted to do.



References

English, M. C., & Kitsantas, A. (2013). Supporting student self-regulated learning in problem-and project-based learning. *Interdisciplinary Journal of Problem-based Learning*, 7(2), 128-150.

Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? *Educational Psychology Review*, 16(3), 235-266.

Kajner, T., Chovanec, D., Underwood, M., & Mian, A. (2013). Critical community service-learning: combining critical classroom pedagogy with activist community placements. *Michigan Journal of Community Service Learning*, 19(2), 36-48.

Mills, J. E., & Treagust, D. F. (2003). Engineering education -- Is problem-based or project-based learning the answer?

Australasian Journal of Engineering Education, 3(2), 2-16.

Mills, C. W. (1959). Engaging the Sociological Imagination. New York: Oxford University Press.

Mobley, C. (2007). Breaking ground: engaging undergraduates in social change through service learning. *Teaching Sociology*, 35(2), 125-137.

Savery, J. R. (2015). Overview of problem-based learning: Definitions and distinctions. In A. Walker, H. Leary, C. E. Hmelo-Silver, & P. A. Ertmer (Eds.), *Essential Readings in Problem-Based Learning: Exploring and Extending the Legacy of Howard S. Barrows* (pp. 5-16): Purdue University Press.

Stefanou, C., Stolk, J., Prince, M., Chen, J. C., & Lord, S. M. (2013). Self-regulation and autonomy in problem- and project-based learning environments. *Active Learning in Higher Education*, 14(2), 109-122.



Wiek, A., Xiong, A., Brundiers, K., & van der Leeuw, S. (2014). Integrating problem- and project-based learning into sustainability programs: A case study on the School of Sustainability at Arizona State University. *International Journal of Sustainability in Higher Education*, 15(4), 431-449.

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Discussion Questions

- 1. Stefanou, et al (2013) remind us, "Since no single course or activity can support all learning outcomes, instructors should be intentional in their choice of an active learning approach that is best aligned with the desired learning outcomes" (p. 120). What learning outcomes most correspond with problem-based, project-based and community service-learning?
- 2. To what extent can problem-based, project-based and community service-learning approaches be jointly implemented when they are focused on the same problem in a single course? To what degree are these instructional methods complementary? What contradictions do you see among them?



3. What are some promises and pitfalls of combining problem-based, project-based and community service-learning approaches in a staged manner around a single problem within a course?