

Reflections on Experiential Learning in an Undergraduate Global Health Course: Bringing the Workplace into the Classroom

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Experiential learning has the potential to enhance students' success and prepare them for the job market, including through class experiences that mirror experiences in the workforce. In this article, I lay out the process of incorporating experiential learning in a global health course. I have derived three key lessons from the design and implementation of this course: focus on one overarching goal, align learning activities with real world expectations, and help students understand connections between their projects and course content. These lessons provide insights to integrate experiential learning activities in the classroom.

L'apprentissage expérientiel a le potentiel d'améliorer la réussite des étudiants et de les préparer pour le marché du travail, notamment en créant en classe des expériences qui ressemblent aux expériences en milieu de travail. Dans cet article, je présente le processus d'incorporation de l'apprentissage expérientiel dans un cours sur la santé mondiale. Je tire trois leçons de la conception et de la mise en œuvre de ce cours : il faut 1) se concentrer sur un objectif primordial, 2) harmoniser les activités d'apprentissage et les attentes du monde réel et 3) aider les étudiants à comprendre les rapports entre leurs projets et le contenu du cours. Ces leçons permettent de mieux comprendre comment incorporer des activités d'apprentissage expérientiel en classe.

There are ongoing discussions on how to make global health educational courses and programs meet the core requirements for public health and better prepare students through experiential learning (Friedman & Rigby, 2012; Hoffman & Silverberg, 2015; Kienzler & Fontanesi, 2017; Wilson et al., 2014). These discussions are fueled by the recent interest in effective global health education across North America (Drain et al., 2017; Lencucha & Mohindra, 2014; Withers et al., 2016). Experiential learning can be defined as learning from experience or learning by doing (Lewis & Williams, 1994), which involves action, reflection, abstraction,

and application (Fry & Kolb, 1975; Itin, 1999). It can be an effective approach to teaching global health in a way that makes students feel connected to the field and provides students with a hands-on, meaningful, educational experience.

Experiential learning is relevant to global health education due to the inherent pragmatic nature of the subject (Hoffman & Silverberg, 2015). For example, global health is defined as “collaborative transnational research and action for promoting health for all” (Beaglehole & Bonita, 2010), and strives for “health equity among nations and for all people” as

its major objective (Koplan et al., 2009). The concept of global health is therefore connected to practice, and institutions and departments are motivated to provide their students with real-world skills due to the benefits that experiential learning can bring to global public health education (Hu & A, 2015; Baytor & Cabrera, 2014). Traditionally, global health programs have strived to integrate experiential learning activities into their programs through overseas placement for their students which generally result in positive outcomes (Cole et al., 2012; Panosian & Coates, 2006). However, there are risks and challenges associated with this kind of experiential learning. For example, students can become daunted by intense experiences and the high cost and planning associated with overseas travels and expenses (Parsi & List, 2008).

The general consensus is that global health programs and courses should integrate experiential learning activities. For example, a systematic review of undergraduate majors in global health by the Consortium of Universities for Global Health, 2016 (Drain et al., 2017), resulted in seven recommendations for the effective development and expansion of an undergraduate major in global health. One of these recommendations included facilitation and encouragement of experiential practicum and internship experiences. A few years before the review by the consortium, the Association of Schools of Public Health developed a global health competency model through a multistage modified Delphi process. Some of the competencies included in this model require experiential learning activities such as developing “context-specific implementation strategies for scaling up best-practice interventions” and “monitoring and evaluation

frameworks to assess programs” (Ablah et al., 2014). One of the ways to better prepare students for the workplace is by incorporating learning activities that are experiential in nature into classroom settings (Obenchain & Ives, 2006). Unfortunately, there is a gap in the literature on developing experiential learning activities in global health in traditional classroom settings.

In order to integrate experiential learning into my public health courses, I designed and implemented an upper year undergraduate course in global health based on Fink’s model, which incorporates activities from the workplace into the classroom. Fink’s model has also been used in courses in other disciplines (Fallahi et al., 2009; Levine et al. 2008). In this article, I share some of the insights gained from the course design and implementation, and demonstrate one way that experiential learning in a global health course can be integrated in traditional classroom settings to enhance student learning.

Course Design Approach

The design of the course followed four steps:

1. Developing the experiential learning goal
2. Designing learning outcomes based on the experiential learning goal
3. 3) Aligning teaching and learning activities with experiential learning outcomes; and
4. Ensuring that assessment/feedback is based on experiential learning teaching/activities (Figure 1).

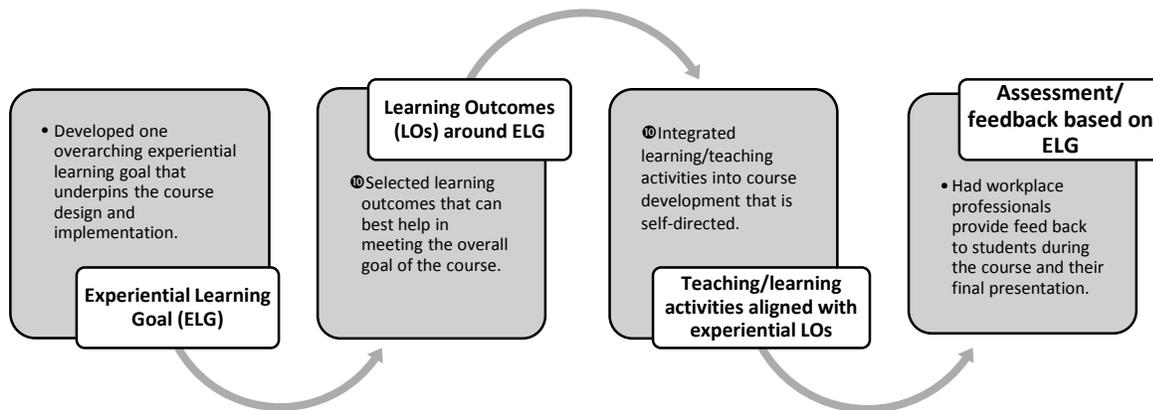


Figure 1. Model for designing a course with a pitch to- and feedback from external panel/potential employers

The main experiential goal of the course is to learn how to design, implement, and scale technological and social innovations to address global health challenges. Students who successfully complete this course should demonstrate the following experiential learning abilities:

1. Generate practical and sustainable ideas for improving global health outcomes
2. Pitch their technological and social innovation ideas for global health to potential investors and funders

Twenty-four third- and fourth-year students attended the course which ran for 12 weeks. Most of the students reported little or no prior knowledge about global health. I therefore designed and planned learning activities in the first two weeks of the course around an overview of the field. For the next eight weeks, students in groups of four worked to identify a specific global health problem and then designed a solution to solve it. During these eight weeks, the lectures were tailored around their projects in such a way that their projects were used as a lens for discussions around global health innovations for improving health outcomes. Students also had the opportunity to discuss their ideas with the class and to get feedback during lectures. We had experts

representing global health funding agencies who presented guest lectures during these eight weeks where the students discussed their ideas and got feedback during the class and through separate meetings with these experts outside the classroom. The generation of ideas by each group was an iterative process taking into account feedback from the instructor, peers, and guest lecturers. Students had the opportunity through this feedback to continually refine, reformulate and test out their ideas. The refinement of their ideas culminated in the submission of a three-page proposal by the ninth week, just before the pitch to an external panel.

The project pitches to the expert panelists took place during the last three weeks of the course. Each group had five minutes to describe and quantify a global health problem and provide a solution. The goal was for each group to make a case as to why they should be given \$100,000 to fund their innovation and how their solution would tackle a global health problem from their chosen angle and make a substantial impact in saving and improving lives. The panel had 25 minutes to ask the group questions and their responses were evaluated based on the parameters used by a number of global health funders, including Grand Challenges Canada, in evaluating global health interventions. The expert panel consisted of three

individuals who worked in global health and included an entrepreneur, a scientist and a global health consultant focused on emerging technologies in Sub-Saharan Africa and South Asia. Students were also given an opportunity to reflect on the experience. In

sum, the approach to developing the course was to ensure that the learning activities, the course goal and the form of evaluation revolved as much as possible around experiential learning (Figure 2).

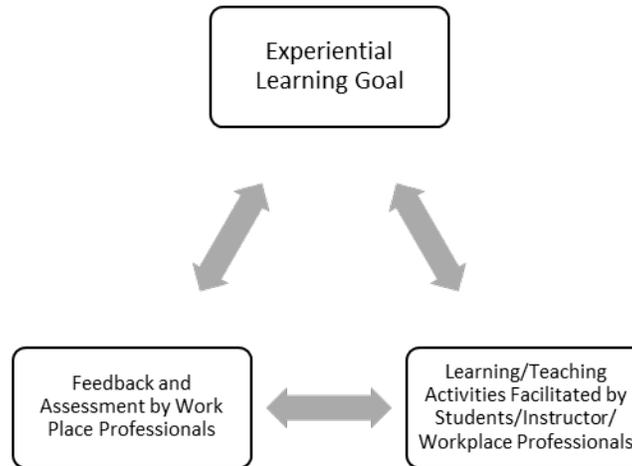


Figure 2. The Fink Model with a focus on experiential learning (Fink, 2003)

Reflections

Based on the design and implementation of this course, I derived three lessons which instructors and course designers can use to effectively integrate experiential learning activities into their courses. These lessons are drawn from my observations and reflections.

Lesson 1: Focus n One Overarching Goal

An experiential learning goal through project-based learning brings it all together. One of the most useful lessons learned was the idea of having just one learning goal that was experiential in nature and that facilitated the generation of learning activities and forms of evaluation. The development of effective course goals can serve as an important foundation that sets the trajectory for course design (Whetten, 2007). The main goal for this course was to teach students to *design, implement and scale technological and social innovations to address global health challenges*. This goal underpinned the design of the course, especially

the project-based design aspect where students in groups worked on a global health innovation project which culminated in a proposal and a pitch at the end of the course similar to the Dragon’s Den format: a reality television program format in which entrepreneurs pitch their business ideas to a panel of venture capitalists in the hope of securing investment finance from them. Studies have shown the importance of such project-based learning in improving experiential learning, particularly in the field of engineering (Mazorra et al., 2016).

The learning outcomes derived from the main course goal were connected to experiential learning such as the ability for students to have reliably demonstrated the ability to generate practical and sustainable ideas for improving global health outcomes. Such learning outcomes help guide the project-based learning aspect of the course. By focusing on one goal, it was easy to see what content, learning activities and evaluation methods were needed to support this goal for the students. For example, for students to reliably generate practical and sustainable ideas for improving global health outcomes, I immersed the

students into social, technological and financial barriers that may hinder technology development and adoption in resource-constrained settings. The immersion was done through relevant case studies, assigned readings, lectures, in-class activities and guest lectures. For a student to develop an understanding of the constraints surrounding the development and adoption of global health innovations, they have to first understand the overall process and environment of scaling technologies in resource-constrained settings. I used their projects as cases throughout the lecture to help coach them. The experiential goal makes the course easier to design and implement, particularly the project-based learning aspect of the course. There is evidence that project-based designs can help support experiential education in other health related fields such as medical education (Maudsley & Strivens, 2000).

Lesson 2: Align Learning Activities with Real-World Expectations

Students truly want to see the relevance of their learning beyond the classroom. The alignment of learning activities with real world expectations in a classroom setting can be difficult to achieve. However, the closer the learning activities are to future work environments, the more authentic and meaningful it will be for the students (Herrington & Oliver, 2000). A recent study showed this to be the case in the context of social work courses where creating similar stakes to the workplace through the involvement of service users and carers enables students to achieve overwhelmingly positive experiences which were implemented in their practice (Molyneux & Gillman, 2015).

Some of the ways the course attempts to mirror real world experiences and expectations is to work with the students in continually refining their projects throughout the course. This is achieved by providing the students an environment to create, test, fail, reflect and keep trying within the first ten weeks of the course until their idea is feasible and delivers a significant health impact. The idea of continuous

refinement and feedback mirrors what is considered critical in the workplace. Secondly, the evaluation of their project is carried out by representatives of organizations who have funded millions of dollars worth of global health interventions and who employed some of the same evaluation parameters used in their organizations in assessing the student projects. Some of these parameters include potential health impact, potential to scale, sustainability, and level of integrated innovation. In other words, this was not just a final class presentation pitched to the instructor and students, but one pitched in a simulated real-life context, to actual assessors using the same benchmarks they use to appraise and fund global health projects.

Lastly, the course featured two experts from global health organizations who offered guest lectures earlier in the course and interacted with students during the ideation phase of their proposals, which provided students with the opportunity to receive feedback as they thought through their ideas. This allowed students to keep creating, testing, and reflecting on their ideas until they produced significant impact.

Lesson 3: Pitch Coaching is as Important as the Pitch

Preparing students for their pitches helps them make the connection between project and content learning. Mason and Arshed (2013) criticise the Dragon's Den approach because of the strong focus on the proposal or pitch at the expense of the knowledge and skills needed to create or implement an idea and detachment from reality. This concern was taken into account in the course design, thus making the pitch a lens through which to teach the course. One unique feature of the course is that I, as the course instructor, have a stake in ensuring that the students present their best effort to the panelists. In the course of preparing students, there is ample opportunity for me to connect course content to their individual projects during lectures and in-class activities. In addition, students have an opportunity to refine their

ideas with their guest lecturers and with me in preparation for the pitch. I use a preparatory approach to prepare students for the pitch that involves them as leaders and innovators.

Preparing them for the pitch also encourages active learning and participation. The preparation involves working on refining their idea, which is evaluated by the instructor and the guest lecturers without any penalties for failure. This allows students to be creative and get adequate feedback on their project. It also involves preparing them for questions that the panelists might ask about their projects. It was interesting to see an improved engagement in the lectures as the course progressed because students had a deeper appreciation of how the course content was relevant to their projects.

Conclusion

There are questions as to how global health programs can best integrate practical experience opportunities for students (Asgary, Price, & Ripp, 2012; Asgary, 2013; Eaton, Redmond, & Bax, 2011; Nelson, Saltzman, & Lee, 2012) in light of the growing demand from students for more inclusion of experiential learning activities. The design and implementation of this course demonstrates how real-world global health issues and practice can be effectively taught through experiential learning activities. Through the course, students develop a nuanced understanding of the skills needed in generating, implementing and pitching technological and social innovations for global health. This course shows that it is possible to bring some of the activities from the workplace into a typical classroom setting through simple experiential learning activities in conjunction with external experts.

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Biography

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