

Building a Public Health Practicum: Reflections on Course Design

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Abstract

This reflection captures the collaboration between an experienced faculty member and a center for teaching and learning to develop and assess an honors practicum course in public health. Integrating principles of course design, experiential learning, and community engaged learning, the authors describe the process of modifying a theory-based course into a hands-on practicum. Instructional strategies and lessons learned are shared to encourage the creation of aligned and student-centered coursework.

Keywords

course design; public health practicum; experiential learning; community engagement; team-based learning

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Capstone and practicum programs, designed to synthesize academic learning and provide students with substantive experiential learning opportunities, are becoming increasingly common. In public health, these programs have become essential to the accreditation of undergraduate programs (Gilbert et al., 2014; White et al., 2018). At a large public research-intensive university, a year-long honors practicum in the Bachelor of Science in Public Health program was created in 2017. While the primary purpose of the practicum was to reinforce what students had learned in the required courses in the field, the instructor had two additional goals. The first was to have the students use their knowledge to conduct a real-world evaluation of a community health problem that could result in program improvement. The second was to have them learn to work effectively in teams, which has become an essential skill in the public health field. In this paper, we present

the important role that course design workshops can have in creating an articulated program extending over multiple quarters, as well as lessons learned in transitioning students from a theory-based course to an emphasis on experiential learning, in creating functional teams, and in evaluating student performance.

Implementing the Practicum Course

The following reflections convey the experience of building and assessing a novel practicum program in public health.

Course Design

The professor enrolled in a structured course design experience through the center for teaching and learning at her institution. Throughout the three-day course design experience, she met with faculty developers to revise course learning outcomes, build assessments, and integrate appropriate learning activities for the summer elective course. Having familiarity with backwards design, this process was not necessarily novel but working alongside colleagues to generate ideas proved to be a productive experience. Through hands-on group activities and guided work time, she was able to complete a draft syllabus that integrated her course learning outcomes. She then replicated this process for the year-long honors practicum. After the short-course design project, she had a sense of the course learning outcomes and found the resources of the teaching and learning center to be extremely helpful in the process of articulating course materials for a lengthy practicum. However, ongoing support through regular follow-up meetings with faculty developers was essential for designing overall learning objectives and breaking them down by quarter to create a coherent flow.

Building an Experiential Environment for Learning

Students admitted to the honors program are high academic achievers and are at home in traditional classroom environments where the emphasis is on the mastery of materials from readings and lectures. The demands of this course are different, and it was essential for the instructor to create active learning opportunities to develop these skills. The focus of the honors practicum is interactive, and it integrates time for a concrete experience, reflective observation, conceptualization, and action as highlighted in Kolb's cycle for experiential learning (Kolb & Kolb, 2005). Students engage in a multi-step process that includes obtaining stakeholder input, developing program logic models, focusing evaluation questions, determining data collection methods and instruments, collecting qualitative and quantitative data, and analyzing and presenting the findings. Working on community-based evaluations provides a fluid structure that allows the instructor and students to co-create meaningful responses without the confines of "right" or "wrong" answers.

Despite their general enthusiasm, the ambiguity resulting from the lack of "right" and "wrong" answers differed greatly from their previous classroom experiences and caused anxiety among some students used to the traditional class format in which they had been so successful. In the second iteration of this course, expectations were further clarified to lessen student anxieties about engaging in an experiential class.

Establishing Effective Teams

In public health, working in teams is an essential skill since few activities are done by individuals. Additionally, identifying and supervising opportunities for students in a setting saturated with universities and graduate public health programs seeking opportunities for their students made it impractical to identify individual projects. While students had worked on short-term team projects, most were used to working independently with little experience in negotiating and learning to trust their peers.

In the course, students worked in groups of three or four with a faculty mentor and/or the professor. Teams were assigned based on how students ranked the available projects, and with few exceptions, they received their first choices. An important lesson learned was that developing effective teams takes considerable time, effort, and feedback, but without it, students may experience unnecessary stress and ultimately their projects may be of poorer quality. During the first year of the program, working out team dynamics was left largely to the students, and some of the teams developed dysfunctional working styles. The professor had provided initial guidance on group dynamics and asked for reflections on group work during the first quarter but did not specifically intervene in the groups. And although peer evaluations served as an important assessment modality for the course and students completed a team assessment and peer evaluations at mid-year which was fed back to the students, it was clear that these efforts were too little and too late.

One of the most common challenges of dealing with highly self-directed honors students was that some students experienced problems relinquishing control of the work to their equally competent peers to complete the task in a quality way. This was a problem that was exacerbated by different working styles, availability, and attitudes about how soon prior to deadlines the projects needed to be completed. In other situations, “groupthink” developed where, often in the interest of harmony, there was little critique of each other’s efforts and standards and expectations were low. For this reason, the syllabus now includes administration of the Gallup social strengths instrument and a subsequent class presentation on strengths and how they relate to group activity, the development of a team contract that includes roles, responsibilities, and expectations, mid-term “check-ins” on team assessment and peer evaluations, and final peer evaluations each quarter that count toward the grade for the quarter. As a result, the second iteration of the course resulted in higher group functioning and ultimately in higher quality products.

Assessing the Practicum

Especially in the honors practicum setting, where most students are planning on entering graduate school, assessments and the overall course grade are of particular importance. Products were identified and rubrics designed to evaluate each course outcome. For example, one outcome was to prepare effective written and oral presentations for different public health audiences, including public health officials and the lay public. Students were assigned multiple intermediate and final group presentations of their work in which the same core content was adapted for presentation to scientific as well as stakeholder audiences and as part of the final graduation ceremony for public health majors. They also gained skills in writing scientific abstracts and making posters, which were presented at an on-campus scientific meeting and an epidemiology meeting co-sponsored by

the health department and the two major universities in the city. The final product was a short final report for the stakeholders with key findings and recommendations. Specific rubrics were developed for each of these group activities and shared ahead of time with the students. Some students who were used to more traditional assignments experienced anxiety at the thought of having a team project influence their course grade. Rubrics are a proven method of clarifying expectations and increasing the objectivity of student evaluations (Stevens & Levi, 2013).

To reduce grade anxiety and to better mimic the “real world” working experience in public health, students and teams can submit their assignments in advance of the final deadline for feedback. The professor’s feedback does not consist of correcting or editing documents but providing general feedback on what meets expectations and what may benefit from changes or improvement. While this method increases faculty workload, it ultimately results in a better product, which in this case is particularly important because the evaluations are being done for community stakeholders and the quality of the work affects the university’s reputation. This instructional approach is well aligned with the research on providing effective feedback within a team-based learning (TBL) setting (Michaelsen & Richards, 2005). An additional tool has been to invite faculty mentors to oral presentations and have them complete the rubrics for each of the students, which not only provides different viewpoints and helpful comments but also reduces the subjectivity of having a single grader.

Identifying Meaningful Community Projects

An additional challenge of the practicum is to identify meaningful community-based projects for the students. Since there are several post-graduate training programs in public health that have long-standing relationships with the local health department and large non-governmental agencies, this limits several obvious options. Additional factors that can impede mutually beneficial community engagement are: the relatively prolonged nine-month time frame to produce results; the minimal background experience of students; concerns over institutional review board clearance and exemption; infrastructure limitations of some local organizations in addition to logistical considerations such as transportation and student availability during normal working hours. Additionally, partners may have anxiety about what the evaluation process entails and whether this exercise has the potential to negatively impact their organization. Off-campus projects have been somewhat less successful for the reasons noted above, although they have produced valuable information that has been used to guide programs. In virtually all cases, the institutions involved have asked that we return the following year to conduct additional evaluations.

The most successful projects to date have been done on campus with the student health service and the campus police, both of which understand the realities of student abilities and availability, do not involve off-campus travel, and are genuinely enthusiastic about having information to better guide their policies. Projects involving observation rather than data collection such as interviews and focus groups have also gone more smoothly. Another key factor in building successful community projects is working closely with the stakeholders for each project and involving them as active participants in setting the evaluation questions, determining the best means of data collection, inviting them to the end-of-quarter presentations, and providing end-of-the-project reports and in-person presentations or briefings.

The field of public health involves extensive interaction with the public, the community, or in facilities providing client and patient services; not surprisingly, ethical clearance is an important issue. Students are required to undergo the ethical training for researchers at our university, and each student team further discusses its planned data collection at a class session with the director of the institutional review board. While the course is engaging in research that is considered exempt, the training and coursework are designed to ensure that data are collected carefully with attention to obtaining consent and safeguarding participant confidentiality.

The Role of Mentorship and Co-Instruction

Another element of this practicum is the integration of additional mentorship to allow for deeper engagement with each of the student projects. The design of this course integrates a project mentor in addition to the course instructor. To support the development of student projects, the input of additional faculty members is a good solution. Not only does their involvement provide additional support and credibility to the projects and technical skills in specialized areas such as qualitative research or study design, it also offers junior faculty an opportunity to create local community ties and obtain university teaching credit. Mentors also receive a stipend of \$1000 per quarter. The students and mentors in several cases have formed strong bonds, and the mentors serve as an additional source of references for graduate school or jobs. The role of supervision and feedback on projects for the practicum course has been shared between the instructor and mentor.

Discussion and Future Considerations

The experience with the honors practicum demonstrates the value of backwards course design and the important role that experienced educational experts can play in the development of courses, particularly complex, multi-term courses such as this one. Both were instrumental in creating the initial course but also in subsequent revisions and improvements and brought what otherwise seemed to be a near-insurmountable process into a far more manageable one. The course design process helped focus class development. Grounded in backwards design (Wiggins & McTighe, 2005), the concept of building or modifying a course with the end in mind has become increasingly popular. Centers for teaching and learning across the globe have adopted this model. Countless faculty across disparate institutions have engaged in the process of building course learning outcomes, then creating aligned and authentic assessments, followed by integrating appropriate learning activities. There are varied approaches to how course design programs are implemented in distinct institutional settings, but the fundamental principles are relatively consistent. When considering a redesign of a chosen course, it is useful for the instructor to account for the context of the course, institutional consideration, environmental factors, student demographics, and instructor characteristics. The course design also integrated tools to support mapping course learning outcomes and aligning these with the appropriate assessments and learning activities (Fink, 2009).

The course design process also supported the development of project assessments and rubrics, such that assessments were closely aligned with the course outcomes. The rubrics were especially important given the potentially subjective nature of grading non-conventional assignments. The ongoing assessment process also made an important contribution to student learning: The preliminary feedback allowed them to reflect and further improve their products and was much

appreciated by the students. The improvement in initial submissions over the course of the year was striking, suggesting that the students had internalized much of the feedback they had been previously offered. The assessments thus had a clear purpose and were aligned with the outcomes and experiences of the course and created an environment in which the students can meet their responsibilities to their course and the community (Astin et al., 1992).

The literature on team-based learning suggests that the distribution of intellectual talent and the diversity of student strengths should be considered when forming groups and that teams should be fixed for the whole course. Once teams have been selected, students must have accountability for not only their self-directed learning but the organization and development of the whole team. Research on TBL suggests that timely directed feedback is essential for student learning outcomes to be met (Michaelsen & Richards, 2005). Additionally, group assignments should serve a dual purpose of promoting learning and team development. Finally, it is crucial that students receive frequent and immediate feedback (Michaelsen & Richards, 2005).

These collaborative team-based learning principles were mirrored in the honors practicum. A valuable lesson learned in the first iteration of the practicum was the importance of more active feedback during the critical early stages of team development in which students not only rated their and their fellow group members' contribution but also suggested not only areas of strength but areas for improvement. Many took to heart the constructive criticism of their peers and in many cases, a change in their behaviors and practices was noted over the course of the year both by the professor and by their peers in subsequent evaluations.

In addition to the collaborative nature of the course, there were also considerations in creating meaningful community partnerships. The research on service learning emphasized the effective pedagogy that can exist when there is a positive relationship between the academic institution and community partners. A community-based model of coursework can create a rich learning environment with an emphasis on social justice (Butin, 2006). Indeed, strong collaboration developed between the groups and their community stakeholders, and recommendations have been well-received, and in many cases, have been implemented. As the reputation of the course has spread, we have been approached by other organizations on and off campus and have developed a broader base for future community partnerships.

The first year of the honors practicum program encountered several obstacles, which is not surprising given the resistance that can sometimes be expected when integrating more active learning in coursework (Tharayil et al., 2018). In the second year, most of these issues have been resolved through more informed recruiting and interviewing, improved explanations of the course philosophy, clarified expectations about the evaluation activities and student assessments, increased instructor access, and increased frequency of feedback.

Teaching labor-intensive courses, while rewarding, requires a great deal of time and attention per student. Intentional course design can alleviate some of the challenges and limitations with time. Additionally, parallel to much of the team-based effort within the classroom, having a collaborative community of educators can support the course design and instruction of capstone experiences. Findings from faculty across various universities show the positive impact of engaging in a community of practice; these collaborative faculty spaces foster rich learning

opportunities that improve teaching practices, encourage professional growth, and in turn support student learning (Trust et al., 2017). An area for exploration to support faculty engaging in capstone instruction is the potential development of a learning community for faculty to continue to share ideas through a supportive peer network.

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