Tearing Down the Silos: An Interdisciplinary, Practice-Based Approach to Graduate School Education

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Introduction

The most meaningful measure of effective teaching is how well students learn. According to Michael Hunter Schwartz, an expert on teaching, learning, and curriculum design in law schools, students learn best when they think, do, reflect, write, speak, and collaborate.1 With the exception of the dreaded “group project,” the traditional graduate or professional school educational experience does little to encourage meaningful collaborative interactions between students in any given field, let alone across disciplines.

The normative culture of student “silos” was reflected in my own legal education. I began law school at Tulane University in 1981. All of my classes were held in one building. Each class consisted only of law students. Professors ruled as autocrats, and both course content and outputs were singularly controlled by them. Teaching approaches focused on the Socratic method of questioning, with an occasional merciful offering of traditional lecture-oriented pedagogy.

There was one exception to Tulane’s uniformity: a course on law and psychiatry. This course was offered to both law and medical students, and the classes were held off-campus in a New Orleans hospital auditorium. The approach was multidisciplinary (i.e., the legal and medical issues were taught in parallel and the different schools assessed their students separately) rather than interdisciplinary (i.e., a course that draws from more than one discipline to effectuate a common goal). Educational scholars associate interdisciplinary education with a number of distinct benefits, including advanced critical thinking and cognitive development.2

After a 35-year absence, I returned to academia at the University of Pittsburgh. There were a few noted changes in the way law school classes were taught. Some of my law school colleagues retreat from the one-grade assessment based on student performance on a single final exam. Instructors tend to be a lot less combative and more intent on keeping students, rather than eliminating those who are less than high performers. But one aspect has remained consistent: overwhelmingly, law students remain educated in a disciplinary silo.

Formal and informal surveys of my public health law students reveal that this approach is contradictory to how they would like to be educated. Universally, students want to work with others in different disciplines in which real-world public health issues are identified, effective strategies implemented, and community health improved.

I work closely with the Allegheny County Health Department (ACHD), an autonomous local health department of approximately 350 public health professionals serving 1.2 million individuals in southwestern, Pennsylvania. Local health departments play increasingly pivotal roles in the provision of community services; however, many are also experiencing diminished funding and reduced workforces. In light of these constraints, it is evident that public health
practitioners could benefit greatly from the insight and research capacity of graduate students.

In November 2013 a law school colleague suggested that I apply for The Future of Public Health Law Education faculty fellowship program, which was being funded by the Robert Wood Johnson Foundation (RWJF). At first, I was skeptical — why would I ever be considered for such a prestigious honor? However, the more I thought about it, the clearer it became that it was a wonderful opportunity to construct a class that would address the concerns of my students, assist the ACHD, improve the health of the community, and serve as a template for others’ courses. The prospect presented a creative and logistical opportunity for me: how could I develop a meaningful, interdisciplinary practice-based course that students would actually want to take and that would provide a practice partner with beneficial information? This essay explores the challenges I faced, how I addressed them, and the lessons I learned from this fellowship experience.

**Challenge #1: Creating the Course**

*Choosing a Community Partner and Course Topic*

After being given this tremendous opportunity by the RWJF fellowship program, I became petrified that: (1) no one would enroll in my course; (2) a couple of students would enroll, but the number would be too few to make the experience meaningful; or (3) a respectable number of students would enroll, but they would all be from one school so the premise of an interdisciplinary class would be undermined.

My fears were not completely baseless. At the University of Pittsburgh’s School of Public Health (“Pitt Public Health”), students are required to take many core courses, leaving few electives such as my new one. At the law school, law students tend to gravitate toward courses that will help them pass the bar or improve their grade-point averages. Also, I am a relatively new professor and not particularly well known across the university.

Inspiration came from the ACHD, and we worked together to identify the first topic to be addressed in the course: the regulation of tattoo parlors. I hoped that the legal, economic, and health implications associated with inking would appeal to 20-somethings. Moreover, the possible regulation of tattoo parlors is a topic that the ACHD has been interested in since they initially explored it in 2008. Because of a sparse workforce, the health department’s analysis was incomplete and inconclusive. The scope of the research topic appeared to be narrow enough to allow a thorough analysis to be completed in one semester.

Pennsylvania does not regulate tattoo parlors at the state level, but a few local jurisdictions have promulgated regulations, including Philadelphia (the largest city in Pennsylvania) and Monongahela (the second smallest city in Pennsylvania located in a county adjacent to Allegheny County). A preliminary review of states that do regulate tattoo parlors revealed wide variances in both the type and stringency of legal mandates. This variance lent itself to a robust discussion of interjurisdictional comparison of laws.

**Lessons Learned:** For anyone interested in creating a practice-based course with a public agency or not-for-profit community organization, I recommend that you choose your practice partner carefully. Make sure that the goals align and that the topic has relevance. Also, to ensure both student engagement and student success, it is important to select an issue that is topical, novel, and doable in whatever time constraints you have (and also remember that projects take longer than you think to complete).

**Attracting Interdisciplinary Enrollment**

The course, called “Law in Public Health Practice,” met for two hours each week for 15 weeks. After selecting the course topic, I had to advertise it. I enlisted the assistance of one of my creative Pitt Public Health colleagues to design an eye-catching, edgy poster of a tattooed man. The flyer was placed on multiple bulletin boards at Pitt Public Health, the School of Law, and in weekly newsletters. Several of my colleagues advertised my course during their classes. I also engaged in self-promotion during my public health law class, when I guest-lectured in others’ classes, and during student symposia.

Much to my relief, the students who registered for “Law in Public Health Practice” came from a wide variety of fields:

- A behavioral and community health services (BCHS) student working on an LGBT health research certificate
- A BCHS student working on a certificate in global health
- Two first-year master’s in public health (MPH) students in health policy and management (HPM)
- Two second-year law (J.D.) students
- A senior undergraduate student in neuroscience who is pursuing an M.D./M.P.H. degree at the University’s School of Medicine in fall 2015
- A first-year master’s in health administration (M.H.A.) student in HPM who already has a law degree
- A senior student at the School of Nursing with a master’s in nurse anesthesia
- A J.D./M.P.H. student
Lessons Learned: When offering a new course, particularly one with novel practice-based and interdisciplinary features, use every avenue possible to promote your class. Start early enough so that students can plan well ahead of the drop/add deadline. Also, do not be ashamed of promoting your course. Engage the assistance of fellow colleagues to make students aware of the new offering.

For the next class, I also gave an overview of public health, the legal process, and public health law. I also asked LuAnn Brink, Chief Epidemiologist at the ACHD, to lecture about Pennsylvania’s public health infrastructure (which is unique and fractured) and the health department’s previous research into the regulation of tattoo parlors. Dr. Brink was invited back mid-semester so that the students could ask her questions about formatting their projects as well as to share their initial findings.

It is critical to create a class that is student-centered with respect to content as well as process. Despite a well-thought syllabus in advance, remain as flexible as possible with it, to meet your students’ needs as they arise during the semester. Listen to your students. Incorporate not only what you feel is necessary for your students to know, but also what they want to learn.

Through this course, I learned how to play the role of an effective advisor, mentor, and guide, and to give up trying to control the students’ learning. It can be hard for type-A faculty like myself, accustomed to the role of benign classroom dictator, to step back and let the students take responsibility for their own learning, but doing so results in better student outcomes.

Challenge #2: Structuring an Unstructured Course in Uncharted Territory

No one ever taught a class like this before at the university, so I was unable to discuss a choice of textbook nor could I review someone else’s syllabus to glean ideas as to how to proceed. On one hand, the lack of precedent gave me the freedom to move in any direction I wanted. There was no clear, accepted method of teaching an interdisciplinary, practice-based course. On the other hand, it was difficult to gauge exactly how long it would take in any one class session to cover the course material or what subject matter would be most beneficial for the students. I had to walk a fine line between approaching this as an “anything goes” course and imposing a structure that would be too rigid to allow for change.

Practice-Based Learning

The first class was entitled “Learning to Speak Another Language.” I encouraged the students to reveal self-identified stereotypes of each other’s professions. My approach, however, was rather cursory. In the future, I will spend more time exploring similarities and differences between disciplines. I will also give the students an issue with public health law implications and have each cohort explain to the others the methodology they use to address problems.

Lessons Learned: To maximize the benefit and constructive learning opportunity offered by having a practice-based partner, be sure to keep your partner engaged throughout the semester. Elicit feedback to make sure your project is sound, informative, and delivered in a way that is useful to your partner.

Student Engagement

For the rest of the initial classes, we talked about evidence-based judicial decision-making, population health, and the administrative process. In retrospect, I spent too much time on theory. My lectures should be less pedantic and more didactic.

I also did not realize until later in the term that the students were unfamiliar with some rudimentary professional competencies. For example, the students did not fully understand how to create an agenda or run an efficient meeting. Few of them could produce a logic model or work plan, which are essential tools for many grant proposals and useful organizational instruments for any career path. The students needed a refresher in how to create an effective survey. I was able to create mini-lectures (i.e., 30-minute presentations) for each of these areas, and each class was run thereafter like a meeting with committee reports, new business, and status updates.
Lessons Learned: It is critical to create a class that is student-centered with respect to content as well as process. Despite a well-thought syllabus in advance, remain as flexible as possible with it, to meet your students’ needs as they arise during the semester. Listen to your students. Incorporate not only what you feel is necessary for your students to know, but also what they want to learn. Through this course, I learned how to play the role of an effective advisor, mentor, and guide, and to give up trying to control the students’ learning. It can be hard for type-A faculty like myself, accustomed to the role of benign classroom dictator, to step back and let the students take responsibility for their own learning, but doing so results in better student outcomes.

Field Experiences
In order to better familiarize the students with the tattoo process, I arranged a trip to a local body art establishment. This was definitely a highlight of the semester, and the information gathered during our hour-long excursion proved invaluable. We watched the owner tattooing a customer and learned about the art of inking. We also interviewed the customer and other employees about the industry (including best practices, changes they would like to see implemented, and problems within their profession).

Lessons Learned: Students learn much more effectively by doing than by reading or hearing. Try to incorporate relevant trips, meetings, and other interactions into the curriculum to synthesize theory and practice.

Group Project
After the initial six weeks of class, the students then started to delve into the practice-based project. A scribe was elected to take notes during our work sessions. An account with Google Docs was created to share information and drafts of work product.

The students determined that research was necessary in three areas: law, health outcomes, and economic implications. With respect to legal differences, I grouped students into pairs to look into the tattoo regulations in seven diverse jurisdictions: Oregon, Virginia, New York, the District of Columbia, New Jersey, Monongahela, and Philadelphia. The students had teleconferences with local health departments in these jurisdictions to ascertain how practitioners implemented the legal mandates. Questions were raised concerning the number of health department employees assigned to monitor the artists and owners, the amount of revenue generated from licensure fees, and the type of support or push back health departments encountered from the industry. The students reported their findings to the group, and similarities/differences between the laws were noted.

After sharing their legal research findings, the students self-divided into three new work groups: the research team, the deliverables team, and the presentation team. My sole prohibition was that a team could not be a student silo (i.e., each team had to involve students from at least two different disciplines).

The research team took the lead in creating a survey of tattoo parlor owners and artists. The students on this team designed the survey using Survey Monkey and sent it electronically to over 100 establishments in Allegheny County. They made follow-up telephone calls to discuss some of the responses. The survey data were analyzed, graphically represented, and presented to the rest of the class.

The research team also assigned projects to students in the other groups, including analyses of the health and economic impacts of tattoo parlors. The results were surprising. Very few poor significant health outcomes were directly attributable to tattoo parlors. Anecdotal evidence revealed that the majority of minor problems associated with tattooing (such as mild infections or rashes) were primarily caused by amateurs who were not associated with a brick-and-mortar business. Regulation of tattoo parlors is also costly, as was confirmed through the follow-up teleconferences with local health departments.

After comparing the laws and analyzing survey results and health outcomes, the students determined that regulation in Allegheny County was not warranted at this time; therefore, model regulations were premature (which was a surprising departure from my original proposal). The class came to a consensus that a consumer-education campaign and the convention of a stakeholder advisory board would better serve the community.

Lessons Learned: By letting the students take responsibility for determining the necessary research to be undertaken, the other data to be gathered, and the conclusions to be drawn, I learned how important it is to not micromanage your students. Give them guidance and set parameters, but also be respectful of your students’ conclusions. After all, it is their work product, not yours.

Presenting the Students’ Recommendations
The students decided that the best way to convey their recommendations to the ACHD was through a white paper. The deliverables team was responsible for the paper’s layout and design, working within a modest printing budget, and assigning additional student projects. The deliverables team determined that outreach needed to be made to the other universities in Allegh-
Students perform better when
any County to poll their interest in disseminating information concerning best practices of selecting reputable tattoo parlors and appropriate aftercare (i.e., a “do’s” and “don’ts” of inking). The students also determined that it would be helpful to the ACHD to have a webpage devoted to good tattoo practices, to assist both tattoo artists and consumers. The deliverables team assigned some of their peers the task of designing a mock website.

The class unanimously decided that only three of students would present their findings to the ACHD but each of them would be prepared to answer questions regarding their findings. A law student, an M.P.H. student, and an undergraduate student volunteered to design and perform the presentation. A week before the actual presentation to the Director of the ACHD and her Executive Leadership Board, the presentation team performed a dress rehearsal before the rest of the class and elicited feedback concerning the style, graphics, and content of the presentation. The class also practiced fielding questions so that they would be better prepared to address them during the actual presentation.

Lessons Learned: Students perform better when given a choice of tasks. Allowing the students to select which team to be on, and which tasks to perform on their team, motivated them to achieve a high level of performance on their respective tasks. They did not want to let their team members — or the practice partners — down.

Challenge #3: Assessing the Students

When I have students from different disciplines in my public health law survey course, I typically evaluate them separately by discipline. For example, although each of the law students must take a final examination, I allow my non-law students in the same class to write a paper instead. To be truly interdisciplinary, however, assessment of each of student should be made using the same methods.

Based upon feedback from my students, I changed what projects I originally planned to grade. Initially, I wanted to assess the research portion of my students’ efforts; however, through a series of conversations, the group and I decided to forgo each of the team members’ individual grades and, instead, to evaluate the students’ collaborative final product. Quizzes on the readings counted for 20 percent of the student’s grade. The importance of professionalism was emphasized during our summer institute in Park City and reflected ten percent of their grade. The rubric I used, which was borrowed from Michael Hunter Schwarz, evaluates students in several areas including attendance, class preparation, attitude, and arriving on time for class. Seventy-percent of each student’s grade was for the work product and presentation to the ACHD. It is very challenging to assess an individual student’s effort on a group project. At times, it is quite apparent that a student is engaged and contributing to the effort, especially when that individual goes beyond what is expected. For example, one of my students on the research team arranged to go independently to the ACHD, took pictures of the presentation space, and inquired as to technical support, so that the presentation team could be prepared when they spoke to the ACHD leadership. Much of the teamwork occurred outside of the classroom, and I thought other students would be in a better position than I to evaluate their peers for overall contribution.

Ultimately, I developed three assessment tools to determine the work product and presentation grade. The professor’s evaluation was weighted 70 percent of this grade. I evaluated each student individually as well as their contribution to the group effort, and assessed them in the following areas: quality of student research, communication of research findings, information gathering, contribution to the group, completion of individual tasks, attitude, and work ethic.

A peer evaluation was averaged among the students and worth 20 percent of the work product and presentation grade. The students assessed their peers in the following areas: contribution to the group effort, completion of individual tasks, attitude, and work ethic. Additional comments were also solicited. The student’s self-evaluation was worth ten percent. The students were asked to assess their overall efforts in comparison to their classmates.

Lessons Learned: Although I had initially thought that the students’ themselves would be in a better position than I to fairly evaluate each other’s contribution to the team, this turned out not to be the case. The peer evaluation and student self-evaluation tools were not useful. Only one of my students gave thoughtful evaluation to her peers. The rest gave a perfect score for each of their classmates. Few meaningful additional comments were given. When I next offer this course, I will consult with our cohort of fellows on their successes (or not) with peer evaluation and review the literature on peer assessments to consider modifications to my evaluation process.

Impact

The students derived a variety of benefits from participating in this course, including learning how to communicate effectively by engaging with peer collaborators who utilized completely different problem-solving techniques, how to work with and for a client,
how to prioritize tasks, how to work within a budget, and how to respectfully educate others.

The University of Pittsburgh benefited from this project as well. There is a certain caché associated with the RWJF fellowships. There is a closer tie now between Pitt Public Health, the School of Law, and the ACHD. The university's support of an RWJF fellow has been promoted throughout the country and, in turn, reflects upon the university as a leader in public health law.

From a personal standpoint, the best thing about the class was the feedback from my students. Our students assess their instructors and courses using an online evaluation tool. The results were humbling. The student responders were unanimous in giving the highest score of 5 (“One of the most outstanding”) in most areas, including that the instructor explained the subject matter in a way that made it understandable, made good use of examples to clarify concepts, conveyed knowledge of the subject, maintained an environment where students felt comfortable asking questions, included worthwhile information in class that was not duplicated in course materials, provided useful feedback, and encouraged independent thinking. Perhaps most importantly, unanimous scores of 5 were given for overall teaching effectiveness of instructor and that the instructor generated interest in the subject as well as stimulated a desire to learn more about it. I credit much of the success of this course to the support, education, and inspiration I received through the RWJF fellowship program.

The students would linger after every single class and seemed really interested in discussing the class’s take-aways. After one particularly intense work session, I decided to reward them by dismissing the class ten minutes early. Following what I assumed would be a welcomed pronouncement, one of my students said, “But Professor, we still have ten minutes to go. Can we keep working?” The other students’ heads nodded around the table, and then one remarked, “That’s the first time that I have ever heard students asking to stay after being dismissed by their teacher.” It truly warmed my heart that the students were so dedicated to the project and their enthusiasm was infectious.

Because of the course’s success, Pitt Public Health is exploring whether it should be a mandatory course for all students in its health policy and management program. In the second iteration of Law in Public Health Practice, the class is even more diverse than the original cohort and is populated with students from the schools of medicine, law, public health, and public policy. We are exploring legal and public health interventions to address the opiate epidemic. Additionally, the School of Law already has a health law certificate program, but no similar concentration is available in Pitt Public Health. I am honored that my Pitt Public Health students have asked that I develop a law and ethics certificate program here because of the newfound interest in public health law that was generated from my course.

Lessons Learned: Do not hesitate to apply to be a fellow in one of the RWJF fellowship programs. The experience was invaluable for me, particularly because it encouraged me to think beyond my own siloes of comfort. The student feedback reflected that they loved the course and gained invaluable professional and networking experiences. My university now has a more cogent relationship with governmental public health and is seen as a pioneer in fostering public health law education. The ACHD benefited by having an issue thoroughly vetted by multi-disciplinary experts. Much to my delight, the ACHD was recently contacted by members of the Pennsylvania legislature concerning tattoo regulation. The Director forwarded a copy of the class’s white paper as part of the department’s response. I want to thank RWJF for introducing me to my fellow fellows who are remarkable not only in their scholarship, but also in their commitment to educating the next generation of public health law practitioners. I look forward to continued collaboration with the fellows, mentors, and others in our community of practice in the field of public health law.

References
3. Many thanks to Mary Crossley, Professor of Law and former Dean (2005-2012) of the University of Pittsburgh School of Law, who is a colleague, a mentor, a leader in health law and ethics, and, most importantly, my friend.
5. Linda S. Duchak, EdM, MCHES, Associate Director, Center for Public Health Practice at the University of Pittsburgh Graduate School of Public Health, was the creative force behind my poster.
6. The syllabus for this course is available through the fellowship program’s teaching resources library on-line. See Network for Public Health Law, “Public Health Law Faculty Teaching Resources,” available at <https://www.networkforphl.org/faculty_teaching_resources/> (last visited January 20, 2016) (this site is password protected; faculty may request a password from the Network on the site) (see “Law in Public Health Practice” in the Syllabi section of this website).
7. Id. See “Public Health Law – Quizzes” (four quizzes to assess student understanding) in the Other section of this website.
8. *Id.* See “Public Health Law – Evaluations” (professionalism evaluation) in the Other section of this website.

9. *Id.* See “Public Health Law – Evaluations” (self-assessment, peer assessment, and professor evaluation for an interdisciplinary project) in the Other section of this website.