

TEACHERS' TOPICS

An Interdisciplinary Oral History Initiative

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To achieve a significant educational experience that offered effective and lasting change in students' attitudes about expertise and collaboration, the authors designed an interdisciplinary project that purposefully linked students from history of pharmacy and communication studies courses. Over 3 successive semesters, 60 students formed interdisciplinary teams to design, conduct, and transcribe area pharmacists' oral histories. This project challenged students to overcome stereotypes, address anxiety about working with people outside traditional peer groups, and recognize specialized knowledge and skills they offered to the interdisciplinary partnership. Fifty-seven students wrote individual reflective self analyses that examined their own attitudes and experiences prior to, during, and after the project. Qualitative and quantitative analyses of the students' accounts provided substantial insight into the value of the interdisciplinary and intergenerational experience as well as students' recognition of disciplinary expertise, both in and outside of their respective majors.

Keywords: interdisciplinary education, oral history

INTRODUCTION

In pharmacy education, the term "interdisciplinary" is often used to describe in or out of classroom collaborations between faculty members and students from closely related health care professions. These types of collaborations are often aimed at changing the social, cognitive, and professional behaviors of pharmacy students in order to prepare them for their role in a more integrated healthcare setting. These changes primarily occur when pharmacy students are afforded the opportunity, through classes or projects, to consider where they fit into the healthcare arena and what expertise other healthcare providers have to offer. While reports of these types of experiences are not uncommon, it is unusual to find research describing interdisciplinary partnerships between students and faculty members from pharmacy, the humanities, and social sciences. This manuscript describes the design, implementation, evaluation, and impact of an interdisciplinary oral history project that brought together students and faculty members from the college of pharmacy and communications program, as well as practicing and retired pharmacists in northeastern Pennsylvania. The goals of this project were to collect the oral histories of area pharmacists and to study the process

of expertise negotiation and recognition between students from vastly different disciplines.

Interdisciplinary health care experiences help pharmacy students gain an appreciation for and understanding of the expert skills and knowledge that other healthcare providers possess, to enhance critical thinking and problem-solving skills, and provide students with an opportunity to develop new ways of thinking about patient-based problems. For example, Joyner and colleagues describe the development and delivery of an interdisciplinary case conference experience where students in pharmacy, medicine, nursing, physical therapy, audiology, occupational therapy, and social work came together to work on developing a management plan for mock patients during a 2-day case conference. This project required that all participants negotiate and recognize one another's expertise, and utilize problem-solving and other discipline-related skills and knowledge to formulate a management plan for mock patients. The exercise also helped participating students develop an appreciation for and an understanding of the specific skills and knowledge that other healthcare providers possess. Changing attitudes about the abilities, skills, and knowledge base of other healthcare-related disciplines were obvious.¹ Popovich et al reported a similar type of experience involving the joint participation of pharmacy, nursing, dietetic, and health promotion/education students and faculty members in an interdisciplinary health care elective. All students came away with a better appreciation for their unique set of skills and knowledge

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as well as that of other healthcare students. Furthermore, students recognized that interdisciplinary cooperation among healthcare providers as well as looking at patient-related problems from different perspectives could significantly impact patient care.²

Clearly, each of these collaborative experiences was aimed at changing the social, cognitive, and professional behaviors of pharmacy and other students in various health care fields in order to prepare them for their role on an integrated healthcare team. Despite differences in the design, scope, and implementation of each of these interdisciplinary projects and/or courses, each ultimately allowed students to participate in the process of expertise negotiation and recognition. Furthermore, they provided students with a valuable opportunity to enhance critical thinking and problem-solving skills.

However, there are few reports in the literature that describe collaborations between faculty members and students from pharmacy with those from social sciences and humanities. The few projects/collaborations that are reported are either designed to (1) illustrate moral and ethical issues in healthcare, (2) improve critical thinking skills, or (3) to capitalize on the faculty members' unique training, teaching strategies, and philosophies in order to enhance a lecture, course, or classroom project.^{3,4} None of these interdisciplinary experiences required pharmacy students and those from the humanities and social sciences to collaborate on a shared research project as well as work through the process of expertise negotiation and recognition.

The lack of primary literature in this area may be due in part to a lack of reporting or a feeling that these types of collaborations have little usefulness within the context of pharmacy education. As the Boyer commission suggests, perhaps the most likely reason is that research and teaching innovations are likelier to occur within the bounds of departments rather than outside of them. Furthermore, as soon as they choose a major, undergraduate students begin to associate with the faculty members from that department, thus limiting the possibilities of crossing "traditional academic" lines and experimenting with new and broader ways of thinking.⁵

True interdisciplinary educational experiences could be valuable to pharmacy students in that they may address, in nontraditional ways, the development of important professional skills such as interpersonal communication, ethical decision making, and a tolerance and appreciation for other ways of learning, as well as the qualities of adaptability, leadership, and creative problem solving outside of patient care. Furthermore, the new accreditation standards for the doctor of pharmacy degree place an increased emphasis on interprofessional educa-

tion within the pharmacy curriculum. Specifically these standards state: "The college or school, with the full support of the university, must develop suitable academic, research, and other scholarly activity; practice and service relationships; collaborations; and partnerships, within and outside the university, to support and advance its mission and goals."⁶

DESIGN

A pharmacy-based oral history project was initiated at Wilkes University in the spring of 2003. The University is a small, private institution with approximately 3,300 full-time students and 35 undergraduate majors. The pharmacy program, the first professional doctoral degree program on campus, was established in 1994 as a traditional "2 + 4" program. The professional program admits 65-70 students per year.

This project, based in part on one designed by Clarke Ridgeway of West Virginia University,⁷ was designed to collect the oral histories of local pharmacists and provide pharmacy students with an appreciation and understanding of how pharmacy was practiced in northeastern Pennsylvania over the last 60 years. In addition, it brought together 3 classes: 2 in communication studies (a senior-level research methods class and an advanced video production class) and 1 in pharmacy (an elective history of pharmacy course).

Through combined classes, students in both disciplines were trained in the technical background and history of local pharmacy practice, as well as oral history interview methods, transcription, and analysis. Student teams were also required to meet outside of class to develop interview questions and an interview strategy, and to transcribe their work.

Following Fink's Taxonomy of Significant Learning,⁸ the authors sought to deepen the students' already significant educational experiences by emphasizing the value of interdisciplinary research. While expertise in both academic disciplines often focuses on cognitive and skills development (eg, recall knowledge in terms of factual data; demonstrable comprehension through testing and application; analysis; synthesis; and evaluation), the authors designed the oral history project to emphasize other components of their education such as interpersonal communication, ethics, tolerance, and appreciation for other ways of learning, adaptability, leadership, and creative problem solving. Furthermore, this project required pharmacy and communication student partners to design, conduct, transcribe, and analyze the outcomes of an intergenerational oral history interview with a local pharmacist. The authors believed that as students interacted with research partners of differing

ages and disciplines, discovered and named their own and others' expertise, and acknowledged their own biases and preconceptions prior to and after the project, they would experience lasting change in their behavior and attitudes, a defining feature of Fink's taxonomy.

The project also sought to cross territorial boundaries by asking students from different disciplines to work with one another. Because of the relatively prescribed curriculum and close knit culture of the program, pharmacy students rarely have opportunities for academic and social interaction outside of the professional program. As a result it is not uncommon for pharmacy students and the undergraduates on campus to develop their own preconceived notions about one another.

Our goals for this project were to demystify the unknown elements of the student partnership, to require students to perform off-campus research in unfamiliar locations and with unfamiliar people as well as to forge a strong, positive relationship with the pharmacists themselves. Perhaps the most important "process" goal was to encourage students and community members to reach beyond university/academic boundaries to better understand one another and their own interdependency. Finally, the project sought to train students in important disciplinary knowledge and skills. For the pharmacy students, learning how pharmacy was practiced, both abroad and at home from first-person accounts, automatically afforded an authenticity to the historical foundation they were learning through the course. The communication students were challenged to master a variety of qualitative research methods, and learning how to conduct and transcribe an oral history interview was a hands-on way of applying methodological theories.

Interdisciplinary student teams consisting of a communication and pharmacy student, were instructed to produce a collection of oral histories of pharmacists who lived and practiced in the northeast Pennsylvania region. Both practicing and retired pharmacists participated in the project, and many were members of the Luzerne County Pharmacists Association. In order to encourage class ownership of the project interdisciplinary insights, and self-awareness, student teams were given complete responsibility over the logistics of the research project.

Preparation for the oral history project took place in traditional seminar classrooms and involved both lecture and class discussion. The actual interviews took place at the participating pharmacists' homes, the campus television studio, or in a quiet public place of the researchers' choice that was appropriate for audio taping.

Through lecture, class discussion, and several assigned supplemental readings⁹⁻¹¹ students were intro-

duced to: (1) oral history interview techniques and methodological rationale; (2) a survey of the history of American pharmacy that included significant historical shifts in pharmacy practice; and (3) historical background on the geographic area. Students also practiced oral history interview strategies in a mock interview with the communication professor in class and experimented with recording and transcription machines. Teams were required to meet outside of class to develop interview questions, practice interview strategy, and transcribe their work.

After the interview, the student investigators transcribed the recordings verbatim. In addition, many of the oral histories collected during the first semester of the project were used as the basis for a Ken Burns-style documentary. Students from all 3 classes collaborated on the content of the documentary, by discussing appropriate passages or clips from the interviews and participating in writing the script and locating stills for the video. The video students were responsible for shooting, collecting, and editing preexisting and original footage.

At the end of the project, students were required to submit: (1) a full transcription of the interview; (2) an audio/digital tape of the interview; (3) an electronic copy of the transcription; and (4) a voluntary participation/consent form signed and dated by the participants; and (5) individual self-analyses of the oral history collaboration process and the project. Students were evaluated on (1) accuracy of transcription; (2) depth and value of questions; (3) execution of oral history interview strategies (use of silence, etc); (4) balance of responsibilities before, during, and after the interview between interdisciplinary partners; and (5) completeness of packet.

Each researcher was asked to write an informal, open-ended self-analysis of the oral history process that addressed expectations about the project, the collaboration with students of another major, and how those expectations were or were not met. Students understood that the self-analyses, while a required component for the oral history project, were not to be graded; thus, there was little pressure to withhold opinions about their reflections on the experience.

The self-analyses were designed to allow students the opportunity to reflect on their experience specifically, the process they utilized to negotiate expertise when working on the project, perceptions of their degree of expertise, as well as that of their partners. Reaching out across disciplinary boundaries through a qualitative research experience was intended to help students dispel myths about the academic/campus identities of each major and to link technical/scientific disciplinary knowledge with qualitative inquiry. In addition, the collaboration offered

students and faculty members an opportunity to work closely with community members.

The methodology used for grading the self-analyses was largely qualitative. Students' self-analyses were read and each statement was color coded according to the pre-determined theme that best described it: (1) pre-project apprehension about the interdisciplinary partnerships; (2) positive experiences with the student partnership (3) positive experiences with the pharmacist; (4) negative experiences with the student partnership, or (5) negative experiences with the pharmacist.

After the essays were coded separately, the authors met to discuss their respective findings. In cases where our findings did not agree, we negotiated our positions and discussed our rationales for coding choices, usually focusing on the context of the statement to more accurately interpret the student's meaning. Agreement on the coding of all statements was eventually reached.

While the methodology was largely qualitative, we also attempted to quantify our findings in an effort to fully integrate both disciplinary approaches. Once we had negotiated the coding for all students' self-analyses, we counted instances of stated initial anxiety or negativity and the positive and negative statements about the actual experiences with the interdisciplinary partnership and the pharmacist. We then calculated the mean number of statements describing each one of the themes per self-analysis with a 95% confidence interval (CI). Table 1 contains the quantitative data collected from the self-reflection essays.

ASSESSMENT

Throughout the course of the project, the authors collected 57 separate self-analyses from participating students. Generally, these narratives varied in length from approximately 200 words to nearly 1,200. As is the case with most class work, the level of detail and attention to close analysis varied according to the ability, and some

would argue the stamina, "the ability and determination" of the student.

The data in Table 1 represents a quantitative analysis of the student essays that provided the authors additional insight into the student's own experience in the oral history project. In column 1, we list the 5 major theme areas previously discussed. In column 2, we provide the mean number of statements per self-analysis that reflects each of the 5 major theme areas. Column 3 offers insight into the variability of responses via a 95% confidence interval (CI). Finally, column 4 represents response rate, which illustrates the percent of self-analyses that contained at least 1 statement about each of the 5 major theme areas.

Of the 57 self-analysis collected from both communication and pharmacy students, 23 of them (40%) contained 1 or more statements indicating some type of pre-project apprehension about the interdisciplinary partnership or negative assumption about students from a different major. The mean number of statements indicating these concerns/attitudes was 2.0 per self-reflection piece. Despite the apparent pre-project apprehension, 93% of the student essays contained at least 1 statement that indicated that they had a positive experience with the student partnership and that their preconceived notion of their partner had changed by the time the project was completed. The mean number of statements per self-analysis indicating this shift in perception was 5.4, more than twice that of pre-project apprehension.

The data clearly indicate that students had positive experiences with the pharmacists they interviewed as 83% of the self-reflections contained at least 1 positive statement about this aspect of the project (Table 1). Their self-analyses seemed to focus twice as much on the positive interactions with their student partners. Thus, while collaboration with the pharmacists was clearly important to the students, successful interaction with the interdisciplinary student partner merited more attention in their self-analyses.

Table 1. Five Major Themes Identified in Pharmacy Students' Self-Analyses After Completing an Interdisciplinary Project With Communication Students, (N=57)

Theme	Mean Number of Statements*	95% CI	Response Rate, % [†]
Pre-project apprehension about the interdisciplinary partnerships	2.0	1.3-2.6	40
Positive experiences with the student partnership	5.4	4.5-6.3	93
Positive experiences with the pharmacists	2.7	2.1-3.4	84
Negative experiences with the student partnership	1.8	0.8-2.8	40
Negative experiences with the pharmacist	0.7	0.4-1.2	33

*The mean number of statements in each student's self-analysis that reflected that theme area

[†]Percentage of self-analyses that contained at least 1 statement about the theme area.

CI = confidence interval

There were reports of negative interactions between partners throughout the self-analysis. The reporting level was similar to that seen with pre-project apprehension. However, the context of their remarks was unrelated to any pre-project apprehension or initial bias about the partner. Rather, these remarks focused more on logistical and communication problems. Overall, only 6 of the 57 students recorded more negative comments than positive about the interdisciplinary partnerships. Five of those 6 were written by pharmacy majors, and their comments suggest that they may have had higher standards for collaboration and expectations for disciplinary expertise among the communications students.

Even though 40% of students reported some issues with scheduling and a lack of verbal response to questions during the interview process, the frequency of responses in this category (0.7) was the lowest of all issues reported by students in the self-reflection pieces.

DISCUSSION

The project as a whole was intentionally student-centered, “hands-on,” and encouraged negotiated learning strategies. This approach recognized the human dimension of the learning process and the value of establishing roles in an academic partnership. During initial joint class sessions, students were encouraged to get to know one another, exchange contact information, begin the process of brainstorming for interview questions, and assign project responsibilities. All members of the group volunteered for various tasks (eg, contacting the participant, gathering background information, securing the location for the interview), which ensured personal responsibility and investment in the project.

It was through the students’ self-analyses that the authors gained the most insight into how students perceived the degree of their own and their partner’s expertise as demonstrated through interdisciplinary collaboration. While the quantitative analysis of the self-reflection pieces shown in Table 1 highlights a number of important key issues, it does not tell the whole story. By evaluating the self-analysis pieces, we determined that the number of times a student acknowledged anxiety or success, or even identified areas of expertise in their self-reflection, did not necessarily reflect the depth or meaning of the comments. While a student might mention some level of anxiety in 2 separate sentences, the statement could be repetitive for a variety of reasons (eg, emphasis because of heightened anxiety, or simply an effort to fill space). Thus, analyzing the frequency of comments offered only limited insight into the students’ own perceptions of self and other in an interdisciplinary experience.

Recognizing the limitation of the quantitative data, we juxtaposed the rating we assigned to each statement with the actual words the student used to describe his/her own experiences.

We knew before we began the project that students would approach the challenge of working with “outsiders” with some apprehension. Based on our own experience within the culture(s), we knew that the students in both majors were relatively comfortable in their disciplinary spaces. However, the oral history project not only forced students to work with people they did not know; it also asked them to acknowledge the biases many of them held but had never articulated.

There is no standard benchmark at which point a student of either journalism or pharmacy may claim, “I am an expert.” Successful completion of the degrees our students sought is but one step of many by which they move toward authority in the workplace. However, our project was not about whether the communication students could write a publishable article or whether our pharmacy students could regurgitate the names and dates of the most noteworthy moments in local pharmacy history. Our oral history project evolved into an opportunity to better understand what our students perceived expertise to be in this setting and how they negotiated their own “turf” in the academic arena. It was the students themselves who acknowledged what skills they brought to the table and what gaps they had that another needed to fill in order to be successful with this project.

Many students acknowledged how valuable the 2 disciplinary perspectives were throughout the process and the fact that the interview itself was enriched because 2 interviewers with different backgrounds contributed. The result was a layered, more complex understanding of ongoing identity and expertise negotiation on many levels. This project not only served to cross academic and social boundaries on campus, but also helped negotiate a new, shared academic identity between students and faculty members.

Communication students’ comments indicated a willingness to share what they had already learned in their field about interview question construction, follow-up questions, and basic interpersonal skills in an interview setting such as conscious body positioning, eye contact, etc. For example, one student stated, “It gave me as a communication studies major an opportunity to teach what I know and a chance to learn things from my pharmacist [student] partner.”

In what seemed to be a fairly dramatic departure from the early anxiety about working with students from another major, many students communicated that by the end of the project they had learned a great deal from the

“expert” in the other field. One student mentioned she learned from her partner the importance of asking follow-up questions “because there could be very interesting material that needs to be helped out of the person that is being interviewed.”

Most of the students seemed to recognize their own disciplinary limitations and valued the skills that their partners brought to the experience. One student stated that the most important thing she learned from the project was “not to shelter yourself in what I like to call the ‘pharmacy box,’ [and] find out about different people and their strengths and weaknesses.”

In addition to recognizing what outside skills others brought to the interview, it was important for many students to also acknowledge openly what skills or traits they contributed. In effect, this legitimized their own role and affirmed their faith in what expertise they felt they did have. Students also found that working with someone with a different perspective or approach can cause conflict. One pharmacy student complained that the communication major she partnered with “got hung up on some of the details that in my opinion were less important to the overall project focus” but that they were “able to compromise and things turned out well in the end.”

The oral histories had 2 content goals: to encourage the interviewee to talk openly and in detail about (1) personal aspects of their lives and (2) their professional experiences. Naturally, there were times when the balance of these 2 goals was uneven. In general, communication students valued the personal stories over the professional, while pharmacy students tended to find more worth in the stories of professional development.

But many students acknowledged the different types of expertise both disciplines brought to the table. For example, one student noted, that the “knowledge of pharmacy practice” and “expertise of interviewing” are both “necessary components to a successful outcome” of the project. The richness of the stories that emerged from the pharmacists would never have been realized without the skills both sets of students brought to the experience.

Finally, the oral history project also provided an opportunity for the students to gain valuable insight into the profession as well as local history. While the idea of interviewing a professional was intimidating at first, most of the pharmacy students eventually saw it as an opportunity to personalize and broaden their insights into the field. But both groups of students were also surprised and pleased to learn more about the local history and gain contacts among professionals off campus. For example, one communication student noted, “The oral history project has given me a newfound respect for the ‘people

behind the counter at CVS.” Similarly, a pharmacy student echoed, “The most important thing that I learned from this project was that each pharmacist and each person that we see everyday has a story.”

The interviews helped students recognize that individual stories are the foundation for our complex social fabric, an awareness that is likely to carry far beyond their formal education. Several students indicated plans to keep in touch with the pharmacist they interviewed, opening the door for a more sustained mentoring relationship. Finally, the pharmacy students acknowledged that the oral history experience was something that affirmed their desire and drive to enter the profession. One student stated, “After the interview, I honestly was excited for my future because if I could have the experiences and impact on the profession that he [the pharmacist] has had I would most certainly consider my career a success.”

SUMMARY

Our interdisciplinary oral history project allowed students to engage and interact with community pharmacists, learn from faculty members and students on campus with whom they would not otherwise have had an opportunity to interact, and acquire new skills, knowledge of area history, and new attitudes and beliefs about other members of the campus community. The data demonstrated that unique interdisciplinary pairings allowed students to explore new areas of learning that would not be available through traditional curricular routes. By developing and encouraging students to participate in these types of projects, they acquire new skills and values that not only enrich their academic experience but also make a lasting impact on their attitudes and belief systems.

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