TEACHERS' TOPICS

Plaintiff or Defendant: Using Legal Cases to Teach Students Pharmacy Law

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Objective. To demonstrate the value of students using actual legal cases during collaborative "break-out" sessions in a pharmacy law class.

Design. Students were broken into smaller groups and randomly assigned a legal case to arbitrate or defend. One week prior to the groups' presentation, all students were given the facts of a case that was reflective of issues covered during the lecture component of the course. Formative assessments were utilized in addition to an overall breakout satisfaction survey administered at the end of the course.

Assessment. Overall, students felt the breakout sessions enhanced their learning environment and reinforced material covered during the didactic portion of the course. Students also recommended the breakout sessions for future pharmacy law courses.

Conclusion. Dividing a large pharmacy law class into 2 sections of 12 groups each and conducting mock trials resulted in increased student participation and interaction and deeper understanding of the course content.

Keywords: pharmacy law, case presentation, group work, mock trial

INTRODUCTION

Pharmacy law courses have been an integral part of pharmacy education for decades, but the content of these courses typically receives little attention in the literature. However, one innovative idea in pharmacy law focused on a "fix the law" project. Pharmacy law students identified a law or regulation that needed to be changed or "fixed," and then presented their argument to the class as to why the change was needed. The top 4 student groups had the opportunity to present their changes to members of the Washington State Board of Pharmacy, thereby participating first-hand in the regulatory process.

The use of "real world" cases in pharmacy education is nothing new. Typically, the cases involve issues regarding patient therapy and the appropriate clinical judgment that should be used in improving the patient's health and well-being. However, there is little documented use of actual legal cases in the classroom setting.

Some of the students in a pharmacy law class were given legal cases to determine whether preparation before class resulted in greater understanding of the material.² Performance on subsequent essay questions was used to determine whether those who were expected

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to prepare outperformed others who were not expected to prepare.

Mock courtroom events have also been utilized to enhance pharmacy student learning.^{3,4} In a classroom innovation reported by Broeseker and Jones, mock trials that included both pharmacy and law students were used to discuss and litigate ethical and legal issues.³ In Van-Dusen, pharmacy students were "deposed" by another student who served as the plaintiff's (patient's) attorney.⁴

Legal Principles of Pharmacy Practice (PHRD 400) is a 2-hour required course offered during the fall of the second year doctor of pharmacy (PharmD) program. The course covers both federal and state law, in addition to addressing issues such as pharmacist negligence and actions by the state board of pharmacy. Traditionally, this course was offered either as a single 2-hour block taught once a week or as a 1-hour class offered twice a week. Since each class comprises some 120 students, interaction with the class posed some challenges. As such, the law class was modified somewhat to include an additional 1-hour breakout session.

At the McWhorter School of Pharmacy (MSOP), increasing class sizes led us to develop an innovative approach to teaching pharmacy law. The concept of breakout sessions was not new at the MSOP as several existing courses utilized this format. Given the positive feedback from both students and faculty members, breakout sessions were implemented in the pharmacy law

course. However, creating 2 "identical" sessions in back-to-back hours was a new approach. In reducing the class size from 120 to 60, it was hoped students would not feel as intimidated, thereby leading to greater student interaction. Also, with a smaller group of students in each section, there were more opportunities for students to speak during class without having to compete with their classmates.

DESIGN

In fall 2007, the 120 students in the *Legal Principles of Pharmacy Practice* course were divided into 2 groups to allow for greater student participation and discussion. This breakout session was devoted exclusively to group-type activities. Due to the nature and composition of breakout sessions at the University, approval of the University and School curriculum committees was not required for adding this 1-hour session to the existing course.

A case-based format was chosen, partly in an attempt to reflect "real world" issues seen in pharmacy practice. Another reason for the inclusion of a case-based format is that pharmacy students who participate in this method of learning versus standard didactic format may have better retention of the material. Another reason for modifying the course's structure was to gain additional time for case discussion. During a typical 50-minute lecture, it is difficult to cover the required material, especially in a 2-hour credit course. Often, great case discussion resulted in valuable material being omitted or merely skimmed. As such, the breakout sessions were created to provide an opportunity to reinforce the lecture material with case presentations.

During the first day of the breakout sessions, each group drew a number to determine the order in which they would select a presentation day from a list of available dates. It was the responsibility of the 2 groups presenting to develop both the plaintiff and defendant arguments as the groups did not know which side they would represent. On the day of each group's presentation, a coin toss determined which group would present which side of the case.

Since there are few "black and white" issues in law, the course caused anxiety in some pharmacy students. In an attempt to alleviate these fears, the instructor provided a group presentation grading rubric in the syllabus (copies are available from the author). This rubric was a modification of rubrics provided in various educational assessment texts⁶⁻⁸ and was discussed on the first day of the breakout sessions in an attempt to clearly convey expectations. Furthermore, the instructor went through a sample case so that the students better understood the type of presentation required.

There were a total of 6 cases (each section had the same cases) for each breakout group. These cases were

reflective of the topics/issues covered during regular class periods. For example, the 2 cases highlighting issues from the Controlled Substances Act were presented during the time this law was discussed in the lectures. However, due to multiple issues in several cases, some groups were faced with presenting issues that had been covered during the earlier part of the course. In these instances, it was hoped that repetition would reinforce student learning.

Part of the grading rubric included the groups' ability to spot the relevant issues. If the entire text of the actual case had been provided to the students, it would have been easy for the students to merely restate the issues and ruling provided by the court. Likewise, if given the exact reference data, students could have looked up the case in the library or via an online database, thereby defeating a major purpose for the exercise. Thus, a modified version of the case facts was created and given to the students (example in Appendix 1).

During the breakout sessions, each group presented either the plaintiff's (normally a patient) or defendant's (normally a pharmacist) side to the class. Table 1 shows the breakdown for a typical case presentation day. After each group completed its presentation, the rest of the class (the jury) would talk among themselves, forming questions to ask each side. Once the questioning ended, the jury would vote for the following: (1) which side presented the most persuasive argument and (2) which side should prevail. The "jury's" verdicts played no role in the presenting groups' grades.

The last few minutes of each breakout session were structured as a recap of the day's presentations. The instructor would revisit certain questions/points that had been raised to clarify any uncertainties. Furthermore, if students still had trouble comprehending an issue, class time would be devoted the following week to resolve the issue.

To gather feedback on the students' understanding of the material presented, a modified exercise similar in purpose to the "minute paper" was used. 10-12 At the end of each breakout session, each of the 10 groups not

Table 1. Typical Group Presentation Class Period

Activity	Time Allotted (Minutes)
Presentation and overview by each presenting group	10
Non-presenting groups discussion and question formulation	5
Discussion/question and answer session/jury verdict	25
Instructor follow-up/conclusions/ final thoughts	10

presenting that day were required to submit at least 2 questions to the instructor.

These included questions the group (as part of the jury) asked the plaintiff and defendant groups during the "trial." Once submitted, the instructor would perform a preliminary check in reading the questions to make sure they reflected significant depth and thought as they were not assigned a letter grade but rather, a numeric score. The grading rubric used for the questions (Appendix 2) was developed using the same educational assessment resources as the other course rubrics and provided to students in the course syllabus. ⁶⁻⁸ Points awarded for the questions were added to the group's grade, which accounted for 10% of each student's overall course grade.

After all groups had presented their cases, students were asked to evaluate the overall breakout sessions using an assessment instrument consisting of 8 items rated on a 4-point Likert scale followed by several open-ended questions, such as "What were the most valuable parts of the Friday group sessions?" and "How would you change the Friday group sessions?"

ASSESSMENT

Of the 119 students who completed the pharmacy law course, 103 completed the breakout session survey (86.6% response rate). Overall, the students' responses to the survey items about the breakout sessions were very positive. The survey item with the highest mean score was the item that asked whether or not the students would recommend the breakout sessions to next year's law class. Also, it appears the students enjoyed the Friday sessions and that the group component enhanced their learning of the law (Table 2). There were also many students who provided open-ended comments, the majority of which were extremely constructive and positive.

DISCUSSION

These second-year professional students strongly agreed that the breakout sessions should continue for

future classes, similar to students' response in the study mentioned earlier that utilized a mock trial-type component. 4 One of the main reasons for introducing this format was to get students more engaged in the material. The area of law can be rather dry and boring, given the many rules and regulations pertaining to the profession. Reading the law to the students is one approach to teaching the subject, an approach that can ensure all the material is covered. However, that approach does not enhance student engagement in or excitement over the pharmacy-specific issues addressed within the cases, which is the real purpose of teaching the course. As such, it is important to try and connect with students in making the learning process enjoyable. The results of this survey suggest the breakout sessions helped create such an environment. The results of a separate course and instructor evaluation administered by the university revealed similar results.

The students in this course also appreciated the reality of actual case examples. In examining the open-ended results, many comments were made as to how the cases made the course appear more like "real life." It is important that we, as educators, strive to make the classroom experience practical and applicable to everyday pharmacy practice. Academia has been criticized (and at times rightfully so) as living in an "ivory tower." If students perceive their learning as such, they will discount valuable information, ultimately reducing the quality of care they one day will be able to provide to patients. On the contrary, if students perceive the benefit and value of "real world" cases, they will be more likely to gain valuable confidence and a greater understanding of the impact they can make on pharmacy practice. 13

Several students commented on the way the breakout sessions challenged their way of thinking. One great thing about incorporating cases into coursework is the ability to show students various perspectives. As with a clinical case, changing 1 detail in the fact pattern can have enormous consequences and result in a completely different outcome. Often this makes students uncomfortable as it

Table 2. Breakout Session Survey Results $(N = 106)^a$

Survey Item	Meanb
I enjoyed the Friday group sessions.	3.3
The cases improved my understanding of the subject matter.	3.2
The "mock trial" format did not add value to the course.	1.9
The guest speakers provided valuable information.	3.0
I would recommend continuing the Friday group sessions for next year's law class.	3.4
I do not believe the topics covered during the Friday group sessions were relevant to me as a future pharmacist.	1.7
The Friday group material reinforced the material presented throughout the rest of the law course.	3.3
The smaller class size on Fridays enhanced the learning environment.	3.3

^aNot all respondents answered all items so total number of responses for each question ranged from 103-106

^bResponses were based on a 4-point Likert scale on which 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree

challenges their "one size fits all" approach. It is not uncommon to hear students make comments such as, "what is the correct answer?" The classic answer in a pharmacy law course is "it depends." A second goal in this course was to challenge students to see things from various perspectives. As evidenced by several student comments, it appears this format helped achieve that goal.

On several occasions, the prevailing party in one class section was different than the prevailing party in the other breakout section. Though every attempt was made to try and minimize the free time between the 2 sections, there was no way to completely sequester all of the students from the early breakout section.

At the MSOP, the traditional didactic pharmacy law course meets twice a week for 1 hour. This course was taught to 119 students, a daunting task when trying to connect with each student. A third goal for creating the breakout sessions, which consisted of approximately 60 students each, was to create a more personal and less threatening atmosphere. Though creating 2 identical sessions required more classroom time for the instructor, it was well worth the investment. The survey results demonstrated that the students felt the learning environment was improved by the smaller class sizes. Also, the following comment provided all the encouragement needed for continuing this format in the future. When asked what the most valuable part of the breakout sessions was, 1 student commented, "the smaller, more comfortable atmosphere." As an educator, this is extremely rewarding to read. Based on this feedback, a similar format may be implemented for other courses. Additionally, as an instructor, it was amazing to see normally reserved students become passionate when defending their position on current issues in pharmacy law.

Though the results from the various assessments were positive, there is still room for improvement. One theme that emerged centered on the actual case information provided to each group. In an attempt to prevent groups from simply reciting the court's holding in each case, only certain facts were given to the students. Also, some additional scenarios were added by the instructor to the existing fact pattern to try and stimulate greater thinking. However, a tendency developed for the groups to create facts that would support their particular position. As a result, significant jury/group interaction and questioning centered on the fictitious information. In the future, the groups will be instructed to adhere strictly to the factual pattern presented.

Also, simply creating case breakout sessions is not a guaranteed recipe for success. It is essential for these group sessions to build upon a strong foundation from the course itself. The results from this survey helped confirm that the case material reinforced the material from the didactic portion of the law class. Though a challenging and perhaps daunting task, implementing group case discussion can be very rewarding for both students and faculty members.

Finally, the new Accreditation Council for Pharmacy Education (ACPE) Standards encourage the use of case studies in trying to develop students' critical thinking and problem-solving skills. Specifically, Guideline 11.2 states:

The development of critical thinking and problemsolving skills should be supported through the application of computer and other instructional technologies, laboratory experiences, case studies, guided group discussions, and simulations and other practice based exercises. Instructors should employ active learning strategies and encourage students to ask questions wherever possible. Where appropriate, these techniques should involve actual or simulated patients, pharmacists, and other health care professionals.¹⁴

Furthermore, Guideline 25.7 states, in part:

Faculty should deploy educational technologies and techniques that support various modes of educational delivery (e.g., simulations and case studies) and evaluation (e.g., test construction and clinical performance assessments).¹⁴

As noted by these guidelines, it is imperative for colleges and schools of pharmacy to attempt novel approaches to delivering quality education. Case studies are but one method for attempting to achieve this goal.

CONCLUSION

In addition to making the course more enjoyable for the instructor, it appears the addition of breakout sessions made a positive impact on the students. As educators, we should always strive to improve our courses. Often, that may require an approach that is more time consuming. This project demonstrated that creating a smaller class setting that fosters more student interaction is indeed possible.

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Appendix 1. Example of a legal case used in conducting a mock trial in a pharmacy law course.

Facts of the Case

Pseudoephedrine, a "listed chemical" under a federal drug statute, 21 U.S.C. § 802(33) & (34)(K), is an ingredient in many overthe-counter cold medications. It can also be used to manufacture methamphetamine, a controlled substance under 21 U.S.C. § 812. Both the United States and California have statutes prohibiting over-the-counter sales of drugs containing pseudoephedrine in certain instances.

This case concerns the conviction of the pharmacist and owner of a small pharmacy for selling cold remedies containing pseudoephedrine. Samuel Henry was convicted of violating 21 U.S.C. § 841(c)(2), which prohibits the distribution of listed chemicals, including pseudoephedrine, "knowing, or having reasonable cause to believe, that [the pseudoephedrine] will be used to manufacture a controlled substance."

Henry owned and operated Sam's Apothecary. After receiving information about the law regarding the sale of pseudoephedrine from an industry newsletter, Henry instructed his clerk, Vicky Clark, not to sell more than 150 sixty-milligram pills per person, per day. Henry believed that sales under this quantity were legal.

Henry purchased drugs containing pseudoephedrine from Bergen Brunswig. In May 2000, the Drug Enforcement Administration (DEA) received a report from Bergen Brunswig that Henry's purchases of drugs containing pseudoephedrine had sharply increased.¹

The DEA began an investigation of Henry, sending undercover agents to purchase cold remedies containing pseudoephedrine from his pharmacy. Two transactions are relevant to this appeal: On January 4, 2001, three undercover agents entered Henry's pharmacy. Henry was standing in an elevated section at the rear of the pharmacy, filling prescriptions. Henry nodded and smiled at the three agents. The agents attempted to purchase all the packages of cold medication on display. After Clark started to tell the agents that one person could not buy all the medication, Henry interjected to ask what was going on and who was buying what. Henry instructed them to return some of the medication so that his stock would not be depleted. The three agents returned some of the boxes and divided the remainder for purchase. Ultimately, the agents were each allowed to purchase two boxes of 96-count thirty-milligram tablets and one box of 24-count thirty-milligram tablets, for a total of around 6 grams of pseudoephedrine. Additionally, in Henry's presence and conspicuously, the men inquired about and purchased hydrogen peroxide, iodine, and rubbing alcohol, all of which are used to manufacture methamphetamine. One of the men mumbled, in connection with the purchase of alcohol, that he needed alcohol to "break it down." One of the agents provided all the money for the purchases, although the purchases were rung up separately. There were confusing statements as to whether the person who supplied the money was holding the others' money for them or, instead, paying for all the purchases himself.

As Clark was completing the transaction, one of the agents asked, "Can we get some more of this tomorrow?" Clark answered, "Well hopefully." Henry, however, answered, "We're not selling every day." He added that the purchase "lasts for you, normally."

The next day, January 5, 2001, the same three undercover officers returned to the pharmacy. Henry again nodded to them as they entered. Although the officers assumed that he recognized them, there is no direct evidence that he did. One officer attempted to purchase multiple bottles of pseudoephedrine. Again, Clark would not allow this sale to proceed. She did, however, allow each man to purchase one 100-count sixty-milligram bottle. As on the previous day, one officer held all the money initially and handed it to the other two so they could pay for their pseudoephedrine. Afterwards, the officers also each purchased two 24-count boxes of thirty-milligram pseudoephedrine, for a total of about 7.5 grams each. Henry was not involved in this transaction, but he was in the store at the time.

Assume that the Government has now filed a lawsuit against Samuel Henry (pharmacist) and the pharmacy.

- I. What Are the Issues?
- II. Any Additional Information You Need?
- III. What Are the Arguments For the Plaintiff and Defendant?
- IV. What Law(s), If Any, Apply?
- V. Which Party Should Prevail?

Adapted from United States v. Kim, 449 F.3d 933 (2006).9

Appendix 2. Examples of expected types of questions generated from group presentations.

STRONG (+): 2 point examples

- Questions that dig deeper in the subject matter
- Questions that draw comparisons about a related topic or issue
- Questions that address an issue previously covered and how that issue compares and contrasts with the presentation topic
- Questions that raise the possibility of inconsistencies in the presentation
- Questions that attempt to resolve gaps in the presentations
- Questions that are very specific in nature

NEUTRAL (0): 1 point examples

- Questions that require the presenters to merely restate a confusing fact
- Questions that would allow the presenters to answer in a "yes" or "no" fashion
- Questions that would not add to classroom discussion
- Questions that are vague in nature

NEEDS WORK (-): No point examples

- Questions that have nothing to do with the subject matter
- Questions that reflect group in audience was not paying attention to presentation
- Questions that had been answered several times throughout the presentation

Grading System: There will be fifteen (15) opportunities to turn in group questions throughout the semester. For each group submission, I will examine your questions as to their quality. It is recommended that each group submit its best 2-3 questions. After examining the questions, I will give each group a score of (+) meaning 2 points, (0) meaning 1 point or (-) meaning no points.

Therefore, each member of the group has the opportunity to receive thirty (30) points for their group participation grade. A group does not have to have all (+) scores for its questions to receive 2 points for the assignment. Rather, I will examine the questions as a whole and will make the determination based on the entire set of questions. All group members will receive the same score unless a member is absent. An absent group member will receive no points.

¹Evidence at trial showed that Henry's purchases increased from a total of 347.28 grams in December 1999 to 1712.16 grams in April 2000. The quantity continued to increase, reaching a high of 4396.32 grams in July 2000. Henry's purchases of the larger-count bottles (stock bottles) also increased drastically over the same time period.

²There were seven total purchases by undercover agents, each one eventually resulting in a count in Henry's indictment.