Closing the Loop: The Value of Student Collaboration in Course Design and Assessment

Kimberley Begley, PharmD  RPh

Background

At an increasing number of higher education institutions across the country, curriculum design and delivery is a product of collaboration between faculty members and students.

- The goal of these pedagogical partnerships is to establish a meaningful relationship between faculty and students that leads to a higher quality of teaching, more effective course delivery, and graduates who are better prepared for the workplace.
- Discussion offers different insights and perspectives of what students find engaging in the classroom.
- Some faculty may feel it is the students’ responsibility to become engaged. These instructors have been designing and delivering courses in their own manner for years and therefore have little inclination to change a system that works for them.
- Students given a voice in course development are more engaged in the classroom and perform better academically because they have a more intimate knowledge of the course structure and expectations levels.
- Whether assessment is formative (occurring during the process of learning) or summative (occurring at the end of the learning process), it provides information about what students know, what students can do, and what students hold of value. Assessment of student learning is a faculty-led process with support from the administration.

Purpose

Curriculum design and revision have traditionally been guided by faculty priorities and accreditation guidelines. Students enrolled in the curriculum have limited direct involvement in this process. This study was designed to collect and apply student feedback specifically for the revision of a pharmacy course.

Methods

After a fall elective course, faculty assembled a student focus group to gather feedback.

- Students expressed interest in a rounding-type case that reviewed several disease states. Often times one disease and treatment is studied.
- Students expressed a desire to have answers to case questions available, to determine why an answer was correct or incorrect.
- A mock-round simulation was recorded and placed in a third-year pharmacy course to pilot. Students voluntarily reviewed the case, answered questions, and completed a pre-/post-confidence survey.
- Students were asked to provide feedback on the module and reflect on their performance.

Mock Round Cases

- Cases were designed to be comprehensive. They re-visited materials from the previous five semesters of the curriculum. Content from the case was mapped to Pharmacy Calculations, Microbiology, Professional Development and Experience (Top 200), Patient Assessment, Nonprescription Products Self Care, Dispensing and Patient Care, and Pharmacotherapeutics.
- Answers were provided for all questions including how to work out a calculation problem.

Student Feedback

- Feedback on the mock rounds case was positive. Students liked the simulation rounding between healthcare practitioners. They appreciated the format of the case questions. Students could go through the module at their own pace and could review the answers to each question. They were allowed multiple attempts at the questions and 57% of students went through the case a second or third time.
- One-hundred percent of those surveyed agreed or strongly agreed that these types of cases could help them be better prepared for their experiential year.

Results

Thirty students completed the case and the pre-/post-confidence survey. Students’ confidence in evaluating a patient case and students’ level of understanding a patient case increased from pre- to post-survey. (p<0.001) There was an increase in students’ rating of the importance of the ability to successfully evaluate a patient case. (p<0.002) After reflection, 47% of students stated they did not perform as well as they initially thought they were going to.

Theme Analysis of Reflections

Qualitative data were collected from Creighton student reflections and theme analysis was conducted by a group of pharmacy faculty members with expertise in this area. The most prominent occurring themes were the desire for students to comprehensively review patient cases; the importance for students to have a strong knowledge base (brand/generic, dosing, dosage forms, over-the-counter products); and, the need for comprehensively testing now so students could see what they needed to focus on before rotations.

- I think it is good to pull from information that we learned in previous semesters. It helps to test if we have retained the knowledge for more than just that test. I would do more of these in the future.
- This was humbling. I need to do some reviewing before rotations begin. I will get out my drug cards to review top 200, dosing, and OTC products. I did like how this tested everything all in one activity, so I can see what I need to work on.
- I loved participating in this! I believe community cases are very pertinent to what I will be doing and how I will be practicing. This was a great review and good practice. I like the answers available, so I know why I missed it.
- I thought that I would do a lot better than I did. I know I need to review brand and generic and dosages. It was an eye opener. I can see the types of things other practitioners will be asking me on rotations.

Conclusion

Allowing student voice in course development provides an understanding of how students experiences pedagogy and offers a different perspective into what is transpiring in the classroom. This approach may increase student engagement in course content.