Pharmacy Ethics: hybrid, flipped, personalized, and collaborative learning groups using Google Apps and Adaptive Courseware

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ABSTRACT
We transformed a large lecture/discussion into a personalized learning experience and a collaborative learning space by using adaptive courseware and Google Apps.

BACKGROUND
High enrollments made it difficult to facilitate class discussion. We started with 49 students divided into two sections back in 2010, but in 2017, we had a fall semester section with 51 students and a spring semester section with 112 students.

METHODS
- Flipped classroom
- Hybrid classroom
- Adaptive Courseware for individual student work
- Google Apps for student collaboration
- Active learning

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ATTENDANCE RATES

STUDENT SURVEY DATA

CONCLUSIONS
- Students are not as technology savvy as we had presumed.
- Students prefer self-paced and self-determined learning when the content is of easy – medium difficulty for them to understand.
- Adaptive courseware allows us to see gaps and problems in the content and assessments.
- Course development should be a continuous effort as no course is perfect in its content, delivery, assessments, and activities.

OBJECTIVES
- To increase student engagement
- To improve class attendance
- To create small discussion groups

Students working in teams of three to problem-solve ethics scenarios and case studies. Teams work in their section folder in our shared Google Drive, and after class, their submissions are moved to assignment folders hidden from view to secure them. Collaborative work in auditorium seating is awkward, but students make it work.