

In order to positively impact the health outcomes of the patients they serve, pharmacists must be skilled educators and clinicians. Skilled clinicians must be empathetic, possess critical thinking skills needed to balance evidence-based medicine against the needs of individual patients, and work successfully as part of an interdisciplinary team. The methods I find most effective for teaching these skills reflect Jane Vella's 12 principles of adult learning, which are rooted in Malcolm Knowles' adult learning theory and Paulo Freire's emphasis on dialogue and praxis.¹ As an educator, Vella's principles of safety, engagement, and action with reflection are priorities when I teach in a classroom or clinical setting.¹ These teaching philosophies guide me in my teaching endeavors to ensure that pharmacy students learn empathy, form the ability to function as part of an interdisciplinary team, and develop critical thinking skills.

Teaching pain management and palliative care to students provides me with an opportunity to facilitate development of empathy, which is the cornerstone of patient-centered care. Empathy and cultural competence are crucial to developing patient-centered care plans and education. In the classroom, I teach empathy through stories, readings, clinical scenarios, and role-play. I assess empathy through student self-reflections and through role-play with standardized patients, who provide formative feedback to students. In my ambulatory pain management and diabetes clinic, I model and coach my students in using motivational interviewing as a tool to show empathy and promote patient engagement.

Palliative care and hospice teams are historically interdisciplinary, so students on my palliative care and hospice rotations are immersed in team-based care. To prepare my rotation students for interdisciplinary team care, I teach them about the other team members' roles and training. For example, I developed an online module for trainees at a geriatric memory disorders clinic that better prepared them to work with the interdisciplinary clinic team. With an interdisciplinary team of faculty, I facilitated a session on family meetings at our school's Interprofessional Education Day. For our students to be optimally prepared to practice in an interdisciplinary environment, I led a team effort in curricular mapping of interprofessional communication. To address identified curricular gaps, I subsequently created an online training module and in-class workshop to provide our students with the foundational skills they need to effectively communicate with other healthcare providers.

In addition to empathy and interpersonal skills, I strive to teach my students critical thinking skills. The first step in teaching critical thinking is to create a safe learning environment in which students feel comfortable taking risks. Students will only engage when they feel safe. I use anonymous polling technology to collect student responses. I also emphasize that while students should be prepared for class with basic knowledge, they come to class to gain understanding. To model critical thinking for them, I show them how to work through complex cases. Early in the curriculum, I provide guided learning questions for complex cases, whereas later, I expect students to think through clinical problems with increasing independence. I employ a variety of active learning activities in my classroom, including cases, debates, role-play, and storytelling. I also involve students in my research, which provides them additional opportunities to develop critical thinking skills that they can also apply in the clinical setting. In research and on rotation, I ask students to explain their thought and decision-making processes for the problem at hand so that I can provide coaching as needed.

Student engagement can be maximized by meeting students where they are. For example, I embrace technology as a learning tool. I am currently developing branching online modules, enabling students to practice clinical decision-making and see the consequences of their decisions unfold in a safe, judgment-free virtual environment. Social networks can be used to transform and expand my students' personal learning networks, which they will benefit from as lifelong learners. I also encourage students to interact with and apply new attitudes and knowledge to the world around them. For example, in the elective course Care of the Terminally Ill, I opened our traditional viewing of the movie "How to Die in Oregon" with the young adult Brittany Maynard's story of asserting her right to die on her own terms by moving to Oregon. This story was heavily covered in the media at the time, and many students stayed after class to further discuss Brittany's illness and the ramifications of choosing hospice versus options available through death with dignity legislation.

As an educator and clinician, I model continuing professional development for my students. For example, in addition to earning a Master of Arts in Instructional Systems Development and completing a residency-based teaching certificate program, I am an active participant at the School of Pharmacy's annual Teaching Excellence Day, other faculty development programs at my current institution, and nationally through the American Association of Colleges of Pharmacy. As I move forward in my career, my instructional design training and clinical experiences uniquely qualify me to teach content other than pain and palliative care, such as literature evaluation, diabetes management, pharmacy skills lab, patient education, and life-long learning/study skills. Regardless of what or where I teach, I am dedicated to the art and science of scholarly teaching. I use the ADDIE (Analysis, Design, Development, Implementation, Evaluation) instructional design process to design courses and learning activities. Evaluation and continuous quality improvement are essential components of ADDIE. I measure my effectiveness through student engagement, reflections, and performance. Instead of waiting for the return of course evaluations, I ask students to submit brief, anonymous reflections on their learning after each class. On rotations I ask students to tell me one thing they learned and one thing they are confused about every day. Use of this technique gives me the opportunity to provide additional instruction. For example, recent student reflections informed me of students' confusion about opioid conversion calculations; therefore, I made a Prezi and Vittle-style YouTube video to reinforce these concepts. Input from preceptors and peer feedback also help me determine how well students retain knowledge from my classes. Based on peer feedback, I developed strategies, such as mindmapping, to better focus students on crucial learning objectives.

As the first woman in my family to graduate from college, I firmly believe that education is a rising tide that lifts all boats. Helping pharmacy students develop the attitudes and skills necessary for patient-centered care and education is both professionally and personally rewarding. I look forward to continuously refining my most effective, technological, erudite teaching strategies in order to help my students learn empathy, function on an interdisciplinary team, and develop critical thinking skills.

1. Vella, J. (2002). *Learning to listen, learning to teach: The power of dialogue in educating adults*. John Wiley & Sons.