

PRECEPTOR SERIES:

# Precepting Preferences: How Does Your Pharmacy Student Like to Learn?

by Julianne Kowalski, PharmD, Amanda Margolis, PharmD, MS, BCACP, and Mara Kieser, MS, RPh

There are numerous teaching techniques pharmacists can utilize when precepting pharmacy students. Thus far, this series has provided some great insights into precepting techniques including the one-minute preceptor, providing feedback, setting expectations, and respectful quizzing.<sup>1-5</sup> But how do you choose which techniques to focus on? Have you ever wondered which techniques students prefer?

When preceptors use teaching techniques students prefer, there is a higher level of satisfaction, enjoyment, and motivation to learn.<sup>6,7</sup> Additionally, when information is presented through a preferred precepting technique, the student may be able to learn the information more efficiently and better retain the information presented to them.<sup>6,8</sup> By having a better

understanding of Advanced Pharmacy Practice Experience (APPE) student preferences, we can improve rotation satisfaction.

We surveyed APPE students at the University of Wisconsin-Madison School of Pharmacy at the end of their fourth year to identify their preferences and suggestions regarding preceptor techniques. Two open-ended survey questions were asked: “As you reflect on your learning experiences over the last year, what techniques or teaching experiences did your preceptors offer that you most appreciated and why?” and “What techniques will you utilize when you become a preceptor?” Of the 129 students who were invited to participate, 63 students (48.8%) provided responses. The responses were analyzed by the authors using content analysis, and preferences were coded and ranked. This survey was determined to be exempt from IRB review by the University of Wisconsin-Madison Institutional Review Board.

The most common teaching techniques preferred by students were fostering independence, topic discussions, personalizing the rotation, asking questions, and providing feedback. See Table 1. for the full list of ranked student preferences. Figure 1. shows the most commonly used words in the student responses.

### Fostering Independence

Clinical rotations are meant to prepare students to be independent practitioners. With this in mind, many students want to be challenged with hands on activities,

engaging in topics outside of their comfort zone, and learning independently. Independent learning can be achieved when preceptors use the four preceptor roles: direct instruction, modeling, coaching, and facilitating.<sup>9</sup> While students may need to experience the initial three stages during the first few weeks, students’ ultimate goal is to be autonomous by the end of the rotation with the preceptor facilitating in the background. This final stage of facilitation provides students with the opportunity to develop their knowledge, skills, and ability for self-evaluation through direct practice.<sup>9</sup>

Preceptors should integrate students into the daily workflow where possible, and allow the students to actively participate in the pharmacists’ responsibilities. For example, students described becoming more independent and competent through going on rounds, participating in final verification of scripts, and performing chart reviews. Students commented their preceptor had discussions with them on how they came to certain conclusions to make recommendations or perform certain activities. Those discussions helped them become more independent by allowing those students to check their critical thinking skills. This improved their confidence as they became more independent. As students become more proficient, the preceptor can also consider incorporating self-assessments into the feedback process to foster the student’s ability to critique their own skills and behaviors. Once the preceptor is comfortable with a student’s ability to perform a task, the student should be allowed to work independently with the preceptor available as needed for questions. Students who were able to achieve this independence felt their rotation experience was more rewarding at the end. For further reading on the four preceptor roles, how

TABLE 1. Student Preferences of Teaching Techniques

Teaching Technique	Number of Responses (%)
Fostering Independence	27 (43%)
Topic Discussions	24 (38%)
Case-Based	10 (16%)
Articles	5 (8%)
Journal Clubs	4 (6%)
Personalizing the Rotation	23 (37%)
Asking Questions	18 (29%)
Respectful Quizzing	13 (21%)
Information Searches	10 (16%)
Feedback	18 (29%)
Share Clinical Decisions & Experiences	8 (13%)
Determine Learner’s Needs	8 (13%)
Challenge Comfort Zone & Knowledge	7 (11%)
Teaching Models	7 (11%)
Set Expectations for Rotation	5 (8%)

(N=63): Students comments were often assigned more than one teaching preference. Not all comments within a category also fell into a subcategory.

to implement them, and how to reach the role of facilitation, refer to “Teaching clinical problem solving: A preceptor’s guide” from the September 15, 2012 issue of the American Journal of Health-System Pharmacy.<sup>9</sup>

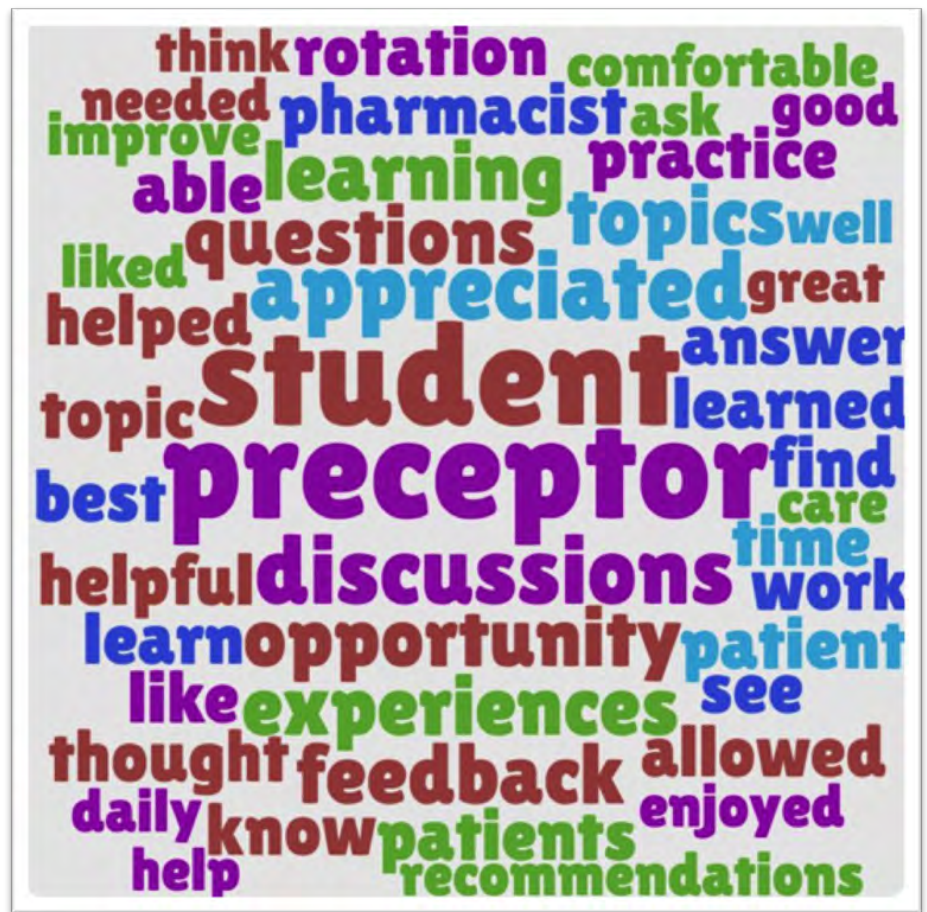
### Topic Discussions

Topic discussions are a great way to actively engage the students in learning. Students enjoyed this activity because it allowed them to review topics they might see at their rotation site while also gaining their preceptor’s perspective. When preceptors shared the similarities or differences between textbook approaches and their own clinical experience students felt they were able to obtain a practical perspective of real world practice. Topic discussions can be based around a pharmacological topic, a patient case, or a journal article. Preceptors should provide the student with the topic and any assigned readings prior to the discussion. Students found it helpful when their preceptors allowed them time to independently research the topic before the discussion as they felt more confident during the conversation. It is important to set expectations for any required preparation and expected participation during the topic discussion. Both the student and preceptor need to be actively involved in the discussion to prevent it from becoming a student presentation or a preceptor lecture. Allowing the student to lead the topic discussion provides them with the opportunity to practice teaching. Many students felt researching and teaching a topic helped with memory retention. By having the student lead, preceptors can also identify misunderstandings or gaps in knowledge. The preceptor should participate by augmenting what the student found with their own experiences, knowledge, and thoughts. As the conversation wraps up, the preceptor should summarize any important clinical pearls they feel are important for the student to remember. Students also noted that a related reading assigned by the preceptor after the topic discussion helped to reinforce the information discussed.

### Personalizing The Rotation

Many students found their experience

FIGURE 1. Student Word Cloud



more rewarding when their preceptor took the student’s professional goals and educational needs into consideration. Students felt the rotation experience was more memorable when the preceptor took the time to tailor the experience as opposed to focusing only on completing the school requirements. The preceptor helps to ensure the student will be engaged and invested in learning by tailoring the rotation activities to match the interest and comfort of the student. Students described shadowing providers for disease states they were passionate about and challenging themselves with learning unfamiliar material such as medical procedures. Preceptors and students can start the rotation on a positive note by setting expectations for the rotation experiences. Preceptors should assess student interests, knowledge and comfort level with topics and activities related to the site, and identify opportunities the student might like to experience during the rotation. This information can be used to

customize the assignments and activities of the rotation to the individual student in the same way a pharmacist tailors treatments for an individual patient. This will create a rewarding and enjoyable learning experience for both preceptor and student. For further suggestions on personalizing rotations, refer to the Great Expectations article in the preceptor pearls series in the May/June 2016 issue of *The Journal*.<sup>2</sup>

### Asking Questions

Students may not admit it to their preceptors, but they love to be asked questions! By asking the student questions through respectful quizzing, the preceptor shows the students that he or she is invested in their learning experience. This exercise also allows the students to realize the extent of their knowledge as well as their gaps. Students enjoyed when preceptors pushed their comfort zone and found the use of questioning helped to guide their thought process and aided in developing their critical thinking skills. Quizzing related

to patient cases allowed a student to learn or review information while applying it. When students did not know the answers, they preferred the opportunity to look the answers up themselves. Students felt the subsequent opportunities for independent learning and follow-up teaching increased memory retention as compared to when the information was given to them. Both quizzing and asking for information searches often led to topic discussions which helped to further reinforce the student's knowledge. Preceptors should use quizzing and questioning to prompt the student and guide them to the correct conclusions. It is important to avoid 'grilling' the student which can make them feel intimidated, frustrated, anxious, inadequate, and belittled.<sup>3</sup> For more information on this technique, refer to the Teaching with Questions article in the preceptor pearls series in the July/August 2016 issue of *The Journal*.<sup>3</sup>

### Feedback

Providing feedback is a crucial role for preceptors. Feedback at the midpoint and final evaluation is required by most schools of pharmacy, but students preferred feedback, both constructive and positive, on a more regular and timely basis. Daily in-the-moment feedback and a weekly meeting with feedback were both preferred by students over periodic evaluations only at midpoint and final evaluations. As discussed previously in the preceptor series, feedback should be provided on behaviors and not attitudes, motivation, or intent.<sup>1</sup> Feedback should also be phrased in terms of what the student should do in the future as opposed to ruminating on what was done wrong in the past. Providing feedback on behaviors with an actionable plan for the future can improve the student's performance and experience. For further information on providing feedback, refer to the Taking the Fear Out of Feedback article in the March/April issue and the Formulating Effective Feedback About Presentations article in the September/October 2016 issue of *The Journal*.<sup>1,5</sup>

In summary, students enjoy a variety of teaching techniques that can help make rotation experiences more rewarding. Preceptors should practice using a variety of techniques as each student may learn

differently, and many students prefer and learn best from a combination of techniques.<sup>8</sup> Discussing the student's goals and preferred learning preferences will aid the preceptor in developing the rotation activities. Utilizing techniques preferred by students can make learning more enjoyable and help motivate students during experiential rotations. ●

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