

PRECEPTOR SERIES:

Taking Fear out of the Pharmacy: Creating a Positive Environment for Learners

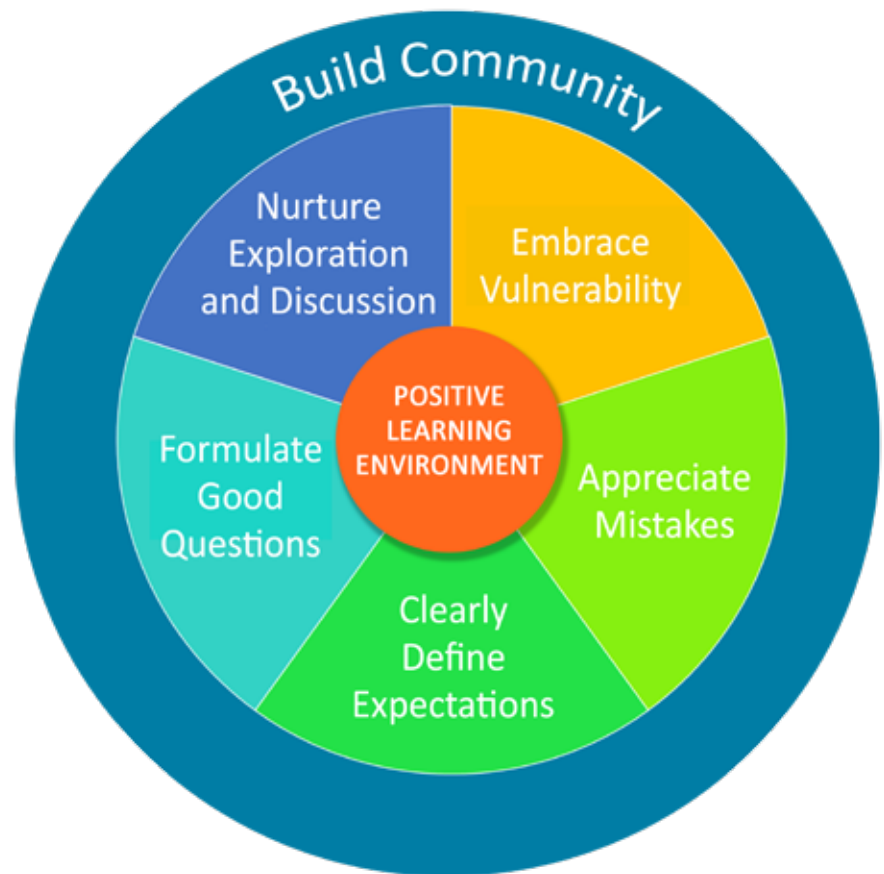
by Kathryn J. Baganz, MA and Melissa L. Theesfeld, PharmD

Pharmacology. Pharmacotherapy. Medicinal Chemistry. Microbiology. Pharmaceutics. You're probably having flashbacks to pharmacy school now and all of the drug and disease state knowledge that was crammed into your head and spewed out in exams over a whirlwind four years. We are conditioned throughout our years as learners to memorize these facts and be ready to supply them when quizzed.¹ Busywork and meaningless assignments make learning new material uninteresting and seemingly unimportant. Learners are also conditioned to be afraid. There is fear of answering too slowly, fear of getting an answer wrong, and fear of not getting a perfect score or passing grade.

This fear exists in pharmacy learners too. Traditional pharmacy school curricula focus heavily on drug names, mechanisms of action, drug interactions, and the other practical skills and knowledge needed to be a successful pharmacist. Pharmacists are scientists, and the required schooling reflects this. Quizzes, lab practicals, and board exams require pharmacy learners to supply the right answers as often as they are capable. Students become afraid to take risks and learn from their mistakes because they are worried about getting good grades. But does this ensure that, just because they have graduated from pharmacy school, pharmacists have truly learned the material we are trying to teach them? Ideally, learners should focus less on getting all A's and more on acquiring the skills and knowledge they need to effectively take care of patients.

As soon as you start your first job, you quickly realize that pharmacists are more than just scientists and patients are more than scantron answers. Perhaps the most important role that a pharmacist plays is that of a teacher – teaching patients,

FIGURE 1. Attributes of a Positive Learning Environment



physicians, nurses, pharmacy technicians, students, and residents. Yet, little in our pharmacy school curricula taught us how to be effective teachers. Great teachers recognize that many factors influence their learners' ability to learn.² Whether your learner is a fourth-year pharmacy student, a PGY1 pharmacy resident, a newly-diagnosed patient, or a seasoned physician, learning is influenced by culture, physical surroundings, the subject matter, and the learning environment. This article will discuss strategies from the field of education that pharmacists can incorporate to eliminate fear in their learners and create a positive learning environment.

Build Community

"People don't care how much you know until they know how much you care" - Theodore Roosevelt

In traditional educational settings, including pharmacy school education, the default learning format involves teacher-initiated questions, students' responses, and teacher feedback.^{3,4} Learning is enhanced where there are strong relationships in the classroom. This sense of community allows for deeper learning because learners know that they are in a safe space to ask questions, expose their weaknesses, and have success. A community isn't built with a teacher in front of a classroom.

Learners need to interact and learn with the teacher and other learners. Table 1 describes strategies to build community in a pharmacy setting.

Educational research has shown that instructors should establish rapport in the classroom by being attentive to learners, engaging in discussions, and demonstrating courteous behaviors that foster connections with learners.⁵ These principles can also apply in pharmacy settings. A good rapport and sense of trust within the team create an environment where preceptors and learners share ideas, thoughts, and questions in a professional manner. Team building activities allow learners to work and laugh together, thereby establishing bonds of trust and reinforcing the community, which ultimately enhance learning.

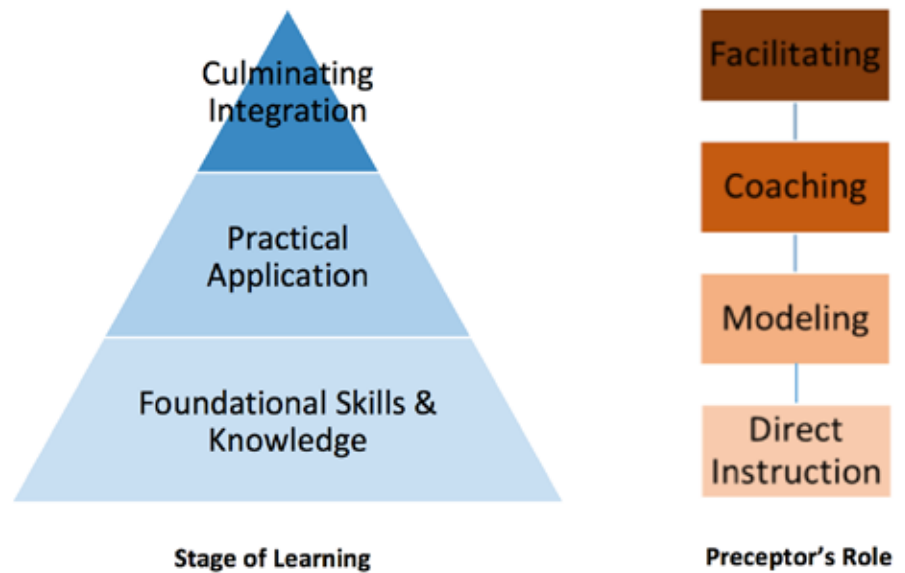
A strong learning community, in conjunction with educators who embrace vulnerability, appreciate mistakes, nurture exploration and discussion, formulate good questions, and set clear expectations, fosters a positive learning environment (Figure 1).

Embrace Vulnerability

Vygotsky's Zone of Proximal Development is a well-known concept within the field of education.⁶ In this Zone, learners should experience appropriate levels of challenge based on their existing levels of mastery and understanding. Learners gain knowledge and skill by completing a series of activities that progressively encourage them to feel more comfortable with the increasing levels of challenge.^{4,6} Within the profession of pharmacy, a similar scaffolding concept exists in the roles that preceptors play with their learners.⁷ Learners who need to acquire basic knowledge may benefit most from a preceptor who provides hands on guidance and access to relevant readings and guidelines; learners who are integrating information well need their preceptor to facilitate more challenging experiences (Figure 2).

As mentioned previously, years of formal education have conditioned learners to be afraid of making mistakes. Many learners avoid situations that make them uncomfortable or vulnerable. As educators, we need to change this mindset to encourage learning. Frequently

FIGURE 2. The Learning Pyramid⁷



remind learners that it is okay to be vulnerable and make mistakes. Even in the pharmacy profession that demands accuracy at all times, *we must also remember that learners are just that – learners.* Preceptors can embrace and facilitate this mindset by allowing learners to take small risks and subsequently by encouraging them to be comfortable with the accompanying vulnerability. Preceptors can also guide learners to build confidence in their learning processes and encourage them to be willing to accept the vulnerability when they encounter new or challenging activities. Developing an environment where learners can be open and vulnerable is crucial for a positive learning experience.

Appreciate Mistakes

When learners make mistakes, embrace those teachable moments in an open, kind, and straightforward manner. An established community that allows for embracing vulnerability in the learning environment allows mistakes to be showcased in a non-threatening manner to enhance the learning process for all learners. As you highlight the “good” mistakes the learners make when they explore new concepts, learners can work individually or collaboratively with other learners to correct their mistakes, rather than having the instructor simply provide the answer. Preceptors can function as a

learning coach or a guide on the side that facilitates the learning.⁸ Help learners experience the value in the struggle of discovering and learning together and be mindful to continue embracing mistakes and maintaining a culture that accepts vulnerability that leads to a positive learning environment.

Nurture Exploration and Discussion

Another key aspect of a positive learning environment is fostering a sense of curiosity and open discussion amongst learners.^{4,8} But productive discussion to facilitate learning is different than casual conversation. Learners should wrestle with difficult ideas and challenge the thinking of others, without engaging in personal attacks or taking constructive criticism personally. This type of discussion format will likely not occur naturally and, as a preceptor, you may have to facilitate the discussion initially. Learning discussions can also occur amongst learners; discussion should not just involve the preceptor providing information to the learners. It is important that preceptors guide learners to think critically, without providing all of the answers.

Formulate Good Questions

“Grilling” or “pimping” often have a bad connotation in pharmacy educational

TABLE 1. Strategies to Incorporate Attributes of a Positive Learning in Pharmacy Practices

<i>Build Community</i>	
<ul style="list-style-type: none"> • Spend time getting to know your learner and build a rapport with them. What are their career goals? Who has been most influential in their career so far? • Share your hobbies with learners. How do you balance pharmacy responsibilities and time for things you enjoy? • Share your career path with learners. What choices are you most proud of? What would you do differently if you were starting over? • Include learners in social activities with coworkers, when appropriate. • Introduce learners to other members of the healthcare team you work with. • Describe learners' responsibilities with coworkers and other healthcare providers. Show that you trust the learner by encouraging others to go directly to them with questions or problems about their patients. • Allow time for learners to share their thought processes with you and the healthcare team. Encourage discussion and provide direction to relevant resources. • Facilitate "think-pair-share" strategies where learners share their thoughts with other learners before reporting back to the preceptor or healthcare team. 	
<i>Embrace Vulnerability</i>	<i>Appreciate Mistakes</i>
<ul style="list-style-type: none"> • Share examples of mistakes you have made in your career and lessons you learned from the experience. • Discuss learners' assessment of patients before rounds or before the patient arrives. Listen carefully to their entire plan or assessment before pointing out mistakes or alternatives. • "Start low, go slow" applies to patients too. Assign learners only one or a few patients to work with on their first day and allow them to acclimate to your expectations • Help learners prioritize their patient care interventions. For example: <ul style="list-style-type: none"> » Is it more important to deescalate antimicrobial therapy or restart the patient's home multivitamin? » Is it more beneficial to get an available product from the OTC aisle or spend time on the phone with the insurance company getting an override for the same product? 	<ul style="list-style-type: none"> • Highlight "good" mistakes that learners make. Consider a learner who applies antibiogram data to correctly select drug therapy, but does not adjust dosing for a patient's renal function. This learner demonstrates understanding of the concept and now needs reinforcement to consider the entire patient profile. • Remember that learners are still learning and are not yet experts. Avoid chastising learners for making mistakes; instead inquire about their thought process and point out where your process differs from theirs. • Encourage learners to discuss their patient care recommendations with you, before they address the healthcare team or call the physician's office for a new prescription.
<i>Formulate Good Questions⁸</i>	<i>Nurture Exploration and Discussion</i>
<ul style="list-style-type: none"> • Use questions to help learners identify knowledge gaps and promote information recall. Use questions to determine the learner's understanding of a drug's mechanism of action, metabolism, or dosing factors. • Convey to learners proactively that this technique will be used (e.g. during rounds, after a topic discussion, before calling a prescriber). • Allow learners time to identify and supplement their knowledge gaps. • Use a respectful tone and allow for back-and-forth dialogue with learners. Do not ask questions with the intent to humiliate, intimidate, or dominate a learner. 	<ul style="list-style-type: none"> • Encourage learners to engage in topic or patient case discussions with other learners. • Allow learners to shadow and work with other health care professionals. Exposure to others' roles fosters interprofessional teamwork and thinking. • Facilitate informal discussions with learners and provide articles or pertinent guidelines for them to reference at a later time.

settings, but purposeful questions can be used effectively to increase knowledge and motivate independent learning.⁹ When preceptors and learners understand how to ask the right questions, they are better equipped to be independent learners in the moment and in their future endeavors. Questions from a preceptor allow learners to gain or recall their knowledge and analyze topics. There are times when a preceptor should initiate questions and ensure a learner understands. But there are also times when learners need to formulate their own thought-provoking questions to

learn at a deeper level and prepare for life-long learning.^{4,8}

Good questions can also help learners make connections across disciplines and between compartmentalized concepts.¹⁰ Pharmacists cannot take care of patients by simply memorizing drug facts; they must be able to overlap their knowledge of physiology, pharmacology, and math disciplines to formulate an appropriate and individualized care plan. Good questions enable learners to develop essential skills as independent learners and critical thinkers.

Clearly Define Expectations

When learners know what is expected for a learning activity, they can navigate the experiences more confidently.¹¹ The content that pharmacy learners are trying to master is challenging enough; don't let unclear rules or parameters of an assignment further impede their ability to learn. Clear and specific expectations allow learners and preceptors to trust each other. Setting and continually re-evaluating expectations for learners provides structure to the experience and supports the community you are creating for learners.

Creating a Positive Pharmacy Learning Environment

Pharmacists typically aren't teaching their learners in a classroom, with lectures, PowerPoint slides, exams, or essays. Learning happens with each patient encounter, during patient care rounds, and each time a patient, family member, or healthcare provider approaches us with a question. Learning happens when learners trust our expertise and we have built strong relationships that allow learners to make mistakes, on their way to becoming experts. Table 1 provides some strategies that can be used in pharmacy settings to create a positive learning environment.

Conclusion

Building community and developing trust and rapport allow an instructor to take specific action steps to establish a positive learning environment. After the instructor establishes a sense of community and trust, notions of honest vulnerability, embracing mistakes, effective exploration

and discussion, learner-initiated questions, and clear expectations are all components that contribute to a positive learning environment. Overall, the development of a positive learning environment takes significant time and deliberate action as the instructor facilitates the learning activities. The process is iterative and challenging, but well worth the effort.

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2019 Journal of the Pharmacy Society of Wisconsin Editorial Plan

Journal Issue	Issue Theme	Submission Deadline
January / February	Theme: Endocrine Series: ID Corner / Precepting Tips	Submission Deadline: October 1, 2018
March / April	Theme: Epidemics Series: ID Corner / Precepting Tips	Submission Deadline: Dec 1, 2018
May / June	Theme: Allergy / Asthma Series: ID Corner / Precepting Tips	Submission Deadline: Feb 1, 2019
July / August	Theme: Practice Advancement Series: ID Corner / Precepting Tips	Submission Deadline: April 1, 2019
September / October	Theme: Immunizations and Population Health Series: ID Corner / Precepting Tips	Submission Deadline: June 1, 2019
November / December	Theme: Pediatrics Series: ID Corner / Precepting Tips	Submission Deadline: Aug 1, 2019