PRECEPTING SERIES:



harmacy students' learning needs change as they transition out of pharmacy school and into residency programs. With that transition, preceptors need to adjust their teaching to accommodate the progression of the higher-level learning that takes place with pharmacy residents. That adjustment comes with its own unique challenges. The purpose of this article is to review precepting strategies that support pharmacy residents, as well as how to identify and mitigate common pitfalls when teaching resident learners.

Challenges with Precepting Pharmacy Residents

The American Society of Health System Pharmacists (ASHP) requires pharmacy residents in accredited programs to develop precepting skills and gain experience using the four preceptor roles (Table 1) under the guidance of qualified preceptors. ¹⁻³ However, not all preceptors have the requisite experience or confidence to provide the necessary support for pharmacy residents to meet ASHP's precepting standards. Furthermore, lack of time poses a significant obstacle to effectively precepting pharmacy residents. ⁴

TABLE 1. Four Preceptor Roles⁵

Role	Definition
Direct Instruction	 Preceptor provides foundational knowledge to the learner May include assigning readings or giving mini-lectures
Modeling	 Preceptor performs ("models") desired behavior or skill Learner observes preceptor and asks questions for clarification
Coaching	Learner performs desired behavior or skill while preceptor provides real- time feedback ("coaching")
Facilitating	Learner independently performs desired behavior or skill Preceptor provides support indirectly (non-real-time)

Additionally, pharmacy residents differ from pharmacy students in that they are expected to develop a great deal of autonomy on rotations. Traditional teaching methods and philosophies may not be as effective for training these learners due to this high degree of autonomy. Preceptors may fail to meet the needs of these autonomous learners if they are unable to adapt their teaching style or are unfamiliar with common challenges when precepting this type of learner.

How to Support Resident Learners

Despite the challenges with precepting pharmacy residents, there are strategies preceptors can implement to support resident learners.

1. Create an organized and structured rotation

Investing time to carefully plan and thoughtfully organize a learner's rotation before it starts can lay a solid foundation for the overall experience. Planning may include determining how learning objectives will be met, the anticipated progression of the learner through the rotation, and project opportunities. Additionally, it can be helpful to set up an orientation meeting with the learner to provide a rotation calendar, outline responsibilities and determine major due dates for projects. Residents may be able to help with structuring their own rotation, which could be discussed at the orientation meeting. Can the learner select their own topics for discussions? Can the learner take responsibility for setting up project meetings? The preceptor may not need to micromanage the scheduling or completion of tasks for residents in the same way that they might for students. This can simplify rotation planning and allows the resident to take an active role in their learning.

2. Set clear expectations

Discussing expectations at the start of the rotation sets the stage for the learning experience and provides learners with a clear understanding of what is expected in terms of their responsibilities, performance, and behavior. What are the specific responsibilities and expectations for the resident? Which responsibilities will the preceptor maintain? Outlining expectations of the preceptor and learner reduces ambiguity and allows for greater efficiency of tasks. It also provides autonomy and enhances accountability of the resident learner. Lastly, it is easier to facilitate feedback for both parties when clear expectations have been set.

3. Match teaching to the level of the learner

Tailoring teaching to the level of the learner, also known as "differentiated instruction," is essential when precepting resident learners. Residents may feel unchallenged, or students may be given unrealistic expectations if teaching is not adjusted. Differentiated instruction creates a positive learning experience by tailoring teaching to the learner, ensuring it is neither too challenging nor too simple.

Differentiated instruction should be applied not only to the level of the learner (e.g., resident or student), but also to the individual. Even if precepting multiple residents, not all residents will be at the same skill level, and preceptors should adapt their teaching to fit the individual learner's needs. To effectively do so, preceptors will need to gain a better understanding of the individual. What are the learner's strengths and

weaknesses? What are the learner's interests? What is the learner's readiness to learn? A preceptor can then use information gathered about the learner to create educational activities that are more effective and appropriate for both the level and the experience of the learner.

4. Implement a layered learning practice model (LLPM)

The LLPM is a teaching strategy in which a seasoned pharmacist oversees multiple "layers" of learners, including both students and residents.7 This model of layered learning provides numerous benefits to resident learners, including the opportunity to directly practice the four preceptor roles, fulfill precepting requirements, and focus on more advanced clinical skills.^{5,8,9} There are also many benefits for the preceptor and site. In a previous preceptor development series article, Barnes and Haskell outlined several benefits of LLPM for preceptors, including the ability to host more learners, and increased opportunities to assess resident precepting performance independently of clinical skills.10

5. Meet independently with residents

Residents should feel supported on their rotation, even if functioning independently. Meeting with residents separately without students can ensure that their goals and needs are being met. Time alone with the resident can be used for informal or formal feedback, topic discussions without distractions, or professional development planning. It is also an opportune time to check in with and solicit feedback from the resident learner – how is the rotation going? What needs to be adjusted? Do they feel they have the appropriate amount of autonomy? What support do they need? Are their personal goals for the rotation being met?

6. Provide timely feedback

Although resident learners are often given more autonomy, it's important that preceptors still provide timely and effective feedback. Timely feedback promotes a culture of continuous learning and improvement while fostering learners' confidence, motivation, and engagement in their training. Whether it's "Feedback Friday" or the One-Minute Preceptor, 11 find a feedback strategy that can be integrated into daily workflows so residents can frequently gain insight into their strengths and areas for improvement.

7. Evaluate precepting skills separately from clinical skills

When resident learners are evaluated on their ability to precept, it can be helpful to separate assessment of precepting skills and clinical skills, as those skill sets may not match. For example, a resident who is very strong clinically may have difficulty explaining concepts in a way that a student can understand. Conversely, a resident who is less strong clinically may be effective at delegating responsibilities and engaging students while teaching. Evaluating precepting skills separately from clinical skills can ensure that the precepting skills are not being overlooked during the evaluation process. For residents who have little experience with teaching and precepting, preceptors may need to begin with direct instruction or modeling to teach precepting skills with slower advancement through the four preceptor roles.

8. Preceptor self-reflection

It can be helpful for preceptors to reflect on their own teaching and use of the four preceptor roles. What teaching strategies are used and are they successful? Is a specific preceptor role avoided or overlooked? What meaningful feedback has been received from learners that could be incorporated? Preceptors should consider areas for growth in their own precepting to improve the experience for residents and other learners.

Navigating Pitfalls of Precepting Residents

Even with providing sufficient support for residents, there are still unique challenges that preceptors face. Less experienced preceptors may give residents too much independence, or conversely, not enough autonomy. Teaching may not be adjusted to fit the depth and breadth of a resident's experience, or greater emphasis may be placed on teaching students rather than the resident in a LLPM. Whether a new or seasoned preceptor, self-reflecting on common pitfalls that may occur with residents and identifying ways to overcome identified pitfalls can be beneficial in further developing one's own precepting abilities (Table 2).

Conclusion

Teaching pharmacy residents can be challenging – from meeting ASHP precepting standards and tailoring the rotation to the level of the learner to navigating challenges that come with greater autonomy. Applying the strategies and being mindful of the pitfalls outlined in this article can help preceptors become more confident and comfortable when precepting pharmacy residents.

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References

- 1. ASHP accreditation standard for postgraduate pharmacy residency programs. American Society of Health-System Pharmacists. Published April 2023. Accessed June 22, 2023. https://www.ashp.org/-/media/assets/professional-development/residencies/docs/examples/ASHP-Accreditation-Standard-for-Postgraduate-Residency-Programs-effective-July-2023.pdf
- 2. Required competency areas, goals, and objectives for postgraduate year one (PGY1) pharmacy residencies. American Society of Health-

TABLE 2. Navigating Pitfalls of Precepting Resident Learners 5,7,12

Precepting Pitfall	Strategies to Overcome Pitfall
Reluctance to give resident autonomy as rotation progresses	 Communicate with resident to understand their perspective on desired autonomy Explore own reasons for control Model the desired behavior Observe resident completing the desired behavior Have resident demonstrate competency of four preceptor roles Collaborate to identify areas of ownership Start small and add more autonomy as rotation progresses
Resident provided too much independence based on knowledge base or experience	 Assess resident's clinical knowledge, skills, and experience Identify the most appropriate preceptor role to employ based on resident's clinical knowledge, skills, and experience Reserve resident precepting responsibilities to repeated rotations
Teaching not adjusted to fit the level of the learner	 Communicate with resident to understand their perspective of knowledge gained Assess resident's competency in four preceptor roles Adjust teaching style to align with level of the learner Seek mentorship or observe more experienced preceptors
Decreased learning for the resident Too much focus on preceptorship duties Greater attention spent on student(s)	 Encourage resident to communicate challenges with their learning Create time map of current workload Identify top "must-do," meaningful priorities and tasks Provide resources and strategies to improve efficiency Divide and conquer responsibilities Set aside dedicated time for resident-focused teaching and feedback
Suboptimal time management	 Prepare rotation materials in advance Utilize training opportunities outside of rotations (e.g., webinars, teaching workshops) Collaborate with other preceptors and learners Collaborate with other teaching/precepting programs Divide and conquer responsibilities

System Pharmacists. Published 2015. Accessed June 22, 2023. https://www.ashp.org/-/media/assets/professional-development/residencies/docs/required-competency-areas-goals-objectives

- 3. Competency areas, goals, and objectives for a residency in an advanced area of pharmacy practice. American Society of Health-System Pharmacists. Published 2018. Accessed June 22, 2023. https://www.ashp.org/-/media/assets/professional-development/residencies/docs/pgy2-outcomesgoals-objectives-residencies-advanced-area.pdf
- 4. DiPaula BA, Mohammad RA, Ayers P, et al. Residents as preceptors and educators: what we can learn from a national survey to improve our residency programs. *Curr Pharm Teach Learn*. 2018;10(1):21-27. doi:10.1016/j.cptl.2017.09.006
- 5. Weitzel KW, Walters EA, Taylor J. Teaching clinical problem solving: a preceptor's guide. *Am J Health Syst Pharm.* 2012;69(18):1588-1599. doi:10.2146/ajhp110521
- 6. Berger R, Woodfin L, Villen A. Learning that lasts: challenging, engaging, and empowering students with deeper instruction. 1st ed. *Jossey-Bass.* 2016.
- 7. Loy BM, Yang S, Moss JM, Kemp DW, Brown JN. Application of the layered learning practice model in an academic medical center. *Hosp Pharm*. 2017;52(4):266-272. doi:10.1310/hpj5204-266

- 8. Pinelli NR, Eckel SF, Vu MB, Weinberger M, Roth MT. The layered learning practice model: lessons learned from implementation. *Am J Health Syst Pharm.* 2016;73(24):2077-2082. doi:10.2146/ajhp160163
- 9. Residency guide: recommendations for practice and engagement in a layered learning model as a resident. American Society of Health-System Pharmacists. Published 2019. Accessed June 22, 2023. https://www.ashp.org/-/media/assets/new-practitioner/docs/Residency-Guide_Best-Practices-for-Resident-Engagement-in-LLM_Final.pdf
- 10. Barnes J, Haskell S. Meeting precepting challenges with layered learning. *J Pharm Soc Wis.* 2019;22(4):25-27.
- 11. Neher JO, Gordon KC, Meyer B, Stevens N. A five-step "microskills" model of clinical teaching. *J Am Board Fam Pract.* 1992;5(4):419-424.
- 12. Marrs JC, Rackham DM. Residents' challenging role: preceptee, preceptor, or both? Am J Health Syst Pharm. 2010;67(3):239-243. doi:10.2146/ajhp090003