Being an Effective Teacher

Five Tips for Busy Clinicians

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Teaching is challenging, and most clinicians have little-to-no formal training on how to teach. For many, the extent of their experience has been limited to teaching medical students during residency. Many clinicians would benefit from learning about effective teaching practices. This article offers practical tips to help busy clinicians who teach medical trainees of all levels.

"See one, do one, teach one" is an adage with which most, if not all, physicians are acquainted. It captures the essence of the medical education paradigm of learning through observation and implementation. It also implies that being content-competent is adequate for being an effective teacher.

Multiple studies, however, have demonstrated that most of the characteristics of effective teaching are not related to having medical expertise. Thus, effective teaching transcends the physician-teacher's own mastery of knowledge, skills and attitudes—the domains of learning as defined by Bloom's taxonomy.

Unfortunately, most physicians receive little, if any, formal training on how to teach and may be unaware of effective teaching practices and techniques. Many medical schools offer faculty-development opportunities for educators; however, patient care responsibilities, research, administrative tasks and lack of awareness may limit some from participating. Physicians who work in the community not only face these same barriers but also lack access to such opportunities. The goal of this article is to empower all physician-teachers by offering practical tips they can use when working with medical students, residents and fellows.

1. Create a Positive Learning Environment

Studies of what makes an effective learning experience consistently identify the importance of a positive learning environment—one in which a learner can safely and comfortably engage with the content and the teacher. Teacher behaviors that may foster such an environment include listening to the learner, encouraging learner participation, avoiding dogmatism, demonstrating respect for the learner, and conveying enthusiasm for the learner and the topic.

There are a number of ways to create a positive learning environment. One is to encourage students to articulate what they want to learn. For example, following a case presentation, one might ask the learner what he or she wants to gain from the discussion about the case. By allowing the learner to articulate what he or she wants to learn, the teacher conveys interest in the learner, gains the learner's buy-in, and communicates that he or she expects the learner to have their own needs, goals or interests. The goal is a learner-centered dialogue rather than a teacher-centered monologue, which is a natural tendency.

To encourage learners to share their thoughts and willingly engage in such a dialogue, the teacher can show respect for the learner's ideas. Even if the learner is wrong, the teacher can correct them while still being respectful of their thought process and their willingness to commit to an answer. The teacher also can communicate enthusiasm for the learner's growth and success through words, body language and eye contact. Maintaining eye contact, leaning in and nodding can convey that the teacher is present and invested in the learner. Finally, the teacher can acknowledge that it is acceptable to have limitations. By saying "I don't know" when they don't have an answer, teachers can help lift the false veil of omniscience learners perceive in them and that they believe may be necessary.

Teachers may need to consciously implement these behaviors in order to help create an environment in which the learner thrives.

2. Establish Clear Goals and Expectations for the Learner and the Teacher

Learners are best-positioned to succeed when teachers are explicit about their goals and expectations. Yet many teachers fail to articulate these, assuming they're obvious or implied. Trainees know that teachers can have widely varying expectations and goals, and they want their instructors to be explicit about them. For example, consider articulating how much time medical students should spend with patients, how long their presentations should typically be, what elements of the case presentation they should communicate and how much of a diagnostic/therapeutic plan they should develop independently. By communicating expectations, the teacher has a basis for assessing the learner's performance and the learner has clear goals to work towards. When learning goals are not clear, both teachers and students can experience confusion and frustration. Therefore, it is important to ensure learners know what is expected of them.

When developing goals, consider making them specific, measurable, actionable, realistic and time-sensitive (SMART). For example, a teacher may wish to set a goal
regarding length of case presentations. Instead of saying that presentations should be kept short, they might instead say: “By the end of the rotation, give all case presentations in five minutes or less.” The goal is time-specific (it should be accomplished by the end of the rotation), measurable (the presentation can be timed), actionable (the learner can demonstrate the behavior and receive feedback), and realistic (although potentially challenging).

At the outset, consider meeting briefly with the learner to discuss goals and expectations. Involving learners in setting goals early on engages them, encourages self-reflection and identifies their interests.1,2,5 For example, in a recent encounter, a learner set a goal of developing an algorithm for approaching a patient with hypotension. Having such a specific goal allowed the teacher to address the learner’s interest, making the time more worthwhile and useful for both.

During the initial meeting, the teacher might also ask the learner about his or her expectations of the teacher; the teacher also might articulate what the learner can expect of him or her. Thus, both the teacher and learner can begin with a clear understanding of what they can expect from one another. This can be useful when the learner is assessing the teacher’s performance and vice versa.

3. Teach Digestible Amounts Across the Domains of Learning

A common tendency amongst teachers is to teach more than a learner can remember or understand. By providing a vast amount of information, it is easy to lose the learner—and the point—as there are limits to the learner’s attention span, the amount of time they have and their ability to remember what they learn. Therefore, consider limiting teaching points to one or two per case. Also, consider setting a time limit on the teaching session.

As a guide for identifying teaching points, consider using Bloom’s taxonomy, which separates learning into three distinct domains (Figure 1).7 This framework artificially compartmentalizes these domains although they are not mutually exclusive (skills inherently require some knowledge, skills may be driven by attitudes, etc.).

By considering these domains separately, the teacher can identify a teaching point that goes beyond medical knowledge and decision-making. For example, the teacher might say: “When asking a patient about medication adherence, consider asking how many times a week they miss their medication. Asking in this way may promote candor by communicating that you understand that patients may miss doses.”

There are a number of other teaching frameworks that can help a teacher focus. These include:

- **The One-Minute Preceptor.** This makes the student responsible for coming up with an answer, probing for supporting evidence, teaching general rules, reinforcing positives, correcting mistakes and identifying the next learning experience. An example of how this approach, also known as the 6-Step Microskills, can be used is provided in Figure 2. Note that the teacher may choose not to sequentially follow all the steps in each case. When time is limited, a teacher may decide to teach a general rule and provide one element of feedback.8

- **SNAPS** (Summarize briefly the history and findings, Narrow the differential to two or three possibilities, Analyze the differential, Probe the preceptor by asking questions, Plan management, and Select a case-related issue for self-directed learning).9

- **The Five-Minute Moment.** This is a method for teaching physical exam skills by 1) attaching a memorable story or fact to convey the importance of the skill and promote retention and 2) demonstrating the exam finding while explaining how to clinically interpret it and avoid common mistakes.10

4. Deliberately Assess the Learner’s Performance

“Evaluation” is the teacher’s assessment of the learner’s performance, whereas “feedback” is communication of that assessment. Thus, evaluating a learner’s performance is essential to providing effective feedback. So how does one assess a learner’s performance? As mentioned earlier, the goals and expectations agreed on by both the teacher and learner may serve as the basis for doing this. Assessing performance takes focus and attention. That can be challenging if the clinician-teacher’s attention is on the patient and not on the learner.

Using frameworks such as the Accreditation Council for Graduate Medical Education’s (ACGME) core competencies and Bloom’s taxonomy may be helpful. Although created for graduate medical education assessment, the ACGME core competencies are commonly used in medical education to assess students’ performance through the lenses of patient care, medical knowledge, interpersonal and communication skills, professionalism, practice-based learning and improvement, and systems-based practice.7 By using either of these frameworks, the teacher can assess different aspects of the learner’s performance in a clear, systematic manner.

**FIGURE 1**

**Bloom’s taxonomy**

**Knowledge: Cognitive Domain**

- Medical decision-making
- Medical knowledge

**Skills: Psychomotor Domain**

- Physical exam
- Procedures and surgeries
- Communication including case presentations, interactions with colleagues and phrasing of consult questions, patient interactions
- Note writing

**Attitudes: Affective Domain**

- Professionalism, values, emotions, feelings

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**MINNESOTA MEDICINE | MAY/JUNE 2016**

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5. Provide Learners with Feedback on their Performance

If the teacher has cultivated a positive learning environment, established goals with the learner and evaluated the learner’s performance using a clear, systematic approach, the teacher will be better prepared to deliver feedback and the learner will be better prepared to receive it. How that feedback is delivered is very important. The teacher may wish to phrase it in a way that communicates what they think of the learner’s performance or behavior and not what they might think of the learner himself.\(^{15}\)

In addition to communicating an assessment of a particular behavior (behavior-specific feedback), the teacher may consider communicating the criterion for that assessment so the learner understands what makes their behavior effective or less effective.\(^{13}\) For example, the teacher might say: “The way you communicated bad news was effective because you started the conversation with a valuable question: What is your understanding of your current medical situation? That allowed you to determine where to begin the conversation (criterion).”\(^{12}\)

Providing behavior-specific feedback with a criterion encourages learners to keep doing what they’re doing or consider changing their behavior. Performance-specific or behavior-specific, criterion-based feedback may be formative or summative. Formative feedback is specific to the behavior and may be offered following a case presentation, a medical decision, a physical exam maneuver, a patient interaction, a review of a learner’s patient note, etc. Summative feedback can provide the learner with an understanding of their overall performance or their performance in a particular area. It might sound like this: “Overall, your performance was truly outstanding, and these are the elements of your performance that resulted in that assessment. . . .”\(^{11}\)

Providing learners with feedback, both formative/summative and positive/negative, helps them understand which behaviors to continue and which ones to change. Furthermore, providing learners with more comprehensive feedback on their knowledge, skills and attitudes may help them more fully develop as physicians.

**Conclusion**

Teaching is undeniably challenging. It forces many clinicians to go outside their comfort zone. Physicians can become better teachers by learning even a little about effective teaching practices. By learning these practices, it is possible for both teachers and learners to get more out of the time they spend together. MM

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**REFERENCES**