For the Office-based Teacher of Family Medicine

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Editor's Note: In this month's column**,** John Langlois, MD, and Sarah Thach, MPH, of the Mountain Area Health Education Center in Asheville, NC, examine teaching and learning styles and provide a practical style assessment tool.

I welcome your comments about this feature, which is also published on the STFM Web site at www.stfm.org. I also encourage all predoctoral directors to make copies of this feature and distribute it to their preceptors (with the appropriate *Family Medicine* citation). Send your submissions to Paul Paulman, MD, University of Nebraska Medical Center, Department of Family Medicine, 983075 Nebraska Medical Center, Omaha, NE 68198-3075. 402-559-6818. Fax: 402-559-6501. ppaulman@unmc.edu. Submissions should be no longer than 3–4 double-spaced pages. References can be used but are not required. Count each table or figure as one page of text.

Teaching and Learning Styles in the Clinical Setting

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Just as every clinician has a unique style of interacting with patients, every clinical teacher has a unique teaching style. In teaching, as in clinical medicine, there is no one right way; clinical teachers can adapt their styles to reflect the situations that arise. This article provides a simple assessment tool to help you recognize your preferred style(s) of interacting with learners and assess learners' preferences so you may more easily match teaching and learning styles.

Self-assessment

Before continuing, please complete the Teaching and Learning Styles Self-assessment Tool in Table 1. As you read each statement, consider how likely you would be to use this style in your teaching. Focus less on the content and more on the manner in which the question or statement is given. There are no right or wrong answers, only preferences.

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Andragogy Versus Pedagogy

One way to look at teaching and learning styles is to consider differences between learning and teaching in adults (andragogy) and children (pedagogy). Essentially all of the learners that we teach are adults; however, not all are adult learners, nor is an adult teaching style appropriate in all situations.

In the pedagogical style, the teacher decides what is taught and how it is taught, and the learner depends on the teacher for direction as well as the content itself. Motivation and rewards for learning are external (grades and awards), and the focus of learning is to build a foundation of knowledge that may be used later. In andragogy, learners take responsibility for their education and have a more active role in directing what they need. The teacher is more of a facilitator of learning and a resource for the learner. Learners' motivation and the focus of the learning is on application of knowledge and the development of competency in skills needed at that moment.

Both styles of teaching are effective in certain situations. At times, the teacher needs to take control of the learning situation and work to ensure that the learner has a solid base of knowledge for future use. At other times, learners must be encouraged to assess their own needs and direct their learning.

Items 1–6 in your Teaching and Learning Styles Self-assessment

Table 1

Teaching and Learning Styles Self-assessment Tool

Items 1–18 are questions or statements from a preceptor to a learner. Items 19–20 are statements made by a learner. How comfortable are you with each question or statement?
Scale: 5=very uncomfortable, 1=very comfortable

1. "We've got a few minutes now . . . I'll give you my 10-minute talk on _____."	5 4 3 2 1
2. "What are the seven causes of _____?"	5 4 3 2 1
3. "_____ is an important and common problem. Read this chapter so that you will know more about it."	5 4 3 2 1
4. "We've got a few minutes now . . . what would you like to discuss?"	5 4 3 2 1
5. "We saw two patients with _____ today. What useful things did you learn, and what questions remain?"	5 4 3 2 1
6. "Look carefully at your knowledge base and your clinical skills, and let me know tomorrow what needs improvement and how we can work on that over the remaining 3 weeks."	5 4 3 2 1
7. "What is the drug of choice for _____?"	5 4 3 2 1
8. "Amoxicillin is an option for that purpose, but in my experience, increasing resistance patterns have made trimothoprim/sulfamethoxazole a better choice."	5 4 3 2 1
9. "How did you arrive at that diagnosis and why?"	5 4 3 2 1
10. "OK. So your working diagnosis for this patient is _____. What would you recommend for treatment and why?"	5 4 3 2 1
11. "What if the X ray was normal? Would that change your diagnosis?"	5 4 3 2 1
12. "Mr Clayton shared some difficult information about his illness with you. How did that make you feel?"	5 4 3 2 1
13. "There is a wide variety of opinions on how to approach that ethical situation. What do you think you would do?"	5 4 3 2 1
14. "You seem to be having difficulty in dealing with this patient. What 'buttons' do you think this situation might be pushing for you?"	5 4 3 2 1
15. "I'm going to watch you interview this next patient."	5 4 3 2 1
16. "Watch my technique on this patient, and I'll supervise you for the next."	5 4 3 2 1
17. "I know you haven't done this before, but I'll be right there to help you."	5 4 3 2 1
18. "You've done it before? OK. I'll watch you do it."	5 4 3 2 1
19. "I feel comfortable and at home very quickly in new environments."	5 4 3 2 1
20. "I enjoy being asked questions on the spur of the moment."	5 4 3 2 1

Tool reflect variations on a pedagogic or andragogic teaching style. Items 1–3, where the teacher selects both the topic and the mode of learning or demonstrating knowledge, are teacher-centered approaches. In Item 4, the preceptor allows the learner to determine the content of teaching and implies discussion rather than a lecture—a more andragogic approach. Items 5 and 6 go one step further, asking the learner to assess what he or she has already learned about a clinical problem and determine what additional learning he or she needs.

You may notice that your answers do not fall neatly into one category. Your preferred answers may be a mixture of both styles. As we have discussed, there is no right or wrong teaching (or learning) style, and a variety of responses can indicate flexibility and comfort in a variety of areas.

Assessing Knowledge

As a clinical preceptor, it is your task to assess and teach knowledge, attitudes, and skills.[1] Questioning is a primary mechanism for assessing a learner's knowledge. Quirk[2] defines four distinct styles of questioning and sharing information. The assertive style is teacher centered; preceptors ask direct questions and provide answers. In the suggestive style, preceptors share opinions and practical experience and suggest options to learners. The collaborative style is even more learner centered; preceptors accept and explore learners' ideas and share their experiences. In the facilitative style, the exchange extends beyond the clinical content to the feelings of learner and preceptor.

Items 7–12 of the assessment tool explore comfort with these teaching styles. Item 7 reflects the assertive style, asking for specific information. Item 8, which provides an opinion and offers experience to back it up, is a suggestive-style statement. Items 9–11 are collaborative; they explore the learner's clinical reasoning. This is a useful assessment technique in helping the teacher assess not only the learner's answer but the process by which he

or she arrived at that answer. Item 12 reflects the facilitative style, discussing the feelings elicited in a patient encounter.

Assessing Attitudes

Items 12–13 of the assessment tool examine attitudes of the learner. Learners' attitudes are most accurately reflected by their behavior,[1] but questions can prompt a discussion of attitudes. Item 12 was discussed in the preceding section; exploration of feelings and attitudes is a part of the facilitative style. Item 13 addresses an ethical issue; these arise from time to time in practice. Item 14 assesses a high-level skill, being able to self-assess an unexpected emotional reaction to a patient. Whitman and Schwenk[1] describe strategies for role-modeling attitudes to inculcate in learners, including the highest quality of patient care, sensitivity to both patients and learners, enthusiasm for teaching and patient care, and dealing with the uncertainties and challenges that all practitioners face.

Assessing Clinical Skills

History taking and physical exam skills are vital tools of the well-trained clinician, yet providing appropriate supervision and feedback can be challenging in the busy clinical setting. Item 15 indicates your comfort with direct observation, a highly valuable means of assessing skills.

Teaching clinical skills and procedures is a challenge. It is difficult to know how much latitude to give the learner while ensuring the quality of patient care provided. Whitman and Schwenk[3] provide a useful modification to the old standard "See one, do one, teach one" model: (1) *Demonstrate* the skill while the learner observes. (2) Closely *supervise* the learner practicing the skill. (3) *Monitor* the learner performing the skill, with as little interference from you as possible—taking into account the need to do no harm to the patient. (4) *Assist* the learner; let him or her perform the skill without you by discussing the procedure in advance, being available (but not necessarily present) during the procedure, and debriefing afterward. Advancing from one step to another is not contingent on a specific number of times performed but on demonstration of competence and skill at a given level.

Responses to items 16–18 indicate your comfort in allowing learners to do procedures and in accepting learners' self-reports of skill or competence. Note that learners who indicate a high level of comfort may be highly skilled in clinical procedures, or they may have an unrealistic assessment of their skills. On the other hand, some learners may underestimate their clinical skills and may need coaching to build confidence. In general, learners' skills should be directly assessed whenever possible, but the assessment tool questions can help point out strategies to build appropriate self-assessment.

Personality Preferences

Volumes have been written on personality types and preferences, too much to go into great detail here. Comfort in adapting to new environments and in responding to challenges versus needing time to research and present a topic are two variables that can be helpful to assess in your learner (see items 19–20). Assessing your own preferences in these areas and recognizing that your learners may feel differently can help you promote learner comfort in your practice.

Using the Assessment Tool With Learners

Having learners complete this same assessment tool helps you and learners get to know each other and adjust to one another's styles, particularly when they assess themselves early in the rotation before their reporting is influenced by observations of your style. Once the learner completes his or her self-assessment, compare the answers to your own. (You might keep your completed assessment in your orientation folder for this purpose.) Where are the similarities and differences? It is neither expected nor wise for you to adjust your style to completely match that of the learner. The learner with a strong preference for teacher-centered learning needs encouragement, guidance, and the opportunity to develop a more learner-centered style. The learner reporting comfort with performing new techniques and procedures still needs close monitoring to assure that his or her confidence is backed up by appropriate skill. Consider showing your self-assessment to the learner. This promotes a collaborative approach to addressing style differences.

Summary

We all have natural preferences and styles that suit our personalities and experiences. One of the challenges of teaching health professions learners is being placed in a close working relationship with learners with different styles. Thoughtful self-assessment of your own style and identification of the preferences of learners will allow both you and the learner to stretch and expand your abilities, resulting in improved clinical and professional skills.

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