

Clinical (Bedside) Teaching/One-Minute Preceptor/Microskills

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Setting the Stage

Initial conversation with the student: What are the goals and expectations? How is this going to work? Sets agenda and builds student commitment.

Importance of “thinking aloud” as much as possible (by both learner and teacher).

Demonstrate and reinforce that not knowing is perfectly fine/expected; this is about education.

Steps:

- 1) **Get a Commitment:** e.g., “What do you think is going on?” “Why do you think this happened?” “What would you do next, or what information would you want next?”

– Avoid the urge to agree or disagree at this point. Need to probe for understanding of the student’s thought processes and knowledge.
- 2) **Ask Questions to Probe for Understanding:** “What led you to that conclusion?” “What else did you consider or rule out?” (Avoid judgment or feedback at this point.)
- 3) **Teach General Rules (When Applicable)** – focused and brief, check for understanding
- 4) **Recognize/Reinforce What the Learner Did Well** – be specific and focus on behaviors rather than overall assessment (e.g., “Good job.”)
- 5) **Correct Mistakes** -- be specific and focus on behaviors rather than overall assessment (e.g., “That didn’t go well.”)
- 6) **Closure and Next Steps:** Summarize, “What did you learn?” “What do you need (to do?) before the next time?”

Common Problems/Mistakes

- 1) Diving in with teaching rather than asking probing questions
- 2) Using leading questions, closed-ended questions, or statements disguised as questions
- 3) Giving feedback too soon/early
- 4) Giving feedback that is too general or judgmental
- 5) Taking over the case or being too directive
- 6) Providing direction without sharing the thought processes behind it

Narrative Explanation of the Steps

Step One: Get a Commitment

At this point, there are many teaching techniques you could employ, but this method suggests that you get a commitment from learners – to get them to verbally commit to an aspect of the case. The act of stating a commitment pushes learners to move beyond their level of comfort and makes the teaching encounter more active and more personal.

An appropriate question from the preceptor might be: “What do you think is going on with this patient?” This approach encourages learners to further process the information they have gathered. You obtain important information on learners’ clinical reasoning ability and learners are given a higher sense of involvement and responsibility in the care of the patient. If the answer is correct, then there is the opportunity to reinforce a positive skill. If the response is incorrect, an important teaching opportunity has occurred and the impact of the teaching is likely to be greater since the learner has made the commitment. Other possible questions:

“What other diagnoses would you consider?”

“What tests do you think we should get?”

“How do you think we should treat this patient?”

“Do you think this patient needs to be hospitalized?”

“Based on the patient’s history, what aspects should we focus on?”

By selecting an appropriate question, the preceptor can take learners at any stage and move them further along in their skills and stretch them beyond their current comfort level. Notice that questions used in getting a commitment do not simply gather further data about the case. The goal is to gain insight into the learner's *reasoning*. Questioning by the preceptor for specific data reveals the *preceptor's* thought process – not the learner's. Learners need the opportunity to tell you their assessment (mental processing) of the patient data they have collected.

Step Two: Probe for Supporting Evidence

Once learners have made a commitment, it is important to explore the basis for their opinions. Educational settings often reward a lucky guess to the same degree as a well-reasoned, logical answer. In the clinical setting it is important to determine that there is an adequate basis for the answer. This step allows the preceptor to closely observe clinical reasoning and to assist learners in improving and perfecting that skill.

Note that the goal is not to ask questions that lead to a correct answer, but to assess the learners’ thinking processes. Also, when an incorrect or unsound answer is provided, resist the temptation to correct and instead ask additional questions to help the learner discover the problem. Similarly, when learners look to you for confirmation when they are indeed correct, resist the urge to pass immediate judgment. Instead, ask a question to understand the rationale for their answer:

“What factors in the history and physical support your diagnosis?”

“What other possible diagnoses did you rule out?”

“Why would you choose that particular medication?”

“If X were different, how would that affect your choice?”

Step Three: Teach General Principles (When Applicable)

A key but challenging task for learners is to take information and data gained from an individual learning situation and accurately and correctly generalize it to other situations. There may be a tendency to over generalize – to conclude that all patients in a similar clinical situation may behave in the same way or require the exact same treatment. On the other hand, learners may be unable to identify an important general principle that can be applied effectively in the future. Brief teaching specifically focused to the encounter can be a very effective remedy.

Because of time limitations it is not practical to do a major teaching session at that moment, but a statement or two outlining a relevant and practical teaching point can have a significant impact on the learner. Even if you do not have a specific medical fact to share, information on strategies for searching for additional information can be very useful to learners. For example:

“Smokers are more likely than non-smokers to be infected with gram-negative organisms. This is one situation where you may need to broaden your antibiotic coverage to be sure to cover these more resistant organisms.”

“Deciding whether someone needs to be treated in the hospital for pneumonia is challenging. Fortunately there are some criteria that have been tested which help . . .”

“In looking for information on what antibiotics to choose for a disease, I have found it more useful to use X rather than Y which may be out of date.”

Step Four: Reinforce What Was Done Well

For learners to improve they must be made aware of what they did well, and therefore should continue to do. The simple statements “That was a good presentation” or “You are correct” are not sufficient. Learners are left unsure what aspects of their thinking or performance led to the final evaluation by the preceptor. Instead, comments should include specific behaviors that demonstrated knowledge, skills, or attitudes valued by the preceptor. With a few sentences you can reinforce positive behaviors and skills and increase the likelihood that they will be incorporated into further clinical encounters. For example:

“Your diagnosis of ‘probable pneumonia’ was well supported by your history and physical. You clearly integrated the patient's history and your physical findings in making that assessment.”

“Your presentation was well organized. You had the chief complaint followed by a detailed history of present illness. You included appropriate additional medical history and medications and finished with a focused physical exam.”

Step Five: Give Guidance Regarding Errors and Omissions

Just as it is important for learners to hear what they have done well, it is important to tell them what areas need improvement. In framing comments it is helpful to avoid extreme terms such as “bad” or “poor.” Expression such as “not best” or “it is preferred” may carry less of a negative value judgment while still communicating the point.

Comments should also be as specific as possible to the situation, identifying specific behaviors that could be improved:

“In your presentation you mentioned a temperature in your history but did not tell me the vital signs when you began your physical exam. Following a standard format in your presentations and notes helps avoid omissions and will improve your communication of medical information.”

“I agree that, at some point, complete pulmonary function testing may be helpful, but right now the patient is acutely ill and the results may not reflect her baseline and may be very difficult for her. We could get important information with just a peak flow and a pulse oximeter.”

The comments are specific to the situation and also include guidance on alternative actions or behaviors to guide further efforts. In a few sentences an opportunity for behavior change has been identified and an alternative strategy given.

It is important that there be a balance between positive comments and constructive criticism. Some preceptors focus on the positive, shying away from what may be seen as criticism of the learner. Others focus nearly exclusively on areas for improvement without reinforcing what is already being done well. Balance and variety are preferable.

Step Six: Closure and Next Steps

Time management is a critical function in clinical teaching. It is sometimes easy for a teaching encounter to last much longer than anticipated with negative effects on the remainder of the patient care schedule. The preceptor must be aware of time and cannot rely on the student to limit or cut off the interaction. This final step serves the very important function of ending the teaching interaction and defining what the role of the learner will be in the next events.

The roles of the learner and preceptor after the teaching encounter may need clarification. In some cases you may wish to be the observer while the learner performs the physical or reviews the treatment plan with the patient. In another instance you may wish to go in and confirm physical findings and then review the case with the patient yourself. In other instances, the learner may be asked to perform some follow-up research and report the results or conclusion to the preceptor. Explaining to learners what the next steps will be and what their role is will facilitate the care of the patient and the functioning of the learner. For example:

“OK, now we'll go back in the room and I'll repeat the lung exam and talk to the patient. After, I'd like you to help the nurse get a peak flow, a pulse ox, and a CBC. When we've gotten all those results, let me know and we can make a final decision about our treatment plan.”

Clinical or bedside teaching presents a unique set of challenges due to the setting and the multiple demands of the task. Still, no other aspect of teaching has the potential to be as meaningful and rewarding.