Beyond ‘See One, Do One, Teach One’: Tips for Terrific Teaching

UMC Resident Orientation
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Diane Beebe, MD
Professor and Chair
Department of Family Medicine
BEST* RESIDENT TEACHING
Bringing Education & Service Together*

After participating in this session, residents will be able to:

- Recognize the “teachable moment”
- List and use the five “microskills” of clinical teaching
- Understand the role of questioning in teaching
- Give detailed and useful feedback

*Adapted from Univ. of CA, Irvine College of Medicine
A Great Teacher Is:
A Great Teacher Is:

- Enthusiastic
- Knowledgeable
- Credible
- Approachable
- Receptive
- Organized
- Creative
- Responsive
- Understandable
- Adaptable
- Caring
- Interesting
- Stimulating
- Humorous
Case Presentation
Student:

“I have a 57 year old male with a history of hypertension. He smokes one pack per day and says he gets short of breath when climbing steps at work. He also reports some vague tightening in his chest with exertion that the patient rates as 6/10. He first noted this 2 months ago, but it now occurs daily. I’m wondering if we should admit him to the hospital.”
Teacher: “Does he have a strong family history?”

Student: “I don’t know, I didn’t ask, but I can.”

Teacher: “Well, it really doesn’t matter. He’s got lots of risk factors for heart disease, so I think we should put him in the hospital and rule out an MI. By the way, what was his heart and lung exam like?”

Student: “Oh, they were fine.”

Teacher: “OK, go call the admitting resident and put him in.”
Case Presentation Analysis:

???????

• What was good?
• What could have been better?
• Did you learn anything?
Five-Step Microskills Model

- **Model for clinical teaching with time constraints.** Neher et al. J. Amer Board of Fam Practice. 5:419-24, 1992.
- **Basis:** Preceptorial encounters with students; opportunities to teach ways of thinking as well as information
- **Recognizes “teachable moments”**
Questioning is the key:

- The right kind of questions open the door to the student's participation.
- The right questions focus the learner's attention on applying their current understanding to the content or problem.
Types of Questions:

- **Description:**
  What did you see? What happened?

- **Reflection:**
  What was surprising about the patient’s presentation?

- **Analogy:**
  What else does it remind you of?

- **Procedures:**
  How would you normally do...? What is the usual next step?

- **Definition:**
  What does ... mean?
• Possibilities and Predictions:
  What else could …? What will happen next if …? What will be the effect of …?
• Justification:
  How can you tell? What evidence led you to…?
• Theorizing:
  Why is it that way? What is the reason for it?
• Generalization:
  Can you generalize to other patients from these events? What is the principle behind ...?
Step One: Get a Commitment

- What do you think is going on with this patient?
- What would you like to do next?
- What additional information do you feel that you need?

Determine how the learner views the case. Even a hunch or a guess is better for learning than no commitment.
Don’t:

- Offer your own opinion
- Ask for more data
- Answer the problem
- Make the diagnosis
Step Two: Probe for Supporting Evidence

- What led you to that diagnosis?
- What else did you consider and rule out?

Diagnoses the learner’s understanding of the case. Helps teacher identify what the learner does and does not know: gaps, misunderstandings, poor reasoning or attitudes.
Don’t:

• Ask for textbook knowledge
• Make lists
• Grill the learner or make it an oral exam
• Pass judgment on the learner’s thinking
• Give own opinion on the case
• Make it unpleasant
Step Three: Teach General Rules

- The key features of angina are ...
- “Shortness of breath can be a sign of both cardiac and pulmonary disease...”

The teaching point should help the learner generalize from this case to other cases. If the learner already knows general principles, add additional information.
Step Four: Provide Positive Feedback

• “It was good that you considered the patient’s age and co-morbid conditions when you selected that drug because other drugs in that class would have more side effects for this patient.”

Reward and reinforce what was done well and why it is important.

Be specific!
Step Four Feedback

Is NOT: General praise
Feedback should be:
• Specific
• Timely
• Constructive
• Valid
• Useful
Giving Feedback

Inquiry (listen to learner’s concerns)
Needs (what does the learner need?)
Specific feedback (start with positives)
Interchange (balance team/learner needs)
Goals (clarify new mutual goals)
Help (any serious problems or issues?)
Timing of follow-up (when will you discuss next?)
Step Five: Correct Errors

• “That drug would be appropriate for some other patients, however, there might be a better choice for this patient.”

Have the learner self-critique first.
Be specific. Make recommendations for improvement – future oriented.
Tailor to situation and place.
Sometimes best done in private.
Errors not corrected will be repeated.

And repeated
And repeated
And repeated
Correction should NOT be:

- Vague
- Judgmental
- Demeaning
- Condescending
The Five Microskills of Clinical Teaching

• Get a Commitment
• Probe for Underlying Reasoning
• Teach General Rules
• Provide Positive Feedback
• Correct Errors
Levels of Learning and Understanding

- **Unconscious incompetence**
  “Don’t know what we don’t know”

- **Conscious incompetence**
  “Know what we don’t know”

- **Conscious competence**
  “Know what we know”

- **Unconscious competence**
  “Just know it”
The SAME Case Presentation
Student:

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Teacher:

What do you think? And why?

Are there things about his history that worry you? What are those?

Are there other questions that would help us assess the patient’s risk?

What are the most important physical findings to look for?

What are the possible causes for his symptoms?

What would be the benefit of admitting him?

If we didn’t admit him, what would you recommend?
Beyond the Five Microskills

- **Debriefing:** Provide opportunities for reflection. Get input/questions from patient and learner. What did you learn today? What are your questions?
- **Education:** Promote self-directed learning. What would you like to learn more about? Recommend resources to promote further learning.
Terrific Teaching

• Seize the moment
• Involve the student
• Begin with what the student knows
• Move from simple to complex
• Accommodate the learner’s style
• Make material meaningful
• Allow immediate application of knowledge
• Give feedback
• Reward
Terrific Teaching

• Create an accepting atmosphere:
  Ask for questions.
  Listen to the question or to any student comments.
  Answer questions adequately.
  Never put down or embarrass the students.

• Evaluate your own teaching
See One, Do One, Teach One...

Mirror Cells?

- A mirror neuron is a neuron which fires both when an animal performs an action and when the animal watches someone else perform the same specific task. Thus, the neuron "mirrors" the behavior of another animal, as though the observer were himself performing the action.

- These neurons have been observed in primates, in some birds, and in humans. In humans, they have been found in Broca's area and the inferior parietal cortex of the brain.

- Researchers have found evidence of a similar system (matching observations with actions), in the human brain.
Bedside Teaching Tips

- Orient and include the patient.
- Address time constraints through flexibility, selectivity and integration.
- Incorporate learners into the teaching process and reinforce their autonomy.
- Advocate evidence-based diagnosis.

Good Teaching

• One. Good teaching is as much about passion as it is about reason.

• Two. Good teaching is about substance and treating students as consumers of knowledge.

• Three. Good teaching is about listening, questioning, being responsive, and remembering that each student and class is different.

• Four. Good teaching is about not always having a fixed agenda and being rigid, but being flexible, fluid, experimenting, and having the confidence to react and adjust to changing circumstances.
Good Teaching (con’t)

• **Five.** Good teaching is about style.
• **Six.** Good teaching is about humor.
• **Seven.** Good teaching is about caring, nurturing, and developing minds and talents.
• **Eight.** Good teaching is supported by strong and visionary leadership, and tangible institutional support -- resources, personnel, and funds.
• **Nine.** Good teaching is about mentoring and teamwork.
Good Teaching (con’t)

• **Ten.** At the end of the day, good teaching is about having fun, experiencing pleasure and intrinsic rewards.

THE AH HA MOMENT ....

Good teachers practice their craft not for the money or because they have to, but because they want to. They truly enjoy it.

Good teachers can’t imagine doing anything else.
Welcome to the Residents' Teaching Skills Web Site, a collaboration with the Graduate Medical Education (GME) Section of the Association of American Medical Colleges (AAMC).

http://www.residentteachers.com
Clinical Teaching Perception Inventory (CTPI)®

- measures comfort with clinical teaching
- compares perceptions of your "ideal clinical teacher" and your feelings about yourself as a clinical teacher

Studies have suggested that taking the CTPI will help you improve your teaching skills.
- 28-item Q-sort instrument
- takes 5-10 minutes.
- immediately feedback and explanation of your scores
- links and resources to help you achieve your goals as a clinical teacher

The CTPI was developed by:
Maurice A. Hitchcock, Ed.D.
Bill D. Lamkin, Ph.D.
William K. Mygdal, Ed.D.
Charles M. Clarke
Sharon O'Connor-Clarke
Have Fun Teaching

Have Fun Learning !!