

Residents as Teachers



UNC
HEALTH CARE

Office of Graduate Medical
Education

Welcome to your teaching role!

One of the most rewarding experiences we hope you have during your residency/fellowship training while at UNC is the teaching you will do, for medical students, your peers, and other medical professionals. Many of you have some experience with this vital role, and we know that all of you have teaching role models that provide inspiration to you. This learning module is designed to provide some guidance and reinforcement of the basic principles of clinical teaching. Your comments are welcome.

In addition to this required module, many of your programs will have additional robust formal experiences in furthering your preparation as a “Resident as Teacher”. Please take full advantage of those opportunities as well.

A “teaching skills card” is also available for download from MedHub.

7 Key Elements of Teaching

- 1. Understand principles of a positive learning environment**
- 2. Prepare for teaching**
- 3. Understand the use of effective questioning as a teaching methodology**
- 4. Set clear expectations and role definitions**
- 5. Provide feedback to learner**
- 6. Seek feedback from the learner about the effectiveness of your teaching**
- 7. Adjust teaching methods and/or style if outcomes not met**

1. Positive Learning Environment

An effective learning environment is one that is encouraging, supportive, and safe. Learners should feel free to ask questions without fear of being harassed or belittled.

Learners should be encouraged to let you know if something about the environment is threatening or not conducive to their learning

Concerns about the learning environment must be addressed without the learner having any fear of retribution or retaliation

“DO’s” of supporting a positive learning environment

- **DO introduce yourself to the students on your service and state your expectations for your work together.**
- **DO tell students you will help them to learn.**
- **DO tell students they can ask you questions.**
- **DO give students feedback in an effort to improve their performance.**

“DON'Ts” in supporting a positive learning environment

- **DON'T harass, belittle, or mistreat students, especially on the basis of gender, race, ethnicity, sexual orientation, or any other characteristics of the individual student.**
- **DON'T ask students to do personal favors or perform personal services.**
- **DON'T question, belittle, or challenge a student's specialty choice.**
- **DON'T give preferential learning opportunities to a student based on their specialty choice.**

2. Prepare for Teaching

Become familiar with the global UNC MD curriculum structure:

<http://www.med.unc.edu/md/curriculum/tec-curriculum-information/tec-curriculum>

Become familiar with the MD Program's competencies by phase and course:

<https://www.med.unc.edu/md/curriculum/governance-policies-and-educational-standards/md-program-competencies-enabling-competencies/>

Understand Application Phase Course Structure (core clinical courses): Review these ahead of time so that can assist the students achieve those outcomes.

<https://www.med.unc.edu/md/curriculum/tec-curriculum-information/application-phase/courses-learning-objectives-and-assessments/>



3. Use Effective Questioning as a primary teaching method

The principles behind effective questioning are simple:

- **the questions are designed to teach, not humiliate**
- **the questions are designed to allow the student to access their pre-existing knowledge**
- **the questions are structured to encourage a student to stretch themselves to new levels of understanding**
- **the questions should provide an opportunity to cement old knowledge, and acquire new knowledge within a framework that will allow them to apply that new knowledge to similar clinical situations in the future.**

One Method of Effective Questioning

The 5 Microskills model

5 “Microskills” Model of Clinical Teaching

1. **Get a commitment**
2. **Probe for supporting evidence**
3. **Teach general rules**
4. **Reinforce what was done right**
5. **Correct mistakes**

Neher JO, Gordon KC, Meyer B, Stevens
N. A five- step "microskills" model of
clinical teaching.

Journal of the American Board of Family Practice 1992; 5:419 -424

Microskills -- Step One: Get a Commitment

“What do you think is going on with this patient?”

“What would you like to do?”

Even a hunch or guess is better for learning than no commitment.

Microskills -- Step Two: Probe for Supporting Evidence

“What led you to that diagnosis?”

“Why did you choose that drug?”

Helps the teacher identify how the learner is applying knowledge to the actual clinical circumstances.

This line of questioning reinforces critical reasoning skills.

Avoid any tone that makes this confrontational or “pimping” in nature.

Microskills -- Step Three: Teach General Rules

“If the patient has cellulitis, incision and drainage won’t help. That’s for an abscess, which you recognize by fluctuance.”

This is an opportunity to provide “pearls” (e.g. when you see a young woman of childbearing age with abdominal pain, you always want to get a pregnancy test)

Can skip if learner already knows general principles.

Microskills -- Step Four: Reinforce What Was Done Right

“It was good that you considered the patient’s age when you prescribed that drug, because other drug classes can cause more side effects in the elderly.”

Some good actions are pure luck, others are more deliberate. In either case, skills in learners are not well established and are, therefore, "vulnerable." Unless reinforced, competencies may never be firmly established.

Microskills -- Step Five: Correct Mistakes

“You could be right that you won’t harm the brachial artery when you draw that blood gas. But if you use the radial artery, you won’t risk cutting off the arterial supply to the whole arm.”

- Have them self-critique first.**
- Be specific about what learner needs to correct.**
- Best done in private if criticism is major.**

4. Set Clear Expectations

Orient your learner; identify mutual goals for the experience

Explain responsibilities of each of the team members

Establish daily work flow; who will do what?

Explain format for supervision; who supervises who?

Establish reporting pattern; who to go to directly for guidance or questions?

Determine process for providing feedback; when and how will feedback be provided

Reinforce professionalism standards; on time, appropriate attire, fitness for duty

Clarify on-call schedule (if applicable), and any other night/weekend duties

5. Provide Feedback

Feedback is critical for growth

Formative feedback is given during the rotation, and is designed to reinforce as well as provide opportunity for improvement

Summative feedback is given at the conclusion of the experience and provides an overall assessment

Encourage learner to actively seek feedback throughout the experience

Emphasize that constructive criticism is necessary for all of us to get beyond our blind spots

Principles of Effective Feedback

Given with care – the intention is to help and support

Given with attention – be aware of learners verbal and nonverbal responses

Invited by the learner – when sought by the learner, they are more likely to be open to seeing and exploring areas for improvement

Well timed – close to time of observed behavior, and sensitive to external factors

Principles of Effective Feedback

Specific – be concrete about behaviors you have seen and outcomes; avoid vague or general comments

Objective – describe what you have seen and avoid subjective judgments

Directed toward changeable behavior – focus on changes that are within the learners control

Clarified – seek input from multiple sources if concerns arise; multiple similar perceptions lends credibility to the observations

Evaluated – seek the learners interpretation of the feedback you provided

6. Seek Feedback from your learner

The teacher needs to grow too; model principles of effective feedback by soliciting feedback about the effectiveness of your teaching and leadership

Identify your own goals for improvement as a teacher, and share with your learner; this provides context for the learner to give you specific feedback

Respond to feedback provided by your learners with an open mind; teachers have blind spots as well

7. Adjust teaching methods and/or style if outcomes not met

Explore different teaching styles if you and your learner are not satisfied with the learning outcomes

Understand that one size doesn't fit all; adjusting a particular approach based on the learner's experience with the clinical problems at hand is necessary to optimize learning

Seek advice from senior residents and/or faculty about different teaching methodologies

Links to Important MD Program Policies

Clinical Supervision Policy: Defines the expectations for supervision of medical students on clinical services

<https://www.med.unc.edu/md/policies/files/2019/01/Clinical-Supervision-of-Medical-Students-LCME-9.3.pdf>

Medical Student Duty Hour Policy: Duty hours should not exceed 80 hours per week inclusive of all scheduled in-house call activities.

<https://www.med.unc.edu/md/policies/files/2019/01/Student-Duty-Hour-Guidelines-LCME-8.8.pdf>

Learning Environment and Student Mistreatment Policy: Includes procedures and how the school tracks and responds to reports.

<https://www.med.unc.edu/md/policies/files/2019/07/Learning-Environment-and-Student-Mistreatment-Policy-LCME-3.5-3.6.pdf>

Summary – Incorporate these elements in all of your teaching

- 1. Understand principles of a positive learning environment**
- 2. Prepare for teaching**
- 3. Understand the use of effective questioning as a teaching methodology**
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Post-test Questions

- 1. Among the following statements, which most accurately describes effective feedback?**
 - A. Critical feedback is best done in the context of the end of rotation evaluation (summative feedback)**
 - B. Pointing out personality flaws is the best way for people to get past their blind spots**
 - C. Behaviorally specific feedback, provided close in time relative to the observed behaviors encourages professional growth**
 - D. Subjective observations have the most value in a feedback process**

2. The following are examples of setting clear expectations:

- A. Establish daily work flow; who will do what?**
- B. Clarify on-call schedule (if applicable), and any other night/weekend duties**
- C. Reinforce professionalism standards; on time, appropriate attire, fitness for duty**
- D. Determine process for providing feedback; when and how will feedback be provided**
- E. All of the above**

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- 3. Why is the microskills step “probing for supporting evidence” an important method of effective questioning? Please choose the best answer from below.**
- A. It exposes the learner’s deficiencies in obtaining an appropriate history and physical**
 - B. It reinforces the critical reasoning process**
 - C. It gives the learner an opportunity to show off their knowledge base**
 - D. It allows the teacher to demonstrate their expertise with the clinical problem at hand, thus enhancing the learning experience**

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- 4. A positive learning environment is established with the following:**
- A. Questions should always be encouraged**
 - B. Meeting your learners after work for a drink is always a great way to establish teamwork**
 - C. Welcoming all specialty choices demonstrates that all learners can benefit from your particular educational experience**
 - D. Asking your learner to babysit your child is a great way to show your trust in their professional character**
 - E. A and C**
 - F. B and C**

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- 5. Which of the following actions/behaviors are acceptable ways to interact with your learners?**
- A. Asking a student to pick up your dry-cleaning on the way to work in exchange for individual tutoring on physical exam skills**
 - B. Pointing out that a student's choice of specialty will likely not be professionally rewarding for them**
 - C. Providing critical feedback based on specific observed behaviors with suggestions on how they can improve**
 - D. Asking a student on your ward team out on a date**
 - E. None of the above**

6. Which of the following is NOT one of the microskills?

- A. Correct mistakes**
- B. Demonstrate competence**
- C. Teach a general rule**
- D. Probe for supporting evidence**
- E. Get a commitment**

- 7. Why is the microskills step “reinforce what was done right” an important part of the learning process? Chose the best answer:**
- A. This facilitates your learner’s self-esteem**
 - B. Because you always need to correct mistakes, this is the positive part of the “feedback sandwich”**
 - C. This will avoid any perception of mistreatment because this is directed toward reinforcement, not correction**
 - D. Knowledge and habits of mind are vulnerable at earlier stages of clinical learning, therefore pointing out specifically what the learner should keep on doing is critical to cementing competencies**

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- 8. A teacher should always seek feedback about the effectiveness of their teaching because... (choose the best answer):**
- A. This provides role modeling for the student and encourages them to solicit feedback about themselves**
 - B. Teachers can have blind spots about their teaching skills**
 - C. Feedback is the fundamental way that we all improve**
 - D. Unresolved educational needs remain unresolved unless they are identified**
 - E. All of the above**

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- 9. Formative feedback is characterized by an overall evaluation of performance, summarizing what the learner has accomplished.**
- A. True**
- B. False**

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- 10. Formative feedback is given periodically throughout the rotation, and focuses on reinforcement as well as identifying specific opportunities for improvement.**
- A. True**
 - B. False**

Answer Key (Do not include in the published module)

1. C
2. E
3. B
4. E
5. C
6. B
7. D
8. E
9. B
10. A