The 5 Clinical Microskills

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Introduction

Tips to teach efficiently and effectively
Roadmap

• Teaching tips for maintaining retention
• Andragogy
• The 5 clinical Microskills
Promoting Retention

Learning Pyramid

- Lecture: 10%
- Reading: 20%
- Audiovisual: 30%
- Demonstration: 50%
- Discussion: 75%
- Practice doing: 90%
- Teach others: Average student retention rates

Source: National Training Laboratories, Bethel, Maine
Promoting Retention

• Ask lots of questions
  – Helps the learner recognize their deficiencies
  – Lets you know on what level to teach
  – Encourages active participation instead of passive learning
Promoting Retention

• Ask lots of questions
  – The Socratic method of teaching
    • Use a series of easy questions to guide learners through an advanced topic
    • Great way to teach basic pathophysiology
  – Ask questions about things you already taught to reinforce concepts
Andragogy
Andragogy vs. Pedagogy

✓ They need to know why
✓ Internally motivated
✓ Self-directing
✓ Prior experiences
✓ Problem-centered orientation

✓ Children will learn what they are told to
✓ Externally motivated
✓ Dependent learners
✓ Little prior experience
✓ Subject-centered orientation

Andragogy

- **The Need to Know** - Adults need to know the reason for learning something

- Adults prioritize what they are going to learn

- For off-service interns, use a case example from their future field

- Start talks with a case or anecdote
Andragogy

• Adults are self-directing learners

• Teach learners about available resources
  – You are asked, “How long do you treat someone with a simple UTI?”
  – Tell them how to look it up (Sanford, Red Book, Uptodate, etc).

• Give learners good review articles
Andragogy

• The adult learner learns most effectively if the new learning is presented in the context of applications to real life situations.

• Cases allow learners to process that they may be faced with this scenario in the future

• Cases make the knowledge seem practical

• During chalk talks, refer to patients the team has managed

• The more anecdotes the better
Learning levels

• Early Learners:
  – Teach less and they learn more
  – Focus on the methods of teaching instead of the details
  – Emphasize understanding over memorization of details
  – Use assigned reading for details

• Advanced Learners:
  – Find and fill in knowledge gaps
Advanced Organizers

• Mental constructs useful to organize knowledge

• Acronyms, pneumonics, algorithms and diagrams

• Increases retention of material taught
Promotion of retention and self-directed learning

• Instead of “Read about your patients”

• The intern picks one patient they admitted and reads about their main problem

• The intern then applies what they read to their patient

• Observing, reading, then applying promotes retention
Repetition

• Repetition is the key to learning
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• Repetition is the key to learning
Teaching is a Performance

• Learning Climate Tips:
  – Enthusiasm and Energy
  – Use “the pause” effectively
  – Make eye contact
  – Use learner’s names
  – Use humor
Teaching Tips

• Ask lots of questions ➝ make it a discussion
• Use repetition
• Teach Advanced Organizers: less is more
• Promote self-directed learning ➝ Teach them how to use resources
• Observing, Reading, and then Applying
• Teach with case centered discussions
Teaching Advice
Objective: You will be able to explain the rationale behind, list, and use the 5 microskills of clinical teaching.
What you do, all the time…

• Much of clinical teaching is discussing a patient
  – Learner interviews, examines patient
  – Presents to preceptor (YOU)
  – Make clinical decisions
    • Diagnosis, tests to order, treatment

• On average, this takes approximately 10 minutes
What you do, all the time...
What you do, all the time…

Teach!!

Diagnose Patient

Diagnose Learner

1. Case Present

2. Inquiry

3. Discussion
Teacher Reasoning During Case Presentations

Teach
3. Teach general rules
4. Provide positive feedback
5. Correct errors

Diagnose Patient

Diagnose Learner
1. Ask for a commitment
2. Probe for underlying reasoning

1. Case Present
2. Inquiry
3. Discussion
Microskills of Teaching

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

No. 1: Obtain a Commitment

- Case is presented to you, ask learner to commit
- Purpose: gain insight into the learner’s reasoning

Example Questions LIKELY to get a Commitment:
“What do you . . .
- think is going on with this patient?”
- want to do next in the work-up?”
- want to accomplish during this visit?”
No. 1: Obtain a Commitment

- Commitment on ANY clinical decision
  - What other diagnoses would you consider?
  - What lab tests do you think we should get?
  - How should we treat this patient?
  - What antibiotic do you want to use?
  - Do you think the patient needs to be hospitalized?
  - Based on the history, what parts of the physical exam should we focus on?
No. 1: Obtain a Commitment

Example questions NOT LIKELY to get a commitment:

- “Sounds like pancreatitis, don’t you think?”
- “Anything else?”
- “Did you find out which symptoms came first?”
No. 2: Probe for Supporting Evidence

When discussing the case

• Before offering your opinion
• Ask learners for evidence supporting their opinion
  – Ensure not a lucky guess; well reasoned logic
  – Understand their rationale
  – Encourages learner to think out loud
No. 2: Probe for Supporting Evidence

Helpful approaches:

• “What were the major findings that led to your conclusions?”
• “Why did you choose that antibiotic?”
• “Why did you rule out that choice?”
No. 2: Probe for Supporting Evidence

Non-helpful approaches:

- “I don’t think this is good. Do you have any other ideas?”
- “This seems to be a classic case of . . .”
- “What do you know about her last admit?”
No. 3: Teach General Rules

• Learner’s responses guide your teaching
• Provide general rules/concepts at the learner’s level

Helpful approaches:
• “Patients with pancreatitis usually present with…”
• “In patients you think have pancreatitis, the appropriate studies to order are…”
No. 3: Teach General Rules

Non-helpful approaches:

• “Don’t give the patient antibiotics yet.”
• “Order a CT instead of a KUB.”
• “Make him NPO.”
No. 4: Reinforce What They Did Right

• Learner has handled the situation well
• Comment on the SPECIFIC good work and effect it had

Helpful approach:
• “You did a very thorough job evaluating the patient’s abdominal complaints. Identifying the alcoholism was critical in making the diagnosis.”
No. 4: Reinforce What They Did Right

Non-helpful approaches:

- “You are absolutely right. That was a wise decision.”
- “Nice job…”
No. 5: Correct Mistakes

• Learner has demonstrated mistakes
• Find appropriate time and place to discuss
  — ASAP
• First allow learner to evaluate their own performance
  — “What would you do differently next time?”
• Then give them negative effect & correction needed
No. 5: Correct Mistakes

Helpful approach:

“
You may be right that this child’s symptoms are due to a viral URI. But you can’t be sure that it isn’t otitis media unless you’ve examined the ears and you may prolong the illness by not prescribing the appropriate treatment.
”
No. 5: Correct Mistakes

Non-helpful approaches:
• “You did what?”
• “What do you mean you didn’t examine his ears!”
5 Microskills of Teaching

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

Microskills Demonstration
Key Point: Microskills

- Your teaching time is limited
- Make the most of the time you have
- Incorporate it into what you do everyday
- Microskills enable you to effectively assess, instruct, and give feedback more efficiently
Questions?
5 Microskills of Teaching

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