Clinician as Teacher: Evidence-based principles for clinical education

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Adapted from:

APDIM, CDIM, AAIM Task Force: Resident as Teachers Curriculum

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Wake Forest® Baptist Health

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Objectives:

By the end of the presentation, the participants should be able to:

- Describe features of excellent teachers

- Recognize barriers to effective teaching you may face in the clinical setting

- Describe at least 3 techniques for effectively incorporating students into your clinical practice

- Utilize at least 1 strategies to educate learners

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Imagine your favorite educator from your years of learning.

Professor

Pharmacist

Attending

Patient

Peer

Better than a
thousand days of
diligent study is
one day with a
great teacher.
-Japanese Proverb

APP

https://www.enkiquotes.com/inspirational-teacher-quotes.html

Nurse

Resident

What qualities or characteristics did that educator have that made them your favorite?

Qualities of Resident Teachers Valued by Med Students

Figure 1: Themes Identified in Medical Students' Written Reflections About Their Resident Teachers*
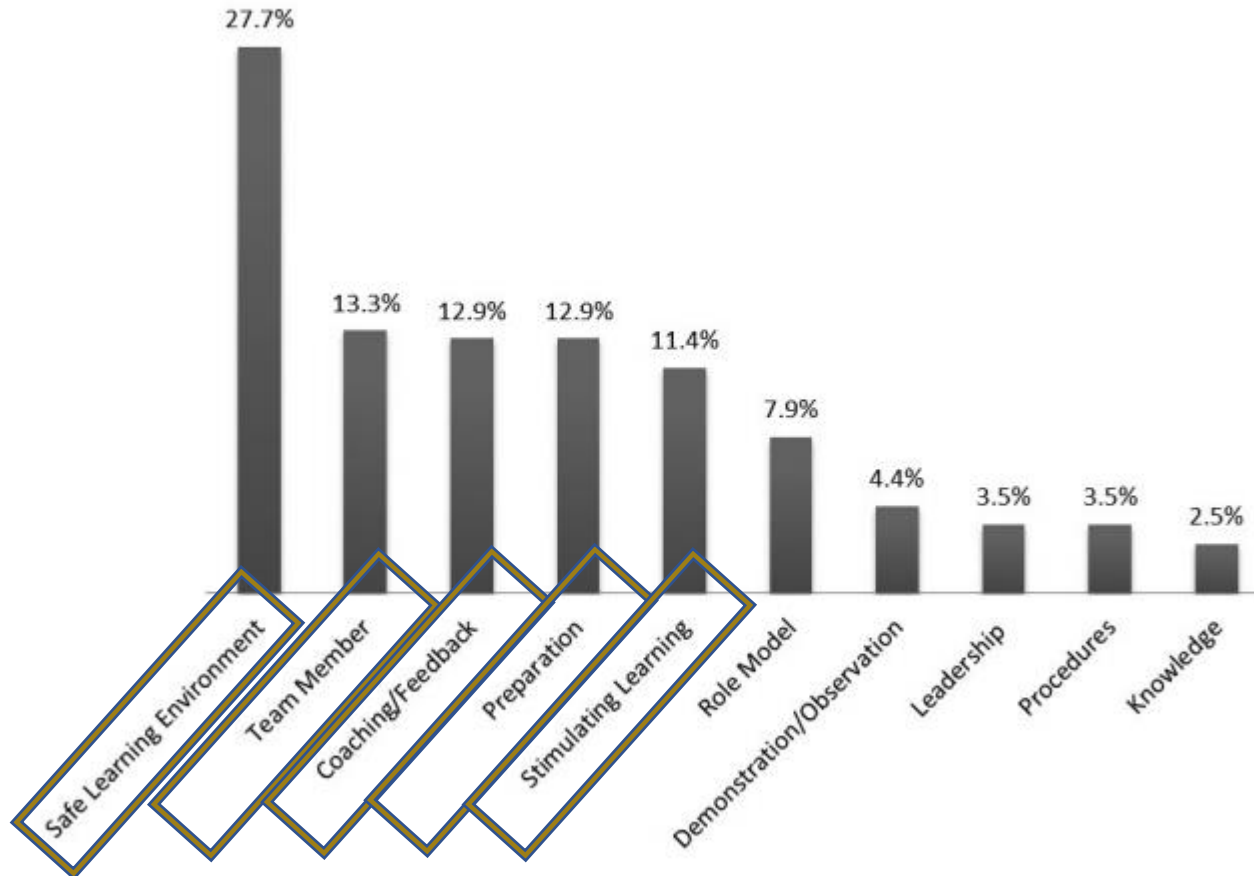
* n=115

Montacute T, Teng VC, Yu GC, Shillinger E, Lin S. Qualities of Resident Teachers Valued by Medical Students. Fam Med 2016;48(5):381-384.

KNOWLEDGE

Why is resident teaching important?

- Residents enjoy teaching and leading a team
- 20% of resident time spent in teaching activities[1]
- One-third of medical student knowledge is attributable to housestaff teaching[2]
- Residents who teach retain more knowledge
- *"To teach is to learn twice"*

[1]Greenberg LW et al. Med Ed 1984
[2]Bing-You RG, et al. Med Teach 1992
[3]Morrison, EH et al. Acad Med 2001

What do adult learners need?

- **Adult learners…**
  - Need rationale
  - Need the information to be immediately relevant
  - Need to be involved
  - Problem centric (rather than content)
  - Learn best by building connections
- **How:**
  - Build relationships!
  - Set GOALS!
  - Have clear expectations!

How can you teach when you don't have time?!!?!?

Scenario 1:

You arrive to inpatient on the first day of your rotation and a student is there waiting for you to give them instruction on what to do?

Goal Setting

When: First day meeting students

Benefit to learners:

- Know what is expected of them
- Know where they should end up

Benefit to YOU:

- Direction for what to teach
- Give feedback and evaluate students based off of progress towards meeting goals
- Align goals to benefit the workflow and learning of the whole team

How: Share specific and concrete goals you have for learners and their relevance. Consider how learner goals can best align with the goals of the rest of the team.

LEAD

L: Establish yourself as a **L**eader

E: Establish clear **E**xpectations for students

A: **A**ssess and plan for meeting student goals

D: **D**evelop a plan for feedback

Scenario 2:

You are _SWAMPED-_ you've already seen 8 patients and this next patient is so medically complex that you don't even know that to do!

You have a medical student with you- how do you proceed?

Modeling

What: Clear illustration of a pattern to be adopted or imitated

When: Most pressed for time; clinical encounter is too complex for the learner

- Pre-brief the learner about the skill, behavior, or interaction they are about to observe in as a learning moment.
- Model the skill, behavior, or interaction.
- Debrief the encounter, highlight learning points, and seek feedback.

Examples:

- *"I want you to notice how I approach the neurological exam in a child."*
- *"Pay attention to how I screen for IPV."*
- *"I'd like you to observe how I share bad news."*

Scenario 3:

You are seeing a very complex patient. You can't think about this patient and teach at the same time. What do you do?

Think Out Loud

What: Making thought processes and clinical reasoning behind decisions and behaviors explicit to learners

When: You are presented with a clinical scenario in front of learners (e.g., on rounds, in the workroom) that requires you to compare options to lead to a diagnostic or treatment decision

How: As you are contemplating a decision in your head and weighing options silently, instead talk through the reasoning process.

I'M THINKING OUT LOUD LIKE ED SHEERAN

http://www.quickmeme.com/p/3w2ual

Scenario 3 cont.:

You just finished seeing that complex patient and you want to expand the learning potential…

Extend the Case!

Teaches the learner how to anticipate the course of the disease or general principles when the context changes

Examples:

- *"What if he were 60 instead of 20?"*

- *"What if the creatinine were 3 instead of 1?"*

https://blogs.bible.org/but-what-if-mom/
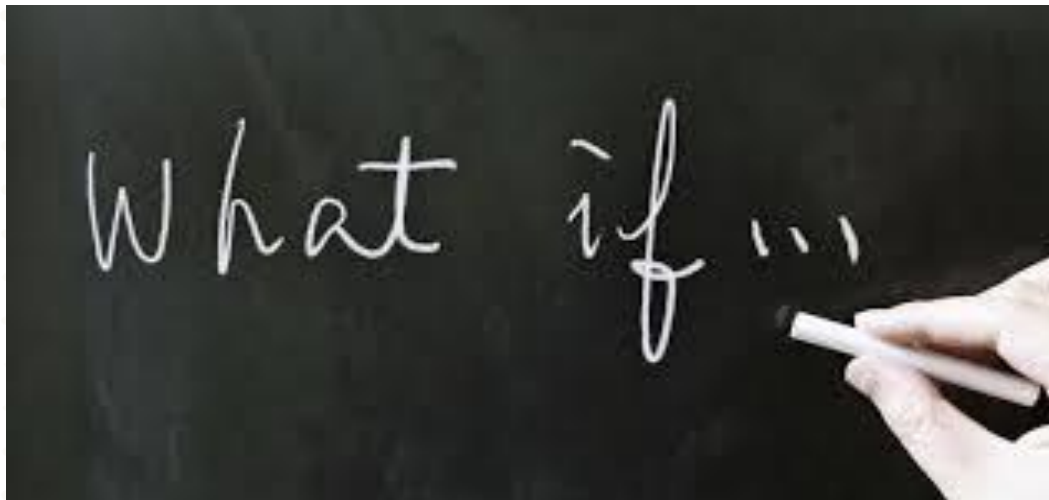
Scenario 4:

You just had a discussion with a patient's family that went TERRIBLE, and worst off, the medical student was there to witness it. What do you do?

Debriefing

What: A continuous learning process, designed for adaptation and embedded evolution of ideas, techniques, and knowledge.

When: Any regularly scheduled time/place (daily, monthly, weekly)
- Should come to be part of the workflow.

How:
- **Set the Tone**: As learning is the primary objective, any judgement or hierarchal standing should be suspended in the debrief space.
- ***Review 4 questions***:
  1. What was trying to be done?
  2. Where did this succeed/fail short?
  3. What was the root cause of this result?
  4. What can be changed, started, or eliminated moving forward?
- **Recap**: State and continuously revisit learning points from the debrief.

Scenario 5:

You are in the middle of a SUPER busy clinic and they added a medical student on to your schedule last minute and asked you to teach them. What do you do?

Focusing Encounters

Benefit to learners:
- Helps narrow focus to avoid lengthy H&Ps
- Prepares the mind for the task at hand

When: One-to-one in outpatient setting; when there's time to discuss cases prior to rounds

Types:
- Priming
- Framing

Priming

Think prospectively about will be encountered

How: Orient the learner to the patient and tasks at hand.

Examples:

- 50 yo here for annual exam. *"What are key screening concerns to address?"*

- 11 yo c/o wheezing. *"What are important causes of wheezing? How will you differentiate them based on history and exam? What exam parts need to occur if he/she is symptomatic?"*

- Provide insight into the patient's background. *"This patient's home life is..." "They struggle to afford medications..."*

Framing

How: Give a specific tasks to be accomplished in a specified amount of time.

- *"I'd like you to spend 10 minutes on the history and spend 5 minutes on a focused physical exam, then come and find me."*

https://www.foxgal.com/residential-construction/products/framing-lumber-sheathing/

Scenario 6:

You actually have a second to breathe and have worked with a medical student for a few days. How do you give them feedback on their performance?

Giving Feedback

What: Sharing observations on performance for the purpose of improvement

How: Know what's to be learned (student's goals, course objectives); give brief daily feedback; acknowledge growth

ARCH model:

- **A** llow self-assessment
- **R** einforce what went well
- **C** orrection
- **H** elp with improvement plan

Characteristics of GOOD Feedback:

- Specific
- Timely
- Private when negative or cumulative
- Based on first-hand data
- Consequences explained
- Plan for next steps
- Goal to help, not punish

Scenario 7:

You have 8 notes to finish from yesterday and you are already seeing your 7th patient of the day with a medical student and don't have any done. How do you optimize both of your time?

Meaningful Task

- **What:** Meaningful = worthwhile = feels like they are contributing = they are contributing!

- **How:** NOTES! :)
  - Share your note template with the student before starting clinic
  - .ambmedstud
  - While you are seeing your last two patients, have the student take some time and do a full note for one of the patients you saw together
  - After you complete seeing the last two patients, spend 3 minutes pulling in the patient's note with the student and edit it live for the student to see your thought process/corrections

Scenario 8:

You have two different patients here (someone showed up early- wahooo). How can you efficiently see them with a student?

Concurrent Visits

WAKE FOREST SCHOOL OF MEDICINE

Scenario 9:

You only have your first patient of the day here and you want to actively engage the student and stay on time. How can you do this?

Preceptor as Scribe

Scenario 10:

You have an utterly rock star student who has crushed history taking, physical exam skills, and presentation skills...how can you challenge them?

Push Assignments

When: really all learners, but especially those who have mastered the basic skills

How: Challenge them with the next step
- Examples:
  - "You have given me a good assessment and plan, but now I want you to commit. For this next patient, pend the orders you feel the patient needs and we can discuss why you think they need them"
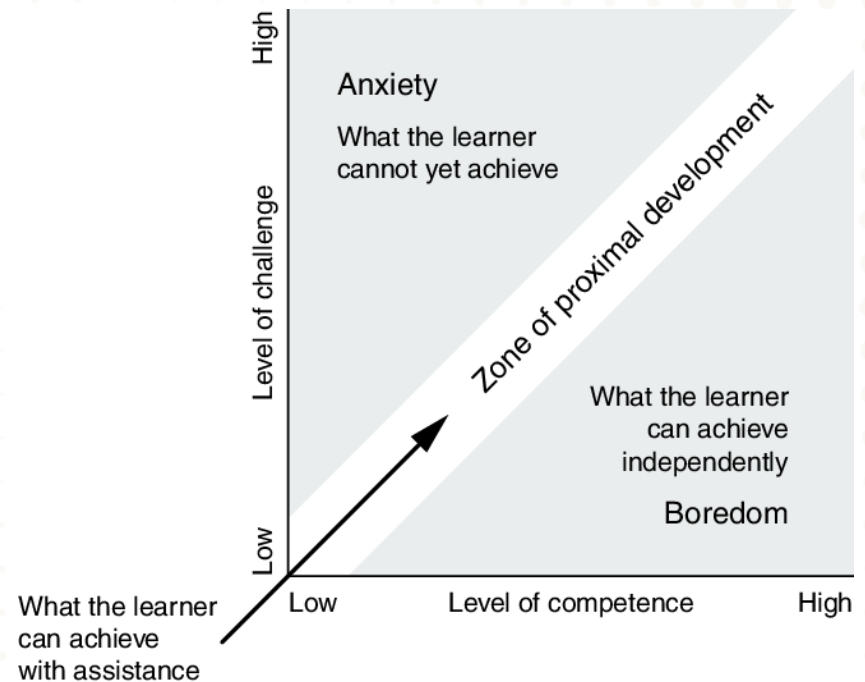
https://www.researchgate.net/figure/Vygotskys-zone-of-proximal-development_fig3_286928704

R eporter
I nterpreter
M anager
E ducator

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Take Home Points:

- Remember- you don't have to have the most knowledge to be the best educator

- My favorite techniques:
  - Think out loud
  - Modeling and Debriefing
  - Presenting in front of patient
  - Meaningful tasks
  - Push assignments

- RIME

http://www.learningradiology.com/lectures/chestlectures/colla
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