

LECTURES

A Faculty Development Session or Resident as Teacher Session for Clinical and Clinical Teaching Techniques; Part 2 of 2: Engaging Learners with Effective Clinical Teaching

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ABSTRACT:

Audience: This workshop is intended for faculty members in an emergency medicine (or other) residency program, but is also appropriate for chief residents and medical student clerkship educators.

Introduction: Faculty development sessions are required by the Accreditation Council for Graduate Medical Education and enhance the learning environment within residency programs.¹ Resident as teacher sessions are important in helping residents transition from junior learners to supervisors of medical students and junior residents. Part two of this two-part workshop introduces learners to effective techniques to engaging learners with clinical and bedside teaching.

Objectives: By the end of this workshop, the learner will: 1) describe and implement nine new clinical teaching techniques; 2) implement clinical teaching techniques specific to junior and senior resident learners.

Methods: This educational session uses several blended instructional methods, including team-based learning (modified), the flipped classroom, audience response systems, and pause procedures.

Topics: Faculty development, clinical teaching, bedside teaching, one-minute preceptor, two-minute observership, teaching scripts, Aunt Minnie, the serious, probably, interesting, treatable: “SPIT” technique, activated demonstration, and teaching scripts.





USER GUIDE

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Learner Audience:

Senior Residents, faculty

Time Required for Implementation:

Instructor Preparation: 15-30 minutes

Learner Responsible Content: 15 minutes

In Class Portion: 60 minutes

Topics:

Faculty development, clinical teaching, bedside teaching, one-minute preceptor, two-minute observership, teaching scripts, Aunt Minnie, SPIT, activated demonstration, teaching scripts.

Recommended Number of Learners per Instructor:

This faculty development session has been tested on groups of 20 to 80 faculty members. This session could be successful with as few as three faculty members or as many as 100 faculty members.

Objectives:

1. Describe and implement nine new clinical teaching techniques.
2. Implement clinical teaching techniques specific to junior and senior resident learners.

Linked objectives and methods:

This faculty development session utilizes several blended learning techniques in order to engage the audience. Learners are asked to complete a reading assignment prior to the faculty development session. This “flipped classroom” method of instruction and promotes active learning.² The readiness assurance process ensures that the learner “knows” the material. The group application exercise demonstrates that the learner “knows how” to apply the material. Finally, the learners that ultimately use the techniques in clinical teaching exhibit a “does” level of behavior. Having completed group application exercise, faculty members may then feel more comfortable to use each of these techniques. Furthermore, faculty members will commit to using new techniques during their next shift.

Recommended pre-reading for instructor:

- Green GM, Chen EC. Top 10 ideas to improve your bedside teaching in a busy emergency department. *Emerg Med J.* 2015;32(1):76-77.

Learner responsible content (LRC):

- Green GM, Chen EC. Top 10 ideas to improve your bedside teaching in a busy emergency department. *Emerg Med J.* 2015;32(1):76-77.

Tips for successful implementation:

This is a two-part faculty development session. Part one focuses on didactics and part two focuses on clinical teaching. Each part will take approximately 60 minutes. Both sessions can be performed in a single day, or the two parts can be separated temporally. Please refer to the presenter’s notes within powerpoint for a sample discussion.

Part 2: Engaging Learners with Effective Clinical Teaching

Prepare:

1. Place audience response system slides from pollev.com to replace the placeholders in the PowerPoint file (optional).
2. Read and instruct learners to read the following article: Green GM, Chen EC. Top 10 ideas to improve your bedside teaching in a busy emergency department. *Emerg Med J.* 2015;32(1):76-77
3. Optional: Prepare review cards for each learner: <http://jetem.org/download/nerds/>
4. Optional: Automatically tweet during your session by activating auto-tweets. Tweets are already populated into the PowerPoint. If you do not have auto-tweet software on your computer, this will not affect your presentation.

Also prepare:

1. One copy of team numbers (one number per team)
2. One copy of iRAT (clinical) for each learner
5. One copy of gRAT (clinical) for each team (4-5 learners per team)
6. One copy of key for RAT (Clinical) for the instructor
7. One copy of group application exercise (clinical) for each team
8. (Optional) One “one-minute preceptor” card for each learner
9. One copy of handout (clinical) tips and techniques I will use for my teaching



USER GUIDE

Implementation:

1. Session is best implemented in round tables with 4-5 learners per table
2. Each table (group) will need the following: A team number, 4-5 iRATs (Clinical), 1 gRAT (Clinical), 1 group application exercise, (optional) 4-5 PV cards, and 4-5 handouts (clinical).
3. Start by giving PowerPoint presentation (clinical teaching – part 1), sample discussion points are in the presenter notes of the PowerPoint file.
4. On slide 6, you will instruct learners to complete the iRAT
5. On slide 7, you will place learners into groups of 4-5 people.
6. Beginning on slide 8, you will call on teams at random (by their team number) and have them answer each of the questions on the RATs.
7. On slide 34, learners can practice the one-minute preceptor (can use the optional cards) with their neighbor.
8. On slide 42, have learners take out the handout (clinical) tips and techniques I will use for my teaching. Learners will now start to record techniques they plan on using (from what has already been discussed and those in the future slides)
9. On slide 53, have groups complete the group application exercise.
10. On slide 55, summarize all of the techniques you have discussed.

Results:

This faculty development session has been implemented in the following venues:

1. A faculty development session for 20 emergency department faculty members. The session was rated as 4.62/5 overall (1: poor; 2: fair; 3: average; 4: good; 5: outstanding) and 2.92/3 for usefulness (1: not very useful; 2: somewhat useful; 3: extremely useful).
2. A faculty development session for 80 multi-specialty faculty in various positions in graduate and undergraduate medical education. It received outstanding verbal feedback for this session.

Content:

1. Lecture slides

Attached PowerPoint for the lecture slides

2. Individual Readiness Assessment Test (iRAT)

Clinical iRAT

3. Group Readiness Assessment Test (gRAT)

Clinical gRAT

4. RAT Key

Clinical RAT key

5. Group Application Exercise (GAE):

Clinical GAE

6. Additional Files

Handout: Tips and techniques

Brief Wrap Up: Please use the PowerPoint and the above “tips for successful implementation” to guide you through the entire session.

Technology necessary: PowerPoint and the session is best run using an audience response system.

Assessment: The clinical iRAT, gRAT, and group application exercises may be used as assessment tools, if desired.

References/suggestions for further reading:

1. Accreditation Council for Graduate Medical Education. ACGME Program Requirements for Graduate Medical Education in Emergency Medicine, 2016. https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/110_emergency_medicine_2016.pdf. Accessed September 12, 2015.
2. Moraros J, Islam A, Yu S, Banow R, Schindelka B. Flipping for success: evaluating the effectiveness of a novel teaching approach in a graduate level setting. *BMC Med Educ.* 2015;15:27. doi: 10.1186/s12909-015-0317-2
3. Green GM, Chen EC. Top 10 ideas to improve your bedside teaching in a busy emergency department. *Emerg Med J.* 2015;32(1):76-77. doi: 10.1136/emered-2014-204211



LEARNER MATERIALS

Clinical iRAT

Match the following teaching techniques with their description.

1-minute preceptor	Teaching Scripts	SPIT	Aunt Minnie
2-minute observation	The Teachable Moment	See one, do one, teach one	

Technique	Definition
	A moment during a patient interaction that is appropriate for teaching.
	A set of brief lectures prepared ahead of time by an instructor. The instructor can use these lessons when a teachable moment arises. Over time, an instructor builds their portfolio of lessons.
	A teaching method that is designed for advanced learners. The instructor and learner see the patient independently. A learner commits to a diagnosis and an instructor provides teaching on why the pattern of presentation fits with a particular diagnosis.
	An instructor probes a learner for a differential diagnosis that focuses on the <i>serious, probable, interesting, and treatable</i> diagnoses.
	A learner presents a case and decides on a diagnosis. The instructor asks the learner for evidence supporting the diagnosis. An instructor then provides a teaching pearl and immediate feedback about the interaction.
	A teaching method designed for teaching history and physical examination or communication skills. An instructor watches the learner in a patient encounter. The instructor provides feedback and a teaching pearl about the encounter.
	An instructor first demonstrates a skill/procedure, by breaking it down into discrete steps. Then, the instructor observes the student performing the skill/procedure and provides feedback on his/her performance. The student develops mastery when he/she can teach it to others.

Adapted from: Green GM, Chen EC. Top 10 ideas to improve your bedside teaching in a busy emergency department. *Emerg Med J.* 2015;32(1):76-77



LEARNER MATERIALS

Clinical gRAT

Match the following teaching techniques with their description.

1-minute preceptor
2-minute observation

Teaching Scripts
The Teachable Moment

SPIT
See one, do one, teach one

Aunt Minnie

Technique	Definition
	A moment during a patient interaction that is appropriate for teaching.
	A set of brief lectures prepared ahead of time by an instructor. The instructor can use these lessons when a teachable moment arises. Over time, an instructor builds their portfolio of lessons.
	A teaching method that is designed for advanced learners. The instructor and learner see the patient independently. A learner commits to a diagnosis and an instructor provides teaching on why the pattern of presentation fits with a particular diagnosis.
	An instructor probes a learner for a differential diagnosis that focuses on the <i>serious, probable, interesting, and treatable</i> diagnoses.
	A learner presents a case and decides on a diagnosis. The instructor asks the learner for evidence supporting the diagnosis. An instructor then provides a teaching pearl and immediate feedback about the interaction.
	A teaching method designed for teaching history and physical examination or communication skills. An instructor watches the learner in a patient encounter. The instructor provides feedback and a teaching pearl about the encounter.
	An instructor first demonstrates a skill/procedure, by breaking it down into discrete steps. Then, the instructor observes the student performing the skill/procedure and provides feedback on his/her performance. The student develops mastery when he/she can teach it to others.

Adapted from: Green GM and Chen EC. Top 10 ideas to improve your bedside teaching in a busy emergency department. Emerg Med J. 2015;32(1):76-77



LEARNER MATERIALS

Clinical Group Application Exercise

For the following questions, your answers can include techniques that have already been covered in this session, or techniques that have not yet been discussed.

You are working with a junior PGY-1 learner, who needs help with data gathering and presentation.

1. What are some teaching techniques you can use with this junior learner?
 - a.
 - b.
 - c.

You are working with a senior PGY-3 learner, for whom you don't feel that you have any more teaching "pearls."

2. What are some teaching techniques you can use for this senior learner?
 - a.
 - b.
 - c.



LEARNER MATERIALS

Handout

Tips and techniques I will use for my clinical teaching:

1.

2.

3.

4.

5.

6.

7.

8.

9.



INSTRUCTOR MATERIALS

Answer keys to all exercises with explanations, are on the following pages.

Learners: please do not proceed.



Clinical RAT Key

Technique	Definition
The teachable moment	A moment during a patient interaction that is appropriate for teaching.
Teaching scripts	A set of brief lectures prepared ahead of time by an instructor. The instructor can use these lessons when a teachable moment arises. Over time, an instructor builds their portfolio of lessons.
Aunt Minnie	A teaching method that is designed for advanced learners. The instructor and learner see the patient independently. A learner commits to a diagnosis and an instructor provides teaching on why the pattern of presentation fits with a particular diagnosis.
SPIT	An instructor probes a learner for a differential diagnosis that focuses on the <i>serious, probable, interesting, and treatable</i> diagnoses.
1-minute preceptor	A learner presents a case and decides on a diagnosis. The instructor asks the learner for evidence supporting the diagnosis. An instructor then provides a teaching pearl and immediate feedback about the interaction.
2-minute observation	A teaching method designed for teaching history and physical examination or communication skills. An instructor watches the learner in a patient encounter. The instructor provides feedback and a teaching pearl about the encounter.
See one, do one, teach one	An instructor first demonstrates a skill/procedure, by breaking it down into discrete steps. Then, the instructor observes the student performing the skill/procedure and provides feedback on his/her performance. The student develops mastery when he/she can teach it to others.

Adapted from: Green GM and Chen EC. Top 10 ideas to improve your bedside teaching in a busy emergency department. *Emerg Med J.* 2015;32(1):76-77