





Teaching Up the Ladder: Strategies for Meeting Your Trainees'
Clinical Learning Needs at Every Level

Part 2



### Introductions

Introduction

• [insert your name, title and qualifications here]

Preparation

Questions

**Techniques** 



## **Objectives**

Introduction

• Characterize methods used by exceptional clinical teachers to effectively gauge and teach to a learner's level.

**Preparation** 

• Discuss multi-level teaching techniques, including appropriate and safe use of questioning as a teaching tool.

Questions

• Practice concrete strategies for engaging varying levels of learners in the same clinical teaching encounter.

Techniques



## Roadmap

Introduction

•

Preparation

Questions

Technique

Part 1

- Introduction
- Preparation
  - Development of excellent multi-level teachers
  - Characteristics of excellent clinical teachers
- Questioning as a teaching tool
  - Bloom's Taxonomy
  - 4-Quadrant Approach
  - Application: Small group



## Roadmap

Introduction

Preparation

Questions

**Techniques** 

Part 2

- Techniques
  - Literature review
  - Multilevel teaching techniques
  - Application: Role-play activity
- Conclusion
  - Large group discussion/Q&A



## **TECHNIQUES:**

How do we make it happen?



## The literature is pretty sparse

Introduction

Teaching well to multiple learners at once is not

really a thing...

**Preparation** 

Questions

**Techniques** 





Introduction

**Preparation** 

Questions

**Techniques** 

Conclusion



#### **Medical Teacher**



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## Effective multilevel teaching techniques on attending rounds: A pilot survey and systematic review of the literature

Laura K. Certain, A. J. Guarino & Jeffrey L. Greenwald



## Effective multilevel teaching techniques on attending rounds

Introduction

 90% of attendings try to teach to multiple levels of learners (59/66)

**Preparation** 

 Attendings divided about whether it is difficult to engage multiple levels of learners at the same time on rounds:

Questions

- 32/66 agreed that it is challenging

Techniques

– 6/66 were neutral

- 27/66 disagreed

difference by years since completing training.

There was no significant



## **Techniques Used by Attendings**

Introduction

Targeting

Preparation

Novelty

Up the Ladder

Broadening

Questions

Student as Teacher

Tachniques

Multi-Answer

**Techniques** 

Teaching to the Top

No Right Answer

Conclusion

Extreme Challenge



#### Introduction

### **Preparation**

Questions

**Techniques** 

Conclusion

## **Techniques Used by Attendings**

### Broadening

- Change the specifics of a case to make it more challenging or interesting
- "What if the patient developed fevers overnight? How would that change management?"

### Targeting

- Target medical knowledge or management questions to specific team members based on the difficulty of the question
- John (student): "What are some major causes of atrial fibrillation?"
- Sarah (intern): "How do you manage atrial fibrillation with RVR?"
- June (resident): "Can you summarize the key points of the BRIDGE trial?"

### Novelty

- Offer new data
- "Let's discuss the new c. difficile guidelines..."



## **Techniques Used by Attendings**

Introduction

**Preparation** 

Questions

**Techniques** 

Conclusion

### Up the Ladder

- Ask the same question to the medical student, then intern, then resident, etc.
- "OK, we have a patient with chest pain and fevers...Oliver, what do you think it is? Jill, what about you? Jose, what do you think it is?"

#### Student as Teacher

- Have a more senior learner train a more junior learner
- "Carline, can you tell Joyce how to assess for lymphadenopathy?"

### Multi-Answer

- Seek many answers to the same question
- "We have a patient with chest pain. What do you think is going on? OK, Sarah thinks it's PE because of his recent hospitalization. What does everyone else think?"



## **Techniques Used by Attendings**

Introduction

- No Right Answer
  - Ask questions with no single correct answer
  - "When and how should we tell the patient her diagnosis?"

**Preparation** 

- Teaching to the Top
  - Teach to the most senior trainee on the team
  - "Susan, what's the next step in management for our heart failure patient who is already on maximum dose of inotropic agents and cannot tolerate further afterload reduction?"

**Techniques** 

Conclusior

- Extreme Challenge
  - Teach to the level above everyone on the team
  - "One way to study the development of drug resistance is to do a haplotype analysis..."





## Techniques Reported Used/Observed

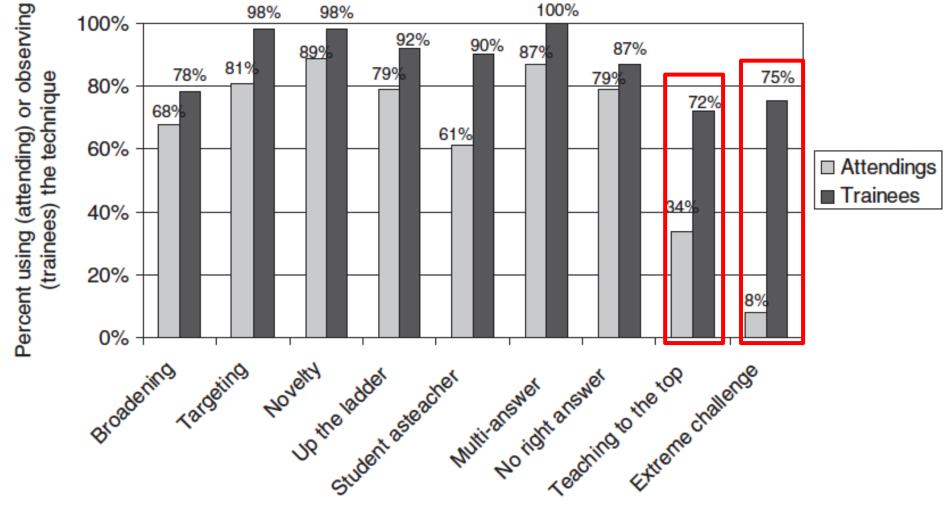
Introduction

**Preparation** 

Questions

**Techniques** 

Conclusion



Technique





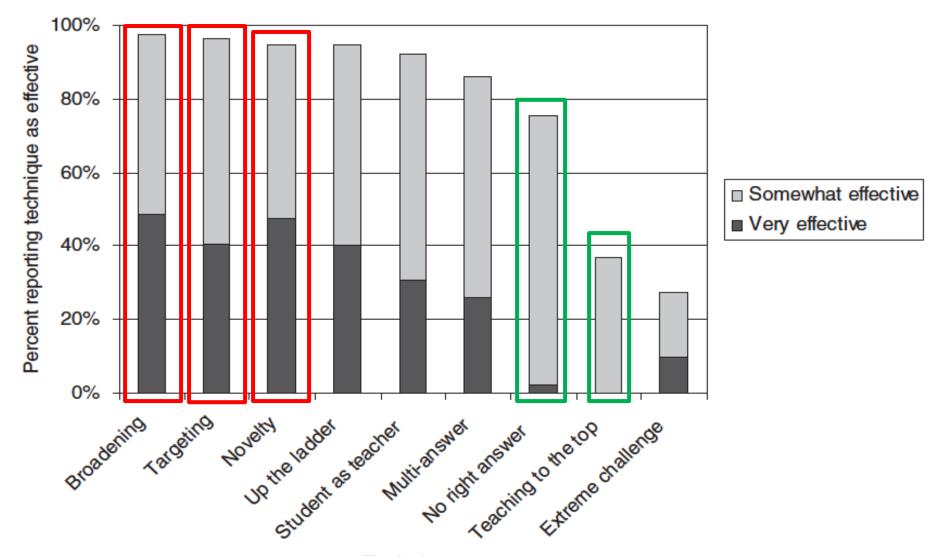
### **Perceived Effectiveness**

Introduction

**Preparation** 

Questions

**Techniques** 





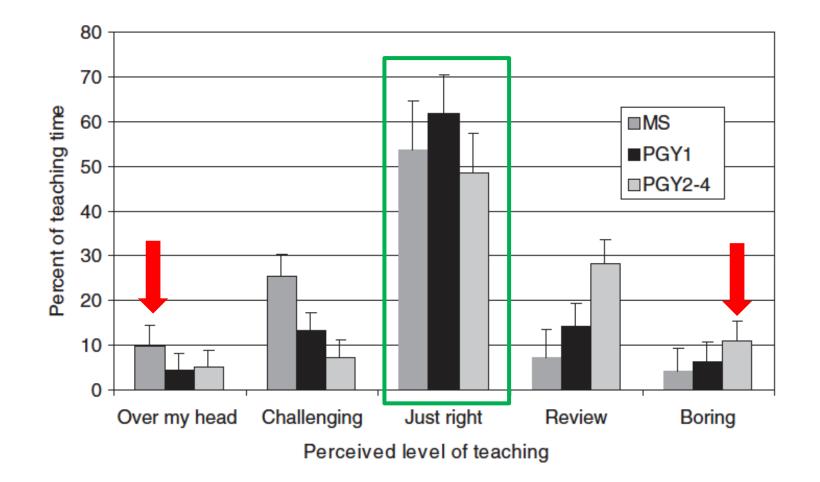
## **Perceived Teaching Level**

Introduction

**Preparation** 

Questions

**Techniques** 







## Summary of Common Teaching Strategies Used to Teach Learners at Every Level

Introduction

**Preparation** 

Questions

**Techniques** 

**Conclusion** 



YouTube Video can also be accessed via the following link: <a href="https://youtu.be/lwEh\_cbfy71">https://youtu.be/lwEh\_cbfy71</a>



## How to "ENGAGE" Multilevel Learner Groups in the Clinical Setting

Introduction

Everyone teaches

Preparation

Novel topics

• **G**uide

Questions

Ascend the ladder

Groups within groups

**Techniques** 

Empower learners for autonomy



## How to "ENGAGE" Multilevel Learner Groups in the Clinical Setting

Introduction

**Preparation** 

Questions

**Techniques** 

Conclusion

### Everyone teaches

- Set the expectation that all learners will contribute to teaching
- Can tailor the teaching points to each learner's individualized learning goals

### Novel topics

 Collectively review recent publications, hospital protocols, clinical guidelines and new understandings of disease mechanisms or treatments

#### Guide

- <u>Explicitly</u> role-model harder to teach competencies such as humanism, professionalism, communication or diagnostic bias
  - Reflect out loud
  - Demonstrate vulnerability
  - Role-play difficult conversations





## How to "ENGAGE" Multilevel Learner Groups in the Clinical Setting

Introduction

Ascend the ladder

 Targeted questioning helps the clinical teacher target specific learning objectives for each team member

**Preparation** 

Groups within groups

Questions

- Create pairs or trios to complete a task
- Pair medical students with residents to create coaching relationships
- Pair learners according to complementary skills/learning goals

**Techniques** 

Empower learners for autonomy

- Promote autonomy among all team members
- Delegate duties appropriate for each learner's level and skill set
- Encourage junior members to lead discussions



# APPLICATION: Putting the Pieces Together





## **Small Group #3: Role Play Activity**

Introduction

**Preparation** 

Questions

**Techniques** 





## **Small Group #3: Role Play Activity**

In groups of 4 to 5, choose one case for role play

Determine roles

 Determine which trainee (student, intern #1 or intern #2) presented the SOAP note

 Attending will facilitate debrief using some of the techniques discussed

**Techniques** 

- Debrief the role play
- Choose another case and change roles



## **Small Group #3: Roles**

Introduction

### **Attending (facilitator)**

 Your trainee has presented a SOAP note to the team. You're tasked with teaching the team during rounds.

Preparation

### **Medical student**

Questions

 You are a new student starting on rotation today. You excelled during your pre-clinical years but don't have much experience taking care of patients. You're eager to learn about anything.

**Techniques** 

### Intern #1

• You're starting to get the hang of managing multiple patients and handling cross-cover calls during rounds. You're ready for more responsibility.



## **Small Group #3: Roles**

Introduction

Preparation

Questions

**Techniques** 

Conclusion

#### Intern #2

 You've been on service 10 days straight and you're tired. You're very stressed and trying to field multiple calls for your complicated patients while on service. You just want to get through rounds quickly since you have so many intern tasks to complete.

#### Resident

 You're bored and burned out. You're going into a different subspecialty and aren't interested in rounding right now. You're excited about graduating in a few months.

### **Interdisciplinary Team Member**

• You're eager to participate in the conversation and feel you can add some additional perspective since you've spent a lot of time with the patient.



## **Small Group Activity #3: Scenarios**

Introduction

Scenario #1

**Preparation** 

50 y/o w/ a h/o tobacco abuse who presents with a COPD exacerbation

Questions

### Scenario #2:

• 65 y/o with newly diagnosed metastatic pancreatic cancer

**Techniques** 

### Scenario #3:

20 y/o here w/ a GI bleed



### **Take Home Points**

Introduction

Preparation

Questions

**Techniques** 

- Good clinical teaching is not completely opportunistic
- It is especially important to do your homework when teaching a session that includes multilevel learners
- Develop questions surrounding key teaching points ahead of time
- Attempt to utilize higher-order questions when possible



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