

# BEST PRACTICES FOR NON-BORING SESSIONS

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## OBJECTIVES

1. Discuss best practices for session planning and generation of student preparation materials.
2. Describe the elements of a safe learning environment and framing questions to generate discussion.
3. Describe variations of classroom strategies ranging from novice to expert.

I HAVE BEEN CALLED A LOT OF  
THINGS....



# BEST PRACTICES FOR PERFORMANCE

## Planning

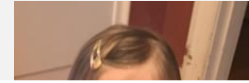
Little planning, poorly connected objectives, poorly articulated assessment

Lots of planning, good resources

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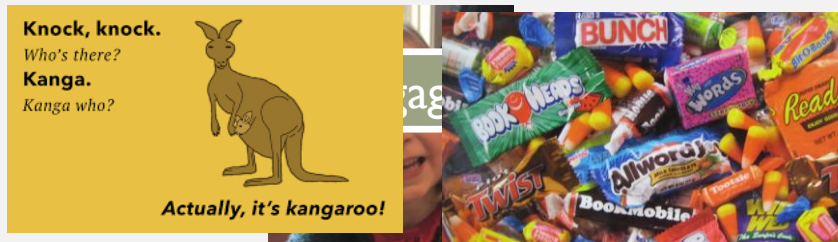
## In class (Student engagement)



Poorly executed



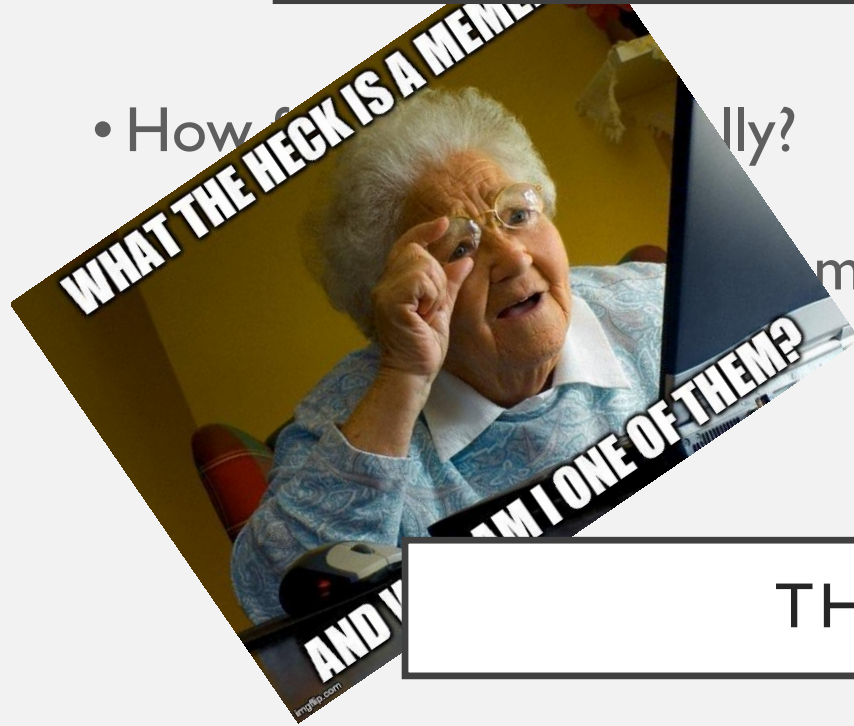
Poorly executed



## Performance



# THE COMIC AND THE CANDY-THROWER



- How funny is it?   
 • Application / Context



## THE STORY-TELLER

- Story can be funny/engaging
- Maintain content delivery
- Application / Context





## Planning

- Connect content, objectives and assessment
- Written learning objectives

## More planning

- Develop resources
- Connect assessment

## In class

- Session development
- Create a safe learning environment

# PLANNING





# PLANNING

## Learning objectives

- Use verbs that are measurable (Blooms)

## Assessment

- Aligned the objective with the assessment

## Preparation

- Timely and appropriate

## Session

- Aligned with the verb used in the learning objective

# SO WHAT HAPPENS IN THE CLASSROOM?

Lots of planning, good resources



Students will trust the process



More likely to attend and engage

Engaging



DOES THE **ACTIVITY** DICTATE HOW  
**ACTIVE** THE CLASSROOM IS?

We need to focus less about  
**WHAT** is implemented in the classroom and more on **HOW** we implement it.

# LESSONS FROM TEAM-BASED LEARNING

## Significant problem

- Apply concepts students are learning in a meaningful context

## Same problem

- Keep the discussion focused



## Specific choices

- Ask questions ! Ask specific questions

## Simultaneous reporting

- Engage in the reporting (Ask questions)

## Summarize outcomes

- Summarize

TEACHING WITH CASES...  
TAKE I

**Lewis Sargent** is a 35-year old teacher presenting for an annual physical. He is concerned about his weight gain of approximately 25 pounds over the past year due to a more sedentary life style and recent divorce.

**Chief Complaint:** Lewis states he has had difficulty maintaining his weight and with his new job, he is more sedentary and the weight crept up. He is also recently divorced and his partner did the majority of the cooking and shopping so he resorts heavily to processed foods. He has noticed shortness of breath while running after his two children ages 3 and 1 year.

Vital signs:	
BP 174/ 98	Pulse 82
Wt: 294 lb.	Ht: 74.0 inches
Respirations 12	70 - 105 mg/dl

Laboratory values:		
- HbA1C	7.8%	<6.5%
- Fasting blood glucose #1	167 mg/dL	70 - 105 mg/dl
- Fasting blood glucose #2	171 mg/dL	70 - 105 mg/dl

Lipid panel:	
Total cholesterol	252 mg/dL
Triglycerides	217 mg/dL
HDL	38 mg/dL

WHY DO WE TEACH WITH CASES?

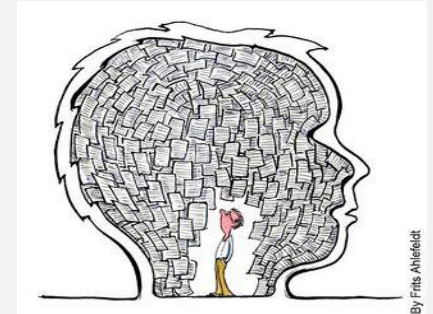
# WHY DO WE ASK QUESTIONS?

Elaborate knowledge: **working** with information to enhance retention



Retrieval: **solidifying** neural connections

Assess for Understanding: **identifying** learning illusion



**Stimulate** curiosity

Dealing with uncertainty: **getting accustomed** to not knowing





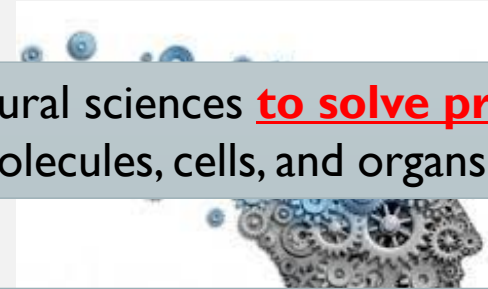
# CHANGING ROLE OF THE EDUCATOR



Living Systems: Applies knowledge and skill in the natural sciences to solve problems related to molecular and macro systems including biomolecules, molecules, cells, and organs.



Human Behavior: Applies knowledge of the self, others, and social systems to solve problems related to the psychological, socio-cultural, and biological factors that influence health and well-being.



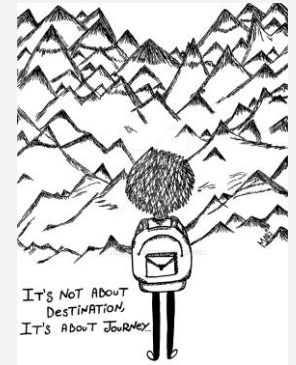
Promote thinking & life long learning

# THINKING ABOUT YOUR THINKING

How does the student approach the problem?



Reveal Cognitive bias



Be a role model in thinking for the student



TEACHING WITH CASES...  
TAKE II

# LEARNING OBJECTIVES

We will address the following learning objectives using several cases:

1. Identify disease states caused by: a) over-secretion of insulin, b) under-secretion of insulin and c) insulin insensitivity
2. Evaluate clinical data to determine the underlying cause of a metabolic disturbance.

Lots of planning, good resources

Be positive, conscious and directive

Lay out a specific plan

**Lewis Sargent** is a 35-year old teacher presenting for an annual physical. He is concerned about his weight gain of approximately 25 pounds over the past year due to a more sedentary life style and recent divorce.

**Chief Complaint:** Lewis states he has had difficulty maintaining his weight and with his new job, he is more sedentary and the weight crept up. He is also recently divorced and his partner did the majority of the cooking and shopping so he resorts heavily to processed foods. He has noticed shortness of breath while running after his two children ages 3 and 1 year.

How would you approach this patient?

Vital signs:	
BP 174/ 98	Pulse 82
Wt: 294 lb.	Ht: 74.0 inches
Respirations 12	

*How do you interpret this information to inform next steps?*

Significant problem	• Apply concepts students are learning in a meaningful context
Same problem	• Keep the discussion focused
Specific choices	• Ask questions ! Ask specific questions

Results of two fasting blood glucose tests are below:

Laboratory values:		
- HbA1C	7.8%	<6.5%
- Fasting blood glucose #1	167 mg/dL	70 - 105 mg/dl
- Fasting blood glucose #2	171 mg/dL	70 - 105 mg/dl

*How do you interpret this information? Or why would these tests been ordered?*

Results of a lipid panel are below:

Lipid panel:	
Total cholesterol	252 mg/dL
Triglycerides	217 mg/dL
HDL	38 mg/dL

*How do you interpret this information? Or why would these tests been ordered?*

Specific choices

- Ask questions ! Ask specific questions

Simultaneous reporting

- Engage in the reporting (Ask questions)

How might you lay out a management plan for this individual?

# METABOLIC SYNDROME

- I. Identify disease states caused by: a) over-secretion of insulin, b) under-secretion of insulin and c) insulin insensitivity

Visceral Obesity

Insulin Resistance  
167 mg/dL

Hypertension  
BP 174/ 98

Elevated Triglycerides  
217 mg/dL

Low HDL -  
cholesterol

Summarize outcomes

• Summarize



# THE LEARNING ENVIRONMENT



# IMMEDIACY



Consistent Eye Contact

Movement

Vocal Variety

Gestures

Personalized examples during class

Reads from notes

Stands behind podium

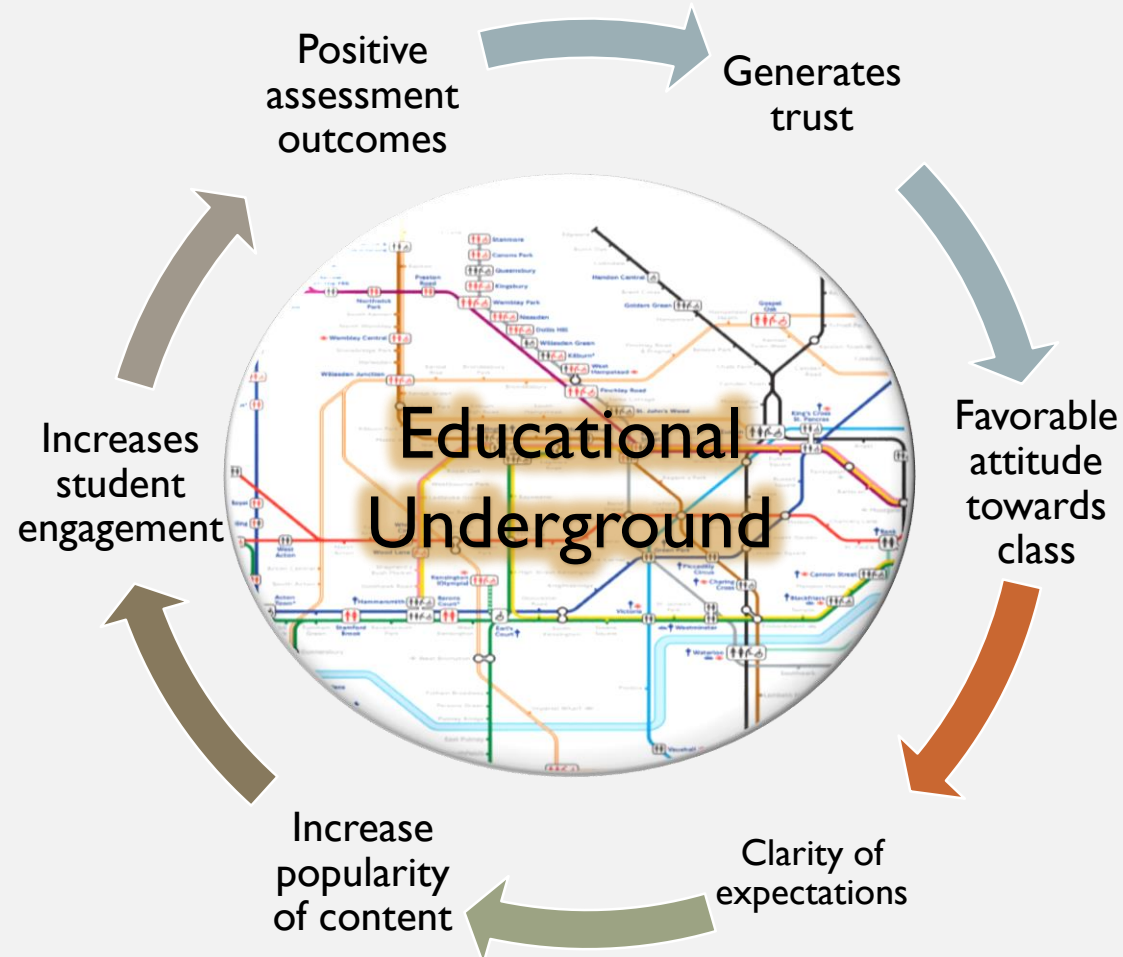
Monotone delivery

Few gestures or humor

Abstract examples



# WHAT DOES THIS DO TO THE LEARNING ENVIRONMENT?





## Planning

- Connect content, objectives and assessment
- Written learning objectives

## More planning

- Develop resources
- Connect assessment

## In class

- Session development
- Create a safe learning environment

PUBLISH IT!

[MedEdPORTAL](#). 2019 Jan 10;15:10793. doi: 10.15766/mep\_2374-8265.10793.

**Integrating Acid-Base and Metabolic Lab Panels Across Systems in an MI Classroom Activity.**

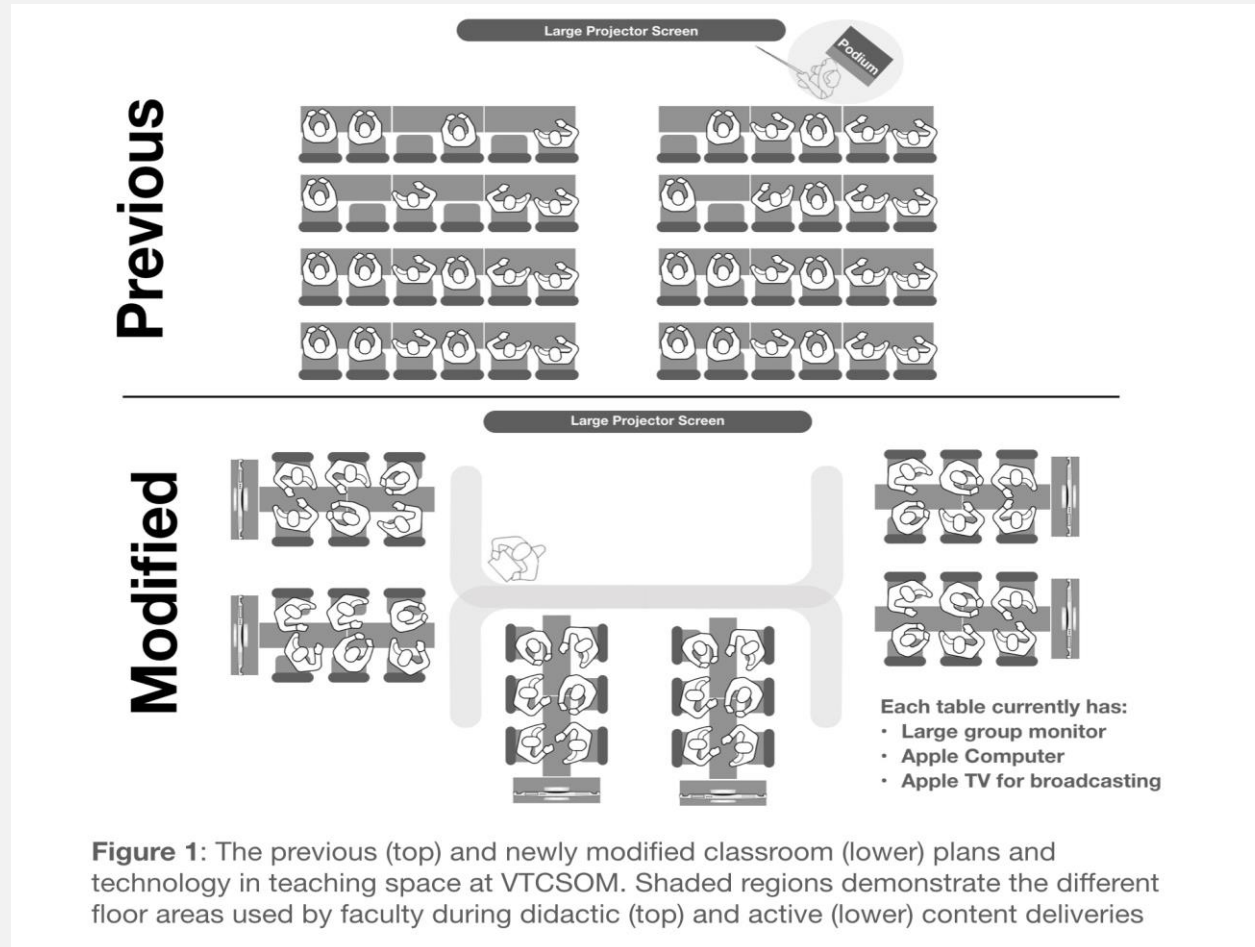
[LeClair RJ](#)<sup>1</sup>, [Binks AP](#)<sup>2</sup>.

**Abstract**

**INTRODUCTION:**

It is important to deliver acid-base balance concepts in the context of multiple physiological systems and metabolic processes that influence acid-base homeostasis. This activity combines the interactions of the respiratory, gastrointestinal, and renal systems in conjunction with basic metabolism to generate an integrated activity for first-year medical students.

# IDEAS AND QUESTIONS



# ACKNOWLEDGEMENTS



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