



Lectures: Active Teaching

Joseph Cofrancesco Jr. MD, MPH

Michael Barone MD, MPH

Rachel Levine MD, MPH



Join us on Facebook



Follow us on Twitter



Connect with us on LinkedIn

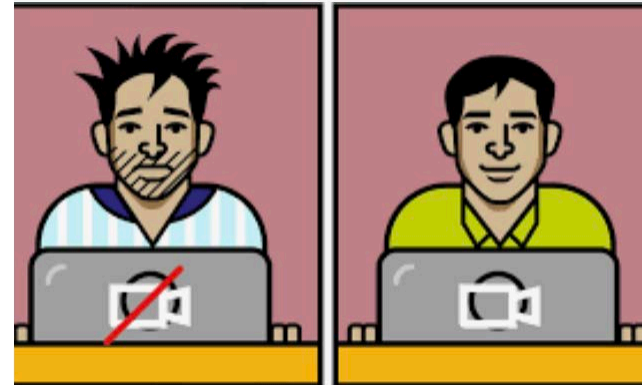
Disclosures

- No financial disclosure

Needed for CME courses

Seeing Everyone?

- If you are comfortable, please show your face via video, however, some block as:
 - Don't want others to see where they are right now
 - It uses too much of your internet bandwidth
 - Federal law: You can't require
- Virtual Backgrounds
 - Have issues



For Today

- I will **not be monitoring chat** unless specifically using chat and often miss the zoom graphic “raise your hand”
- Please keep **muted** unless planning to talk
- If possible, close other programs
 - Distraction and bandwidth
- **If you have an issue please unmute and stop me**
 - There will be time for questions throughout
- If you can and are comfortable, show yourself
- Change name to what you prefer



Objectives

By the end of the session, learners should be able to:

- Design a lecture
- Utilize at least 2 active lecturing techniques:
 - Questioning and/or Audience Response System (ARS)
 - Learner as Note taker
 - Think/Pair/Share report back
 - In-class problem solving
 - **TODAY I WILL BE USING ONLY X TO DEMONSTRATE; DO NOT USE THIS MANY IN A SINGLE SESSION**
- Name one tool for assessing one

Use action words

https://improveteaching.med.jhmi.edu/

JOHNS HOPKINS MEDICINE | Institute for Excellence in Education
Committed to leading the way in medical and biomedical education

PRODUCTION SITE

Improve Your Teaching

Problems viewing this site? [Click here for solutions.](#)

- Welcome to the IEE Improve Your Teaching Website
- Who can benefit from this website?
- What's inside?
- About Us

FEATURED

HOW TO CREATE AN EFFECTIVE E-LECTURE

TEACHING METHODS
What's effective?

ASSESSMENT
Which ones should I use?

ADULT LEARNING
What to Know about Adult Learners

LEARNERS AS TEACHERS
How do I start?

CONCEPT MAP
See the connections

USEFUL RESOURCES
Check these out

JOHNS HOPKINS MEDICINE | Institute for Excellence in Education
Committed to leading the way in medical and biomedical education

Search

Home | Teaching Methods | Assessment | Adult Learning | Learners as Teachers | Useful Resources | Concept Map

TEACHING METHODS

Forum: Teaching Methods

OVERVIEW

Introduction

The medical and biomedical school setting naturally requires varied teaching styles and techniques because of the unique academic and clinical settings in which they reside. It is increasingly evident that a variety of teaching approaches is also important to meet the needs and preferences of a variety of learners. There are now new teaching methods to master as well as ways to improve the effectiveness of tried and true approaches. This section presents quick guidelines, tips and varied teaching methods relevant to medical and biomedical education. We will continually add new topics and would love to hear your feedback in the Comments and Discussion section of each page.
Please select a topic on the right.

Turn On Builder [Edit]

TOPICS

- Teaching Methods Overview
- Lectures
- Small Group Sessions
- The Flipped Classroom
- Team-Based Learning
- One-Minute Preceptor
- Clinical Coaching
- How to Give a Great Chalk Talk

Teaching Methods | Johns Hopkins University School of Medicine

Basic Concepts

- Zoom (like PowerPoint) is a just a tool to help you
 - Just because Zoom has a feature- it doesn't mean you have to use it
- Whether live or virtual: it is still important to
 - Establish a good learning environment
 - Have clear Learning Objectives
 - Use adult learning principles
 - Engage the learners
- There will be technical glitches
 - Browsers, devices matter

Outline

1. Preparation
2. Content: Development and Organization
3. Delivery
4. Assessment of the Lecture
5. Summary

Orienting the learner



Q #1: I am (select best answer)

- A. Instructor
- B. Assistant Professor
- C. Associate Professor
- D. Professor
- E. Student/resident/fellow
- F. Other

Q2: My Level of Expertise with Lecturing

- A. Novice, I've attended lectures
- B. Some Experience
- C. Much Experience
- D. Expert - I could teach this class

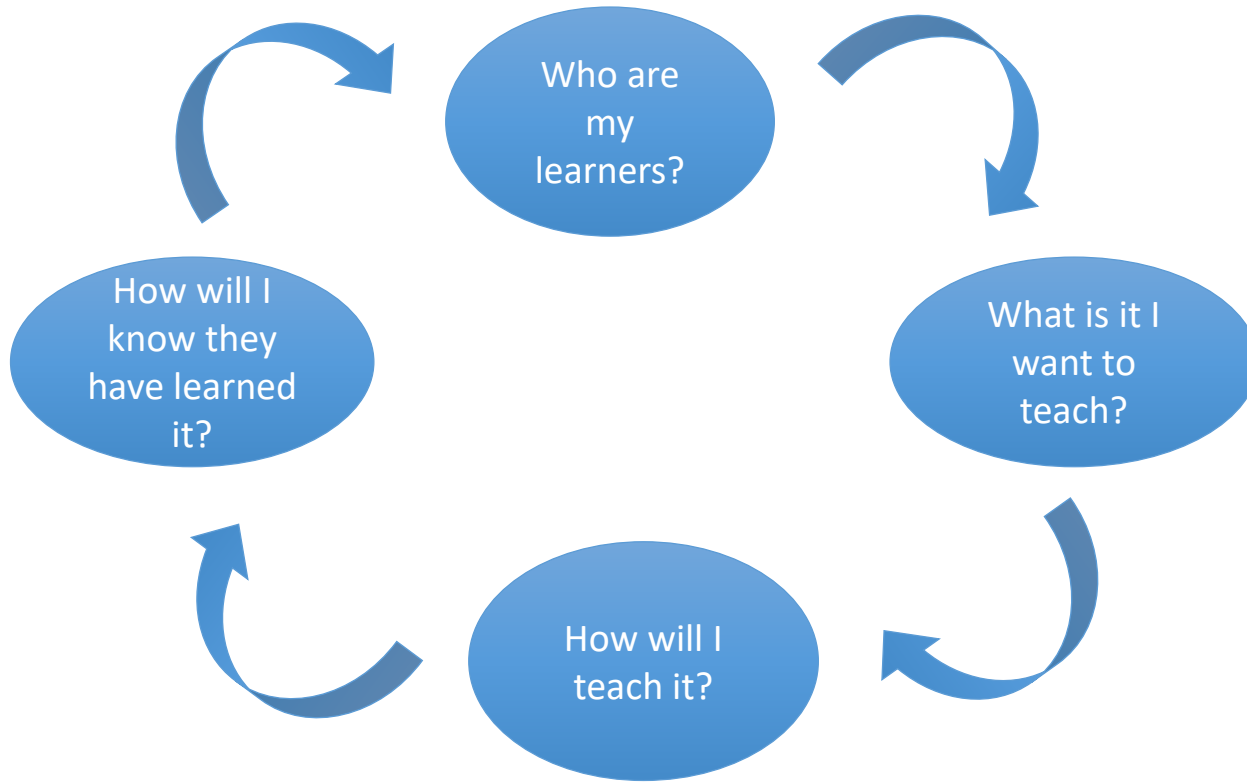
Engage audience; adjust your talk

1. Preparation

Simple slide, orient learner and a
“brain rest”



Model for Everyday Teaching



Lectures As Part Of A Series/Curriculum

- Where does my lecture fit into the curriculum:
 - What have they already been taught?
 - What will other teach?
 - What does course director/curriculum expect from you?

What Teaching Techniques Lead to Active Learning?

- Think of a lecture you gave or attended that was particularly good. What techniques were employed that made for active learning?



Reflection

2: Content: Development and Organization



JOHNS HOPKINS
MEDICINE

How Much/What Kind of Content?

- Use Chat room: Reply all

Make the learner do the work

Some Ideas

- For 60 minute lecture, consider no more than 40- 45 minutes
 - Allow for questions/clarification
- Consider active teaching techniques
- Goldilocks: Not too much, not too little
- Intro (macro) -> Details (micro) -> Summary (macro)
- Proper use of PowerPoint

Retention: Learning Pyramid



<http://ehanceactivelearntechnology.wikispaces.com/Active+Learning>

What Makes for an “Ideal” PowerPoint Presentation?



Tips for GREAT PowerPoint

- There are many **GREAT FEATURES** one can employ to successfully make your power point presentations *useful*. You should practice these to learn what may work best for you. The features you use will vary based up on the presentation, the audience, the venue, etc. *Here we will spend some time making your facile with all of the features that can be useful.*
- You should create an outline suitable to the topic, to keep your thoughts **organized**, and it is easy for a **variety** of learners to follow. *Remember to engage your audience. This can be done in a number of different ways, using different features of Power Point*
- There are a variety of tips sheets, review them all and find the ones that work best for you. This might include:::

- Don't only depend on PP
- Outline
 - Sections with transitions
 - Summary points
- Proper font, colors and pacing
- Balance visuals with text

• PRACTIC

PowerPoint Tips & Tricks

Contents

- Fig. 1 Introduction: Preparing the Slide Deck
- Fig. 2 Preparing the Slide Deck (continued): Layout & Design
- Fig. 3 Layout & Design (continued): Animation
- Fig. 4 Animation (continued): Presenting
- Fig. 5 Presenting (continued): Presentation Best Practices

Introduction

This guide is intended for all audiences. This guide is broken down into five sections. The first section is about preparing the slide deck, including content, slide numbers, and notes. The second section contains information about layout and design. This covers layout, objects, transitions, effect options, timing, and audio and video. The third section covers presentation animation—everything from mouse paths and navigation to making your animations smooth and choppy. The fourth section addresses different aspects of giving a presentation, including criteria for business to give a talk and slides, saving the presentation, and the Microsoft Office integration as a video, and broadcasting the presentation over the Internet directly through PowerPoint 2010. The last section contains slides and data to be created and given a presentation.

Preparing the Slide Deck

At any point while using the Slide Master, you can navigate to the other tabs. The Slide Master will not show, change, delete, copy, paste, copy, and more can be added and edited.

To add images, illustrations, or text:

- Click the **Insert** tab.
- Click on the element you want to insert and proceed as if you were in the Slide Master.
- To return to the Slide Master:
- Click the **Slide Master** tab.
- To change the format in the entire presentation via the Slide Master:
- While in the Slide Master, highlight the text in the placeholder to be changed or select the boxes that need to be changed.
- On the Home tab, click the **Font** drop-down menu and select it.
- To change the font in any of the associated layouts:
- Click the **Font** icon in the ribbon.
- Highlight the text in the placeholder to be changed or select the boxes that need to be changed.
- On the Home tab, click the **Font** drop-down menu and select it.
- To change a format name:
- In the **Font** group of the Slide Master tab, click the **Format** > **Font** button.
- A box will appear. Type in the new name.
- Click **OK**.

NOTE: When the mouse hovers over a slide layout, its name will appear along with the number of times that type of slide is used in the presentation. Changing the layout name is especially beneficial when creating a new layout. Additionally, changing the current name can personalize PowerPoint for the user.

To close the Slide Master & return to Normal view:

- On the Slide Master tab, click the **Close Master View** button.

Handout Master

The Handout Master organizes and provides options to make a printed handout using the slides. A preview of the presenter's slides is very helpful so that attendees can take notes during the presentation or have visual reminders of what was presented.

NOTE: One of the most popular handout layouts is three slides per page. It is the only option that provides space next to the slides for note taking.

To open the Handout Master:

- On the Home tab, click the **Handout Master** button in the Presentation View group of the Ribbon.
- To show how many slides per page:
- In the Handout Master, click **Slides Per Page**.
- Select the number of slides you want printed on each page. The choices are 1, 2, 3, 4, 5, and 6.



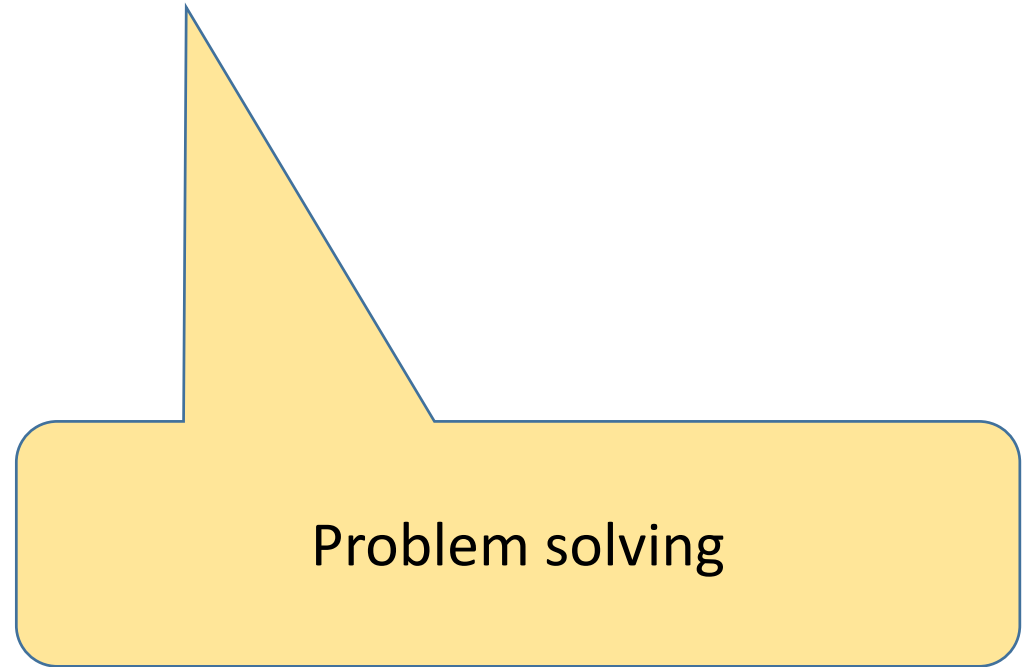
Define PowerPoint “Best” Practices

- 5 minutes
- Break our rooms: 5-6 learners
 - At least one with internet capable device
- Using any resources:
 - Experience
 - Prior coursework in education
 - On-line resources
- *Assign group reporter – will come back and share the screen*



Group Assignments

- General guidelines
- Specific guidance re:
 - Font size
 - Color choices
 - Text length
 - Use of visuals
 - Transitions
- What to avoid



Break Out

Report Back

- White board in Zoom
- Share the screen

PowerPoint

1. You, not PP, are the presenter
 - Don't simply read your slides
2. Create an outline
 - Sections
 - Transitions
 - Summary Points
3. Use contrasting colors, proper font size
 - Be consistent
 - Not overwhelming
4. Stop moving the text

Summary, may not be needed

PowerPoint

5. Don't give people vertigo with the pointer/laser
6. Remote control
 - Not behind podium
7. Don't forget the audience
8. Balance visuals and text
 - Don't overload with animations, distractions
9. PRACTICE

3: Delivery



JOHNS HOPKINS
MEDICINE

Q2: My Level of Expertise with Lecturing

- A. Novice
- B. Some Experience
- C. Much Experience
- D. Expert

Engage audience; adjust your talk



“Funny”, but makes a point

Think/Pair- Group/Share



Individual and Group Exercise

- You are designing an introduction class for first year college students in art history, with no/very limited exposure to art. The BMA is next door.
- The class is 9 weeks, and meets for 60 minutes on Tues. & Thurs.
- You plan to cover basic concepts in the first week and evaluation in the last session.

(Think) Think About Your Own Answer

You divide the remaining weeks into important periods of art. You plan (*and WHY*):

1. Lectures/high quality images followed by discussion (Tues + Thurs)
2. “Flipped classroom” e-lectures (home); class for discussion/questions
3. Take students to museum on Tuesday, discuss specific works; use Thursday for a seminar
4. Assign works, students view on their own at museum (Tues); seminars on Thursdays
5. Assign groups of 4 students to view at the museum on Tuesdays, use Thursdays for seminars led by an assigned team.



Question#3: Select the best answer

You divide the remaining weeks into important periods of art. You plan (*and WHY*):

1. Lectures/high quality images followed by discussion (Tues + Thurs)
2. “Flipped classroom” e-lectures (home); class for discussion/questions
3. Take students to museum on Tuesday, discuss specific works; use Thursday for a seminar
4. Assign works, students view on their own at museum (Tues); seminars on Thursdays
5. Assign groups of 4 students to view at the museum on Tuesdays, use Thursdays for seminars led by an assigned team.



Best Answer

- I know how the class answered but I opted not to share poll results with the class at this point.

(Pair) Discuss in Groups of 4-6

You divide the remaining weeks into important periods of art. You plan (*and WHY*):

1. Lectures/high quality images followed by discussion (Tues + Thurs)
2. “Flipped classroom” e-lectures (home); class for discussion/questions
3. Take students to museum on Tuesday, discuss specific works; use Thursday for a seminar
4. Assign works, students view on their own at museum (Tues); seminars on Thursdays
5. Assign groups of 4 students to view at the museum on Tuesdays, use Thursdays for seminars led by an assigned team.

- **ASSIGN A REPORTER**



Break Out



Question#4: One Answer Each Group

You divide the remaining weeks into important periods of art. You plan (*and WHY*):

1. Lectures/high quality images followed by discussion (Tues + Thurs)
2. “Flipped classroom” e-lectures (home); class for discussion/questions
3. Take students to museum on Tuesday, discuss specific works; use Thursday for a seminar
4. Assign works, students view on their own at museum (Tues); seminars on Thursdays
5. Assign groups of 4 students to view at the museum on Tuesdays, use Thursdays for seminars led by an assigned team.



(Share) Report Back

- Report back
 - ARS
 - Round-robin, limit to one comment per group
 - Random “call on” a group
 - Other
- Need to make sure the key advantages & disadvantages of each technique are reviewed:
 - Have them emerge

Pros/Cons

Method	Pro	Con
Lectures/high quality images followed by discussion		
“Flipped classroom” e-lectures, class for discussion/questions		
Take students to museum on Tuesday, specific works; Thursday for seminar		
Assign works, students view on their own, seminars on Thursdays		
Assign groups view at the museum, Thursdays for seminars led by an assigned team.		

4. Assessment



JOHNS HOPKINS
MEDICINE

After Your Lecture

- Reflect
 - What worked/what might you do differently next time
- Read student evaluations
- Have a coach watch you
- (Peer/self review of lecture form: on website)

Summary



JOHNS HOPKINS
MEDICINE

Active Learning

- The attainment of knowledge by participating and contributing.
- Engage learners mentally (and even physically) in an activity:
 - Gathering information
 - Reflect on ideas/how they use those ideas
 - Thinking and problem solving
- Requiring students to regularly assess their own degree of understanding and skill
 - Handling concepts
 - Problems solving

Conclusions

- Active learning is how adults learn
- Lectures:
 - Prepare lecture (in the context of the course)
 - Develop and organize content
 - Deliver content
 - Use active teaching
 - Assess/change for next time
- Teaching and learning should be
 - Challenging
 - Fun
 - Productive: **learning should occur**





Questions/Discussion

THANK YOU!