BCH Academy for Teaching, Educational Innovation & Scholarship

Effective Lecturing/Enhanced Learning
(How to Give a Stellar Presentation to Your Learners)

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To receive credit for today’s BCH Academy Session:

No financial relationships to disclose

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“In 1945 our parents went away and left us in the care of two men who may have been criminals.”
“Mother died today. Or yesterday maybe, I don’t know.”
“It was a bright cold day in April, and the clocks were striking thirteen.”
“Even in death the boys were trouble.”
What do the opening sentences in these novels have in common?
Effective communication requires what 2 necessary things of the actor? - capturing attention of the audience and then keeping it.
Goals of the Journey

• Encourage the use of proven strategies for effective lecturing & enhanced learning
• Discuss your questions about effective lecturing
• Reflect on the content and process of this presentation
• Motivate you to rethink and refine your presentations
Key Steps for Effective Lecturing and Enhanced Learning

1. Know your audience & attend to logistical details of in person as well as web-based teaching

2. Begin at the end

3. Prepare thoroughly & practice³
Key Steps for Effective Lecturing and Enhanced Learning

4. Employ multimedia research findings and insights from cognitive psychology to enhance learning

5. Engage teaching as a performing art

6. Get feedback from self-reflection, the audience and peers
Key Steps for Effective Lecturing and Enhanced Learning

7. Use Q&A as integral part of the lecture and its revision

8. Summarize the key points of your presentation

9. Finish on a high note

10. *Never* give the same talk twice
Apps for Effective Lecturing & Enhanced Learning

- Caveats
- Questions
- The Basics
- Start @ End

- Slide Primer
- Learning
- Strategies
- Finishing
PowerPoint Caveat #1: Avoid educational felonies

‘Gettysburg Address’
by Peter Norvig
Stanford Institute for Human-Centered AI.
PowerPoint Caveat #2: Avoid the "tyranny of content"*

*Jason N. Adsit. Designing and Delivering Effective Lectures  https://www.iiitd.edu.in
**Chilean Exports" slide from Quite Possibly The World's Worst PowerPoint Presentation Ever:  https://www.apa.org
***"Independent Workers" slide from https://www.consultantsmind.com/2017/04/10/bad-
Significant overlap of presentation strategies
Basics

Do a dry run

1. Appearance/stand
2. Audio
3. Lighting
4. Camera position
5. “What’s behind you?”
6. Virtual backgrounds
7. Computer & settings
8. Minimize interruptions
9. Hydration
10. Follow presentation guidelines offered here
Major themes of your submitted (168) questions:

- Strategies of giving a presentation
- Designing a presentation
- How to *engage* an audience and maintain interest

*Compiled by Joseph Fournier, M.Ed./BCH*
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The ‘basics’ for your presentation: **WIIFT**

**Know your audience**

What are their needs?
Preparing Draft #1: Begin at the End

As a writer—John Irving writes the last sentence of the novel before he writes the first sentence.*


John Irving
Canadian-American Novelist
Preparring Draft #1: *Begin at the End*

*What’s your ‘last sentence’?*
*Remember WIIFT.*

*My ‘last sentence’ today at journey’s end is to help you create lectures that reflect:*

*Thorough preparation,*
*Simplicity in design &*
*Effective presentation*
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Structure & Function of Engaging PowerPoint Presentations

How to create the most effective slides?

1. How do we process presented content in a lecture?
2. How can we use this knowledge in constructing slides?
3. What are the key elements of effective slides?
4. What are the guidelines of Fair Use Doctrine?

How to lecture most effectively to enhance learning?
1. How do we process presented content in a lecture?
3-stage model of human memory*

“One Mind, Two Channels”*

“Limited Capacity”*

“Active Processing”*

2. How can we use this knowledge in constructing slides?
Five ways to reduce PowerPoint overload

by Cliff Atkinson and Richard E. Mayer

*Slide adapted from: Atkinson C, Mayer R. Five ways to reduce PowerPoint overload
1. Write a clear headline that explains the main idea of every slide

**Research finding:**

*People learn better when the material is organized with clear outlines and headings.*

*Slide adapted from: Atkinson C, Mayer R. *Five ways to reduce PowerPoint overload*  
2. Break up your story into digestible bites in the Slide Sorter view

Research finding:

People learn better when information is presented in bite-size segments.

*Slide adapted from: Atkinson C, Mayer R. Five ways to reduce PowerPoint overload
3. Reduce visual load by moving text off-screen and narrating the content

Research finding:

*People understand a multimedia explanation better when the words are presented as narration rather than on-screen text.*

*Slide adapted from: Atkinson C, Mayer R. Five ways to reduce PowerPoint overload
4. Use visuals with your words, instead of words alone

Research finding:

*People learn better from words and pictures than from words alone.*

5. Rigorously remove every element that does not support the main idea.

Research finding:

*People learn better when extraneous material is excluded rather than included.*

Five research-based principles help reduce the PowerPoint load*:

1. Write a clear headline that explains the main idea of every slide
2. Break up your story into digestible bites in the slide sorter view
3. Reduce visual load by moving text off-screen and narrating the content
4. Use visual with your words, instead of words alone
5. Rigorously remove every element that does not support the main idea

3. What are the key elements of effective slides?
Key Elements of Effective Slides

- Background: clean and uncluttered
- Pick a font—I’m using ‘Optima’ in this presentation
- I am sans. Helvetica
- I am serif. Times New Roman
- Slide design ratio of 16:9 (these slides) vs. 4:3
Key Elements of Effective Slides

- Be consistent in font sizes:
  - I prefer 36 point font for titles
  - and 32 point font for text

- Regarding # of slides:

  The Goldilocks Principle
Key Elements of Effective Slides

• Value empty space
• Keep any animation simple
• Spell check: caveats – “In the coarse of human events…”
• Choose well-pixelated images and cite
• Save images of interest
Mount Fuji
The Timeline & Challenges of Palliative Care

Hoag's Object
Jupiter
Three additional thoughts about slide making

You want to make changes to a slide:

1\textsuperscript{st} Make a copy!
"In lectures, use slides and graphical representations of information as much as possible. Think carefully about how you can translate information into a visual format —”*

Lastly:

- If you have normal color vision, you see a 74.
- If you are red/green color blind, you see a 21. (affecting ~8% men and <1% women)
- If you are totally color blind, you do not see a number.
4. What are the guidelines of Fair Use Doctrine?
U.S. Constitution, Article 1/Section 8: Patent and Copyright Clause of the Constitution.

Fair Use Doctrine permits anyone to use copyrighted works, without the owner’s permission, in ways that are fundamentally equitable and fair.

Because it’s on the web doesn’t mean that it doesn’t fall under copyright.
Examples of permissible amounts under ‘Fair Use’:

- Motion media: Up to 10 percent of the total or three minutes, whichever is less.

- Text material: Up to 10 percent of the total or 1,000 words, whichever is less.

Diagram from--https://www.emerginge
tech.com/wp/wpcontent/uploads/2016/03/fair-use-flower.jpg

A federal district court judge found that Warhol's series is "transformative" because it conveys a different message from the original, and thus is fair use.

A Second Circuit Court of Appeals panel disagreed. **Nina Totenberg-**

*https://www.npr.org/2022/10/12/1127508725/prince-andy-warhol-supreme-court-copyright*
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You’ve decided on a PowerPoint presentation that will match how people learn.

How to create the most effective slides?

How to lecture most effectively to enhance learning?

First, consider
“Successful teaching is a performance and the sooner we make peace with that fact, the better.”*

Relevance and affective engagement are crucial.

Assumptions about the teacher/performer

She wants to perform
Has rehearsed
Will give her all
filled with personal feeling & involvement

Is there enthusiasm/Ενθουσιασμός
--"inspired, possessed by a god"?

“Can students make the same assumptions about their teachers?”*


In Preparation for the Presentation:

- Come early
- Test your slides
- If videos: use your own computer
- Turn off notifications
- Microphone usage
- Have lecture backups
- Identify AV person

Who’s introducing you?
Key elements of Effective Lecturing & Enhanced Learning

- Storytelling
- Authenticity
- Simplicity
- Use of metaphor
- Demonstration
- Communication: verbal & non-verbal
- Test concepts
- Challenges
Storytelling: the key to successful lectures
“Good teaching cannot be reduced to technique; good teaching comes from the identity and integrity of the teacher.”

"We teach who we are.”

Parker Palmer

Parker Palmer:
* The Courage to Teach: Exploring the inner Landscape of a Teacher’s Life.
** The Heart of a Teacher Identity and Integrity in Teaching.
Simplicity

“In character, in manner, in style, in all things, the supreme excellence is simplicity.”*

*Henry Wadsworth Longfellow/1868
Julia Margaret Cameron
Perfection is achieved, not when there is nothing more to add, but when there is nothing left to take away.”

Antoine de Saint-Exupéry

Pablo Picasso

The Bull
Use of Metaphor

“Metaphor, consists “Metaphor is powerful, because it forms a bridge between the abstract and the concrete, using images and ideas that are culturally accessible.”


Aristotle
The School of Athens
Raphael
“In a sense we've come to our nation’s capital to cash a check.

a promissory note

America has defaulted

America has given the Negro people a bad check

‘insufficient funds.’

But we refuse to believe that the bank of justice is bankrupt.”

Martin Luther King, Jr.
August 28, 1963
Teaching Newton’s Laws of Motion: The 3rd Law
Communication--Nonverbal:

Facial expression
Gestures
Body language & posture
Paralinguistics
Eye gaze
Touch
Appearance
Kinesthetics

*modified from Kendra Cherry, Types of Nonverbal Communication: 8 Major Nonverbal Behaviors  http://psychology.about.com/od/nonverbalcommunication/a/nonverbaltypes.htm
Note Salieri’s use of pitch, pause, volume, and rate of speech, as he reflects on Mozart’s "Serenade for Winds"
Test Concepts: Problem Solving

"Parabolas"

Eric Mazur, PhD
Harvard University
Balkanski Professor of Physics & Applied Physics
ConcepTests*

Answer: 3. B. The time a projectile spends in the air is equal to twice the time it takes to fall from its maximum height. Because the shell fired at ship A reaches a higher altitude than the one aimed at B, the former takes longer to return to sea level.

1. A
2. both at the same time
3. B
4. need more information

http://mazur.harvard.edu/
Challenges
Key elements of Effective Lecturing & Enhanced Learning

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Post-lecture questions:
• Repeat the question
• Reframe for sake of clarification
• “I don’t know”/crowd source
• Hostile questions

How to end a lecture:
• Summary
• Salute the audience
• End on a high note/consider a ‘scripted finish’
What am I teaching?

How will I facilitate learning?

How will I know what’s understood?

Who am I teaching?

Where am I teaching?

How will I know how I’ve done?
First, take a look at yourself.
“We had the experience but missed the meaning.”

T.S. Eliot
"One-minute" paper worksheet

Name: ____________________________________________

Date: ___________________________________________

Lecture title: ____________________________________

Directions: Take a moment to think about the lecture you have just attended, and then answer the following questions.

1. What was the most important thing you learned in today's lecture?

_________________________________________________

2. What question remains uppermost in your mind at the end of today's lecture?

_________________________________________________

3. What was the 'muddiest point' in today's lecture?

_________________________________________________
Peer review: An effective approach to cultivating lecturing virtuosity

PETER MCLEOD, YVONNE STEINERT, RADAN CAPEK, COLIN CHALK, JAMES BRAWER, VALERIE RUHE & BONNIE BARNETT
McGill University, Canada

Receiving feedback

Developing a Peer Assessment of Lecturing Instrument: Lessons Learned.

Collect good questions
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Be of two minds...
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