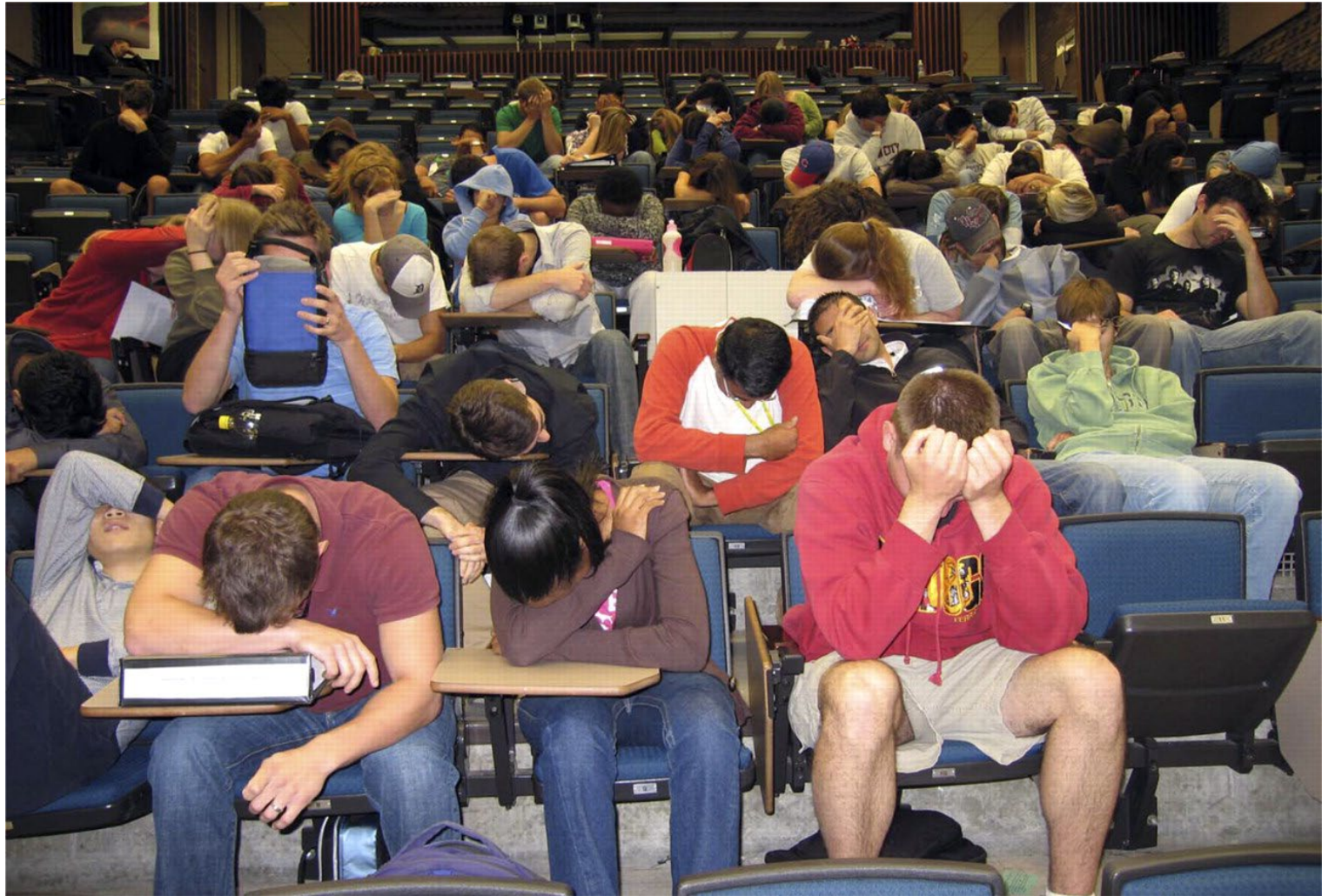


FACE 2024



- Brief Interactive Lecturing session

The passive lecture format is boring, mind numbing for students and monotonous for teachers.



DiCarlo S E Advan in Physiol Edu 2009;33:257-264

Advances in Physiology Education

Goals of effective presentations



- Attract attention
- Maintain attention
- Promote learning

Attract attention



- Stories/Anecdotes/Cases
- Problem or Startling fact
- Test Question
- Humor
- Surveying audience knowledge, attitudes, experiences
 - Relevant to topic
 - Relevant to audience

Worksheet



- Describe 1-3 strategies that could work for “hooking your audience” for your presentation topic. 3 minutes

Maintain attention

- Make organization clear
 - Orientation
 - Guidance
 - Summarization



Maintain attention



- **Adult attention span = 10-20 minutes under same stimulus**
- Change the stimulus
 - Video
 - Demonstration
 - Role-play
 - Debates
 - Case examples
 - Audience reflection
 - Brainstorming
 - Animations

Promote learning



Promote learning



Pause procedure studies:

Tested in undergraduates, medical students and CME

Experimental group: Instructor paused for 2 minutes

Tested through:

- Free recall immediately after
- 65 item MCQ test (2 weeks post)

Experimental group did significantly better on both tests and rated lectures more highly

Promote learning



Continuing Medicine Education (CME) evidence

- Purely didactic presentations (non-interactive) do not lead to changes in clinician behavior
- Interactive techniques building on prior knowledge, include interaction and application/practice can
 - Forsetlund et al, Cochrane Collaboration 2010,

Promote learning



- Harvard 10 plus 2 model
 - Discuss key concepts
 - Apply concepts to problem
 - Discuss problem addressing forthcoming information
- Peer instruction/discussions enhances student answers and long term retention
 - especially low performers

■ Cortright RN et al Adv Physiol Educ
2007

Promote learning: Sample Strategies



Focus

- Case examples with questions
- Change variables that test application
- Problem to solve
- Test question
- Skills to practice

Methods

- See “Teaching Strategies to use in Interactive Lectures”

Worksheet



- Describe at least 2-3 different strategies that could work to allow learners to apply new knowledge during the presentation.

Promote learning



Implications:

- To make room for interaction need to limit content
- Several studies show limiting content leads to better learning and retention
 - Russell et al 1984, Bryner 1995, Wood et al 2020

Promote learning

Implications:

- Limit to 50-70% new information and 3-5 main points
- Select content based on what you want them to remember



Worksheet



- Take home points: List the main things you want your learners to remember?

Worksheet



- Look at your take home points and your learning objectives
- Which of these are reinforced by your activities? Are they the higher-order and/or most challenging ones?
- Do you need to add or change objectives?

Lecture Presentation skills



- What types of lecture behaviors during presentations are less effective?

Summary points



- Engage audience early by using strategies that “hook” their interest
- Keep audience engaged and promote learning through changing stimulus and promoting interaction and problem solving
- Limit the number of points you are trying to make

Lecture Presentation skills



Some behaviors that enhance audience engagement and learning:

- Eye contact
- Varied tone
- Moving around
- Using wait time

Importance of practice



- Time management
- Content management
- Increased audience engagement
- Decreased nervousness

Bad projected visuals

- Death by PPT

Good Projected Visuals

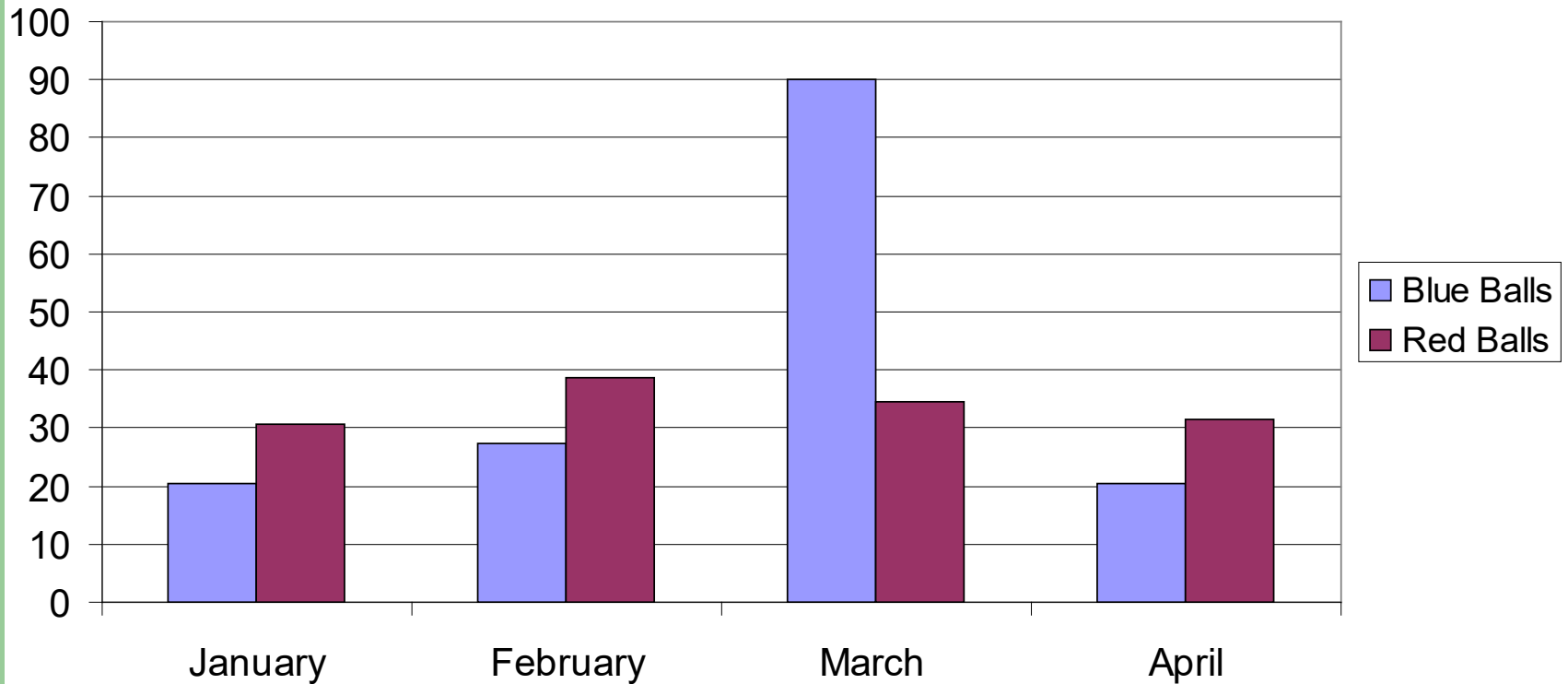
- Use 1-2 slides per minute
- Bullet point form, 4-5 points per slide
- Use key words/phrases = <8 words per line
- 18 point or greater font
- Have contrasting font vs background

Graphs - Bad

| | January | February | March | April |
|------------|---------|----------|-------|-------|
| Blue Balls | 20.4 | 27.4 | 90 | 20.4 |
| Red Balls | 30.6 | 38.6 | 34.6 | 31.6 |

Graphs - Good

Items Sold in First Quarter of 2002



Line Graphs

- Limit to 4 lines
- Limit number of points (markers)
- Use different colors or line styles for each line
- Use highest contrast color for line on which to focus

Effective visuals

Purpose of Visuals/PPT slides:

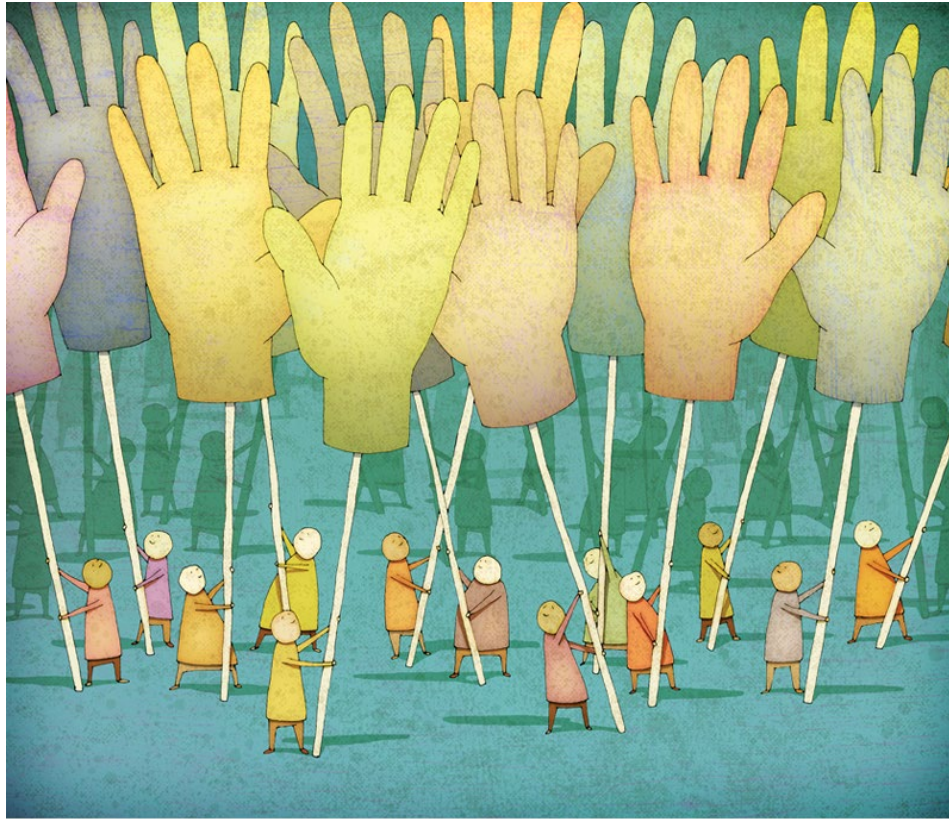
- Summarize key information
- Supplement your narrative
- Visualize data, structure, processes
- Show vs tell

Take Home points



- What is one take home point you want to remember to use in preparing and giving lectures?

Questions/discussion



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