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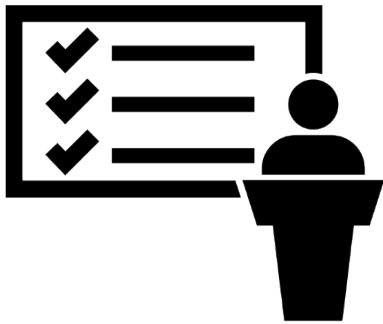
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This resource has been developed by the AAP Committee on CME and may be used for educational purposes.

Creating and Presenting an Effective Interactive Lecture

BACKGROUND



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- ❖ As the traditional lecture can still be an effective means of communicating information, it is imperative that lectures be designed to promote learner engagement and information retention. The articles give several tips on creating memorable lectures that are summarized below. In particular, the active learning techniques can be helpful in breaking the lecture into segments as the average attention span is no longer than 10 to 18 minutes.

PREPARATION FOR EFFECTIVE TEACHING AND LEARNING



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Preparation for Effective Teaching

- **Attention:** Consider starting the lecture with a case presentation, illustrations, or quotes to hook their attention
- **Comprehension:** Carefully and clearly design the presentation's title, outline, and learning objectives to provide an effective learning "roadmap".
- **Integration:** Foster long-term memories by allowing the audience opportunities to apply the new information through a case presentation or solving a problem.

Preparation for Effective Learning

- **Outcomes-based teaching:** Know your audience's needs, and begin with the desired outcomes in mind.
- **Clarity:** Frame your learning objectives to be specific, measurable, achievable, relevant, and time-bound to organize your information. My audience will do "what" by "when"?
- **Engagement:** Present in a conversational manner, e.g. use eye contact, questions, and effective nonverbal communication.
- **Enthusiasm:** Have fun and naturally convey your expertise!

SLIDE ORGANIZATION AND SLIDE DESIGN



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Slide Organization

- Slides are a supplement to the presentation, not the main focus. Limit to one slide per minute. Limit to one idea per slide. Try not to overwhelm with excessive information.
- Organize the content into an introduction, content sections, and a conclusion. Use headings to show where you are in the program.
- Keep content into 10 to 18-minute sections. Consider active learning techniques to break up content.
- Summarize along the way, and as you conclude.

Slide Design

- Use simple slide templates and contrasting colors (set dark colors against lighter ones). Remember to avoid using red and green together for those who may have color-blindness.
- Limit clutter by only highlighting the most important information on the slide. Use visuals instead of text, then use your notes section for your prompts, and put additional information into a handout, syllabus, or appendix slide. Handouts can also assist learners in revisiting information at a future date.
- Use 24-point font size or larger and a simple font (Arial or Calibri). Limit animations if possible.

ACTIVE LEARNING TECHNIQUES (tailor to the size and type of audience)



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- **Pause Procedures:** Brief pauses of 30 seconds to 3 minutes for quiet reflection or sharing with an audience neighbor can enhance retention.
- **Audience Response Questions:** These can be low or high-tech. Take the time to discuss the reasoning behind all the answers (correct, incorrect, or uncertain).
- **Audience Panel Engagement:** Pose the same question to the audience and an expert panel, discussing both responses.
- **Small Groups:** Use small groups or breakout sessions to discuss how to use the new information after the lecture.
- **Games:** Encourage competitive quizzes, or cooperative activities, such as creating a clinical story together.
- **Clinical Cases:** Stories are a powerful way to engage the audience. These can be combined with pauses to reflect on what the learners would do next in the case.
- **Questions from Audience:** Allocate time for questions and anticipate these, answering honestly & succinctly.

PRACTICE EFFECTIVE PUBLIC SPEAKING



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- **Nonverbal communication:** Audience members will generally score a presentation more highly if the speaker has a relaxed confident posture, gestures, and eye contact.
- **Teacher enthusiasm:** Use movement, vary the tone of your voice, avoid gripping the podium, and be kind to yourself. The audience perceives less anxiety in presenters who manage the time well and are enjoying the experience.
- **Practice, practice, practice:** As many are afraid of public speaking, practice the lecture to avoid reading the slides and decrease the worry about knowing what to say. Avoid scripted memorization unless there is plenty of lead time to memorize fully – partially memorized presentations are more awkward.
- **Encourage and listen to feedback:** Evaluate both formal and informal feedback. Consider video recording yourself to look for mannerisms that might be distracting.

Sources:

- Babik, J. M., & Luther, V. P. (2020). Creating and Presenting an Effective Lecture. *Journal of Continuing Education in the Health Professions*, 40(1), 36–41. <https://doi.org/10.1097/CEH.0000000000000281>
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