



Teaching Notes: Large Group Teachings

Why lecture?

Lecturing is one of the oldest teaching methods but is still the most frequently used, because it is an efficient way to:

- provide an overview of a topic
- deliver content uniformly to groups of learners
- generate rapid understanding, and
- inspire and guide independent learning (1-4).

From theory to a practical model

Knowing how we learn enables us to derive a practical and effective model for lecturing. Cognitive theory states that new information remains in short-term memory for about 0.3 seconds before either being lost or added to working or long-term memory; note-taking only defers this. The conversion from short-term to long-term memory happens most readily when we find the information interesting and understandable, and can link new information with what we already know. Learning occurs when existing knowledge structures are modified by incorporation of this new information. Retrieval is easier from episodic memory than from semantic memory, explaining why stories are more readily recalled than list of facts, concepts or theories.(1)

Effective Lecturers

- **Provide handouts (of the presentation or a summary sheet)**
- **Allow time for thinking and note-taking**
- **Explain new information in a structured and interesting way**
- **Link new content explicitly with what is already known**
- **Encourage learners to determine how they will use the new learning**



What you must know at the start

Preparation will ensure success. Review the program objectives, audience and talk to the course chair or planning committee members about the specific talk expected. Develop learning objectives at the higher cognitive levels that describe the 3-5 key points that you would like the delegates to take away from your presentation. (2;4;7) Develop an outline of the structure of your presentation within the presentation timelines and consider that attention spans begin to fade after 12-20 minutes of concentration. (3) Add your content based on the best clinical and scientific information available. Ensure recommendations meet acceptable standards of scientific integrity and are consistent with practice. Finally, ensure a balance of the prevailing body of scientific information about products or services and if unapproved uses of a therapeutic agent are discussed, inform the audience. Choose the media you will use by considering learning objectives, delegate numbers, facilities and your personal preferences. Be reassured that it isn't always necessary to use complex audiovisuals in order to give a great presentation. People learn best in different ways; use drawings, words (written, verbal), tables, lists, diagrams and schematics to build redundancy into your presentation. Mayer's principles of multimedia learning (8) identify that best learning occurs from a combination of words and pictures, when the words are spoken and key words stressed. Construct handouts ahead of time so that they can be printed for the delegates.

On the day of your presentation

Arrive 15 minutes early to familiarize yourself with the room set-up and equipment. Bring your presentation on a laptop and USB stick. If using a Mac, bring the appropriate connections. Your dress is important when presenting via videoconference and you should wear solid, dark colours (avoid red and all white) and avoid any shiny items that could cause glare. When using a microphone, avoid wearing items around your wrists or neck that could jangle or interfere with the microphone.

Enthusiasm

Delegates will find your natural enthusiasm for a subject and eagerness to share your expertise both engaging and motivating.

Clarity and organization

Show your presentation plan and the learning objectives. Consider inserting placeholder slides into visual presentations to indicate progress through the presentation. Introduce the learning objectives and return to them at the end of the lecture. Lecturers typically speak at a rate of 100 words per minute – that’s a lot of content - so structure your lecture carefully by focussing on essentials, summarizing main points frequently, and making relevance and connections explicit as you go. Pause and check for understanding periodically. Pace your delivery to allow sufficient time for delegates to take notes, activate pre-existing knowledge, reflect on new content and allow questions to rise to the surface. Delegates may incorporate new information during the lecture, or later, when reviewing notes and handouts. State, right at the start of the presentation, at what point you prefer to take questions.

Interactive presentations

Human attention spans vary between 12 and 20 minutes (1;2;3;5) so introduce different delivery techniques and delegate activities to maintain interest. Consider directing attention to handouts, audio-visuals or short video clips; poll the audience with a show of hands; ask delegates to get together briefly in pairs or small groups to undertake a task - frame a question, answer a question, solve a problem, make a comparison – then poll the room or check the answer with a few groups to check for understanding before moving on.

Presentation components (8)

Preparation	Research delegates, course and the venue Develop learning objectives
Opening	Introduce yourself Address any conflict of interest
Objectives	Explain the presentation plan and what the delegate will learn (objectives)
Explaining	KEY COMPONENT Explain content – use analogies and metaphors Be clear, be interesting, be persuasive
Presenting information	Cover the necessary facts or theories. Excessive detail induces boredom.
Narrating	Use case histories, personal experiences, concrete examples
Using AV aids	Choose with care – they should complement, not duplicate or contradict, your verbal presentation
Responsiveness	Often neglected – monitor interest (consciousness?), check for understanding, adjust accordingly
Interactivity	Use relevant activities to stimulate interest, understanding, and independent learning
Summarizing	Summarize both during and at the end of the presentation, emphasize important points, show links
Commitment to Change	Encourage delegates to examine how this presentation could improve their practice.

Use concrete examples

Begin the presentation with one or more vivid cases to generate interest or pose an intriguing question. Using examples that delegates are familiar with will allow them to associate new content with pre-existing knowledge, aiding understanding and recall. Introducing colourful narrative and recounting personal experiences makes teaching more memorable.

Audio visual aids

Some fundamental guidelines about PowerPoint are easily found on the web. Aim for simplicity and clarity and plan for no more than one slide per minute. Use point form and put no more than 6 points made up of 6 words on each line in each slide. For face-to-face presentations, use a light slide background and font sizes larger than 22 point. For videoconferencing, a dark slide background shows up better and the font size should be 36 point or larger. Reduce the use of italics and select sans serif fonts (Arial, Calibri, Verdana). Use appropriate visuals (illustrations, charts, diagrams, video clips) whenever possible. Remember that copy written material can be used within your presentation and it can be photocopied and podcast for distribution to delegates if it is properly cited. Creating audio visual aids is a topic in itself; check with the Office of Faculty Development for further information.

Handouts

Handouts are highly valued by participants because they reinforce and clarify verbal information and aid recall. PowerPoint slides make effective handouts when they are printed in black and white and there is limited information on each slide. A one or two page summary can also be effective if it contains important ideas and significant information from your presentation. Include learning objectives, reading lists and 3 key messages so that delegates can apply their new knowledge independently after the presentation. Journal articles cannot be printed for delegates as handouts unless the speaker has obtained prior copyright permission.

Tips for effective handouts (3)

- **Consider the purpose of the handout and the audience needs**
- **Remove or minimize copy written material**
- **A one or two-page outline of the presentation or summary notes may be sufficient**
- **Include references and further sources of information**
- **Highlight the potential for practice change**

Finish with a flourish

Summarise – or ask delegates to summarise – the main points covered in the presentation. Returning to your original clinical case, problem or objectives will help to reinforce the presentation content and tie it all together. Help delegates make a commitment to change by anchoring your summary in current practice and providing time for reflection on how they will change their practice as a result of attending your presentation.

Improving your lecturing

If your goal is to improve your presentation skills, there are several sources of information available to you. Self-reflection is the most important mechanism for change (1), and Taylor and Toews (13) provide a framework for deconstructing presentation strategies that will support accurate self-evaluation.

Sources of feedback

- **Self**
- **Peers, faculty developers**
- **Planning committee members**
- **CME education consultants**
- **Delegates**

Feedback from trusted peers, particularly those who also present, can be very valuable; be specific about which aspect you seek feedback on and honour your team-mate's time and honesty by carefully reflecting on their input. Offer to reciprocate. Educators from the Office of Continuing Medical Education also offer individual, confidential consultations at no cost; contact the offices for an appointment.

Continuing Medical Education collects delegate evaluations and you will be provided with their feedback on your presentation about one month after the course.

Enjoy your teaching!

For further information or confidential no-charge teaching consultations, contact us:

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