

## Engaging Large Groups



The aim of this tool kit is to provide healthcare educators with practical resources and teaching tips to conduct Academic Medicine Education Institute (AM•EI) Education Grand Rounds (EGR).

EGR is a series of talks for healthcare educators and learners to engage in inter-professional learning and exchange of ideas and best practices in education, promoting a vibrant learning environment that leads to better patient care. It is part of AM•EI educational activities that aim to effectively provide exposure to topics, ideas and skills in education to the SingHealth community.

This tool kit contains four sections:

1. **Preparing to Teach a Large Group**
  - Learning Objectives
  - Content Development
  - Effective PowerPoint Presentations
2. **Engaging Learners in a Large Group**
  - Presentation Style
  - Active Learning Strategies
3. **Evaluating Teaching**
  - AM•EI Evaluation Form
4. **References**

## 1. Preparing to Teach a Large Group

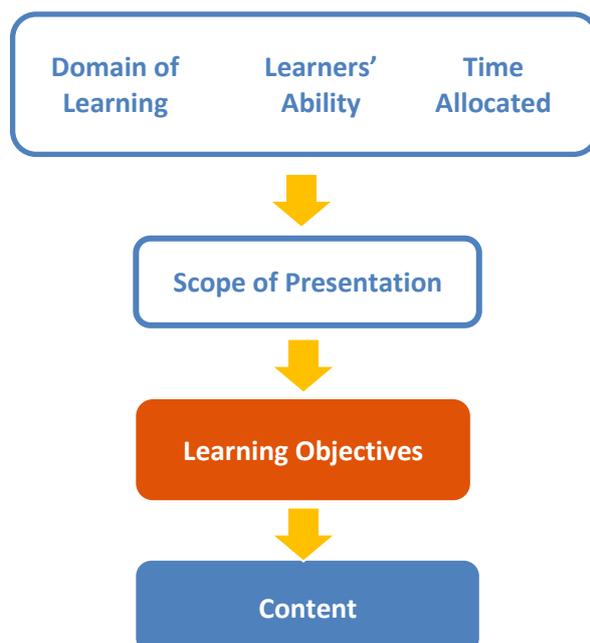
### Learning Objectives

Start planning your session by defining what your learners need to achieve.

Find out about the learners' background and identify the domain of learning (see grey box below). Next, scope what is achievable within the time allocated and learners' ability. Based on this information, craft learning objectives and create content to meet them. This will ensure that the presentation is streamlined and focused.

#### 3 Domains of Learning (Bloom, 1956)

Cognitive – knowledge and intellectual skills  
Psychomotor – physical skills  
Affective – feelings and attitudes



## ABCD Model

The **ABCD** model (Heinich, Molenda, Russell and Smaldino, 2002) can be used as a guide to writing well-defined learning objectives. For a 1 hour lecture, 2 to 3 learning objectives is recommended.

<b>A</b> udience	<i>Who are your learners?</i>
<b>B</b> ehavior	<i>What do you expect your learners to be able to do after the session?</i> This should be an observable behavior described by an action verb that is measurable. Avoid generic verbs like 'understand' and use measurable verbs like 'state', 'explain', 'compare' instead. Refer to <a href="#">Bloom's Taxonomy</a> (Clemson University, 2014) for more examples of measurable verbs.
<b>C</b> ondition	<i>Under what circumstances or context is the behavior expected to be completed?</i>
<b>D</b> egree	<i>How well will the behavior need to be performed?</i> Do you want total mastery (100%) or do you want the learners to respond correctly, for example, 80% of the time?

## Content Development

Based on the learning objectives, decide on an appropriate amount of content to cover. Identify concepts and knowledge that are crucial for learners and focus on them. Spend less time on content that is interesting but not essential.

### Rule of Three

The Rule of Three suggests organising a presentation into 3 main parts or themes to promote more effective learning, as learners tend to remember lists of 3 items better. An example of a basic lecture structure is represented in the diagram below.

### Introduction

The first 5 minutes of learners' attention is crucial. Use interesting content to engage learners and prepare them for learning. You may want to

- Start your presentation with an interesting angle or share a personal experience.
- Interest learners by asking a trigger question or showing an interesting and relevant video clip.
- Give a short quiz to understand learners' abilities.

### Body

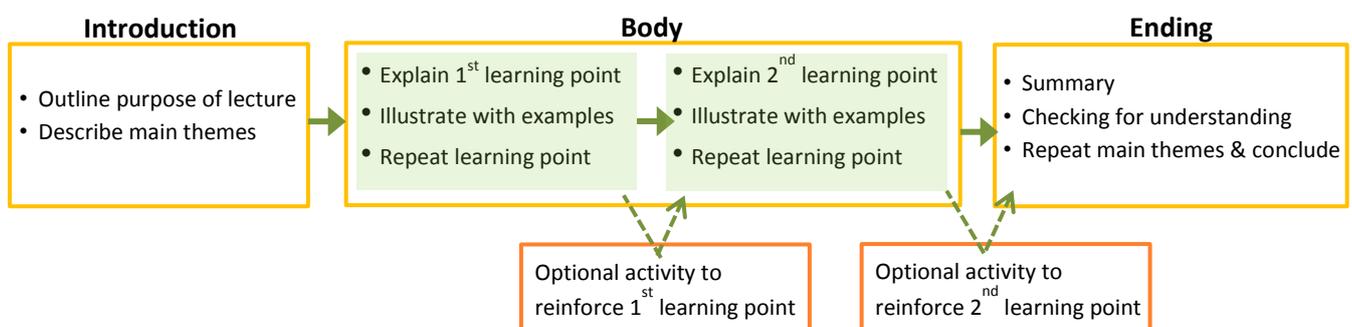
Cover your learning objectives here and consider using the following techniques to enhance learning.

- Illustrate learning points with examples.
- Use analogies to explain new concepts.
- Employ active learning strategies. (see pg 4)
- Ask questions.
- Include activities to reinforce learning points.
- Summarise the points in each section.
- Make reference to the lecture overview so that learners understand their progress.

### Ending

The ending should be planned, and not rushed due to a lack of time. You may want to

- Summarise key learning points.
- Allow time for learners to ask questions, or to ask learners questions.
- Direct learners towards further learning.
- Leave learners with a take-home message.



Adapted from Cantillon P. (2003)

## Effective PowerPoint Presentations

PowerPoint is a common tool for delivering content. How do we use this tool effectively? Here are a few tips.

### TIP 1 Outline your presentation

#### Plan before developing your slides.

Use pen and paper planning to outline the presentation before creating slides. This helps you to think through the presentation instead of being distracted by the technicalities of creating a PowerPoint.



### TIP 2 Know your learning objectives

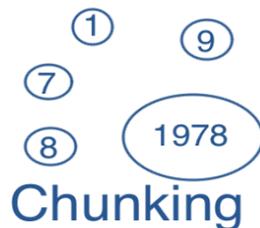
#### What are the learning objectives?

Identify learning objectives before developing a presentation, and then use slides to expand them. Plan the content before thinking about how to visualize it for learner engagement. Do not do both things at the same time.

### TIP 3 Chunk the information

#### A bit at a time, please.

Avoid putting whole paragraphs on the screen. Learners will concentrate on reading all the information as soon as it appears, rather than pay attention to you.



Instead, control the flow of information for focus. Information related to one key point, e.g. in the form of bullet points and images, can be revealed one at a time as you elaborate the point.

Limit the number of slides by only showing those that illustrate what you are presenting. Additional information can be put in the Notes section for learners' reference.

### TIP 4 Keep the design simple

- **Use an appropriate theme** that looks professional for scientific or academic subject matter.
- Use fonts that are easy to read for main text. E.g. Arial, Helvetica, Calibri
- **Use decorative fonts only for slide headers.** E.g. **Cooper Black**, *calligraphy*, *Bradley hand*.
- Use a font size of 20 points or larger.
- Avoid the use of all capital letters and overuse of italics.
- **Put dark text on a light background** for easy reading. If dark background must be used, restrict it to only a section of the slide, use a light text colour and increase the font size.
- **Align text left**, as centered text is harder to read. A textbox may be placed on the right to highlight information e.g. a thinking question.
- **Avoid clutter.** A headline, basic text information, and one or two images that help to illustrate the teaching point will be sufficient. Use bullet points for text information and keep to 8 lines or less.
- **Use good quality images.** Graphics should be large and sharp, and charts and graphs should be readable.
- **Minimize the use of animation effects**, e.g. fly-ins, swipes, swirls as they may distract learners.

## 2. Engaging Learners in a Large Group

### Presentation Style

Interesting content and well-designed visuals alone are not sufficient to maintain learners' attention. Good presentation style is equally important in engaging and motivating learners. Appropriate use of voice and body language can complement verbal explanation and enhance the delivery of learning points. Be positive about your presentation as your enthusiasm can influence learners and motivate them to learn. Here are some tips on presentation style.

#### Body Language

- Maintain eye contact with learners.
- Use suitable gestures to emphasize a point.
- Avoid distracting gestures like fiddling with your accessories.

#### Voice

- Speak clearly and use pauses to give learners some time to think about what you said.
- Vary your tone and volume for emphasis.
- Avoid reading out the slides and talking to the screen.
- Avoid over-using vocalized pauses e.g. 'okay'.

#### Other Tips

- Practice and time your presentation. Fit the material into the given time.
- Monitor your learners' response, both verbal and non-verbal, and adjust your teaching accordingly.
- Use 'signposts' to indicate changes in topic and important points e.g. 'So the main point is...'
- Add some humour that is appropriate and acceptable to learners.

### Active Learning Strategies

Active learning involves engaging learners in activities that require them to **think** about what they have learnt.

Keep activities short, to less than **3 minutes**.

Learner attention span lasts about **15 minutes**, so try to use a strategy every **15-20 minutes**.

#### Opening Question

- Start lecture with an 'opening question' and give learners a short while to think.
- Learners can make connections between prior knowledge and new content.

#### Brainstorming

- Ask learners to brainstorm on what they know, and what they want to learn about the topic.
- Ask them to share their thoughts.

#### Think-Pair-Share

- Learners work individually, and then share with their partner.
- Do this at transition points to allow learners to reflect on learning before you move on to new materials.

#### Case Studies

- Use recent case studies, preferably in contexts that learners can relate to, so that they can link lecture materials to real-life situations.

#### Peer Instruction using Audience Response System (Clickers)\*

Adapted from Deal (2007)

- Ask challenging conceptual questions in multiple choice or true/false format.
- Learners use clickers to select their responses, which are shown on a slide.
- Ask learners to discuss the question with their partners, and select a response again.
- Clickers can also be used in pre- and post-tests to check understanding.

\*Contact AM•EI for the use of clickers.

#### 60 Seconds Buzz

- Get learners to discuss a question with their partner for 60 seconds.
- Ask them to share ideas later.

#### 3-2-1 Format

- Ask learners to share in pairs:
  - 3 ideas/issues presented,
  - 2 examples/uses of the ideas,
  - 1 question/area of confusion.

Adapted from London Deanery (2012)

# 3. Evaluating Teaching

## AM•EI Evaluation Form

Receiving feedback on your session can give you useful insight into its effectiveness. AM•EI uses the program evaluation form below to solicit feedback from your learners and the consolidated feedback will be sent to you.

### AM•EI Program Evaluation Form



Thank you for your participation in the program. Please take a moment to give us your feedback. Your input will help us improve future programs to meet your needs better.

**Educational Event:**

Name (optional):

Email (optional):

From a scale of 1 - 5 (with 1 being *Strongly Disagree* and 5 being *Strongly Agree*), please **SHADE FULLY** the response that best reflects your assessment of the areas applicable to this program

PROGRAM CONTENT	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
1. The content was relevant to my work.	<input type="radio"/>				
2. The content was appropriate for my current level of understanding.	<input type="radio"/>				
3. The scope covered was adequate for time allocated.	<input type="radio"/>				
4. The materials (articles, slides, hand-outs, etc.) support my learning.	<input type="radio"/>				

PROGRAM LEARNING	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
<b>Individual Learning</b>					
1. I gained new knowledge/skills from this program.	<input type="radio"/>				
2. I can apply these knowledge/skills directly to my work.	<input type="radio"/>				
3. The knowledge/skills gained will have a direct impact on others (learners, colleagues, patients)	<input type="radio"/>				
<b>Educator Effectiveness</b>					
1. _____'s learning objectives were clear for event.	<input type="radio"/>				
2. The educator engaged me in active learning.	<input type="radio"/>				
3. The educator communicated effectively.	<input type="radio"/>				

OVERALL ASSESSMENT	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
1. I enjoyed this course.	<input type="radio"/>				
2. I would recommend this course to others.	<input type="radio"/>				

## AM•EI Program Evaluation Form

Thank you for your participation in the program. Please take a moment to give us your feedback. Your input will help us improve future programs to meet your needs better.



### PROGRAM LEARNING

New things I learned include...

I will apply this learning to my work by...

### OVERALL ASSESSMENT

I liked...

I think it could be improved by...

## 4. References

Bloom B.S. (1956). Taxonomy of educational objectives, handbook I: Cognitive domain. New York: Longmans, Green.

Brown G. and Manogue M. (2001). Refreshing lecturing: a guide for lecturers. *Medical Teacher*, 23(3), 231-244.

Cantillon P. (2003). Teaching large groups. *BMJ*, 326, 437-440.

Center for Teaching and Learning, University of Minnesota. (2008). Some Basic Active Learning Strategies. Retrieved from <http://www1.umn.edu/ohr/teachlearn/tutorials/active/strategies/index.html>

Deal A. (2007). Classroom Response Systems. Retrieved from [http://www.cmu.edu/teaching/resources/PublicationsArchives/StudiesWhitepapers/ClassroomResponse\\_Nov07.pdf](http://www.cmu.edu/teaching/resources/PublicationsArchives/StudiesWhitepapers/ClassroomResponse_Nov07.pdf)

Heinich R., Molenda M., Russell J. and Smaldino S.(2002). Instructional Media and Technologies for Learning. Englewood Cliffs: Prentice Hall, Inc.

London Deanery. (2012). How to encourage active learning. Retrieved from <http://www.faculty.londondeanery.ac.uk/e-learning/improve-your-lecturing/how-to-encourage-active-learning>

Clemson University (2014). Bloom's taxonomy of action verbs. Retrieved from <http://www.clemson.edu/assessment/assessmentpractices/referencemat/erials/documents/Blooms%20Taxonomy%20Action%20Verbs.pdf>

Tarpley M.J. and Tarpley J.L. (2008). The Basics of PowerPoint and Public Speaking in Medical Education. *Journal of Surgical Education*, 65(2), 129-132.



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

### Acknowledgements

#### Instructional Design & Development

Centre for Resident and Faculty Development (CRAFD)

Instructional Design Section

#### Content Review

AM•EI Professional Development Committee