

Strategies for Effective (and Active) Large Group Learning



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Disclosures

We have nothing to disclose

We hope to practice what we teach
and that you learn from our mistakes

There might be technical difficulties

Objectives

By the end of this webinar, you will be able to describe strategies for:

1. Engaging learners in active learning
 - asking good questions and using Slido, a platform to add interactivity
2. Optimizing PowerPoint presentations
3. Optimizing the Learning Environment
 - bringing cultural humility to your teaching practice

Outline

1. Strategies for teaching large groups
 - Planning (before)
 - Engaging (during)
 - Reflecting (after)
2. Optimizing the Learning Environment
3. Sharing strategies, successes and challenges

Use Slido – Multiple Choice Questions

Have you taught a large group lecture?

- A) No. This is my first time
- B) Yes. Just once or twice
- C) Yes. Many times

Use Slido – Free Text

What would you like to get out of this session?



Artwork by Katerina Mertikas

Use Slido – Word Cloud

**Describe the best lecture you've ever attended
in one word**

Use Slido – Ranking

Reflecting on your lectures, which of the following would you change?

- Make the lecture shorter
- Make the level more appropriate
- Add more pauses to check for understanding
- Incorporate more interactivity
- Add more summary slides

Planning (before your lecture)

- ❑ Introduce yourself and **orient** students to the topic and its place in the course
- ❑ Disclose any **conflict of interest** and how you manage the conflict (if any)
- ❑ Highlight what students are expected to learn by the end of the lecture by including course **objectives**
- ❑ Introduce the topic - start with a **case** or foundational science
- ❑ Consider using a **“familiar to unfamiliar” progression** to establish a context for new material

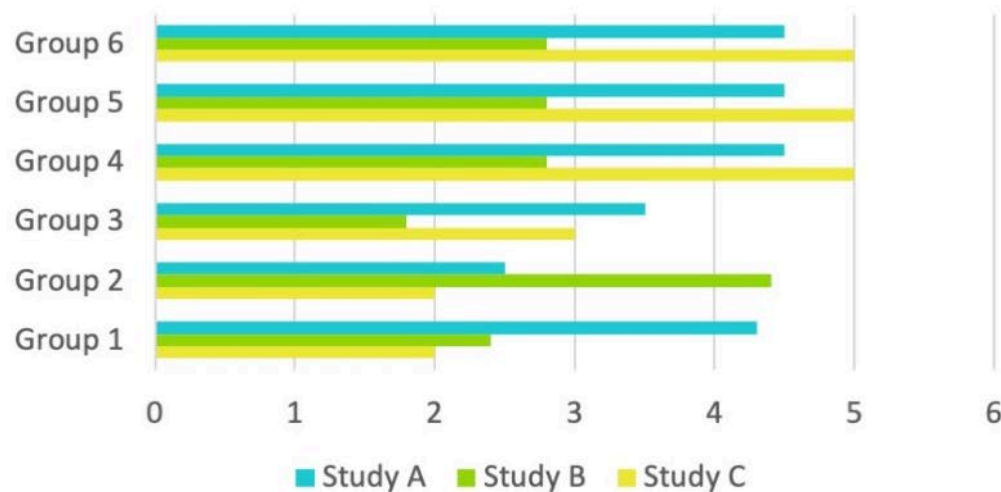
Planning (before your lecture)

- ❑ **LESS IS MORE!** Consider pacing and density of content, being mindful not to overwhelm students.
- ❑ **Change things up** every 10-15 minutes:
 - ❑ 'sum up'
 - ❑ pause for questions
 - ❑ incorporate an active learning exercise
- ❑ Use electronic **handouts** - ensure there is room to take notes or "fill in" content, rather than including everything
- ❑ Use slides effectively – see primer on "**Effective Powerpoint Presentations**"

What is Wrong with this Slide?

This is a Bad Slide

Important Information



Important Data Here, Too!				
Text	So	Small	Who Can	Read It?
55 mg	88 mg	$P \leq .0001$	45 mg	< 65
32 mg	< 1 mg	$P \leq .0001$	33 mg	< 21
44 mg	23 mg	$P \leq .0001$	4 mg	> 2
1 mg	22 mg	$P \leq .0001$	> 12 mg	≥ 12
2 mg	1 mg	$P \leq .0001$	30 mg	< 88

- This text is so important too!
- No, it's not, it's unnecessary
 - You're going to say this
 - So, why is it on the slide?
- Where the heck am I supposed to be looking on this slide? What is the main point here?
- The text is too small and I can't read anything in the figures. What does the Yellow bar stand for? And the blue one? I'm so confused.
 - If you have full sentences on slides that you are presenting, then your script is on your slide. That's a problem.
 - How many bullets and figures can we fit on this one slide? Hmmm, let's see. Maybe two more?
- If you make people work too hard, they get frustrated. That's not what you want when you need them on your side.

1. Wheeler T, Watkins PJ. Cardiac denervation in diabetes. *BMJ*. 1973 Dec 8; 4: 584-586.
2. O'Keefe M, Coat S. Consulting parents on childhood obesity and implications for medical student learning. *J Paediatr Child Health*. 2009 Sep 14; 45(10): 573-576.



Optimizing your PowerPoint Slides (see handout)

- Develop a logical flow for the material, considering the topic, learning goals and objectives
- Use sound and video only for educational purposes
- Provide relevant 'learning cues'
- Select a standard sans serif font,
- *Size Headings: 42 point Main text: 36 point*
- Choose predominantly lower case letters

Optimizing your PowerPoint Slides (see handout)

- The rule of six
- Use the Build Feature
- Pictures are remembered better than word
- Pictures and art should enhance presentation message (not provide a distraction)
- If an item can be removed without compromising the message, then minimize or remove it

Optimizing your PowerPoint Slides (see handout)

What Makes Messages Stick?

- Simplicity – stick to the key point
- Unexpectedness – ask questions that expose gaps in knowledge
- Concreteness – give real examples
- Credibility – support your claims
- Emotions – use vivid images and tell stories
- Stories – great presentations tell a story

Insert video

(If using zoom, Share sound and Optimize for video clip)

The screenshot displays a video sharing interface. On the left, a red 'Share' button is visible. Below it, a 'Symbol' menu is open, showing options: 'Movie Browser...', 'Movie from File...', and 'Online Movie...'. The main area shows four sharing options: 'Desktop 1' (selected), 'Whiteboard', 'iPhone/iPad via AirPlay', and 'iPhone/iPad via Cable'. A tooltip at the bottom indicates 'Hold Shift to select multiple windows'. At the bottom, there are two checked checkboxes: 'Share sound' and 'Optimize for video clip', and a 'Share' button.

Basic Advanced

Desktop 1

Whiteboard

iPhone/iPad via AirPlay

iPhone/iPad via Cable

Microsoft PowerPoint - Tips for eff...

Hold **⇧** Shift to select multiple windows

Share sound Optimize for video clip

Share



Family Feud - Re-Created by Lora O'Neill 4/28/2008
Music and graphics from original game file authored by Kerry Rasmussen

What are the
TOP 10 TIPS
to
ENGAGING LEARNERS through
ACTIVE LEARNING?

FAMILY FEUD

Be enthusiastic

Ask good questions

Use cases

Incorporate pauses

Use small groups

Add summary slides

Use polls/slido

Flipped classroom

Use games

Psychological Safety



Using a Case

- Select a case that is inclusive and resonates with the learners
 - reflects learner and patient identities, and cultural diversity
 - use a multipart case
- Think about questions you would ask ahead of time
- Debrief

Asking Good Questions

- Encourage active learning and productive struggle
- Promote cognitive integration
- Use contextual variation

Encouraging Productive Struggle

- Engage students in **guided discovery** and ask probing questions that encourage problem solving and **understanding**, instead of providing direct instruction
- Maximize **learning in the longer term** versus of performance in the shorter term

Promoting Cognitive Integration

- Cognitive Integration involves looking at **basic and clinical sciences** in an integrated and causal way
- Encourage students to **make connections** to the patient case, and guide them in understanding how basic science applies to clinical situations

Practical strategies on how to promote cognitive integration:

[https://ofd.med.utoronto.ca/sites/default/files/assets/resource/document/18_CBL%20Cognitive Integration %20Questions.pdf](https://ofd.med.utoronto.ca/sites/default/files/assets/resource/document/18_CBL%20Cognitive%20Integration%20Questions.pdf)

Using Contextual Variation

- Learners are exposed to the same concept in different contexts
- Ask, "What if..."

Practical strategies on how to use meaningful contextual variation:

https://meded.temertymedicine.utoronto.ca/sites/default/files/assets/resource/document/18_Adventures_in_Teaching_Contextual_Variation.pdf

Managing Questions and Answers

- Acknowledge both campuses
 - Students take turns asking questions by tapping on/off their mics in a queue
 - There are 2 separate queues – one for each campus
- May leave questions for the end to reduce complexity
 - ensure there is enough time at the end
 - pause to address any confusion
 - ask students to label questions as “curious” or “confused”

Optimizing the Learning Environment

A psychologically safe environment is one where learners feel comfortable **asking questions, taking risks, making mistakes, and asking for help**. They feel **respected**, and their efforts and skills are **valued**.

It involves:

1. **setting the stage**
2. **inviting participation**
3. **responding productively**

Edmondson A (1999). Psychological Safety and Learning Behavior in Work Teams. Administrative Science Quarterly, Vol. 44, No. 2 (June 1999), pp. 350-383

Edmondson A. (2019). The fearless organization. John Wiley and Sons Inc. Hoboken, New Jersey.

Setting the Stage in Cultural Humility

Cultural humility involves humbly
acknowledging oneself as a learner
when it comes to
understanding another's experience

Language Matters

Language is constantly **evolving**
and matters as it has the **power**
to be **oppressive, exclude, dismiss** or
to **empower, include, and uplift.**

Office of Faculty Development and colleagues, *Language Matters (in development)*

Being Trauma Informed

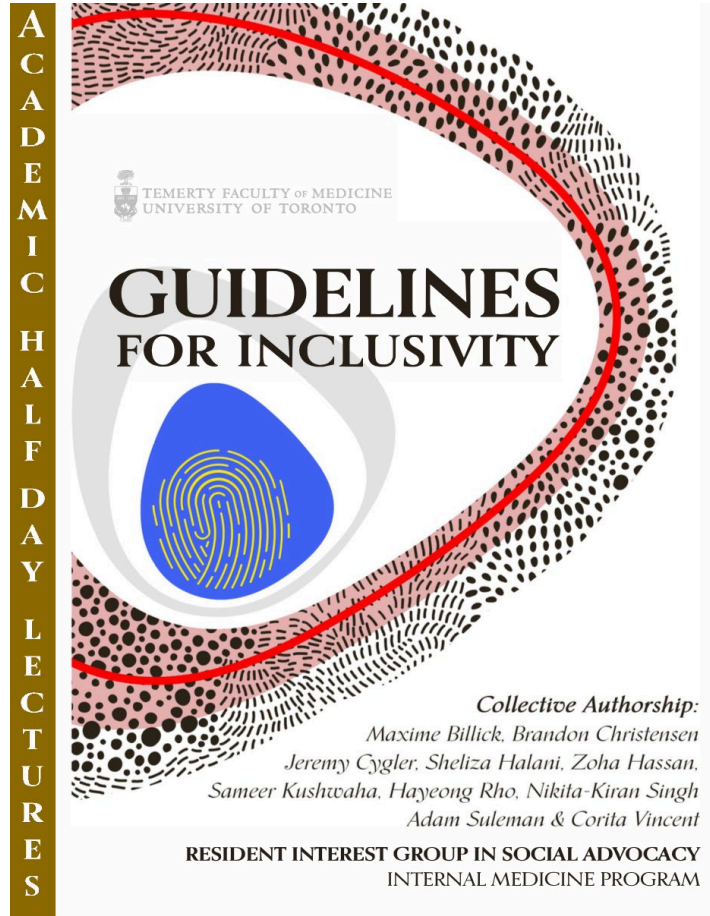
- Trauma is ubiquitous and affects learning
- Students enter medical school with trauma and accumulate more

Inviting Participation through Dialogue

A Comparison of the Characteristics of Discussions and Dialogues

Characteristic	Discussions	Dialogues
Approach	Chiefly cognitive	Cognitive, affective, experiential
Intent	To introduce and defend one's opinions	To explore thoughts, perspectives, feelings
Emphasis on	Objectivity	Subjectivity and intersubjective interactions and relationships
Authority	Preserved	Shared or suspended
Method	Persuasive and instrumental—to convince others of one's views	Exploratory—to illuminate different perspectives, experiences
Requirements for interlocutors	Technical, scientific background and knowledge	One's whole self—values, worldviews, life experiences
Goal	To arrive at a solution, a consensus	To generate new questions, possibilities

CREATING AN INCLUSIVE LEARNING ENVIRONMENT



DO'S

Recognize not all identities of patients or students are visible or known (Iceberg of Identities).

Recognize that most people are not experts on any experiences beyond their own and are not capable of speaking for their entire group (or others) for which they identify.

Work to create a safe space for all identities.

DON'TS

Don't assume an identity group being discussed is not represented in the room.

Don't assume a member of group can or is willing to speak on the group's behalf.

Don't lock eyes with a student who you think represents a group you are discussing. This action assumes their identities and opinions, potentially "outs" them, and puts them on the spot.

Responding in Unsafe Situations

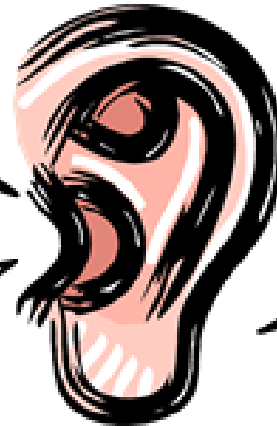
Depending on the context, call people IN vs calling them OUT

- **Acknowledge that some language and behavior is not appropriate and clearly offensive**
 - *I.e. Racial slurs, any form of humiliation or harassment, etc.*
 - *“We began by prioritizing safety, what was just said is offensive and threatens safety.”*
- **RESPOND with humility**
 - *“I recently learned that....” or “It was brought to my attention...”*

How to Respond as an Ally

“Thank you. I really learned something today. I had no idea how that came out. What you said has helped me understand it better.”

“I didn’t realize what I said was discriminatory or offensive. Thank you for letting me know.”

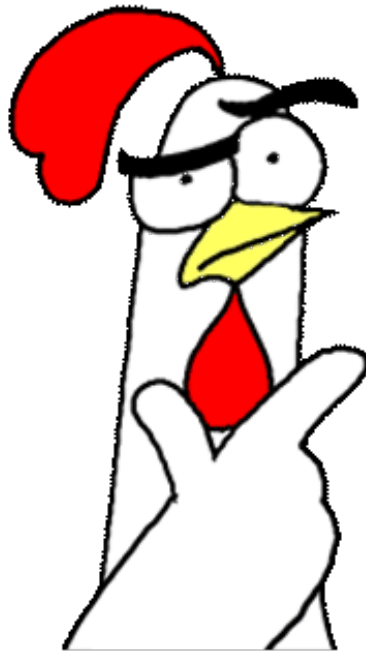


“Thank you for speaking up. I know it may not have been easy. I didn’t intend to sound like that and had no idea that’s how I came across. I’ll be more careful in future.”

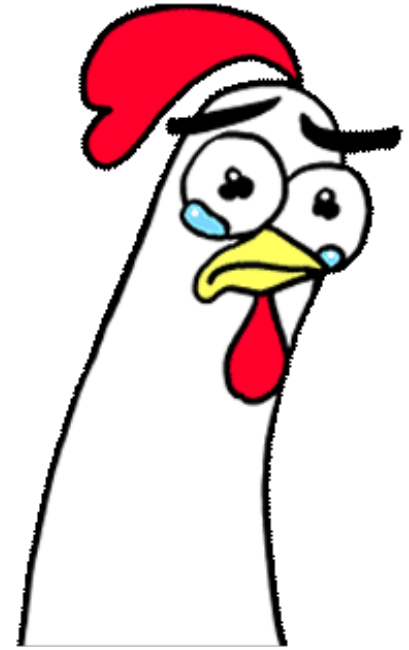
This slide is based on teaching materials from the Human Rights & Health Equity Office at Mount Sinai Hospital



1



2



3

Let's do a “chicken check-in!”

How are you feeling about the content so far?

Reflecting (after your lecture)

- What went well?
- What didn't go so well?
- What will you do differently next time?
- Make edits to your plan or slides right after
- Share your feedback
- If something worked well (or didn't), approach your week lead or course director

Frequently Asked Questions

How can I create an equitable, diverse, and inclusive environment?

- Ensure the content, photos and the language used are diverse, inclusive, and appropriate
- Ask a colleague to review your content ahead of time
- Refer to:
 - Queen's University Style Guide: Equity, Diversity and Inclusion <https://healthsci.queensu.ca/academics/edi/style-guide>
 - CAMH Health Equity and Inclusion Framework for Education and Training <https://www.eenet.ca/resource/health-equity-and-inclusion-framework-education-and-training>
 - Misrepresenting Race — The Role of Medical Schools in Propagating Physician Bias NEJM <https://www.nejm.org/doi/full/10.1056/NEJMms2025768>

FAQ: How long should my presentation be?

- Start on the hour
- Aim for max 45 slides or 45 mins of content
- Leave room for questions at the end

FAQs: Slides

When do I have to hand in my slides?

- **5 business days prior** to your lecture

Is there a slide template?

- Yes, you will receive an e-mail with the template

How do I get/use slido?

- MedIT (formerly known as DC) has your back



FAQs: Tech Support

Is technical support available?

- MedIT will provide preparatory and live support during the lecture
- Is there a MedIT hotline?
 - No, complete your ***Airtable*** form to let MedIT know what support you'll need
 - MEdIT will be on site and listening
- Is there a MedIT website?
 - <https://medit.med.utoronto.ca/support-md-program>

Other Questions?

Suggestions from Students - Do

- Make confusing concepts clear, be organized
- Use memory aids
- Bring in relevant visuals, videos
- Make the session interactive (i.e. ask questions, use polls)
- Apply concepts to real life situations (i.e. include a story or case)
- Emphasize objectives, what is most relevant
- Include summary slides highlighting key messages, sign posting
- Start and finish on time
- Show enthusiasm

Suggestions from Students – Don't

- **Don't speak too fast**/rush through material when running out of time
- Don't include too much information (on each slide/in general)
- Don't include outdated slides or slides different from those submitted prior to the lecture
- Don't forget about the students on video
- Don't use humor inappropriately
- Don't walk away from the podium/mic (this is from MedIT)

Invite Students to Evaluate the Session, and Review Why it is Important

Please Evaluate this Session Now

Your feedback is valuable to the MD Program and to your teachers as we strive to continually improve your learning experience. Thank you.

Desktop

<http://medsis.utoronto.ca/>

Mobile

<http://medsis.utoronto.ca/mobile>

Or point your camera to:



Sharing Challenges, Successes and Strategies

Three Key Questions to ask yourself by Jay Keystone:

1. Is the level of my talk appropriate to THIS audience?
 - Have I put in too much information?
2. Have I kept my audience engaged?
 - Have I motivated my audience to listen and learn? Will it stick?
3. Have I summarized my key points?

Thank you!

(And please evaluate our session)

Questions?

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Resources

Edmondson, Amy. Psychological Safety and Learning Behaviour in Work Team, 1999
http://web.mit.edu/curhan/www/docs/Articles/15341_Readings/Group_Performance/Edmondson%20Psychological%20safety.pdf

Holzi J. Twelve tips for effective PowerPoint presentations for the technologically challenged. *Med Teach*. 1997;19(3): 175-179.

Reynolds G. *presentationzen: Simple Ideas on Presentation Design and Delivery, Second Edition*. Berkeley, California: New Riders, 2012.

Schiano, Bill and Anderson Anderson. "Teaching with Cases Online." Harvard Business Publishing. May 25, 2017. https://s3.amazonaws.com/he-product-images/docs/Article_Teaching_With_Cases_Online.pdf