Moving Beyond the Essentials for Teaching CBL

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Disclosures

- None
- There might be technical difficulties

Setting the Stage

- It is critical to keep in mind that we are all learning and may say the wrong thing
- If you use or hear a term that feels inappropriate, acknowledge it, and welcome and offer feedback in a non-defensive manner
- Show kindness, respect, and compassion for our patients, teachers, students and ourselves as we respond to a mistake, both in professional and personal practice
- *We welcome your feedback!*

Objectives

By the end of the session you will be able to:

- Describe and reflect on your experience as a CBL tutor
- Add to your repertoire of teaching techniques to facilitate learning and discussion in CBL
- Share strategies, successes and challenges around facilitating CBL

Outline

- Introduction and Icebreakers
- Strategies to Guide Your CBL
- Case review: 5 Pitfalls that can Disrupt your CBL Environment
- Sharing Strategies, Successes, and Challenges

Introductions:
What do you do for Icebreakers?

Artwork by Katerina Mertikas

Raise Your Virtual Hand

Have you facilitated a CBL session?

a) No, this is my first time
b) Yes, for the last 1-3 years
c) Yes, for the last 3-5 years
d) Yes, for over 5 years

Raise Your Virtual Hand

Have you participated in a CBL faculty development session?

a) No, this is my first time
b) Yes, I attended part 1 of this series
c) No, but I watched the recording of part 1

Let’s Chat or Use the Chat!

What are you hoping to get out of this session?

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What is CBL?

- Involves the use of learning activities based on patient cases
- Basic, social, and clinical sciences are studied in relation to the case, are integrated with clinical presentations and conditions
- Learning is associated with real-life situations

Thistlethwaite JE, et. al. (2012) The effectiveness of case-based learning in health professions education: A BEME systematic review. Medical Teacher

TEMERTY FACULTY OF MEDICINE
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Student Evaluation of Tutor
Case-Based Learning (CBL) Tutoring Skills

The MD Program takes evaluation of teachers seriously and relies on student feedback to continually improve the curriculum. Providing honest, objective and constructive feedback is a key professional obligation of learners. Please use the following form to evaluate the tutoring skills of your teacher.

Disclosing Mistreatment
If you have experienced or witnessed student mistreatment or a major incident of unprofessionalism in the MD Program learning environment or the MD Program community, please use the following link to learn more about our supports and resources (including a confidential online tool designed to allow medical students at the University of Toronto to report such events): https://md.utoronto.ca/student-mistreatment

What was the duration of your encounter with this teacher?

- ○ I had no contact with this teacher
- ◉ 1-3 sessions
- ○ 4-7 sessions
- ○ 8 or more sessions

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
The tutor supported us in exploring basic science concepts	○	○	○	○	○	○
The tutor supported us in exploring psychosocial concepts	○	○	○	○	○	○
The tutor supported us in making connections between basic science and clinical concepts	○	○	○	○	○	○
The tutor supported our understanding and reasoning process	○	○	○	○	○	○
The tutor supported a safe and inclusive learning environment (e.g., non-threatening, supportive, encouraging)	○	○	○	○	○	○

	Unsatisfactory	Poor	Adequate	Good	Excellent	N/A
My overall assessment of this tutor is:	○	○	○	○	○	○

Please use this additional space to clarify or to make further comments (especially if you have selected a rating of

Encourage Active Learning and 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

https://meded.temertymedicine.utoronto.ca/sites/default/files/assets/resource/document/18_Guided_%20Learning_in_CBL_Revised14Aug18.pdf

Kapur (2014) Examining Productive Failure, Productive Success, Unproductive Failure, and Unproductive Success in Learning, *Educ Psychologist*

Promote 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

For practical strategies on how to promote it, see:

https://meded.temertymedicine.utoronto.ca/sites/default/files/assets/resource/document/18_CBL_%20Cognitive_Integration_%20Questions.pdf

Use Contextual Variation

Learners are exposed to the **same concept** in **different contexts**

Ask, “what if…

For practical strategies on how to use meaningful contextual variation, see:

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

Learner Environment

- We must create psychologically safe environments
- A psychologically safe environment is one where learners feel comfortable asking questions, taking risks, making mistakes, and asking for help. They feel respected, and that their efforts and skills are valued (Edmonson, 1999).
- A supportive and safe environment MUST be created to allow students to feel comfortable participating. Encourage critical thinking while validating student responses, gently correcting misconceptions, and avoiding shaming.

Optimal Relationship between Psychological Safety and Performance Standard

Environment	Low performance standard	High performance standard
High psychological safety	Comfort zone	Learning high performance zone
Low psychological safety	Apathy zone	Anxiety zone

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

Destigmatize Failure

Identify and clarify any misconceptions, both from the verbal answers shared in the group session and the written responses you have reviewed.

Value the incorrect answer

- highlight part of answer that is correct or when it might be right
- use it to get to the correct answer
- thank students for raising common misconceptions

Don’t – Shame student or disregard the incorrect answer

Be Trauma Informed

- Trauma is ubiquitous and affects learning
- Students enter medical school with trauma and accumulate more
- 64% of students had been mistreated by faculty

(Brown et al. *Acad Med*, 2021)

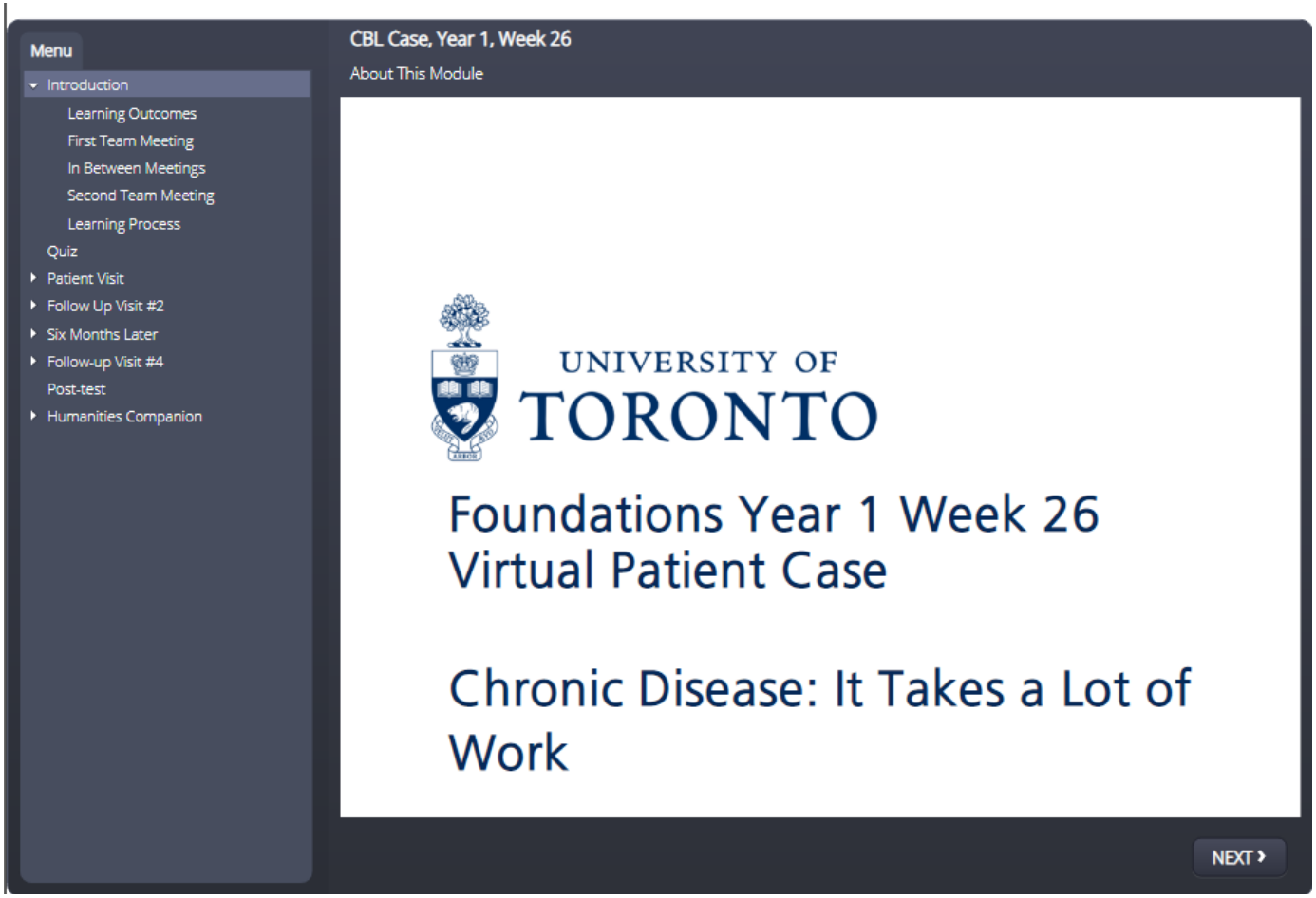
Outline

- Introduction and Icebreakers
- Strategies to Guide Your CBL
- Case review: Five Pitfalls that can Disrupt your CBL Environment
- Sharing Strategies, Successes, and Challenges

Five Faculty Pitfalls that can Disrupt the Learning Environment

1. Lack of preparation and enthusiasm
2. Not setting the stage for open and respectful group discussion
3. Inappropriately responding to a partially correct or incorrect answer
4. Overlooking topics outside our scope of expertise
5. Failing to acknowledge uncomfortable situations

Case scenario: You are a CBL tutor…



Case Synopsis

- This case explores type 2 diabetes and emphasizes the principles of chronic disease management.
- The diagnosis and management of type 2 diabetes, with a particular focus on preventing the microvascular and macrovascular complications of the disease is important for students to learn.
- The case also explores some of the unique issues and social determinants of health relevant to Indigenous Peoples.

Case Synopsis

- The case does NOT address some of the unique issues in managing type 1 diabetes; rather, this content is covered in the pre-week learning, lectures, self-learning module on diabetic ketoacidosis (often the inciting event of type 1 diabetes) and via a patient roundtable discussion on type 1 diabetes.
- **Background:** Students will have had a lecture on the pharmacology of the various drugs prescribed in the management of type 2 diabetes as well as on the microvascular and macrovascular complications of the disease prior to your Thursday CBL review session.

Scenario: Getting ready for CBL…

- You have done CBL and other MD program small group teaching sessions many times in the past, but this is the first time you are facilitating this particular case…
- It's a busy week (clinically and personally) and you figure given your knowledge of diabetes, you will be able to navigate the contents of the case and the discussion on the go…

Pitfall #1: Lack of preparation and enthusiasm

- We are all busy!
- …but try not to “wing it”
- Even 30 minutes of pre-case review can allow you to frame the questions within the weeks’ content
- Students notice and appreciate your preparation!

What can you do to give your session the WOW! factor?

- Review the dialogue in the CBL case itself…
  - Share highlights with the students
  - Ask “why” is question X asked?
- Incorporate content from the students’ lectures, pre-week and/or mid-week modules into your session
- Review the students’ responses
  - Screen share!
- Use a board
  - Whiteboard, jamboard, flipchart paper, etc.
  - Ask students to label questions as “curious, confident, or confused”

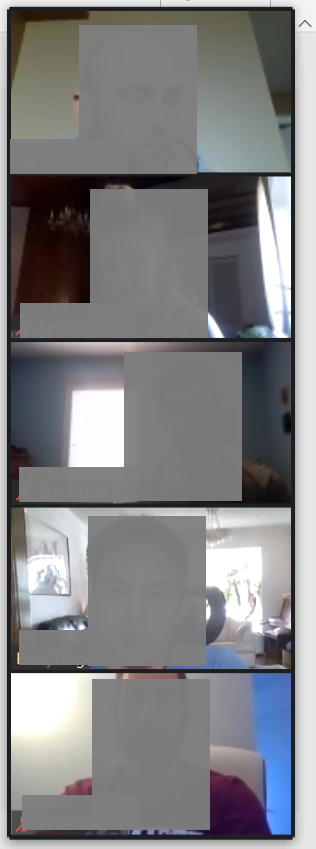
(Group) Q4. What are the two recommended tools for assessing 10-year fracture risk? How and why are they used?

CAROC (Canadian Association of Radiologists and Osteoporosis)

- Uses femoral neck T score and age to classify as low, moderate, or high risk of fracture
- There are separate charts for men and women
- Cannot use this tool if an individual is under 50 or over 85
- The patient is moved to the next risk category is they have had a fragility fracture after the age of 40 or have a history of prolonged corticosteroid use
- If the patient has a T score of less than -2.5 at any site, the patient is automatically at moderate risk
- If the patient has experienced a prior hip or vertebral fragility fracture or more than 1 non-vertebral fragility fracture, they are automatically at high risk
- At low risk, pharmacologic therapy is not indicated
- At moderate risk, risks/benefits should be discussed with patient and consider other reasons to initiate therapy
- At high risk, the patient should be treated with pharmacologic therapy

FRAX (fracture risk assessment tool)

- Specific for Canada
- More accurate than CAROC, especially when individuals have 1+ risk factors for fracture
- The questionnaire includes: age, sex, weight, height, femoral neck T score



Back to the Scenario: Starting your session…

- You introduce yourself, a background on your clinical (and personal) interests, and start with an icebreaker to build rapport
- You jump right into the case…

Pitfall #2: Not setting the stage for open and respectful group discussion

- It is important to create guidelines for discussion
  - Cultural humility
  - Personal devices and engagement
  - Learning pronouns
  - Framing Question Asking and Turn Taking

Setting the Stage – Acknowledging Ourselves as Learners

- It is critical to keep in mind that we are all learning and may say the wrong thing
- If you use or hear a term that feels inappropriate, acknowledge it, and welcome and offer feedback in a non-defensive manner
- Show kindness, respect, and compassion for our patients, teachers, students and ourselves as we respond to a mistake, both in professional and personal practice
- *We welcome your feedback!*

Cultural Humility

- Involves humbly **acknowledging oneself as a learner** when it comes to understanding another's experience

Division of Family Practice. Cultural Safety and Humility. Divisions of Family Practice, An FPSC Initiative. Published 2017. Accessed January 18, 2023.

How to Learn Someone's Pronouns

- When you first meet someone, consider introducing yourself with your pronouns: "Hi, I'm _____, and my pronouns are she/her."
- By sharing your pronouns, you're allowing the other person to share theirs, but not forcing them to.
- Also, avoid saying "preferred" pronouns as it implies that gender is a preference.
- You may need to clarify with a student if the name introduced is not in your list for assessment and taking attendance. However, they should not have to justify why they use a different name

https://blog.hubspot.com/marketing/gender-neutral-pronouns

Personal Devices and Engagement

- Students should be actively contributing to the group learning experience…
- They should not be using computers or phones for activities unrelated to CBL
- They should turn off notifications to minimize distractions
- How will you be asking questions?

Framing Expectations around Questions During the Session

- “My goal is to create a safe and supportive learning environment”
- Turn taking: “I will be asking questions in the following manner”
  - The order of whom I see on my screen
  - Asking the group
  - Students nominate the next speaker
- “My intention is never to put you on the spot and it is completely okay to have an incorrect answer”
- Consider framing your own personal experiences!

Back to the Scenario: During your session…

- You have a student summarize the case of the week…
- You go through the answers from the week's questions and make an effort to foster discussion, incorporate the faculty guide responses, and your own clinical anecdotes
- You are disappointed when the students don't seem to have a grasp of the material

Pitfall #3: Inappropriately responding to a partially correct or incorrect answer

Strategies for Responding to Incorrect Answers

- How can we respond to and engage learners, help create and maintain psychologically safe environments (where learners feel comfortable making mistakes, asking for help and taking risks)?
- Consider your verbal and non-verbal cues…

Strategies for Responding to Incorrect Answers: Verbal

Verbal
Validate the student's response (and the parts that were correct)
Normalize - thank the student for sharing the incorrect response ("I'm so glad you said this, that is so common")
Encourage the student to think aloud (why, how) to see if they pick up the error, without shaming
Frame around yourself ("this is an area I struggled with")

-Tips for Creating and Maintaining an Inclusive Small Group Synchronous Learning Environment, MD Program Office of Faculty Development

Strategies for Responding to Incorrect Answers: Non-verbal

Non-Verbal
Eye contact
Tone of voice (hesitation)
Facial expressions
Posture

- Br J Gen Pract. 2010 Feb;60(571):83-7.
- Br J Gen Pract. 2010 Feb 1; 60(571): 76–78.

Back to the Scenario: Your response…

- You encourage students to answer questions and make a deliberate effort to validate student responses, normalize partially or incorrect answers, and gently encourage students to think out loud.
- You make a deliberate effort to be enthusiastic, and maintain a positive tone of voice even when disappointed with students' preparation.
- You find that participation has increased in the group and that there is a more collaborative discussion.
- You continue to work through the CBL case questions…

Pitfall #4: Overlooking topics outside our (usual) scope of expertise

- Many of us have a tendency to gravitate to the medical expert role…

Perusing the Questions in the CBL Case

Perusing the Questions in the CBL Case

What can you do to foster a fruitful discussion?

- Don’t overlook non-medical expert questions
- Acknowledge your gaps in knowledge if present
- Invite students to share their experiences, but don’t expect them to teach others based on their lived experiences
- Lean into discomfort while maintaining psychological safety
- Consider non-verbal cues
- Use the tutor guide

Back to the Scenario…

- You embark upon a discussion around providing care to First Nations patients and barriers to diabetes care as discussed in the tutor guide…
- A student in the group asks a question that you worry could make individuals in the group feel uncomfortable….
- *“Hey guys, I have a question. Are there even that many Native people in Toronto?”*

Pitfall #5: Failing to acknowledge unsafe situations

- Has this ever happened to you?
- What are you thinking/feeling?
- How might you respond?

Responding in Unsafe Situations

- **Acknowledge that some language and behavior is not appropriate and clearly offensive**
  - I.e. Racial slurs, any form of humiliation or harassment, etc.
- **Depending on the context, bring people IN vs calling them OUT**
  - *"We began by prioritizing safety, what was just said is offensive and threatens safety. Let's stop and talk about why it's offensive even if it wasn't meant to be…."*
  - *"Thank you for taking risks and speaking up, even if you're unsure of how to say it"*
- **RESPOND with humility**
  - "I recently learned that…." or "It was brought to my attention…"

- Ask yourself, **"Whose safety is being prioritized?"**

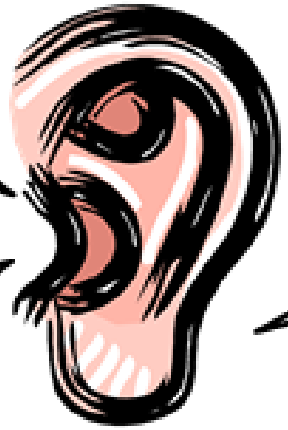
Graphic Recording by @jessamy_draws from www.criticalconversations.com event

https://www.ted.com/talks/loretta_j_ross_don_t_call_people_out_call_them_in

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."

"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."



"I didn't realize what I said was discriminatory or offensive. Thank you for letting me know."

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

Language matters

- The use of the term “Indian” or “Native” is generally not appropriate for a healthcare provider, but may be appropriate for the community to describe themselves
  - e.g. the Native Women’s Association of Canada uses the term Native, and many patients families might do the same

- Peer discussions with colleagues (cited with permission)

Language matters

- **Indigenous Peoples** is commonly used as a **collective term for all the original peoples of Canada** and their descendants. There are three distinct and diverse groups of Indigenous Peoples in Canada: First Nations, Métis, and Inuit
- **"Indigenous people"** with a lower case "people" refers to **more than one Indigenous person** rather than the collective group of Indigenous Peoples
- The term "Indigenous" is increasingly replacing the term "Aboriginal", as the former is recognized internationally, however, the term Aboriginal is still used and accepted

https://www.national.ca/en/perspectives/detail/no-perfect-answer-first-nations-aboriginal-indigenous/

ACADEMIC HALF DAY LECTURES

TEMERTY FACULTY OF MEDICINE
UNIVERSITY OF TORONTO

GUIDELINES FOR INCLUSIVITY

Collective Authorship:
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Sameer Kushwaha, Hayeong Rho, Nikita-Kiran Singh
Adam Suleman & Corita Vincent

RESIDENT INTEREST GROUP IN SOCIAL ADVOCACY
INTERNAL MEDICINE PROGRAM

CREATING AN INCLUSIVE LEARNING ENVIRONMENT

DO'S	DON'TS
Recognize not all identities of patients or students are visible or known (Iceberg of Identities).	Don't assume an identity group being discussed is not represented in the room.
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.	Don't assume a member of group can or is willing to speak on the group's behalf.
Work to create a safe space for all identities.	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.

Back to the Scenario…

- You consider that if you were not sure how to respond at the time, you might…
  - Debrief with colleagues
  - Reach out to your site lead or course director to connect you with resources and provide support
  - Follow-up with individuals in the group via email and/or direct discussions once you have spoken with colleagues and/or debriefed
  - Reflect

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Sharing Strategies, Successes, and Challenges

How's it going?

- What has been the greatest success?
    - How did you achieve that success?
- What has been the greatest challenge?
    - Strategies for addressing that challenge?

Professionalism

- Professionalism is a core competency and should be treated as such
- Most often learned through the informal curriculum (i.e. via observation)
- We must identify both exemplary behaviours and those that should be modified
- Assessments can be completed at any time, not just at the end of the rotation

Other Resources

- MD Program Office of Faculty Development
  https://meded.temertymedicine.utoronto.ca/cbl-tutors

- Centre for Faculty Development – offers a variety of workshops throughout the year
  https://centreforfacdev.ca/upcoming/

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Questions?

…or e-mail us

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Thank you!