

# Organizing a recitation section to promote student learning

Creating a plan for recitation

## **Goals for today:**

After this session, TAs should be able to...

1. Articulate and implement strategies for recitation organization that promote student learning

# Framework for recitation organization

- What is the goal of recitation?
- What material should you cover?
- How should the material be covered?

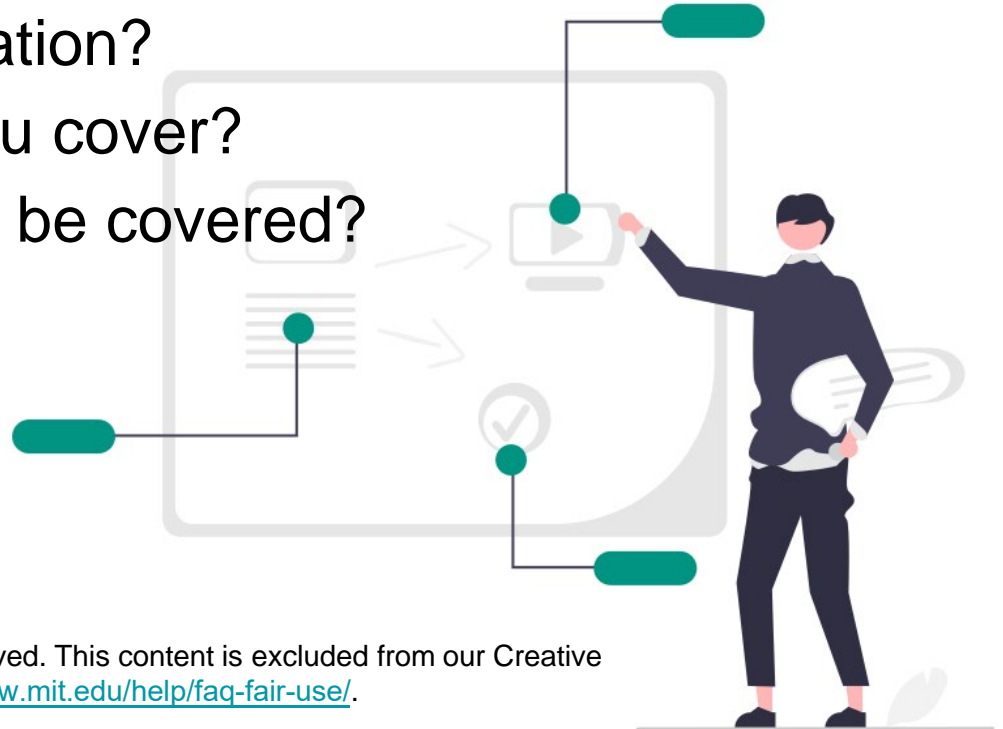
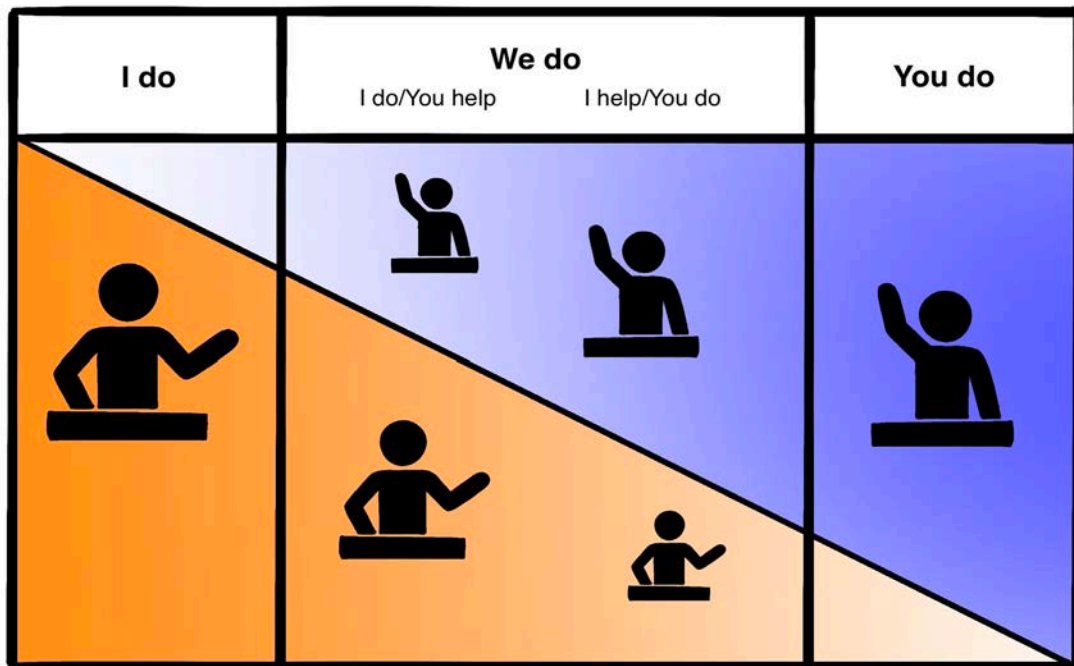


Image © Katerina Limpitsouni, [unDraw](https://unDraw.co/). All rights reserved. This content is excluded from our Creative Commons license. For more information, see <https://ocw.mit.edu/help/faq-fair-use/>.

# What is the goal of recitation?



“teaching as dialogue presumes that teachers listen and respond to their students’ perspectives... rather than talking at students”

Quote from: “Teaching as Dialogue: An Emerging Model of Culturally Responsive Online Pedagogy” -APRIL LAWRENCE **Journal of Online Learning Research** Volume 6, Number 1, May 2020.

© [Association for the Advancement of Computing in Education \(AACE\)](https://www.aace.org/). All rights reserved. This content is excluded from our Creative Commons license. For more information, see <https://ocw.mit.edu/help/faq-fair-use/>.

Figure by Alexander Braille, used with permission.

What does it look like for us to create a dialogue with our students?

# Teaching as dialogue - “we do”

<b>Ask open-ended questions</b>	Consider asking broad questions that have several possible responses
<b>Prompt deeper explanations</b>	“Why do you think that?” “Would you be willing to share how you got there?”
<b>Bring more folks into the discussion</b>	“What else do folks think might be going on?” “What are some other ways of approaching this question?”
<b>Acknowledge contributions</b>	Indicate student contribution holds value without asserting correctness. <ul style="list-style-type: none"><li>• repeat student contributions to emphasize part of a response</li><li>• ask for clarification</li><li>• summarize</li><li>• connect student ideas to specific concepts from class</li></ul>

# What material should be covered?



Identify difficult or important concepts



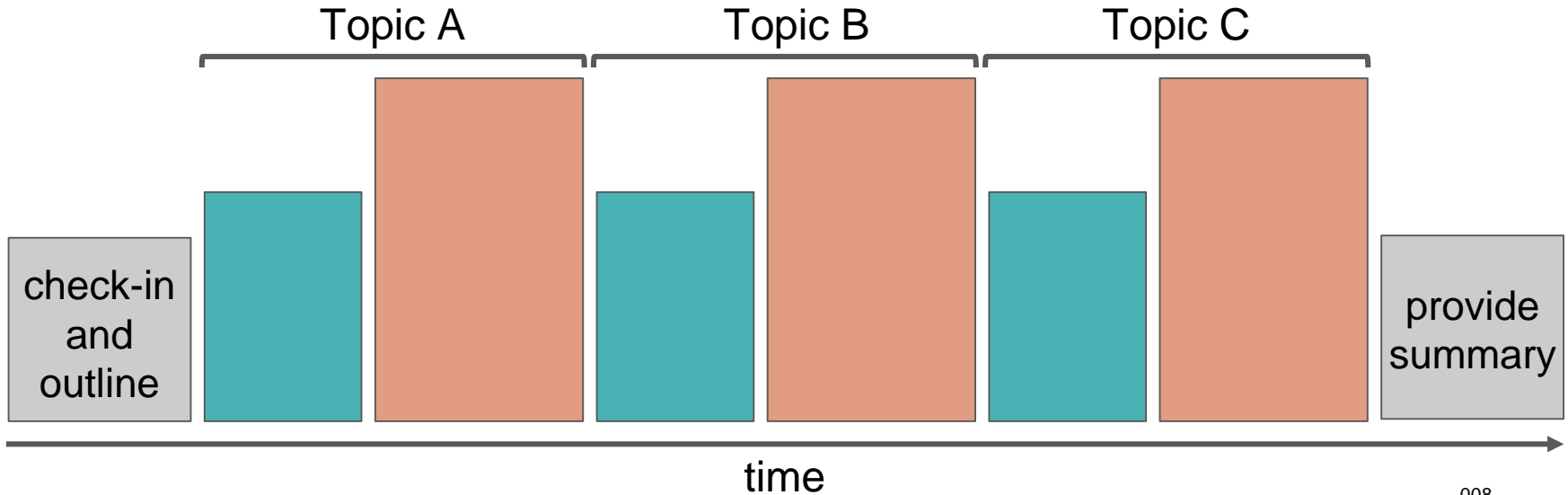
Prepare condensed review and relevant problems

**Take home message:** Think about what students will need to be able to **do** to succeed in their assignments, and plan recitation to give them practice!

# How should the material be covered?

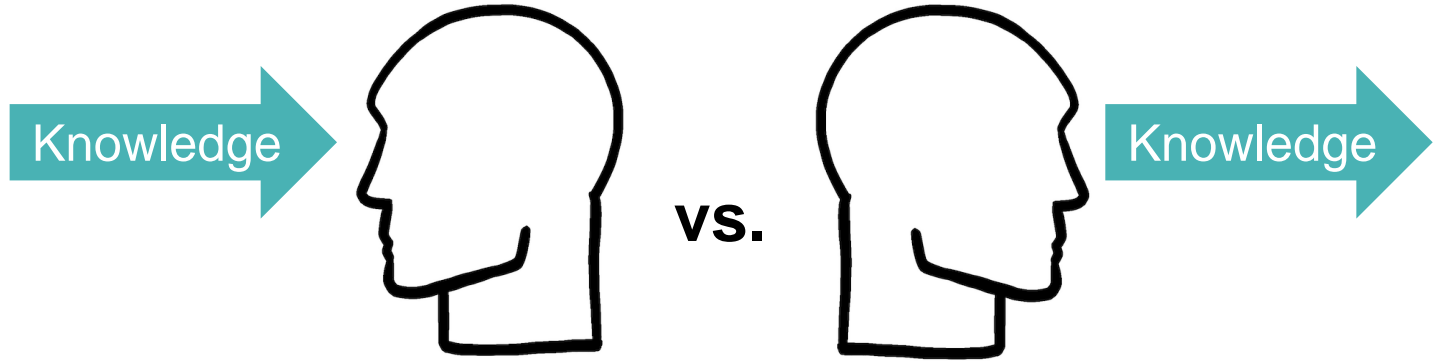
 Knowledge practice

 Skills practice





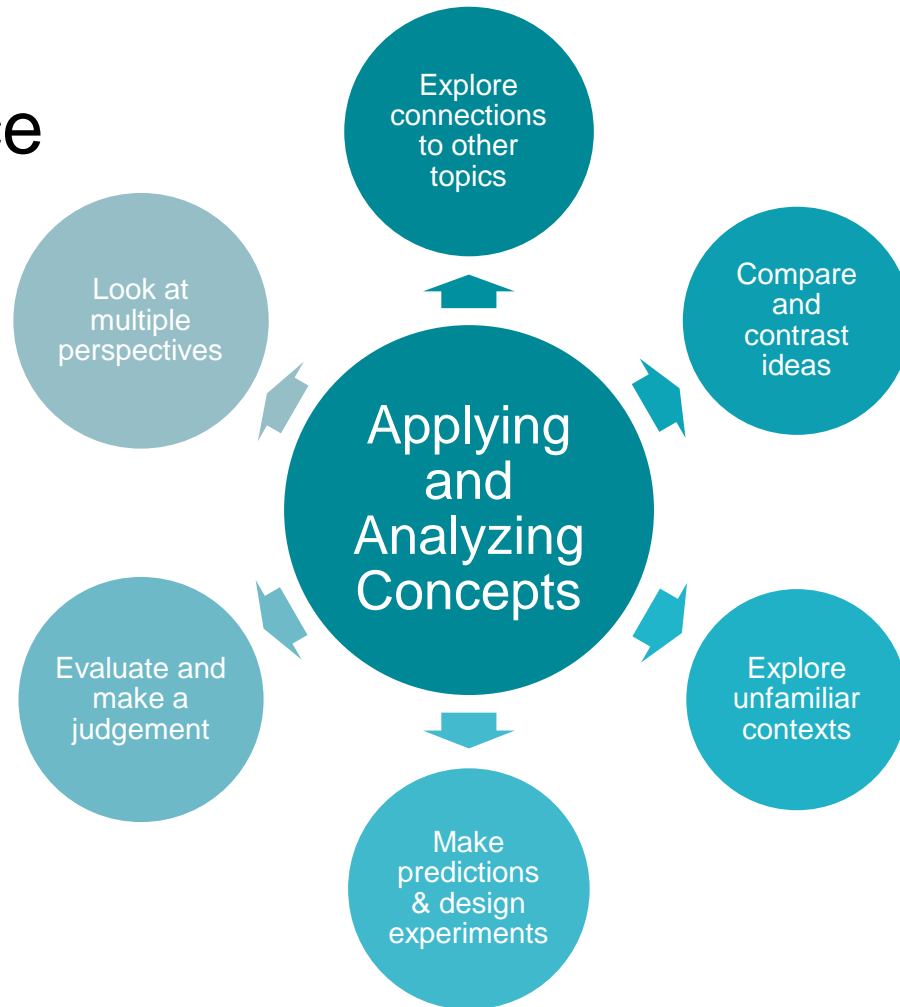
# Knowledge practice



Knowledge practice focuses on fact-based questions that...

- explore **terminology**
- encourage **recall**
- check **comprehension**

# Skills practice



# Breakout groups

## INTRO

## CORE/UPPER

## LAB

- **Slide 1** provides some example approaches to running your recitation or laboratory section.

*Think about which approach(es) appeal to you personally based on the context of your course.*

- **Slide 2** presents you with a scenario or question relevant to your recitation experience.

*Take a few minutes to brainstorm ideas individually and then discuss as a group. Use slide 1 as a resource.*

# Example approaches to guiding skills practice

(when you have a set of problems to work from)

- Break the question or problem down into parts
- Ask students how they interpret the question
- Ask students to describe how they would approach the question
- Model the skill or approach
- Provide an opportunity to reflect on the solution

# Let's practice!

Discuss what you can do to promote both knowledge and skills practice for students going through a question from your first recitation handout.

[Provide an example of a problem from an Introductory Course]

# Example approaches for skills practice

(when you're designing your own problems)

You don't need to design complex, exam-level questions to help students learn the skills needed to succeed on their assignments! Consider the following ideas:

- Students identify several possible approaches for a particular scenario or experimental question . Students can list the pros and cons for each, and/or rank them by preference.
- Ask what would happen if a particular component broke, or a step was skipped in a particular process.
- Create a table where students decide if a feature is PRESENT or ABSENT in a series of scenarios (applies or does not apply, does or does not occur, etc.).
- Practice using resources provided in class (tables, flow charts, etc.).
- Use graphs or other images from the literature to test the concepts that students need to learn.
- Partner with students in going through a past problem set or exam question (with faculty permission), focusing on the process of problem solving & breaking it down into parts.

# Let's practice!

Often, in a core or upper level course covering more advanced topics, it is our inclination to focus only on knowledge practice in recitation. The topics are complicated after all, and there is a lot to go over in each recitation! But if we want students to solve problems on a problem set or exam, **we have to practice this type of problem-based thinking with them.**

Choose one specific topic covered in your course.

1. What are the skills needed to understand or master this topic?
2. Write down a few ideas of how you could support **skills** practice for this topic.

Share ideas as a group.

# Example approaches to a laboratory section

**Knowledge practice** can help folks feel prepared to tackle the lab. To promote this TAs can:

- Review important concepts and sticking points in the lab
- Highlight key terminology

**Skills practice** is what labs are all about! To best facilitate lab skills TAs should:

- Monitor progress of laboratory experiments by walking around and asking questions
- Promote independence by providing guidance and feedback (not giving away answers!)

Note: Depending on the set of experiments to be performed (and the amount of down time), you may find that it is better to condense the review at the beginning. You should do whatever works best for the set up of the lab, with guidance of instructors.



# Laboratory Scenarios

You are walking around the lab and...

- a student approaches you saying they made a mistake in the protocol and they wonder how/if they can fix it.
- a student approaches you asking what step they should do next.
- a student approaches you asking if they got the correct result for a particular question in the lab assignment.

For each scenario, consider:

1. What skills are needed, or can be reinforced, in each scenario?
2. How can you help them practice these skills?

# Teaching tool: Lesson planning worksheet

<b>Check-in &amp; Outline</b>	<ul style="list-style-type: none"><li>• How will you check in with your students at the beginning of recitation?</li><li>• How will you communicate your goals for the day? Are there any announcements to share?</li></ul>	
<b>Knowledge practice</b>	<ul style="list-style-type: none"><li>• What difficult or important concepts from the lecture(s) do you want to prioritize?</li><li>• How will you review these topics in a way that engages your students?</li></ul>	
<b>Skills practice</b>	<ul style="list-style-type: none"><li>• What do students need to know how to do with the material from the lecture(s)? How can you give them practice with these skills?</li><li>• Will you work on questions as a class? Individually? In small groups?</li><li>• How will you ensure everyone has a chance to engage with each question?</li><li>• How will you make sure everyone is understanding?</li></ul>	

# What to do on the **first** day of teaching?

1. How will you introduce yourself to your students?
2. How will you get to know your students?
3. How will you share your own expectations/guidelines for recitation?

## Exit Ticket:

Reflect on today's meeting

- + Something you're taking away from today's topic on organizing a recitation
- Δ Something you still have questions about

MIT OpenCourseWare  
<https://ocw.mit.edu/>

RES.7-005 Biology Teaching Assistant (TA) Training  
Summer 2020

For information about citing these materials or our Terms of Use, visit: <https://ocw.mit.edu/terms>.