

Before we get started



Let us know if you can hear us when we do **Audio checks**



Download **Presentation Slides** at uoft.me/ctsi-videos



Turn on live captions if you would like closed captioning (see screenshot for details)

During the webinar



Your **microphone** will be muted until Q&A at the end of the session



Type questions and comments into the **Chat**



This session features a short activity in breakout rooms.

Welcome to Active Learning Anywhere

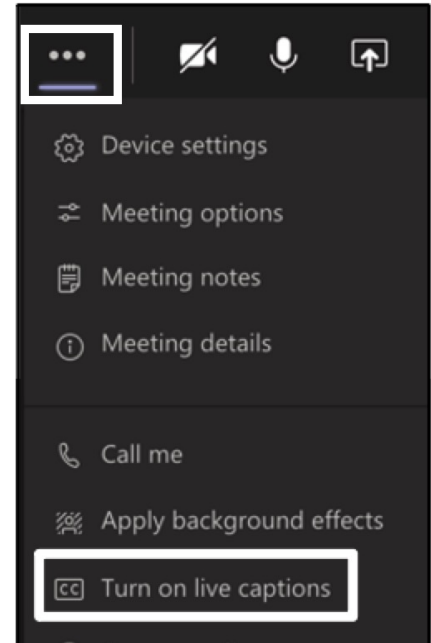
Following the webinar



View **Session Recording** at uoft.me/ctsi-videos in 2 business days



Complete **Feedback Survey** (link sent via email)



Active Learning Anywhere

Cristina D'Amico

Justin Fletcher

August 17, 2023



With contributions from Sarah Shujah, former PASS Librarian and Mike Kasprzak, Assistant Director, CTSI



UNIVERSITY OF
TORONTO

CENTRE FOR TEACHING SUPPORT & INNOVATION



Land Acknowledgment

We would like to acknowledge this sacred land on which the University of Toronto operates. It has been a site of human activity for over 15,000 years. This land is the territory of the Huron-Wendat and Petun First Nations, the Seneca, and the Mississaugas of the Credit. The territory was the subject of the Dish with One Spoon Wampum Belt Covenant, an agreement between the Iroquois Confederacy and Confederacy of the Ojibwe and allied nations to peaceably share and care for the resources around the Great Lakes. Today, the meeting place of Toronto is still the home to many Indigenous people from across Turtle Island.

- Revised by the Elders Circle (Council of Aboriginal Initiatives)



Access check

We understand access to be a shared responsibility between everyone in this space. We will strive to create an accessible space that reduces the need for you to disclose a disability or impairment for the purposes of gaining an accommodation. In doing this together, we strive to welcome disability, and the changes it brings, into our space.

- Is there anything about the virtual space that we should address now?
- Are there any other access needs that might affect your participation in the workshop that we could also address?



Learning outcomes

By the end of this session, you should be able to:

- identify active learning strategies that can be used in different course modalities (in-person, online synchronous, online asynchronous);
- implement active learning strategies using tools in Quercus and the Academic Toolbox and various classroom affordances;
- implement and manage active learning strategies;
- navigate Quercus and active learning support resources.



Teaching modalities at U of T



Modes of delivery

In-person

- Learning in a physical classroom



Hybrid

- Learning through intentional mix of in-person and online elements

Online synchronous

- Online learning that happens in real time (i.e., webinar)



Online asynchronous

- Online learning that happens at different times



Quick survey/poll: Getting to know you



- Teaching modality
- Course size
- Confidence level

<https://forms.office.com/r/99CxfqfF9J>



Introduction to active learning



Breakout group activity: Let's define active learning:

- Groups of approximately 3 people. You will have 8 minutes for discussion.
- Assign someone to be timekeeper and note taker on [shareable document](#).

Prompt: As a group, discuss and make notes on three considerations:

- define active learning
- share up to 3 characteristics of effective active learning
- identify key benefits of active learning

If you have extra time, discuss active learning strategies you've used in your teaching context.



Poll: How forgettable are lectures?

How much information can students recall eight weeks after a lecture?

- 1) More than 80%
- 2) ~70%
- 3) ~60%
- 4) Less than 50%



How forgettable are lectures?

The “forgetting curve”, where the average student can recall:

- **62%** of the material just presented
- **42%** of the material three to four days later
- **24%** of the material eight weeks later

(Menges, 1988; Nelson, 2010)

How much information can students recall eight weeks after a lecture?

4) Less than 50%



What is active learning?

Active learning is defined as “any instructional method that engages students in the learning process. In short, active learning requires students to do meaningful learning activities and think about what they are doing” (Prince, 2004).



What are some of the benefits of active learning?

information retention
(Lujan & DiCarlo, 2006)

increased motivation
(Machemer & Crawford, 2007)

deeper learning & relational thinking
(Biggs, 1999)

critical thinking skills
(Smith et al., 2005)

self-directed learning
(Justice et al., 2007)

improved in-class focus
(Roehling et al., 2011)



When should I use active learning in my course?

When the strategy supports students in achieving the course learning outcomes



In which contexts can you use active learning?

- As a pre-class activity
- As a pre-class assessment or prior knowledge check-in
- As the beginning of a class as a bridge or hook to garner student attention and motivate
- As participatory learning to engage students in hands-on learning
- As a summary/closure to check student understanding
- As a post-class assessment or metacognitive reflection



In which modalities can you use active learning?



In-person



Online synchronous



Asynchronous



What are key considerations for designing active learning?

space/setting

in-person vs. online
classroom furniture

technical knowledge & support

low skill level – high skill level reliability
tech support

difficulty level of engagement

simple - complex

type of engagement

student-student
student-content
student-instructor
student-public

duration of engagement

1-2 min. 45-50 min. the entire course

organization of collaboration

individually
pairs
groups
class

timing of engagement

synchronous / asynchronous
before class/in class/after class

privacy

private vs. public

other considerations?



Considering physical space: Active learning classrooms (ALCs)



Active learning strategies



Let's explore some active learning strategies!



Process content

Connect and
communicate



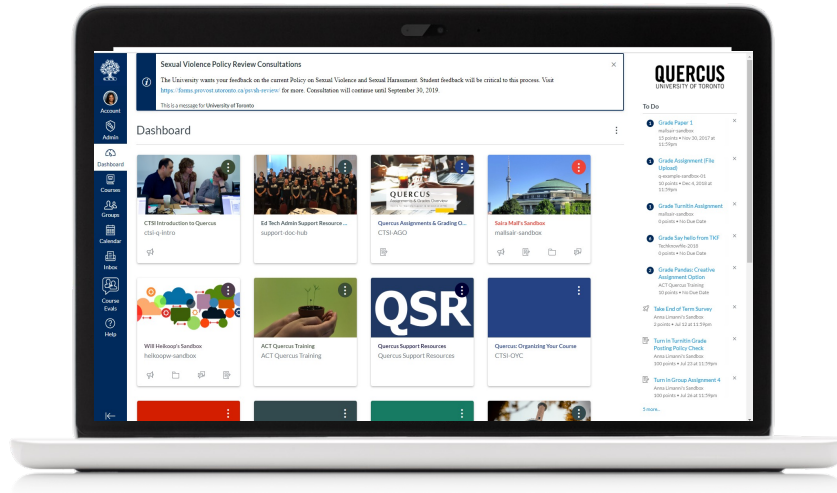
Active learning strategies help students...



Receive and act on
feedback

Stay motivated





QUERCUS

The University of Toronto's Academic Toolbox



Before we begin...

Consider your:

- Context
- Learning outcomes
- Course modality (delivery mode)
- Students
- Available time
- Comfort level



Processing content



Integrate activities within the content

▼ Week 2: Parts of the Cell		
📄	Lecture 2 Part A: Cell Walls	
📄	Lecture 2 Part B: Cell Membranes	
📄	Lecture 2 Part C: Mitochondria	

▼ Week 2: Parts of the Cell			✓	+	⋮
📄	Module Pre-Quiz: What do you already know about the parts of the cell?		✓		⋮
📄	Lecture 2 Part A: Cell Walls		✓		⋮
📄	Lecture 2 Part B: Cell Membranes		✓		⋮
📄	Knowledge Check Quiz: Lecture 2 Parts A and B (Cell Walls and Cell Membranes)		✓		⋮
📄	Lecture 2 Part C: Mitochondria		✓		⋮
📄	Reflection: What have I learned in this module?		✓		⋮



Structure the learning experience

Requirements

☒ Students must complete all of these requirements

☒ Students must move through requirements in sequential order

☐ Student must complete one of these requirements

Course Outline	view the item	×
Syllabus Quiz	score at least 2.0 / 3	×
Introduce yourself	contribute to the page	×
Meet the Teaching Tea	view the item	×

+ Add requirement

Module 2

☐ Lock until

Prerequisites

Module 1

- [Requirements](#)
- [Prerequisites](#)



Guide students' reading

Week 2 Readings

This week, you are expected to read the following 2 articles linked below. Questions to guide your reading are provided to help you make the most out of each reading.

<Reading 1 Citation>

Guiding Questions:

- What is the main argument the author is making about <topic> ... ?
- What are the main factors contributing to <phenomenon> ... ?

<Reading 2 Citation>

Guiding Questions:

- What research methodologies ... ?
- Thinking ahead to the next module ("Module Title"), why is this <topic> essential for our understanding of <subject>?



Create “treasure hunt” / “hidden gem”

Syllabus Quiz

Quiz Instructions

This quiz includes questions about key information you need to know about the course. You can find the answers in the syllabus. It's worth 1% of your final grade!



Question 1

2 pts

The instructor aims to reply to all Inbox messages received through Quercus within...

- ☐ 10 minutes
- ☐ 72 hours
- ☐ 48 hours



Question 2

1 pts

The first word of each paragraph on **page 3** makes a complete sentence. Type it out...

12pt ▾ Paragraph ▾ | **B** *I* U **A** ▾ ▾ T² ▾ | ▾ ▾ ▾ ▾ | :



Break time!



Connect and communicate


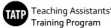


Create community agreements

Community agreements can:

1. Set course expectations
2. Pre-empt difficult topics
3. Help you learn about your students
4. Be worked on collectively

[Resource on Community Agreements](#)

CENTRE FOR TEACHING SUPPORT & INNOVATION

Community Agreements

What is a Community Agreement? Why make Community Agreements?
A community agreement (also known as group contract, learning agreement or classroom agreement) is a shared agreement between learners about how we want to work together over the course of our time together. This can include guidelines for what it means to be respectful, expectations about turn-taking, or accessibility needs (e.g. please don't bring peanuts to class). Discussing and deciding on how the group will work together builds a collective responsibility to make the classroom a safer place and give students an opportunity to voice their needs in co-developing a productive and equitable learning environment. In building community agreements as a class, we have the chance to foster shared accountability and student buy-in to the learning process.

How to develop a community agreement?
During one of your first classes together, invite students to think about what they need in order to make the class environment safer, equitable, and productive for learning: What would help us work best together? You can do this through individual writing prompts, a think-pair-share, or another active learning strategy. After giving students time to reflect and discuss in small groups, collectively generate a list of agreements. You can also consider asking this question in advance through email or Quercus, and having students contribute digitally to the generation of ideas.

Make sure to clarify what each contribution means. For example, "being respectful" can mean different things in different contexts. Also check for active consent: are these the guidelines that people want to govern the group? Does anyone have concerns about them? Revise these guidelines until the class members are satisfied and feel ready to commit to the collective agreement.

You can also use group agreements for group project work. Allow each group time to develop their own agreements for how they will work together. This may help alleviate the stress of unclear expectations around group work, help students to advocate for themselves and resolve conflicts together.

Looking for suggestions on things to include in a community agreement?

- **Respect**—Give undivided attention to the person who has the floor (permission to speak).
- **Openness**—We will be as open and honest as possible without disclosing others' personal or private issues (e.g., family, roommates, friends). It is okay to discuss situations, but we won't use names or other identifiers. For example, we won't say, "My older brother...", instead we will say, "I know someone who...".
- **Right to pass**—It is always okay to pass (meaning "I'd rather not" or "I don't want to answer").
- **Nonjudgmental approach**—We can disagree with another person's point of view without putting that person down.
- **Taking care to claim our opinions**—We will speak our opinions using the first person and avoid using 'you'. For example, "I think that kindness is important", instead of "You are just mean".
- **Sensitivity to diversity**—We will remember that people in the group may differ in cultural background, sexual orientation, and/or gender identity or gender expression and will be careful about making insensitive or careless remarks.

1



30

Activity: Community agreements

Answer in the [shared document](#):

What are some key elements that you would incorporate into your course's community agreement?



Brainstorm and co-construct knowledge: Implementation



Modality	Method / Tools
In-person	<ul style="list-style-type: none">• Shared OneDrive document (Word, Excel, PPT, notebook)• Whiteboard and/or posterboards
Online synchronous	<ul style="list-style-type: none">• Shared OneDrive document (Word, Excel, PPT, notebook)• Virtual whiteboard
Online asynchronous	<ul style="list-style-type: none">• Wiki on Quercus• Shared OneDrive document (Word, Excel, PPT, notebook)• Virtual whiteboard• Discussion on Quercus, Piazza, Ed, or Pepper



Create small group discussions

Practices to implement for effective small group discussions:

1. Provide clear and specific instructions
2. Designate each group member a specific task
3. Ask for an end-product (graded or ungraded)
4. Take-up the discussion, synchronously or asynchronously
5. Encourage reflective practice



Create small group discussions: Implementation



Modality	Method / Tools
In-person	<ul style="list-style-type: none">• Turn and talk or group tables• Think-pair/group-share
Online synchronous	<ul style="list-style-type: none">• Breakout groups in webinar platform
Online asynchronous	<ul style="list-style-type: none">• Group discussions in discussion tool (Quercus, Pepper, Piazza, Ed)



Tips for successful live groupwork

- Do a dress rehearsal, especially if technology is involved
- Assign roles, e.g.:
 - Facilitator
 - Timekeeper
 - Scribe
 - Reporter
- Signpost prompts
- Provide clear instructions/questions
- Allow opportunities to share back and debrief



Tips for successful asynchronous groupwork

Answer in the chat:

What are effective strategies for leveraging asynchronous discussion boards to promote learning?



Use multi-media

Pedagogical benefits:

1. Aligns with universal design for learning
2. Provides alternative forms of engagement
3. Improves students' technical & communication skills



Snagit



PowerPoint



zoom

Zoom



Receive and act on feedback



Facilitate peer review

Answer in the chat:

What are some of the pedagogical benefits of having students participate in peer review?



Facilitate peer review: Scenarios

1. Asynchronous peer review

QUERCUS  Scholar[®]

2. Group presentations with peer review



3. Peer review in small groups



Administer self-assessment

- Students review their own work using instructor-provided criteria
- Self-assessment:
 - Encourages self-reflection
 - Helps students identify where they may have knowledge gaps
 - Helps students improve their work
- Implementation options:
 - peerScholar
 - Survey: Microsoft Forms or Quercus Quizzes (Surveys)
 - Assignment submission via Quercus

peerScholar®



QUERCUS



Stay motivated



Encourage reflection

5.13 ACTIVITY: Reflect on the CDO Modules

One final activity



1. A key takeaway from the CDO for my own work is...

Enter your answer

2. As a next step, I plan to do the following with what I learned...

Enter your answer

3. A final comment, suggestion, or question I have is...

Enter your answer

Metacognition

Example:

- Exit ticket
- Clearest and muddiest points



Encourage reflection: Implementation



Modality	Method / Tools
In-person	<ul style="list-style-type: none">• Exit ticket• Audience response system / polling
Online synchronous	<ul style="list-style-type: none">• Audience response system / polling
Online asynchronous	<ul style="list-style-type: none">• Survey tool (Forms or Quercus Quizzes)



Poll students

Pedagogical use cases:

1. Get to know your students
2. Check for understanding
3. Spark a discussion
4. Enable reflection
5. Collect immediate feedback



Poll students: Implementation



Modality	Method / Tools
In-person	<ul style="list-style-type: none">• Student response system (iClicker, Forms)• Simple hand raise
Online synchronous	<ul style="list-style-type: none">• Student response system (iClicker, Forms)• Polling tool in webinar platform (Zoom, Teams)
Online asynchronous	<ul style="list-style-type: none">• Survey tool (Forms or Quercus Quizzes); share back results in video or announcement



Use case studies for authentic learning

- **Conduct a needs assessment** on the value of using case studies
- **Plan for the use of case study:** How will the case and discussion be introduced? What preparation is expected of students?
- **Organize the conduct of case study:** Do you need to divide students into groups or will they discuss as the whole class?
- **Determine the timing:** How much time is needed for students to explore the case study?
- **Debrief:** How will you debrief the case study? How will you evaluate students?



Stay motivated: Brief closing activity

Answer in the chat or reflect individually:

1. What's one thing I've learned thus far in today's webinar that I will incorporate into my course?
2. What's still confusing?



Staying motivated: Share your strategies!

Using the [shareable document](#), please share active learning strategies that you use in your own teaching to keep students motivated:

- Checking the room temperature
- Checking student confidence levels or emotional state
- Showing compassion and kindness



Implementing and managing active learning strategies



GROUP CHAT:

What strategies do you use to ***overcome*** student resistance to active learning?

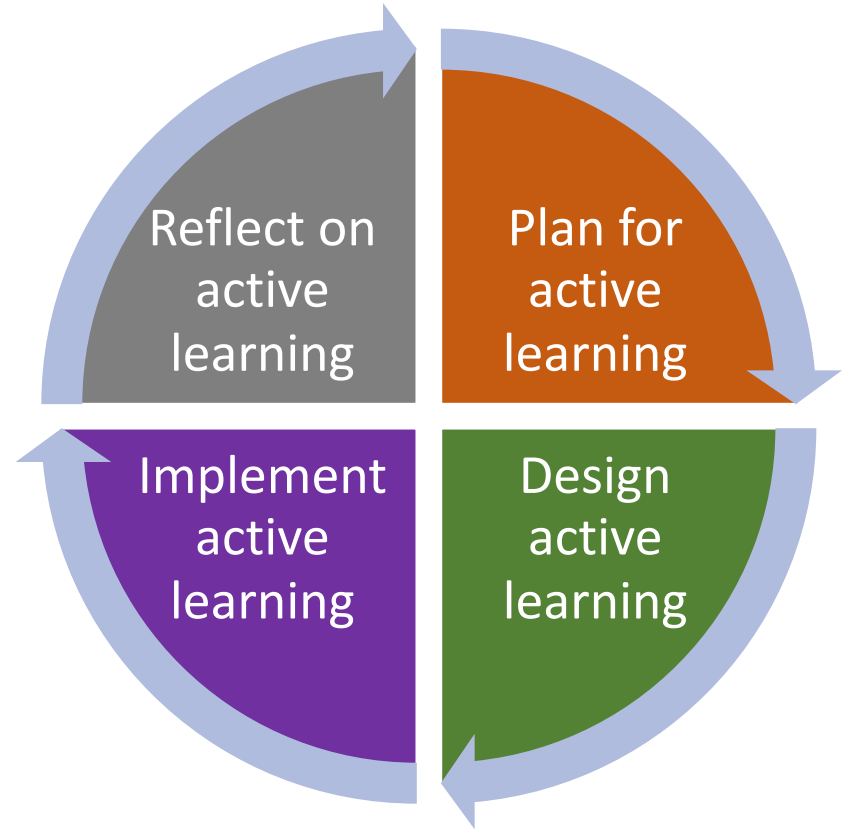


How to overcome resistance to active learning?

- connect activities with course learning outcomes, content, skill development in a meaningful way – be upfront!
- set expectations and start early in the course and use active learning activities often
- start with simple activities and slowly build in complexity
- use a variety of different activities



What are the steps to plan and manage active learning?



Step 1: Plan for active learning

Assess the need for active learning:

- **Addressing a challenge:** What concepts or topics do students struggle with the most in your course?
- **Applying knowledge:** Do students need more time applying knowledge in-class where your expertise could guide or coach their development?
- **Feedback culture:** What information will help you understand how students are learning? Which active learning strategies will provide this data, and ultimately help your students meet their learning outcomes?



Step 2: Design active learning

- Are there **examples of the active learning strategies** that you have seen that would be valuable to your students?
- What **instructions/supports** will students need to be successful and able to complete the activity?
- What are key **considerations for managing** the activity?
- How are you going to **debrief the activity**?

Step 3: Implement active learning!



Step 4: Reflect on active learning

- **Consider any roadblocks or challenges that you and your students experienced in carrying out the activity.** How might these be overcome?
- **Elicit feedback from students on whether the activity assisted in their learning.** Did they find the activity helpful/valuable?
- **Assess the usefulness of the information the activity provided you.** Did the students improve their understanding of the topic or concept?



Navigating support resources



Tune into Teaching

Upcoming CTSI workshops (a selection!)

Intro to the Academic Toolbox

From Panic to Possibility: Rethinking and Redesigning
Assignments in the Wake of Generative AI

Quercus Quickstart

Setting the Tone for Success: The first day of class and beyond

Drop-in consultations for Quercus and the Academic Toolbox
(15- or 30-minute appointments, online or in-person)

Recordings and materials:

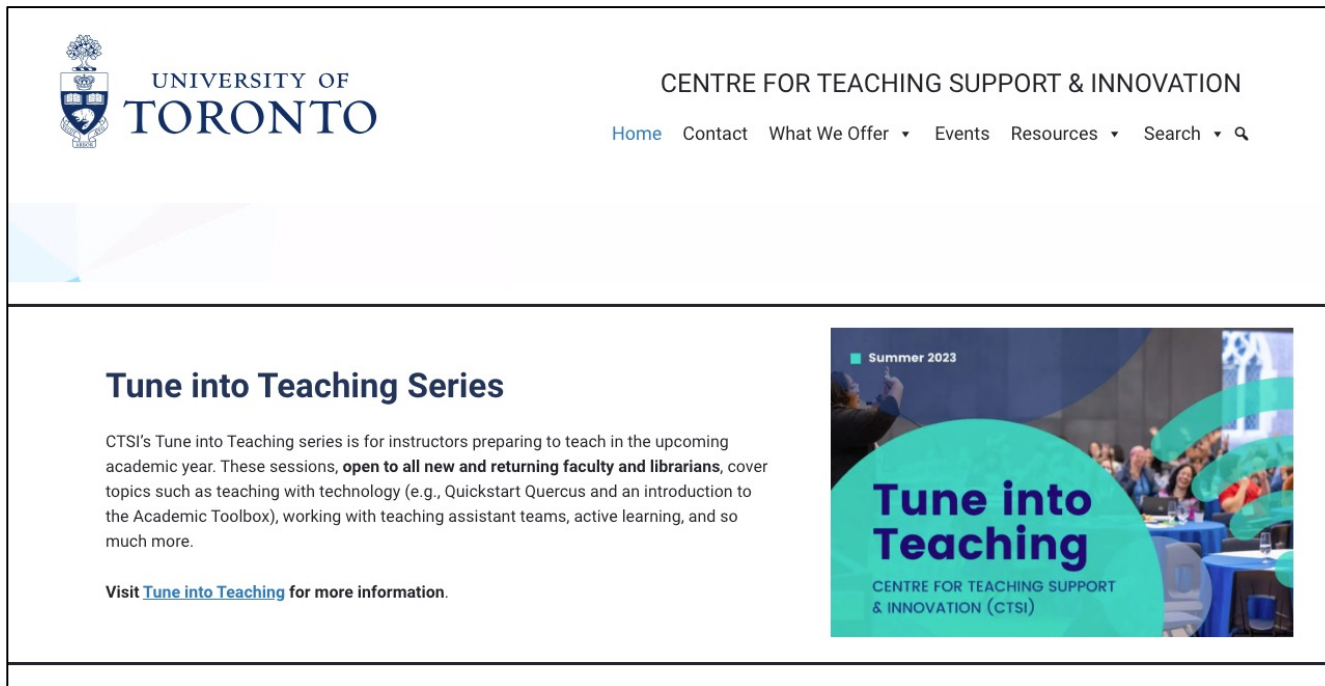
<https://uoft.me/ctsi-videos>

Other CTSI events:

<https://teaching.utoronto.ca/events>



CTSI website (<https://teaching.utoronto.ca/>)



The screenshot shows the homepage of the Centre for Teaching Support & Innovation (CTSI) at the University of Toronto. The header features the University of Toronto crest and name on the left, and the CTSI title and navigation menu on the right. The navigation menu includes links for Home, Contact, What We Offer, Events, Resources, and a Search function. Below the header is a large banner area. On the left side of the banner, the text 'Tune into Teaching Series' is displayed in a large, bold font. Below this, a paragraph describes the series as being for instructors preparing to teach in the upcoming academic year, open to all new and returning faculty and librarians, and covering topics like teaching with technology, the Academic Toolbox, and working with teaching assistant teams. A link is provided to visit the 'Tune into Teaching' page for more information. On the right side of the banner is a promotional image for the 'Summer 2023' session. The image shows a group of people in a meeting or workshop setting. Overlaid on the image is a large teal circle containing the text 'Tune into Teaching' in a bold, white font. Below this, in a smaller white font, is 'CENTRE FOR TEACHING SUPPORT & INNOVATION (CTSI)'.

UNIVERSITY OF
TORONTO

CENTRE FOR TEACHING SUPPORT & INNOVATION

[Home](#) [Contact](#) [What We Offer](#) ▾ [Events](#) [Resources](#) ▾ [Search](#) ▾ 🔍

Tune into Teaching Series

CTSI's Tune into Teaching series is for instructors preparing to teach in the upcoming academic year. These sessions, **open to all new and returning faculty and librarians**, cover topics such as teaching with technology (e.g., Quickstart Quercus and an introduction to the Academic Toolbox), working with teaching assistant teams, active learning, and so much more.

Visit [Tune into Teaching](#) for more information.

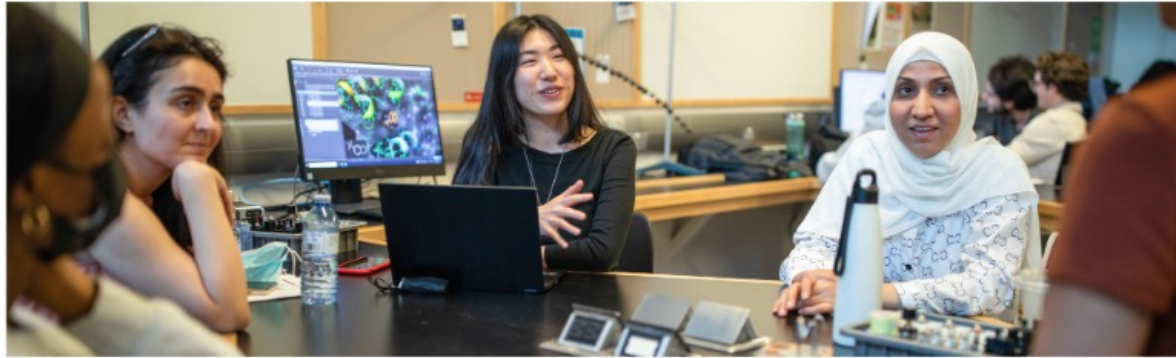
Summer 2023

Tune into Teaching

CENTRE FOR TEACHING SUPPORT & INNOVATION (CTSI)



U of T Active Learning Classroom (ALC) Hub



U of T Active Learning Classrooms Hub

Welcome to Centre for Teaching Support & Innovation (CTSI)'s **Active Learning Classrooms (ALCs)** Hub!

The ALC Hub is a self-paced, asynchronous learning program that is designed to provide pedagogical guidance and support resources for instructors teaching in Active Learning Classrooms (ALCs) at U of T. Instructors and Teaching Assistants can leverage the resources and activities in the Hub to help them navigate teaching in ALCs across all three campuses and maximize the affordances in these classrooms to enhance student learning in line with their pedagogical goals.

<https://q.utoronto.ca/enroll/WMXBA8>



Quercus support resources (<https://uoft.me/qresources>)

Educational Technology

Tool Guides

Learn about the educational technology tools the University has access to.

SEARCH ALL TOOL GUIDES

Tool Finder

Use our Tool Finder to see guides for the various tools in our Academic Toolbox.

TOOL GUIDE MENU

Teach with Technology

Learn how technology can assist in teaching your course.

ACCESS ARTICLES



Summary of support options

- CTSI website: <https://teaching.utoronto.ca>
- Active learning at U of T: <https://teaching.utoronto.ca/resources/active-learning-at-the-university-of-toronto/>
- Upcoming events: <https://teaching.utoronto.ca/events>
- Quercus Support Resources: <https://uoft.me/qresources>
- Divisional Support for Quercus: <https://uoft.me/qsupportcontacts>
- Your [Liaison Librarian](#)
- Questions: q.help@utoronto.ca



References and additional resources

- Forbes, L. K. (2020). Fostering fun: Engaging students with asynchronous online learning. <https://www.facultyfocus.com/articles/online-education/fostering-fun-engaging-students-with-asynchronous-online-learning/>
- Freeman, S. (2014). Active learning boosts performance in STEM courses. *Proceedings of the National Academy of Sciences*, 111, 23, 8410-8415. <https://doi.org/10.1073/pnas.1319030111>
- Harris, J. & Lange, S. (2015). Taking the leap: Moving from in-person to online courses. <https://www.facultyfocus.com/articles/online-education/taking-the-leap-moving-from-in-person-to-online-courses/>
- Kumar, P. & Skrocki, M. (2016). Ensuring student success in online courses. <https://www.facultyfocus.com/articles/online-education/ensuring-student-success-online-courses/>
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93, 223-231. <http://dx.doi.org/10.1002/j.2168-9830.2004.tb00809>
- Shank, P. (2017). *Write and organize for deeper learning: 28 evidence-based and easy-to-apply tactics that will make your instruction better for learning*
- Teaching and Learning Services. (2020). [*Designing peer assessment assignments*](#). Montreal: Teaching and Learning Services, McGill University.
- [*Digital Pedagogy - A Guide for Librarians, Faculty, and Students*](#)
- [*A guide to teaching in the active learning classroom : history, research, and practice*](#)
- Active Learning in Higher Education - UK - [*2000 - current*](#)



Usage

- Icons

- In-person: https://www.flaticon.com/free-icon/conversation_3050525
- Asynchronous: https://www.flaticon.com/free-icon/elearning_3221561
- Online Asynchronous: https://www.flaticon.com/premium-icon/video-call_3101169



What questions do you still have?

Thank you!

