

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

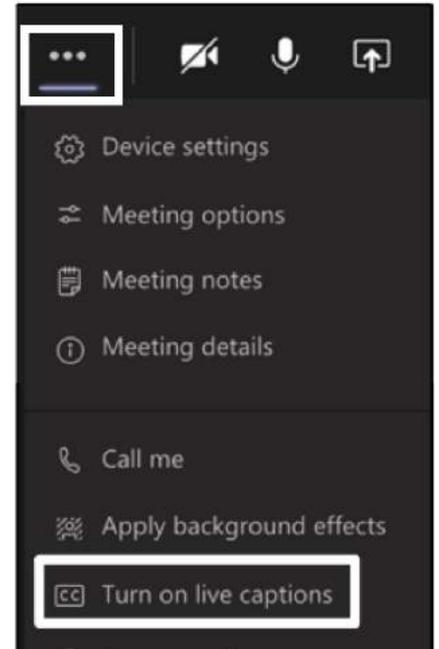
Following the webinar



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



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



Active Learning Anywhere

Justin Fletcher

Mike Kasprzak

Sarah Shujah

August 18, 2022



UNIVERSITY OF
TORONTO

CENTRE FOR TEACHING SUPPORT & INNOVATION



Checking in:

If you feel comfortable sharing: **On this dog scale, how do you feel today?**



@psychiatricmind



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



Official definitions



In-Person	Both the instructor and the student are in the same physical location at the same time for most or all of the teaching and learning involved in the course components, usually on campus. While online components may be included as part of the course design, they do not constitute the majority of academic activities.
Hybrid	Mix of online and in-person interaction, involving the use of technologies to facilitate multi-modality, flexibility, and student engagement. Normally, a course is considered Hybrid if roughly between 1/3 to 2/3 of scheduled class time is replaced by online activities. Exams or other academic assessments may require attendance at a specific physical location.
Online	All instructional interaction occurs without the student and instructor being in the same physical location. Assessments for online courses are conducted or submitted online, with the possible exception of final or interim assessment requiring attendance on campus no more than once per session.



Quick survey/poll: Getting to know you



- Teaching modality
- Course size
- Confidence level

<https://forms.office.com/r/EZXgrUg85H>



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

other considerations?

privacy

private vs. public



Active learning strategies



Let's explore some active learning strategies!



Process content

Connect and communicate

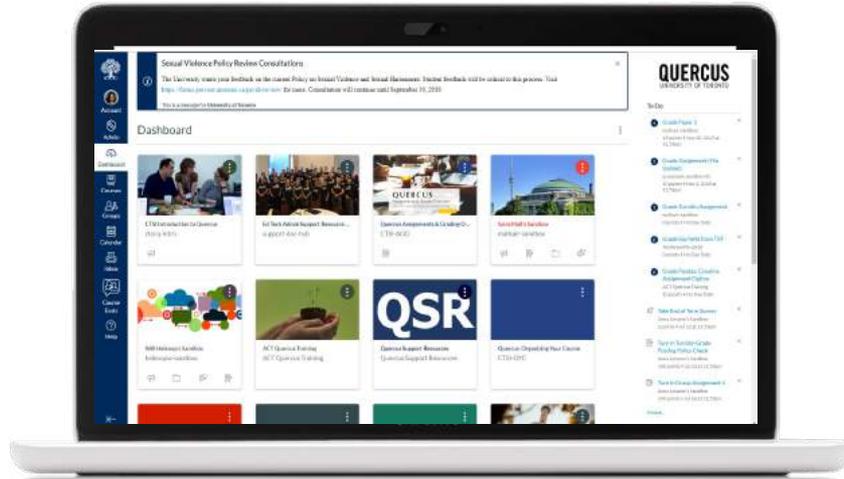


Active learning strategies help students...

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 Membr
⋮	📄 Lecture 2 Part C: Mitochondr

⋮	▼ 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?	✓		⋮



Embed surveys/questions in videos

The screenshot displays a video player interface. The video content shows a survey titled "Contoso May Town Hall - Why we do what we do". The survey text reads: "Hi MOD, when you submit this form, the owner will be able to see your name and email address." The first question is "1. What topics do you want us to cover in future town halls?". The options are: "Information on upcoming campus expansion", "Upcoming budget projections", "Deep dive on latest from Project Bright", and "Other" (with an input field). A "Continue to video" button is located at the bottom right of the survey area. On the right side of the video player, there is a "Transcript" and "Interactivity" panel. The "Interactivity" panel shows a list of items, including "NAME" and "Why we do what we ..." with a duration of "0:07". Below the video player, there is a "Details" section for the video "May Town Hall", published on 5/10/2019 by Allan Dayoung. At the bottom right, there are recommendations for "More from trending videos", including "Your Privacy is Our Priority" and "Contoso Marketing Opportunity".

[Add a form or quiz to a Stream video](#)



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** T^2



Break time!



Connect and communicate

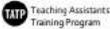


Create community agreements

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



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, TopHat, Forms)• Simple hand raise
Online synchronous	<ul style="list-style-type: none">• Student response system (iClicker, TopHat, 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?

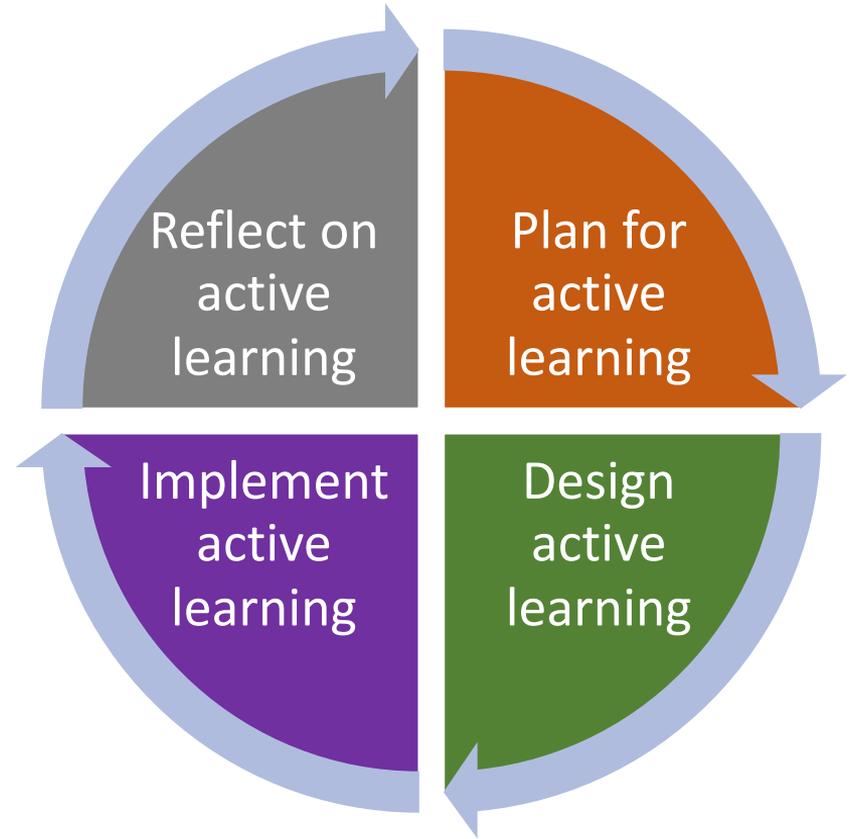


How to overcome resistance to active learning?

- be sure the active learning activities are clearly connected with course learning outcomes, content, skill development in a meaningful way – be upfront!
- if possible, include context and rationale to highlight key takeaways and value
- never use active learning as busy time
- 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 topics or ideas do students struggle with most in your course? What concepts or topics do students struggle with the most based on observation, in-class student responses, quiz/test scores and/or other assessments?
- **Applying knowledge:** Do students need more time applying certain skills and knowledge in-class where your expertise could guide or coach their development?
- **Feedback culture:** What data or information will help you understand what and/or 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

- Where do active learning strategies **make sense in your course?**
- 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

Prepare a timeline plan to help you manage the activity and keep students on task.

- What **instructions** are you going to provide to students before the activity?
- How are you going to **communicate instructions** on how students will engage with each other and complete the activity? What will be the steps?
- How are you going to **establish ground rules** and guidelines for groups?
- Are you going to **assign roles and responsibilities** for any group work, collaboration, discussions, tasks?
- How are you going to **take-up and/or debrief** the activity?



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 or not 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? Can you use data from the activity to make further improvements to future activities or instruction in general?



Navigating support resources



Tune into Teaching

Upcoming CTSI workshops

Making your syllabus work for you and your students

Designing better assignments

Quercus Quickstart

Captioning Clinics (30-minute appointments)

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/>)

WELCOME TO THE NEW CTSI SITE

We've updated the look and navigation of the site, including both pedagogy and educational technology support resources, for easier access in a more inclusive design. To find resources and information

- Click **Resources** in the top menu to browse by category ([Events](#), [Planning and delivering your course](#), [Engaging with students](#), [Assessing learning](#), [Improving practice](#), and [Educational technology](#), including teaching with technology resources and tool guides)
- Use the **Search** bar in the top menu or visit our main resource page to search by category and filters

CTSI programming and consultations are available both in-person and virtual as of July 2022. Please visit [Events](#) or [Consultations](#) for more information.



Active Learning at U of T



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](#)



Library support - Resources

Library Guide

- [Digital Pedagogy - A Guide for Librarians, Faculty, and Students](#)

Books

- [A guide to teaching in the active learning classroom : history, research, and practice](#)

Journals

- Active Learning in Higher Education - UK - [2000 - current](#)



Library support – [Liaison Librarians](https://uoft.me/5M4) & in-class instruction <https://uoft.me/5M4>

Developing a Topic

- Mind mapping

Search Strategies

- Practice searching using keywords & Boolean in a database

Conversations between resources

- Quick Bib Discussion



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>
- Questions: q.help@utoronto.ca



References

- 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.



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!

