Adaptable
Active
Learning
Techniques in
75 minutes

Hello!

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Let’s learn about all of you!

Agenda

1. The what & why of active learning
2. Examples of active learning
    a. Non-tech based
    b. Tech-based
    c. …and a few fail stories
3. Developing an active learning session
4. Your chance to create & share!

Agen

Today's Learning Objectives

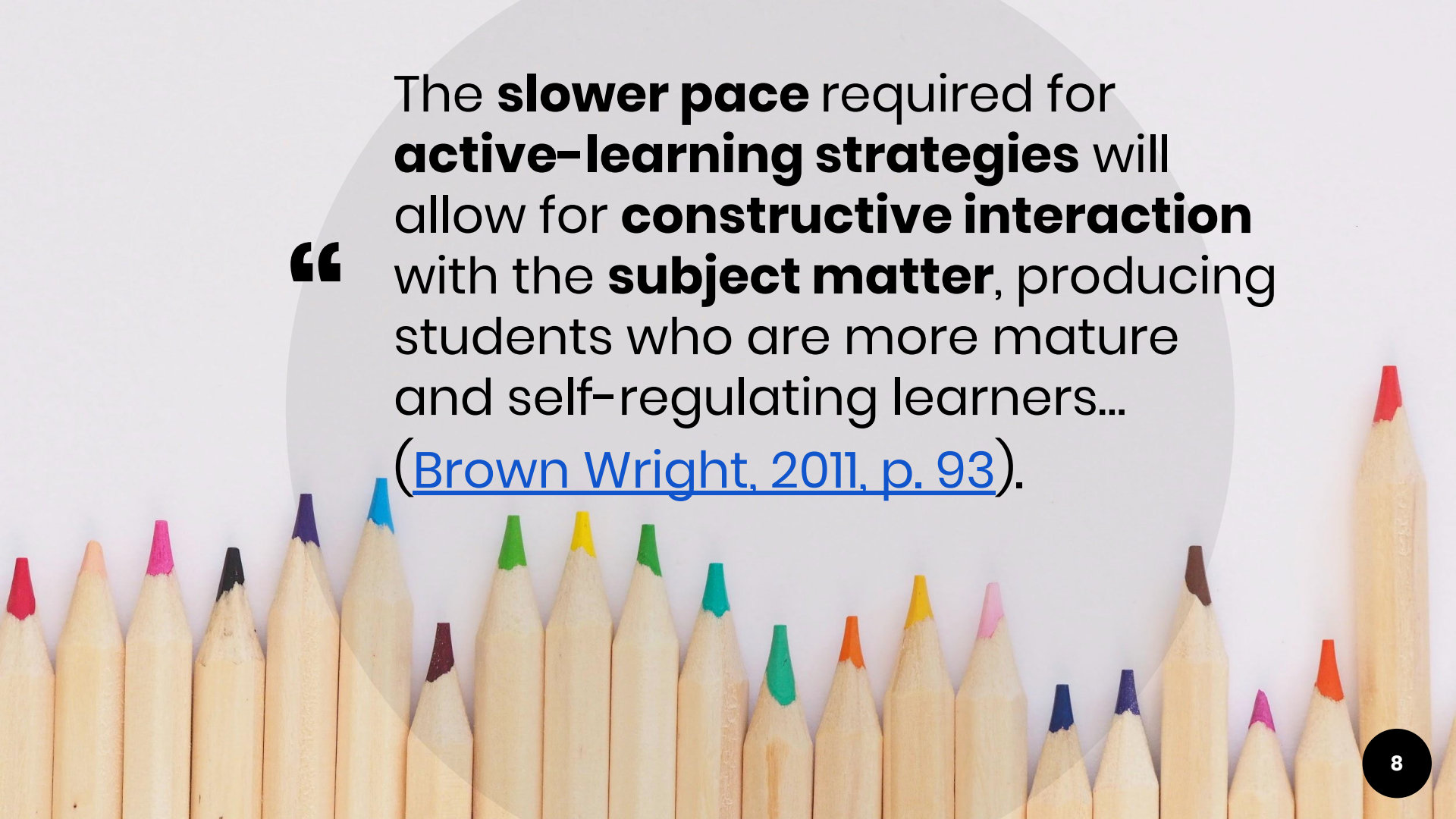
- Identify active learning strategies & techniques
- Explore the implementation of active learning strategies
- Leave today's session with materials & resources to continue implementing active learning

share!

1 The what & why of active learning

Let’s blue sky this!

- Get into groups of 2-3
- Discuss the question:
  - **How would you define active learning?**



> The **slower pace** required for **active-learning strategies** will allow for **constructive interaction** with the **subject matter**, producing students who are more mature and self-regulating learners... (Brown Wright, 2011, p. 93).

> The result will be **classrooms filled with enthusiastic students and teaching faculty** who experience a high degree of job satisfaction (Brown Wright, 2011, p. 93)

Active learning is...

- “Instructional activities involving students in doing things and thinking about what they are doing” (Bonwell & Eison, 1991, p. 3)
- Allows students to be engaged in their own learning - constructing new knowledge and building new skills. (Handelsman, Miller & Pfund, 2007).
- Can take place in any learning environment. For example, large classrooms, seminars, small group training, and eLearning environments.

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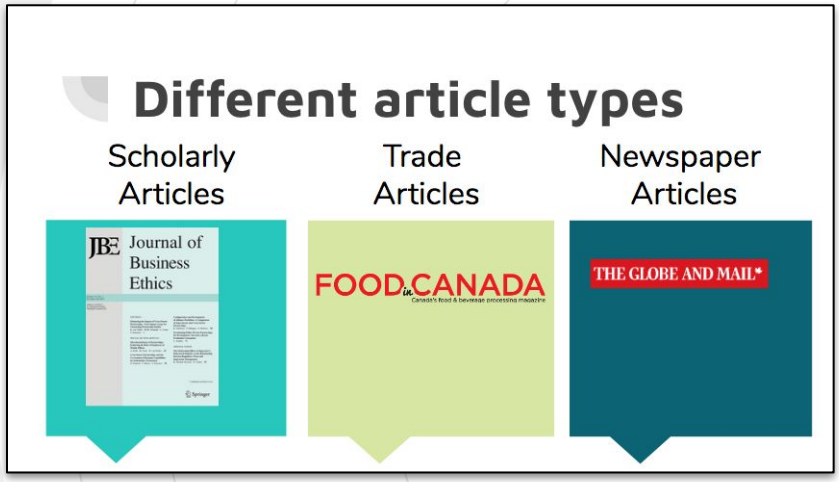
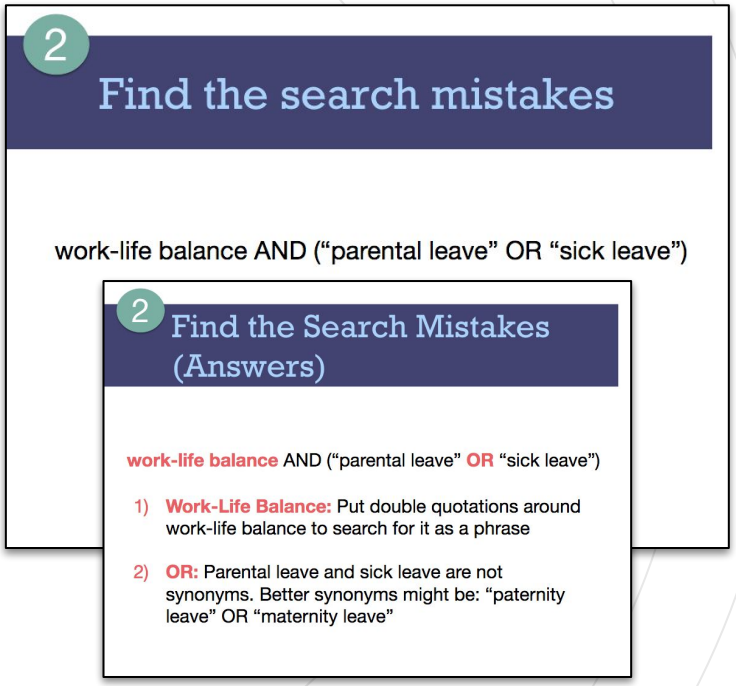
Examples of active learning

Think - Pair - Share



- Students brainstorm 1 to 2 characteristics for each article type
- Then discuss answers in small groups.
- Select groups are asked to share their answers.



- Students learn basic search operators, then locate search mistakes together & share improvements with class.

Concept Mapping & Search Strategy

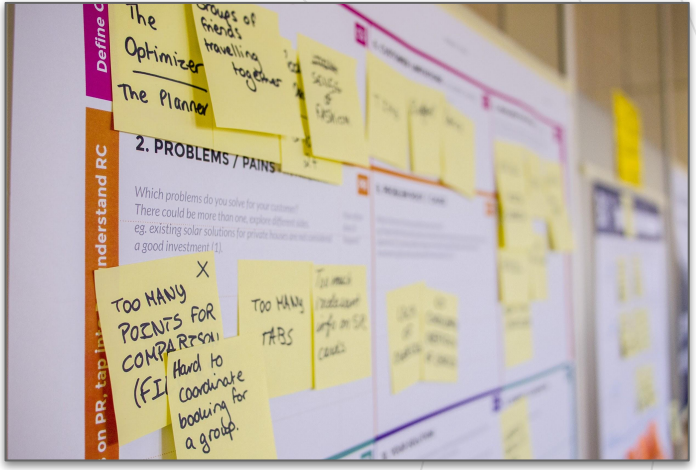
- Give students the research query to work with
- Ask them to identify keywords/concepts and come up with synonyms for them
- Ask students to connect the keywords/concepts and synonyms with Boolean search operators

The Telephone Game & Primary and Secondary Sources

- Ask 3-4 students who know about this game come to the front of the classroom to play it. Start the game by whispering a phrase to student #1
- Ask student #4 to reveal to the class what the sentence is

- Share the original phrase with the class
- Ask the class to reflect on the differences between primary and sources sources, and think about the importance of primary sources based on the game

Mini Charrette



Using concepts from design thinking and research - in a mini charrette, students are put into groups (5-6 students) to troubleshoot and work through a problem - like “developing a search strategy on a given topic” or “developing a research question”

Students are introduced to the concepts: what is a search strategy? What is a good research question? and then they are tasked with putting together one using poster boards, post-it notes etc. They chart or diagram or map out their solutions,

Group Work: Resource Types

- Each group is given a topic (diversity in hiring, Me Too Movement, employee motivation, etc.) and are assigned a specific type of resource.
- Students then discuss and present: a possible research question about that topics and how would their resource contribute to discussing the topic.
- Using poster paper or white boards, students present their ideas to the class and pose a question for discussion.

The Match Game

In this activity, students are broken up into two groups, in one group, students are given common (non jargony) keywords related to a specific industry. While in the other, students are given NAICS specific terminology for an industry - students then have to find their match.

They can ask questions and talk to each other about their “roles” but they cannot use the internet to help them define the terms they have been given.

The Match Game

Not all activities work out!

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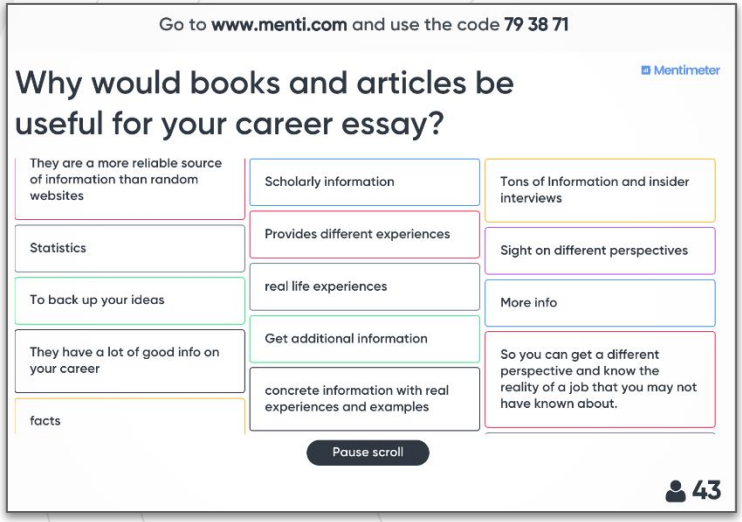
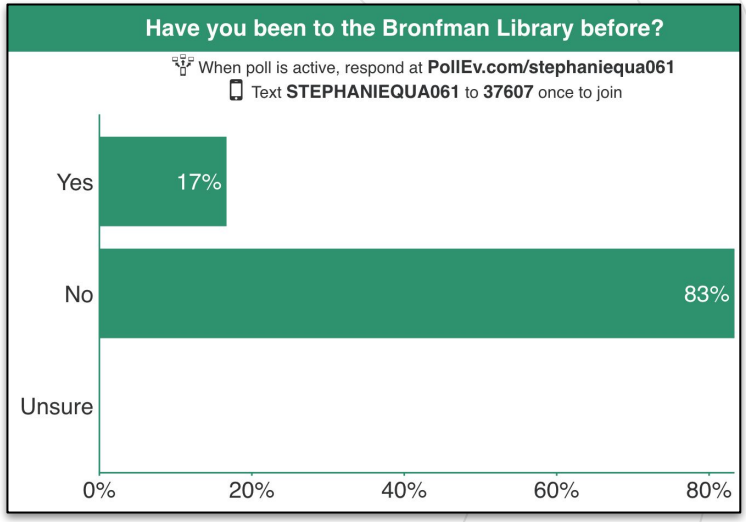
Your turn!

- Discuss in groups of 2-3
  - **Q1:** Have you ever used any of these techniques?
  - **Q2:** Are there any other no-tech active learning techniques you'd add to the list?

Mentimeter / Poll Everywhere



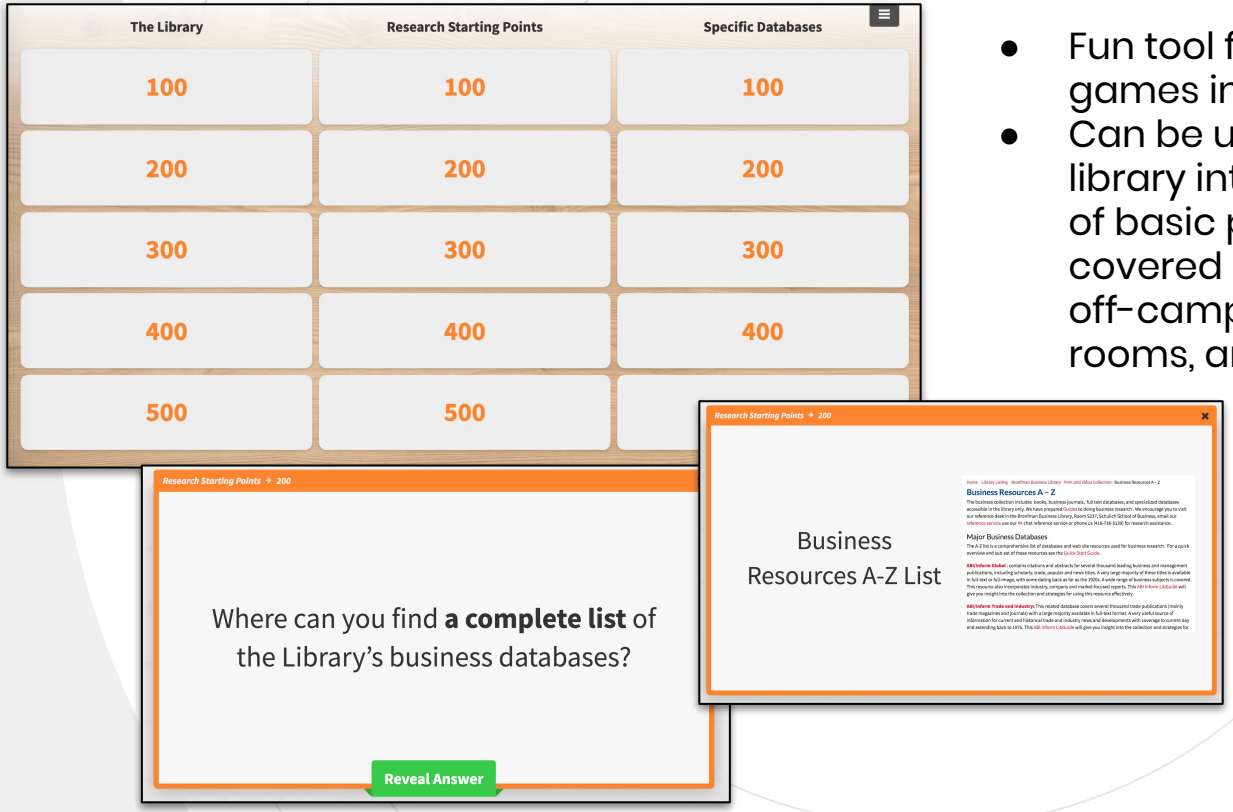


Mentimeter example

Poll Everywhere example

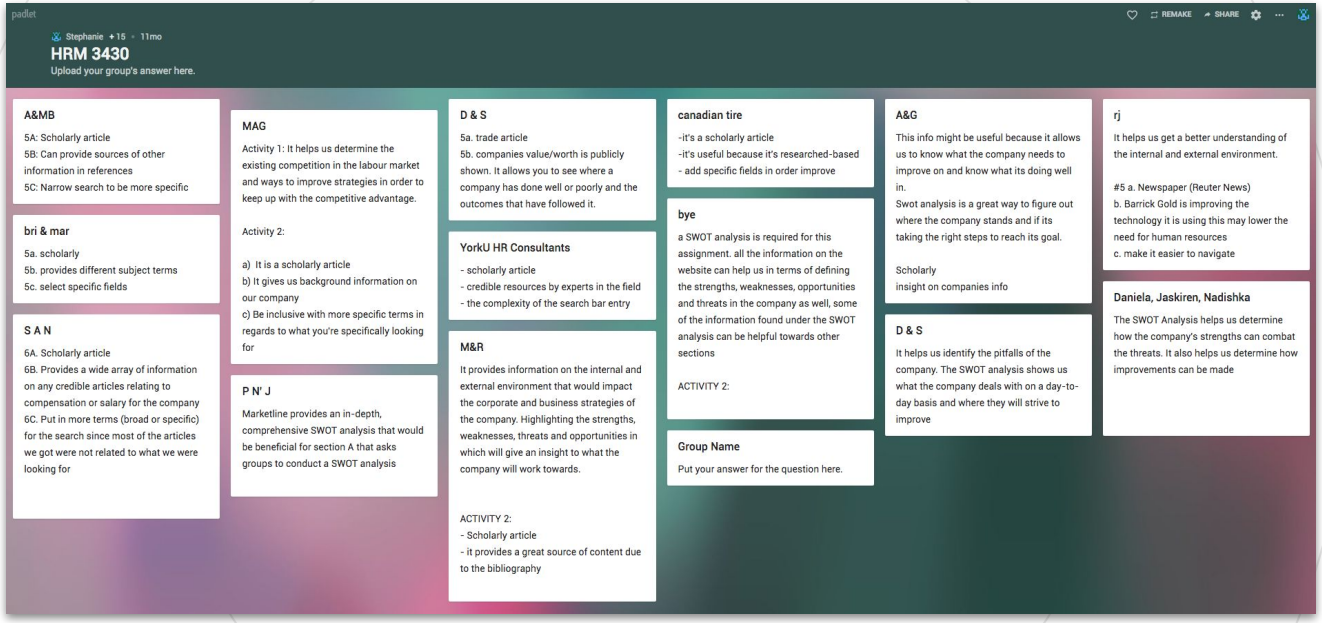
- Both tools have similar functionality, but different limitations for free account.
- Question types include multiple choice, open-ended, and much more.
- Act as useful tools for icebreakers, pre-tests, & post-tests, especially in larger classes.

Flip Quiz



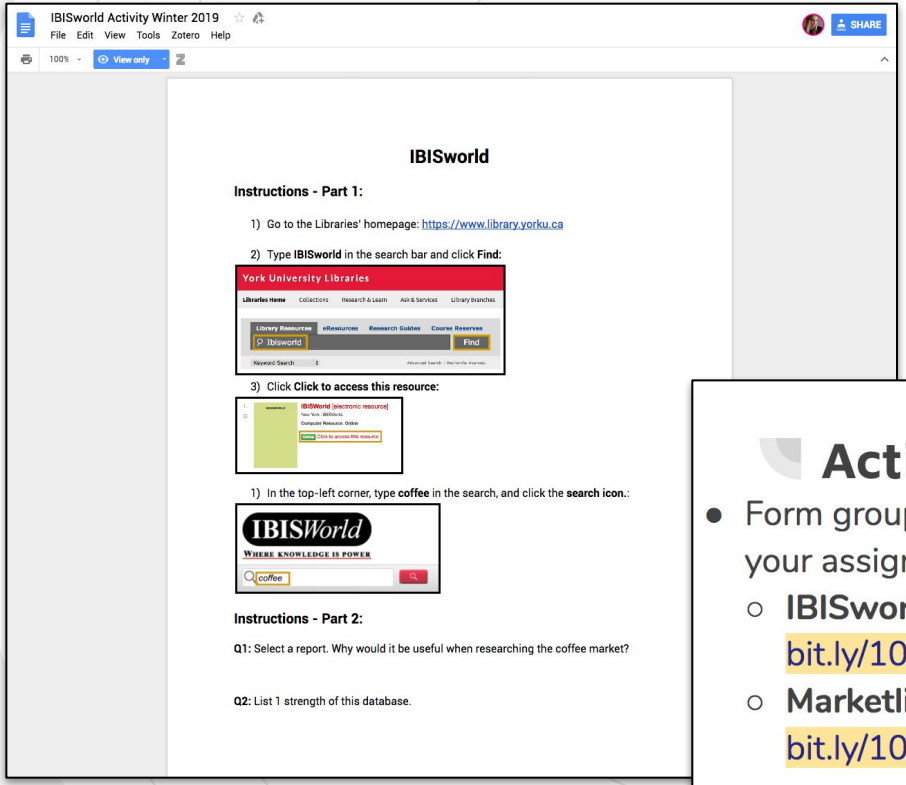
- Fun tool for creating jeopardy-style games in the classroom.
- Can be used as a group post-test for library introduction sessions where a lot of basic pieces of information are covered such as accessing resources off-campus, printing, group study rooms, and getting started resources.

Padlet



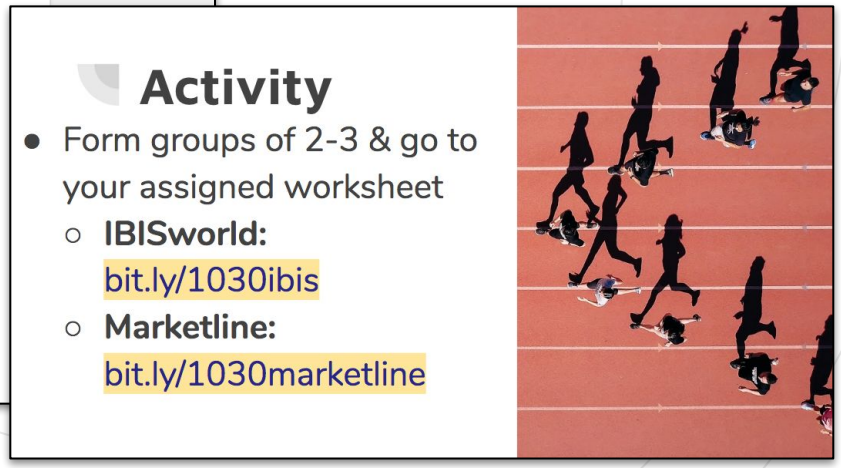
- Assign students activities in small groups and ask them to submit their answers via Padlet.
- The padlet will update in real time and can encourage students to complete the activity before other groups.

Google Docs

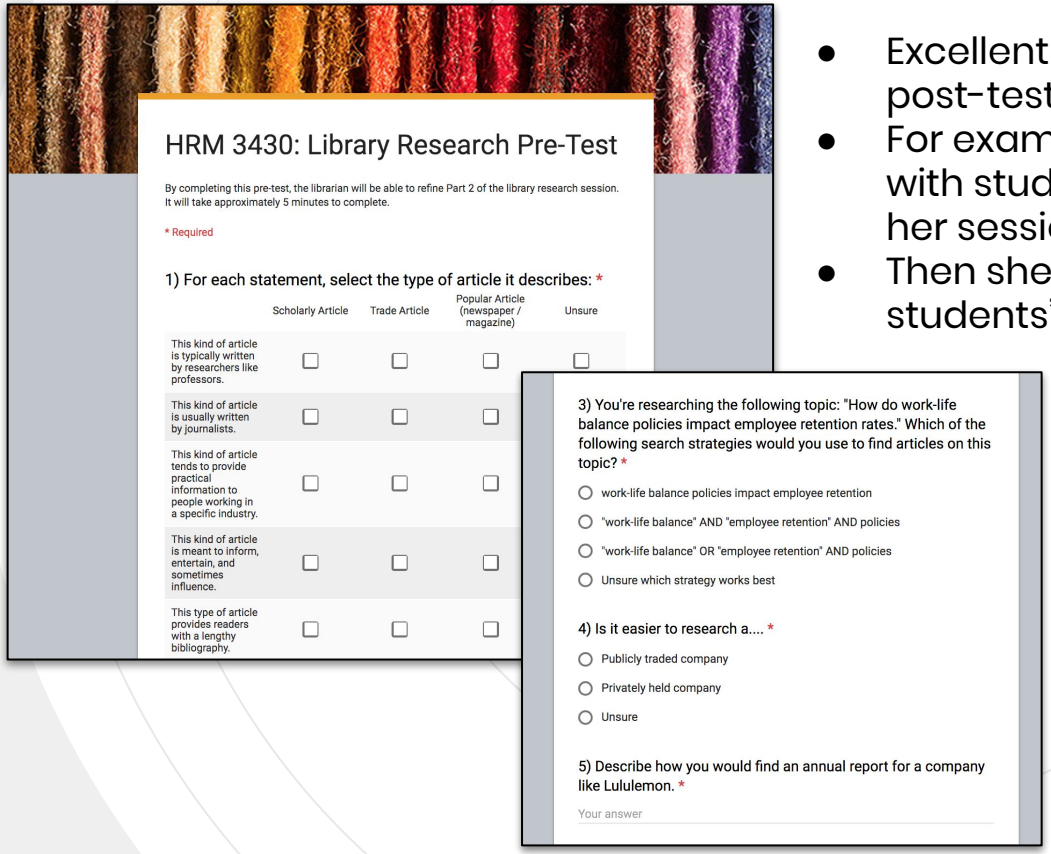


Instead of using paper handouts for exercises, you can create virtual handouts in Google Docs.

- **Tip 1:** make sure you only give students the **View link**
- **Tip 2:** create custom short URL in bit.ly

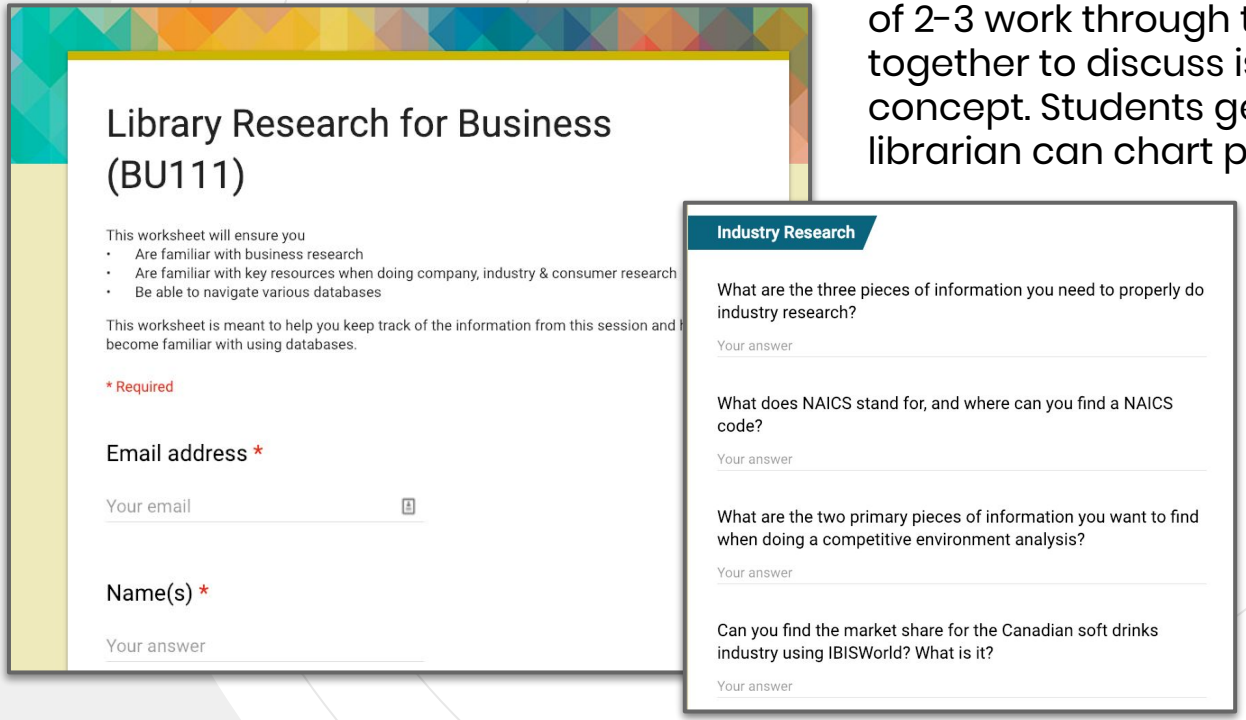


Google Forms



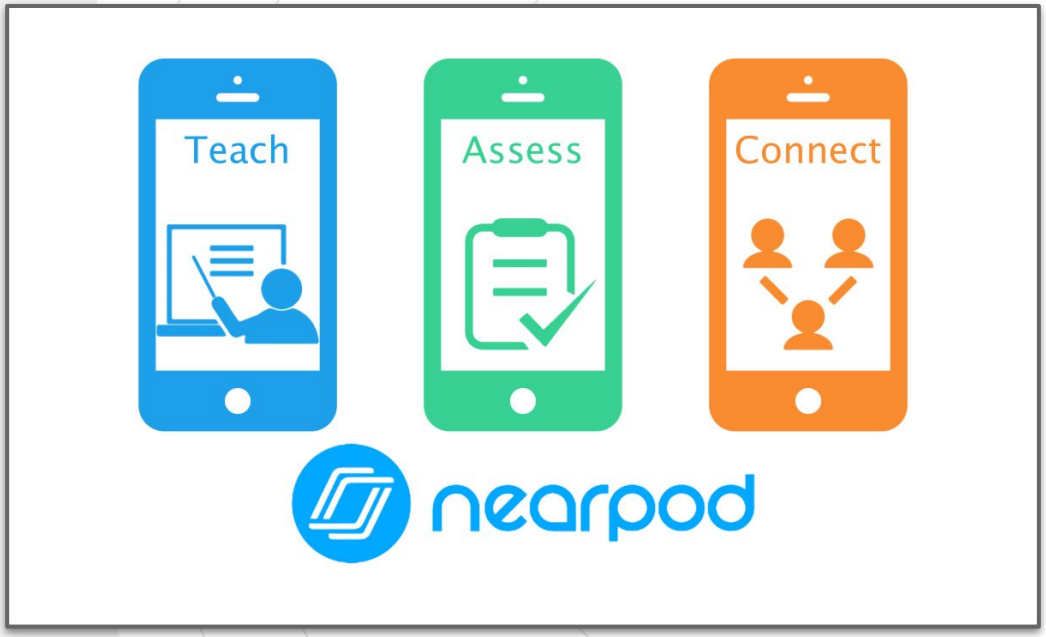
- Excellent tool for conducting pre-tests, post-tests, and session evaluations.
- For example, Stephanie has done pre-tests with students a few weeks before she teaches her session.
- Then she modifies her content based on students' performance on the pre-test.

Matt's Google Form Worksheet



Students are given access to the form at the start of the session. A concept is introduced and then in groups of 2-3 work through the questions before coming back together to discuss issues and learning the next concept. Students get a copy of their answers and the librarian can chart progress and understanding.

Nearpod



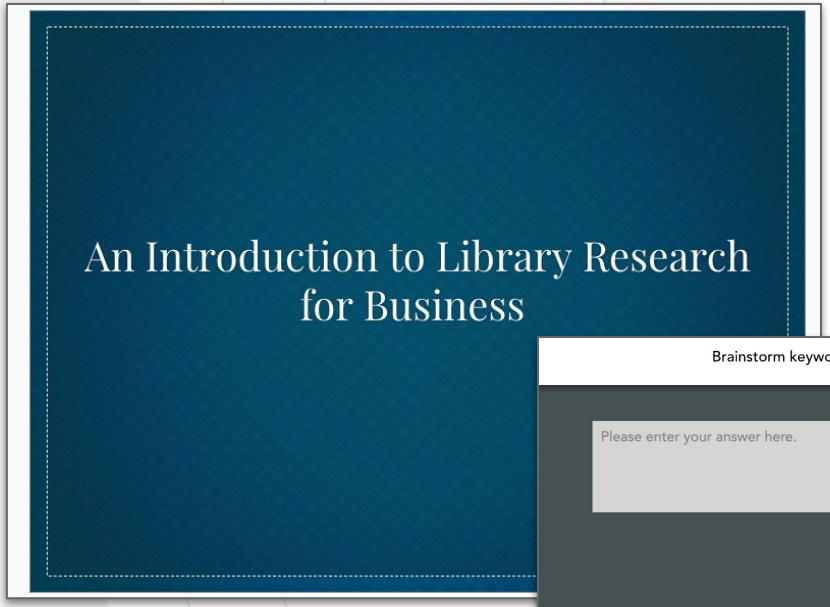
Nearpod is an interactive online software that allows you to create slide show presentations that incorporate active learning elements directly into the lesson.

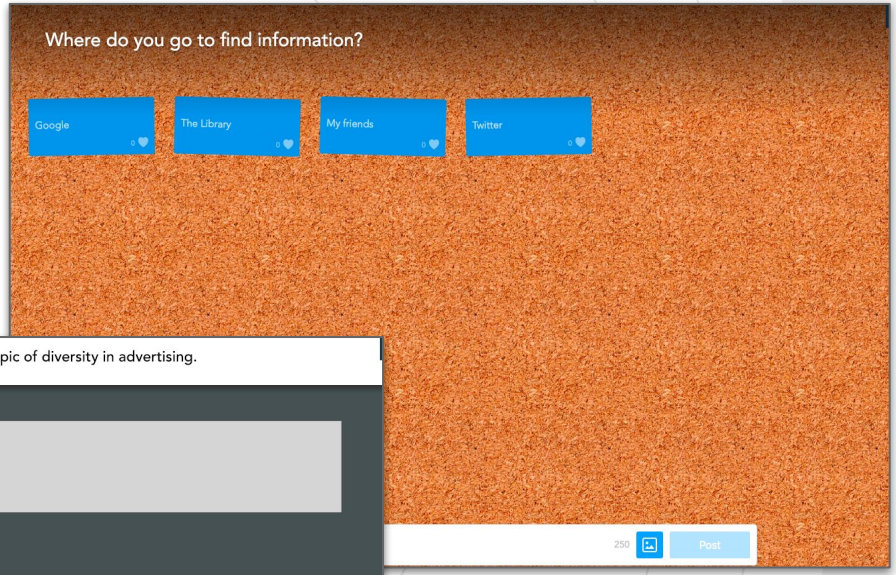
Including:

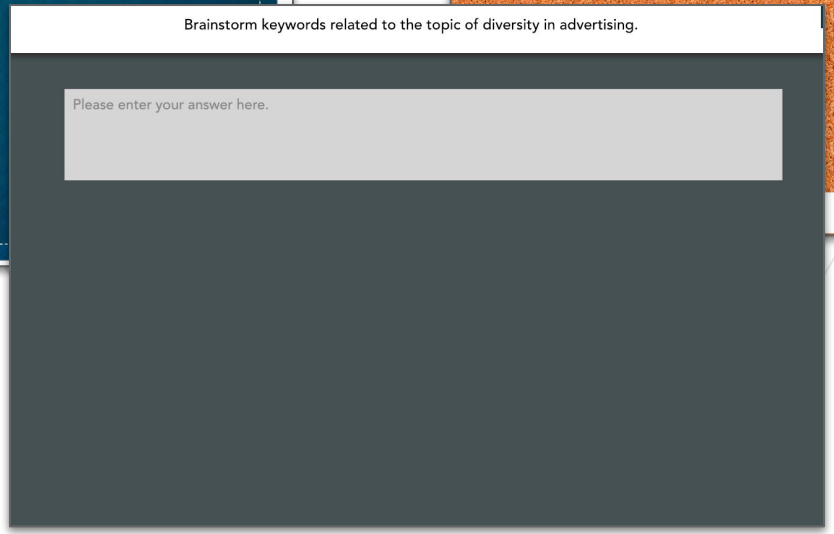
- Collaborative elements
- Short answer
- Draw answers
- Quizzes
- Etc.

Can import PowerPoints or Google Slides and adapt them into active learning elements.

Nearpod examples







Your turn!

- Discuss in groups of 2-3
  - **Q1:** Have you ever used any of these techniques?
  - **Q2:** Are there any other tech-based active learning techniques you'd add to the list?

3 Developing an active learning session

BOPPPS

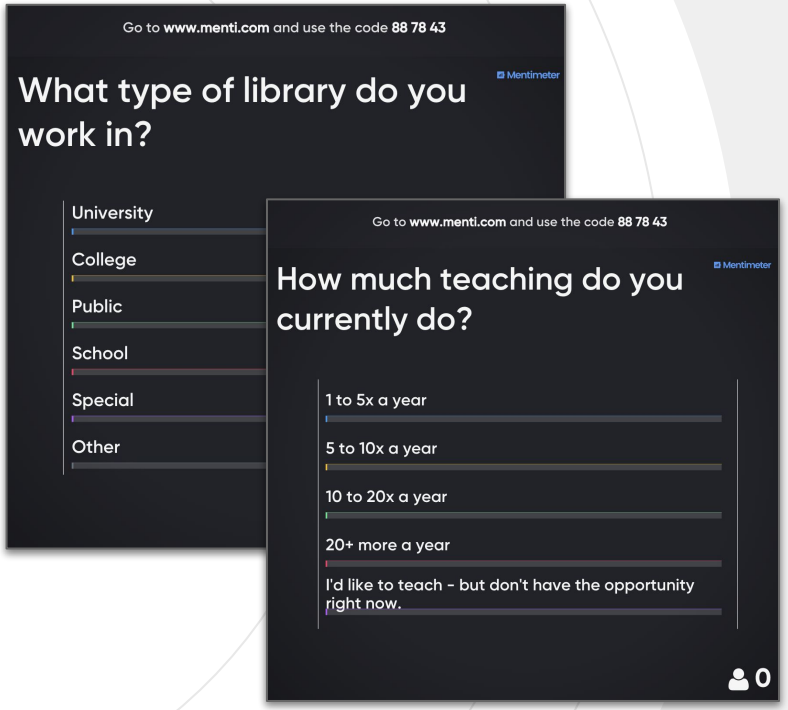
A way to structure your lesson plans with 6 distinct elements focused on active learning:

- **B**ridge-In
- **O**utcomes / Learning Outcomes
- **P**re-Assessment / Pre-test
- **P**articipatory Learning
- **P**ost-Assessment / Post-test
- **S**ummary

BOPPPS in Action

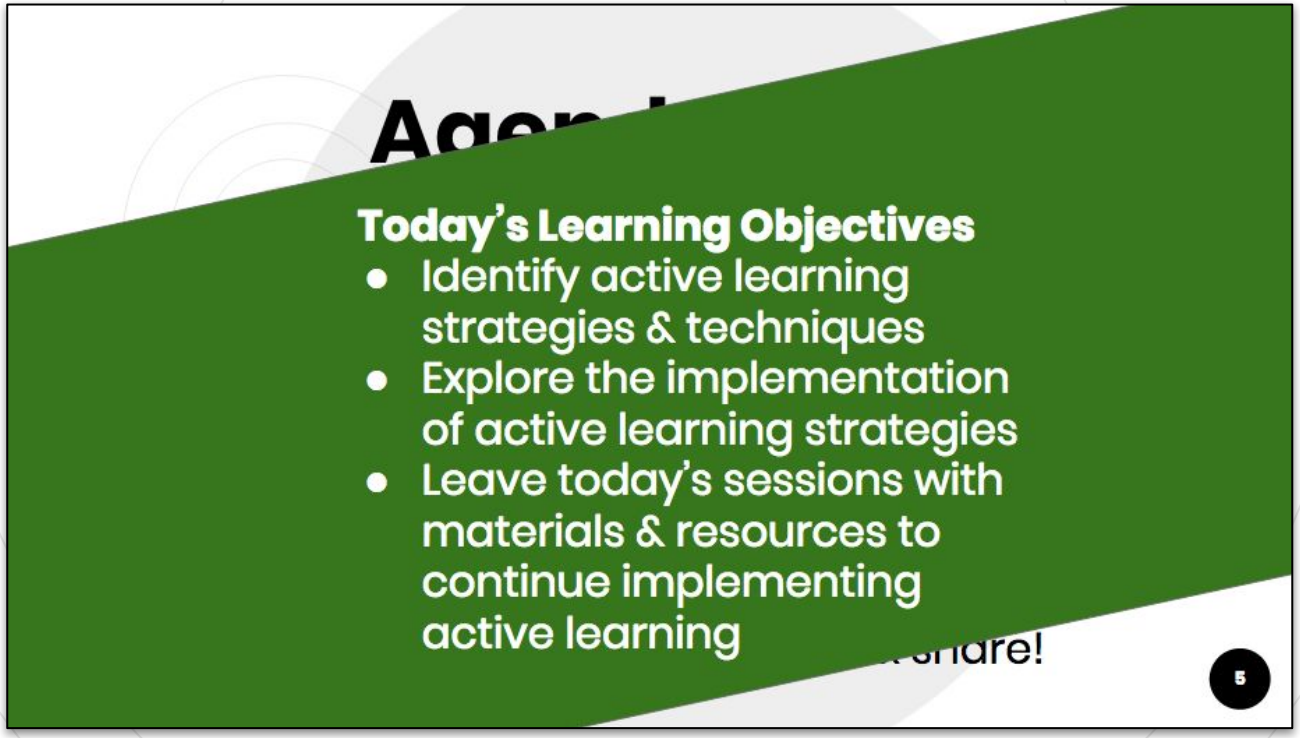
Bridge-In example from today's session:

- **Mentimeter questions:**
  - **Q1:** What type of library do you work in?
  - **Q2:** How much teaching do you currently do?



BOPPPS in Action

Outcomes / Learning Outcomes for today's session:



BOPPPS in Action

Pre-Assessment example from today's session

- **Think - Pair - Share:**
  - How would you define active learning?

BOPPPS in Action

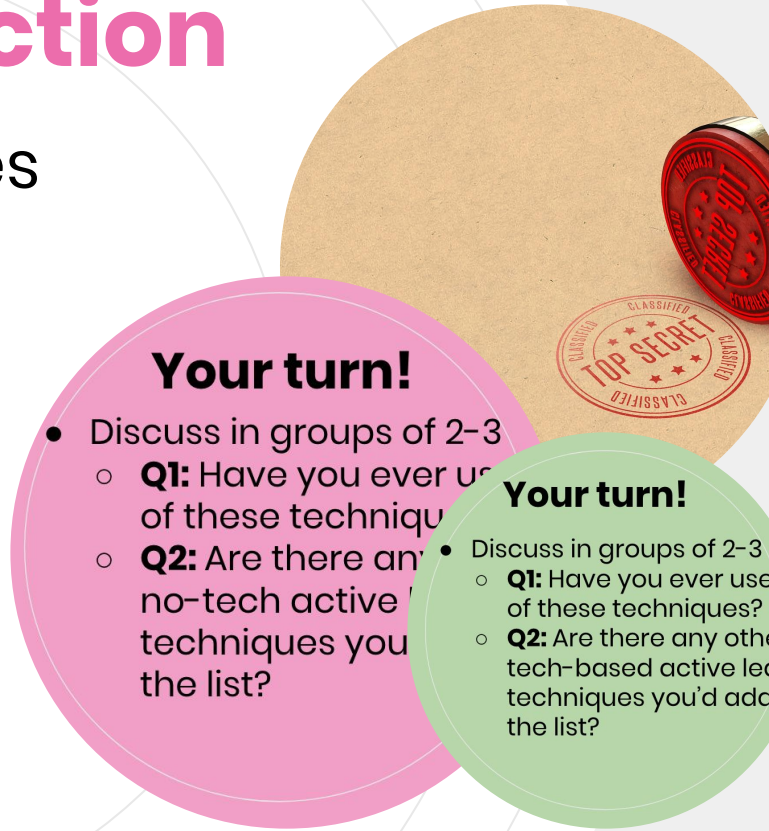
Participatory Learning examples from today's session:

- Occurred during bridge, pre-test & in group activities following more traditional lecture content

BOPPPS in Action

Post-Assessment examples from today's session:

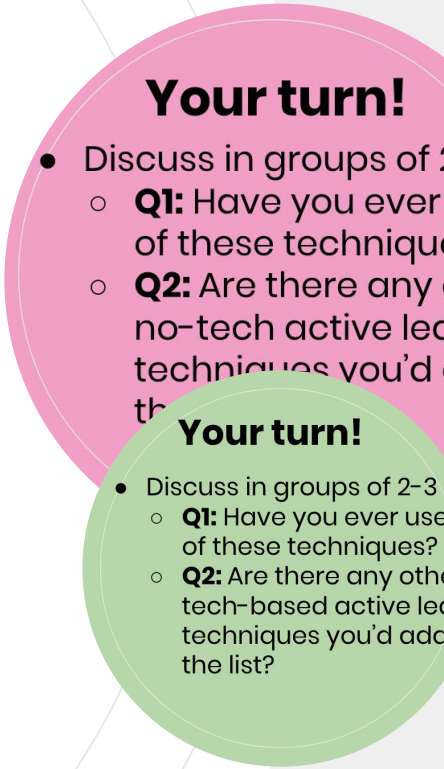
- Having small groups share answers from think-pair-share activities
- **Final post-assessment coming up!**



BOPPPS in Action

Summary examples from today's session:

- Having groups share what they discussed, then instructor provides comments and ties it back to larger lesson.



Overview of BOPPPS

- Queen's Teaching and Learning Centre has created an excellent overview of the BOPPPS model
- Access our lesson plan from today's session. It includes additional sections, but can serve as a useful template.

4

Your turn to create & share!

Brainstorm a mini-lesson plan

At your tables, we'll place:

- Stacks of sticky notes & pens
- Instruction sheet with topic list, BOPPPS description, & list of active learning techniques

Brainstorm instructions

- Form groups of 2 to 3 & select topic from list.
- **Individually** brainstorm ideas & write each key component on a sticky note.
- **Discuss** in groups & rearrange stickies to create a stronger active learning session.

Take a second and share!

- We'd love for a few groups to share their mini-lesson planning experience.

Further Reading

Here are a few excellent resources on creating active learning classrooms.

Active Learning Strategies from UC Berkeley's Center for Teaching and Learning.

Active Learning from the Center for Teaching at Vanderbilt University

Active learning strategies in higher education : teaching for leadership, innovation, and creativity by Misseyanni, Anastasia (ed).

Keep in touch

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Slide 21: Screenshots from Stephanie Quail's FliQuiz account

Slide 22: Screenshot from Stephanie Quail's Padlet account

Slide 23: Screenshots from Stephanie Quail's Google Docs account and Google Slides

Slide 24: Screenshots from Stephanie Quail's Google Forms account

Slide 25: Screenshots from Matt Rohweder's Google Forms account

Slide 26: Screenshot from Nearpod website

Slide 27: Screenshot from Matt Rohweder's Nearpod account

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