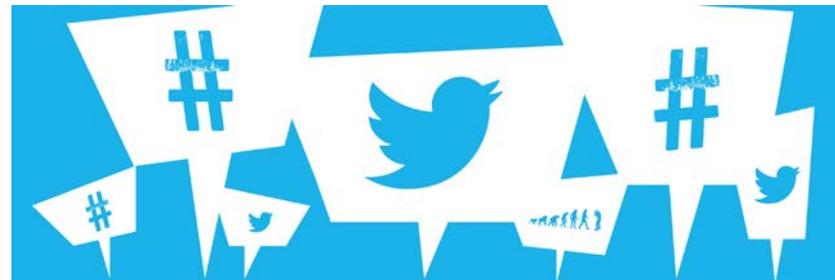


Good morning!

As you settle in....

- Please pick up your name tag
- Grab some tea/coffee and a snack
- Log in to your (or create a) Twitter account
- Hashtag for this morning's work: *#activelearning*



Active Learning Bootcamp

University of Alberta Libraries Workshop, August 11, 2016

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UNIVERSITY OF ALBERTA
CENTRE FOR TEACHING AND LEARNING

Today's Plan

1. What is Active Learning?
2. Why should I build Active Learning strategies into my teaching?
3. Using Technology to promote Active Learning (J.R. Dingwall)
4. Looking closely at some Active Learning strategies
5. Selecting and personalizing Active Learning strategies



Let's get active!

- Get into groups of 3 or 4
- Choose a piece of chart paper (on the wall) as your starting point.
- Discuss the question and write down 1 or 2 answers (can be point form).
- In 90 seconds, move to the next piece of chart paper and repeat the process.



What is Active Learning and why should I use it?

- “Active learning is a process whereby students engage in activities, such as reading, writing, discussion, or problem solving that promote **analysis**, **synthesis**, and **evaluation** of class content.” – University of Michigan CRTL (<http://www.crlt.umich.edu/tstrategies/tsal>)
- Responsibility for learning is transformed from a **one-way** responsibility (“the teacher teaches me so I should learn”) to a **two-way** responsibility (“the teacher teaches me but I also need to actively engage in order to understand and learn.”)
- Promotes **higher-order** thinking (beyond content memorization)



Bloom's Taxonomy

create

Produce new or original work

Design, assemble, construct, conjecture, develop, formulate, author, investigate

evaluate

Justify a stand or decision

appraise, argue, defend, judge, select, support, value, critique, weigh

analyze

Draw connections among ideas

differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test

apply

Use information in new situations

execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch

understand

Explain ideas or concepts

classify, describe, discuss, explain, identify, locate, recognize, report, select, translate

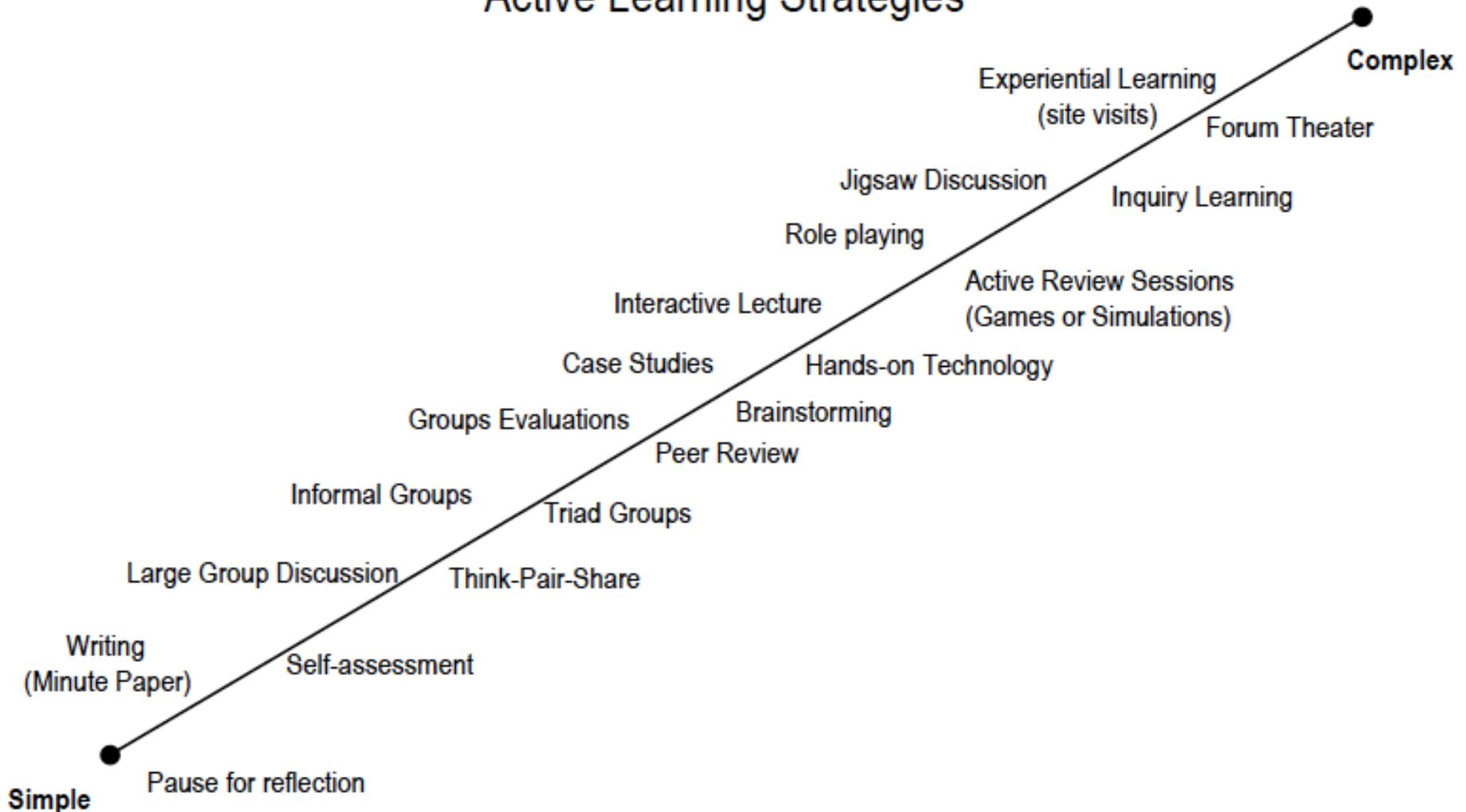
remember

Recall facts and basic concepts

define, duplicate, list, memorize, repeat, state



Active Learning Strategies



This is a spectrum of some active learning activities arranged by complexity and classroom time commitment.

Prepared by Chris O'Neal and Terisha Pinder-Grover, Center for Research on Learning and Teaching, University of Michigan



At the **BEGINNING** of a lesson: Assessing & activating prior knowledge

Pedagogical benefits:

- When done at the beginning of a new unit of study/course, this **activates** students' prior knowledge of a topic or concept (VELCRO)
- By revealing students' prior knowledge, instructor can **assess students' thinking** – areas of strength, but also misconceptions, naïve conceptions
- Promotes **meta-cognition**: students' thinking about their thinking



“The most important single factor influencing learning is what the learner already knows. Ascertain this and teach him [sic] accordingly.”

(Ausubel, 1968, p. vi)



Strategies to Assess & Activate Students' Prior Knowledge

- **3-2-1:** List **3** things you **already know** about the topic, **2** things you'd **like to know** or learn more about, and **1 question** related to the key concept.

- **KWL Chart:** 3 column chart: What I **KNOW**, what I **WANT** to know, What I've **LEARNED**. Students fill in first 2 columns at the beginning of the lesson and the last column at the end of the lesson.

- **Carousel Brainstorming:** Place chart paper around the room, each one with a different question or prompt on it. Distribute students in small groups (3-4 per group) to each piece of paper. Students discuss and respond to prompt. After a few minutes, all students circulate to next paper.



- **Think-Pair-Share:** Pose a question or topic to class. Give students 1-2 minutes to **THINK** about the question/topic, then have them **PAIR** up and **SHARE** their ideas. Variations: **Think-Pair-Write, Think-Write-Share.**



- **4 Corners:** Have 4 topics, questions, or answers posted in 4 corners of classroom and have students move to one based on a prompt.

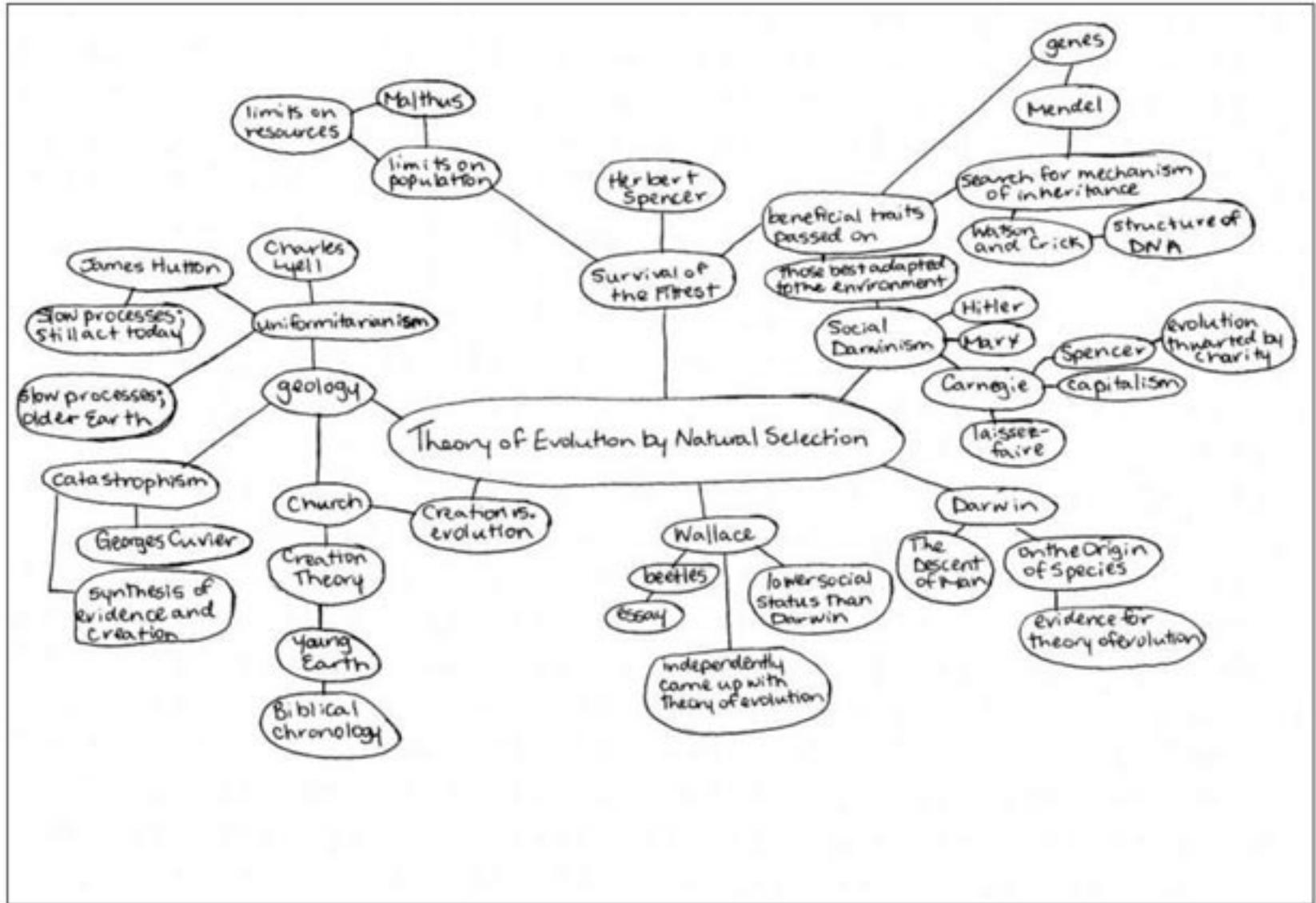
- **Concept Mapping:** Have students make a simple concept map to identify everything they know about a topic. Return to concept map at the end of the lesson so students can refine their thinking based on new knowledge.



- Can use text and drawings.
- Can be done individually or collaboratively.
- Can be more complex, using lines between map bubbles to explain connections.



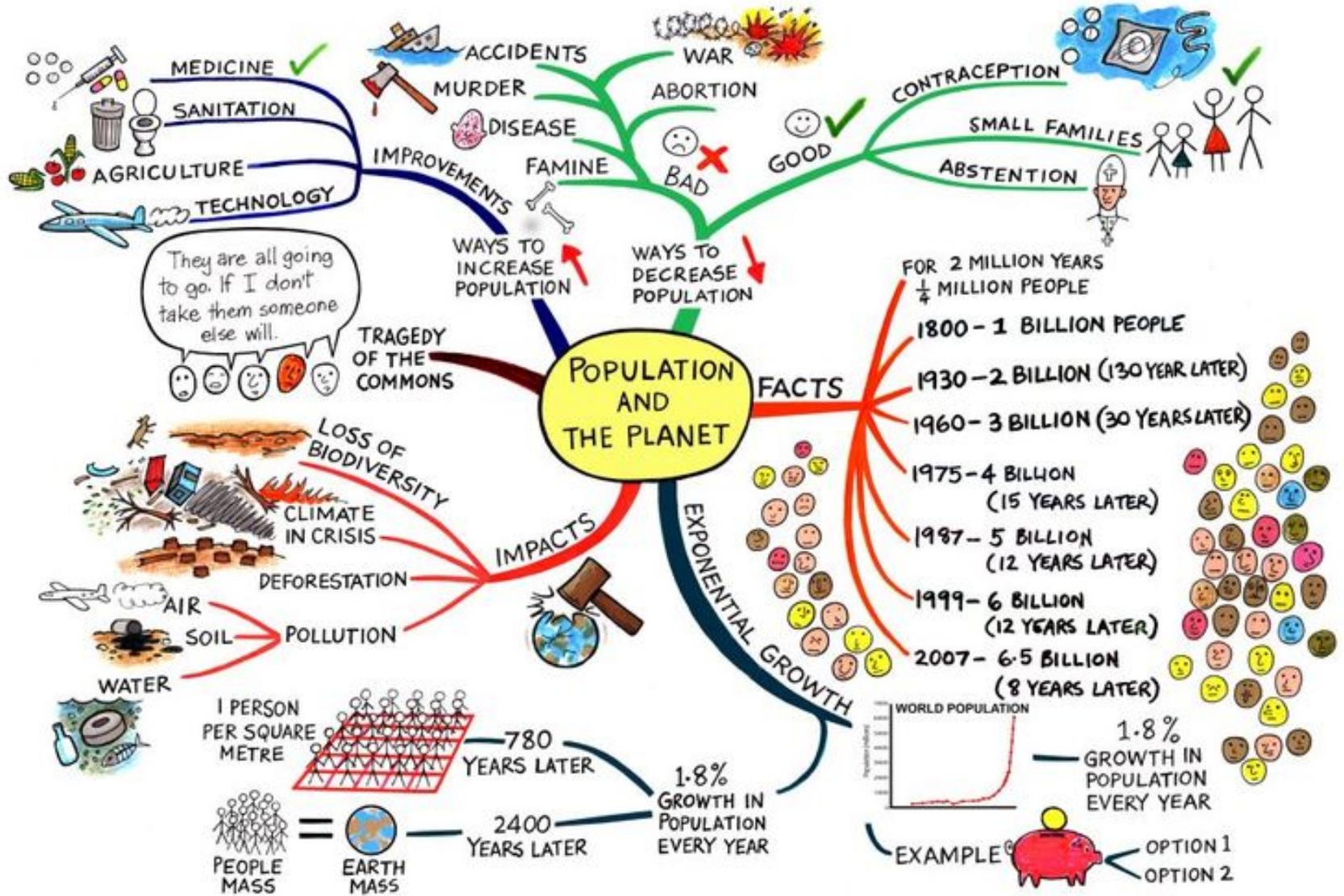
Simple Concept Map



Donated by University of Guelph Learning Commons Peer Helper Julie Irwin ©2010



Complex Concept Map



Application (5 minutes)

- Identify one lesson or workshop where you could integrate one of these quick strategies to assess learners' prior knowledge.
- Which strategy will you use?
- How will you implement it?
- How will their responses inform what you do next?



Active learning strategies to use DURING a lesson



- When done mid-way or near the end of a unit of study, can **assess students' understanding** of major course concepts/topics.
- **Role play:** Group students into groups of 2-4 people and have them role play a scenario related to what you are teaching them.
- **For example:** Person 1 approaches Person 2 to ask for help researching a topic. Person 1 has to use their understanding of library research to teach/demo Person 2 how to do it.
- Take **90 seconds** to **brainstorm** with your table-mates other topics students could role play.



- **Pro- and Con- Grid:** Students list advantages and disadvantages of any issue or topic (can be done individually or in groups). This helps students think critically about the topic and pushes them to go beyond their initial reaction. **For example:** *What are the pros and cons for students (or instructors) of a university using plagiarism-checking software?*
- **Modeling Skills:** Similar to Role Playing but may be less formal. You model a skill to students and then have them practice the skill with a partner. Break skills into small pieces throughout the lesson – save time at the end to put all of the pieces together and have students work through the entire skill.
- **One-Minute Paper:** Have students respond to a prompt and tell them they have one minute to write a response. You can provide paper (or students use their own paper), or you could do this in a Google Doc.



- **Skits:** Give groups of students a topic or issue that you've been working on and tell them they have to act out in a 2 minute skit. Give them 5-7 minutes to plan their skit, 2 minutes to do it, and then other students have to guess the topic or issue.
- **Games:** Create a game for students to play to learn some of the content or skill you want them to learn! **For example:**
- **Webquests:** <http://webquest.org/search/index.php>

Why do I need to learn this? I already know how to search.

- **Kahoot:** [Video tutorial](#), <https://getkahoot.com>
- [Active Learning Kahoot](#)



At the END of a lesson: Assessing learning & promoting meta-cognition

- Enables you to **assess** student learning. Encourages students to **internalize** their learning.



“Ticket out the door”:

- Similar to the “one minute paper” idea, except this happens at the end of the class.
- Students have to give you their “ticket” to “get out the door”
- Can be anonymous – some advantages to this
- **Ask students to write down, on a piece of paper, something you want to know:**
- *What was the most surprising thing you learned in today’s class and why did it surprise you?*
- *How has your thinking about _____ changed or grown?*
- *How would you explain _____ to someone else?*
- *What topics did you find confusing or difficult to understand?*
- *List 3 ways this topic is relevant for society today.*



Application

What Active Learning Strategies will you try?

- Identify three Active Learning strategies that you could use at the beginning, middle, and end of a class.
- Start to map out what you will do.
- Get ready to share your ideas with us!



Final Thoughts

IMPORTANT:

Be willing to try things more than once – you and your students will need time to learn how to use these strategies.

Investing time at the start of the term to incorporate these strategies into your teaching will pay off in dividends during the rest of the term:

- More active classes
- More engagement for everyone!
- Deeper learning, that is both challenging & meaningful

Think about how you can collaborate with your colleagues to support one another! Start a shared Google Doc folder!

