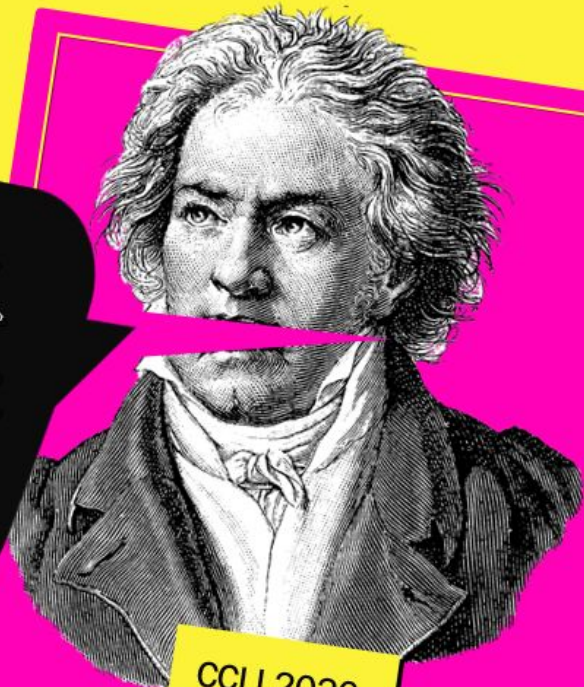


ACTIVE INGREDIENTS:

Using Active Learning as a
Means of Assessment



CCLI 2020

Lightning Talk



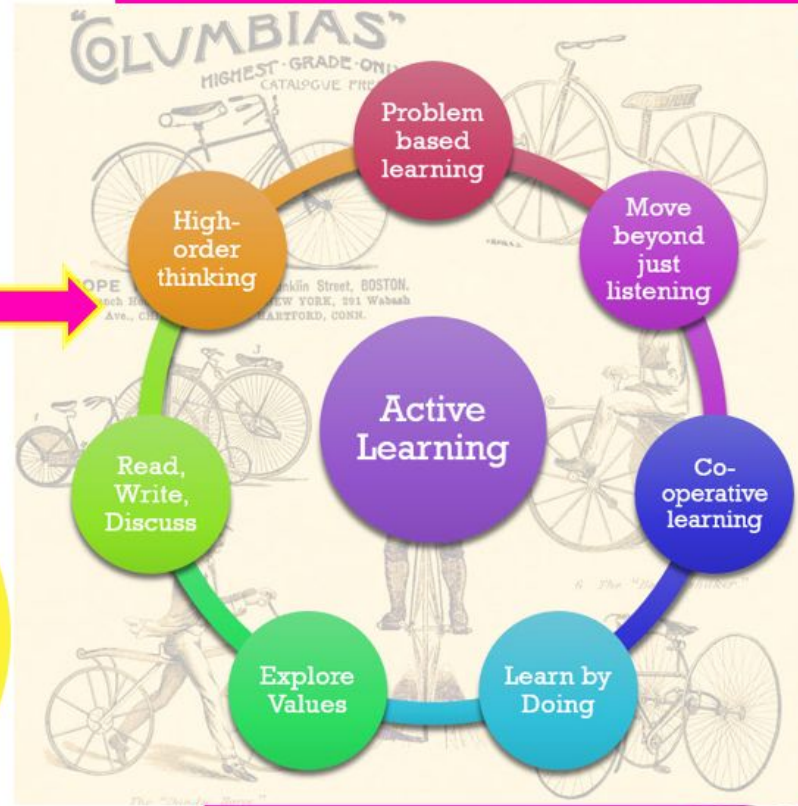
Michelle M. DeMars
Health Science
Librarian
CSU Long Beach

ACTIVE LEARNING

What is it?

- ▶ There isn't a unanimous definition of what active learning is.....however,
- ▶ There are some common elements to many definitions of active learning
- ▶ One of my favorites explanations is:

Active learning is:
“instructional activities
involving students in
doing things and
thinking about what they
are doing”
-Bonwell & Eison



ACTIVE LEARNING



Why active learning

- ▶ In lecture only classes, students are not attentive 40% of the time
- ▶ Student attention decreases as the class progresses; Student's retain 70% for the first 10 minutes, but only 20% of the last 10 minutes
- ▶ Student's develop a deeper understanding and higher thinking with active learning
- ▶ Student's are less likely to fail a class that uses active learning methods.

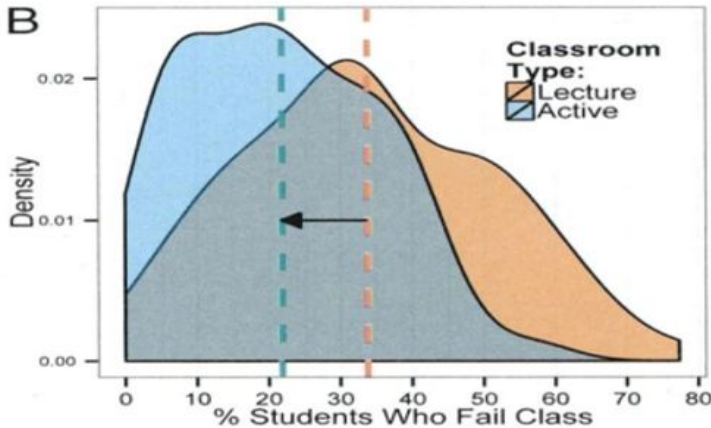
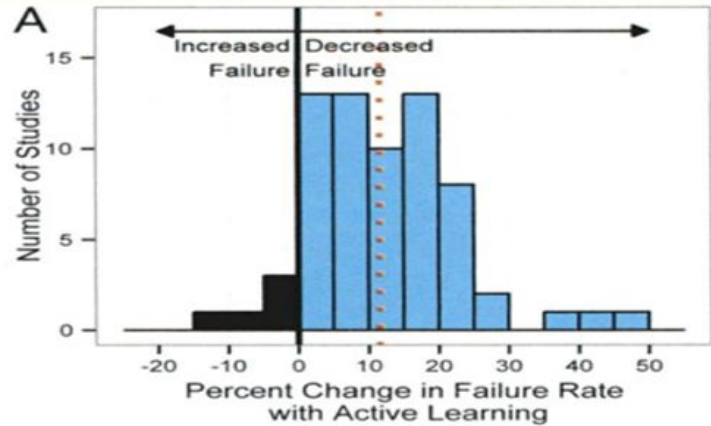


Fig 1. Changes in failure rate (A) Data plotted as percent change in failure rate in the same course, under active learning versus lecturing. The mean change (12%) is indicated by the dashed vertical line. (B) Kernel density plots of failure rates under active learning and under lecturing. The mean failure rates under each classroom type (21.8% and 33.8%) are shown by dashed vertical lines.

-Freeman, Eddy, McDonough, Smith, Okoroafor, Jordt, & Wenderoth.

ASSESSMENT

What is it?

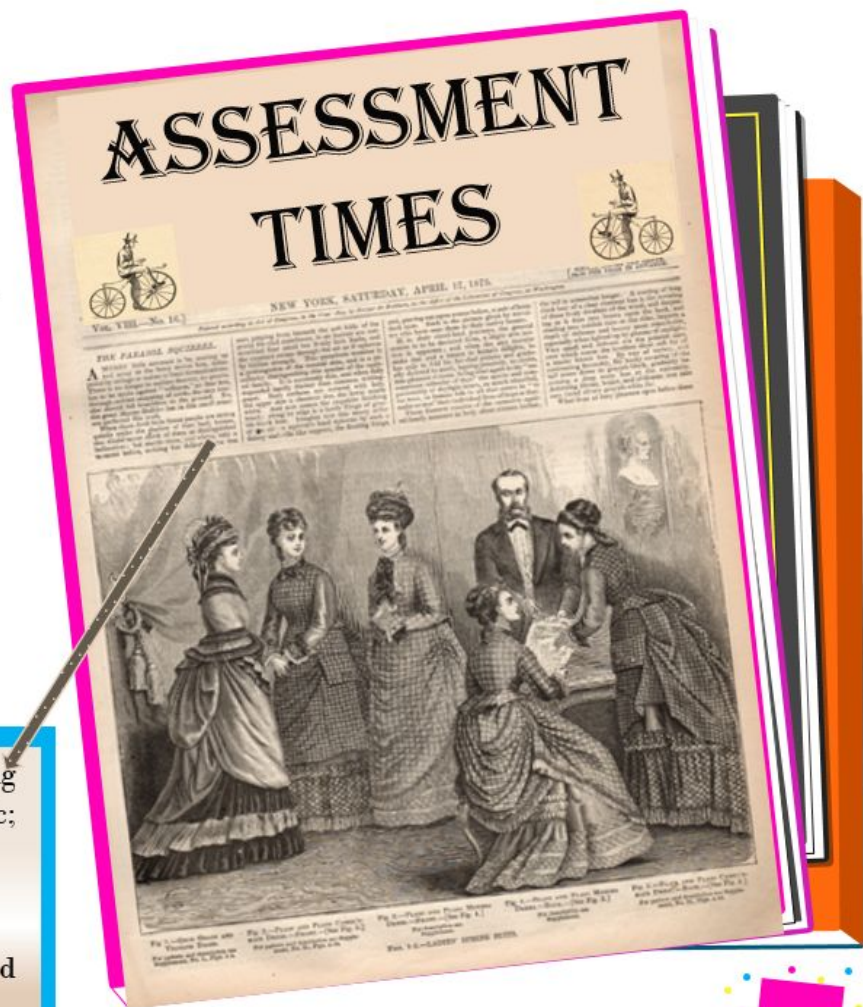
▶ Summative Assessment

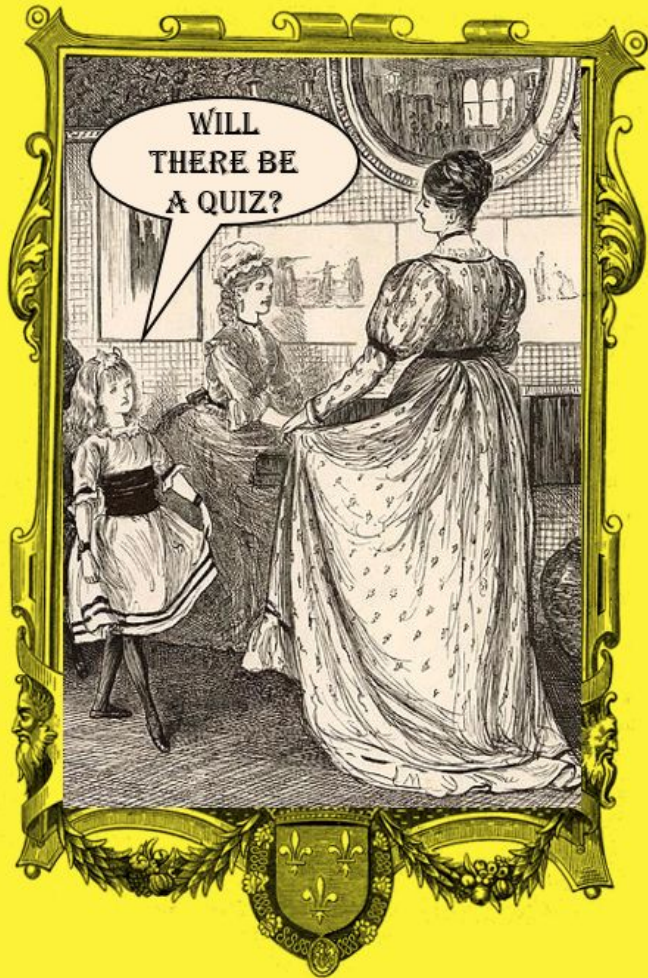
- An assessment, often given at the end of a course or class, that can help gauge if a student has grasped the totality of knowledge or skills on a particular subject.

▶ Formative

- An assessment, given informally, that can gauge if students are understanding the material presented, given immediately following a learning objective.

“Assessment is an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance.” -Angelo





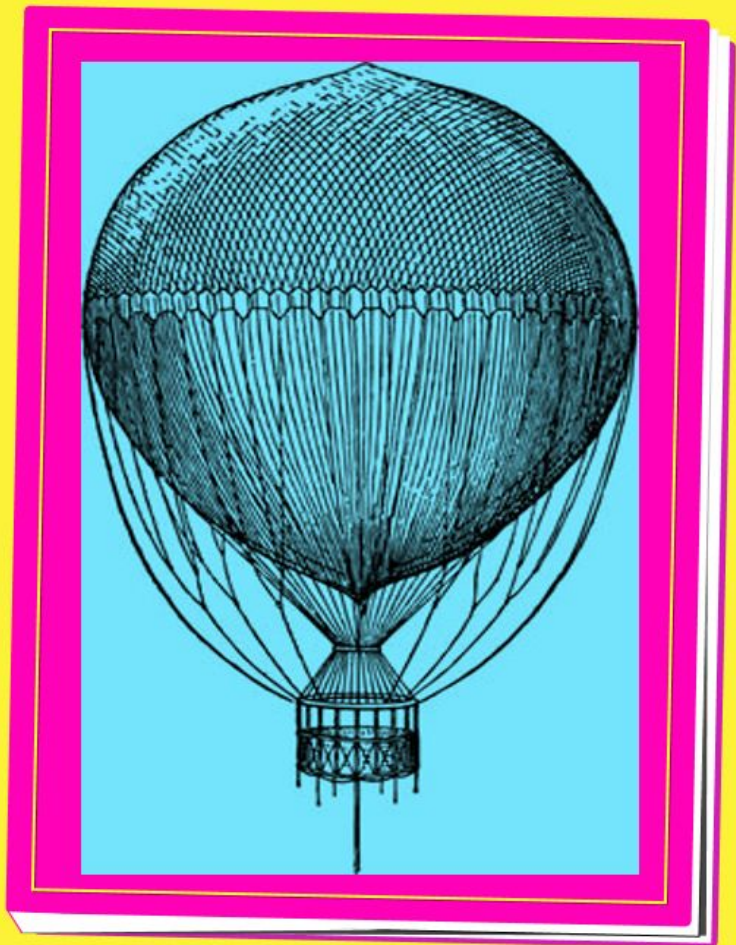
ASSESSMENT

A few things to consider

- ▶ Keep what you are assessing in mind (Knowledge? Skills?)
- ▶ How will you determine the criteria for success? (find an article, cite properly, contribute to discussion?)
- ▶ Who will be the assessor? (librarian as assessor, peer as assessor?)
- ▶ How would you like to perform the assessment? (active learning , of course!)



Using active learning as assessment



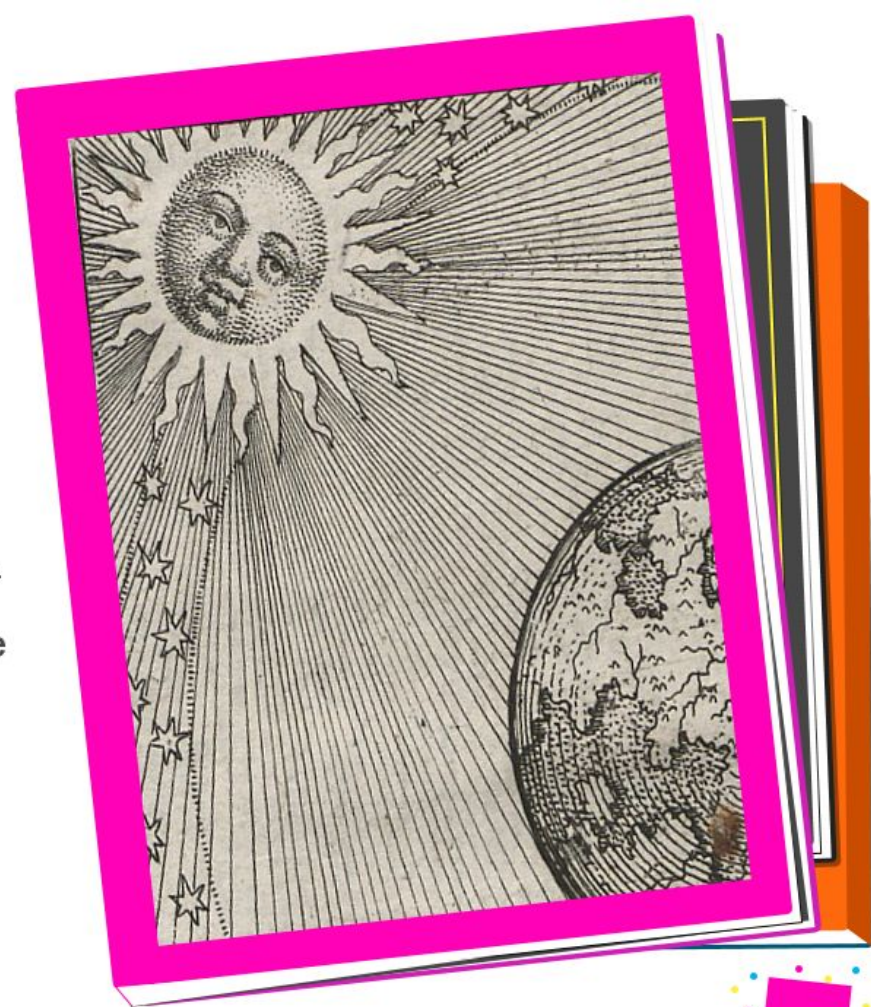
When adding 'Active Assessment' to my classes I use it in at least three areas.

- **Beginning:** To gauge what knowledge & interests the students come in with.
- **Middle:** To gauge the student's grasp of learning objectives through out the instructional session.
- **End:** As a summative assessment or review, to gauge if they have understood the totality of the material.

BEGINNING:

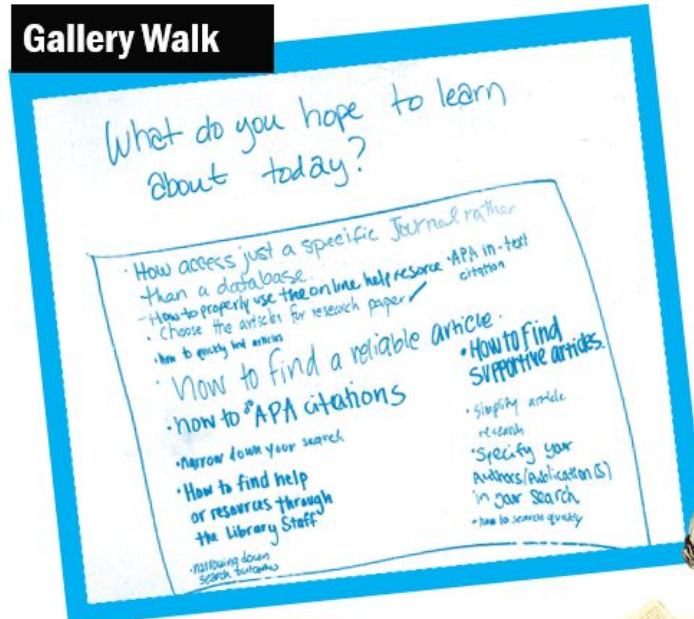
To gauge what knowledge & interests the students come in with.

- Sets the tone for the rest of the instructional session.
- Lets students know early on that they are expected to participate and engage.
- Provides information regarding what the students already know.
- Provides information regarding what they need or want to learn.



EXAMPLE BEGINNING ASSESSMENTS

Gallery Walk



Use a whiteboard, dry-erase wall or large paper and have students stroll through and complete several prompts as they come in. Review for commonalities to drive your lesson plan.

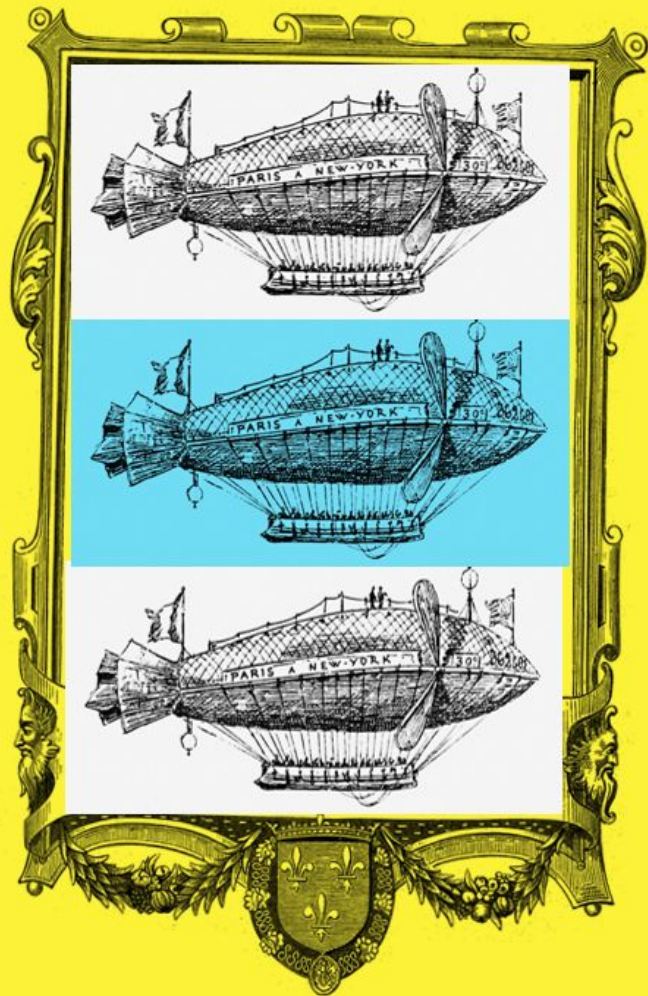
These assessments can help to inform the instructor where any knowledge gaps are and even some common anxieties



Post-It Cloud



Use a sticky notes to have students answer a prompt in their seats then have them get up and stick to the wall. Review & discuss for commonalities to drive your lesson plan.



MIDDLE:

To gauge the students' grasp of learning objectives through out the instructional session.

- Provides information regarding whether or not students are grasping the material.
- Can assess the students' mastery of research skills or ability to think critically about article choices.
- Can assess a students ability to identify parts of an article or citation.
- At the very least provides a check-in to make sure they are with you!



EXAMPLE MIDDLE ASSESSMENTS

ONE MINUTE REPORT

- Break students into groups.
- Have them do a guided search on a research question.
- Have each group give a one minute report describing their search strategies and results.
- Discuss alternatives & successes.
- Ask the class if they agree or what they might do differently.



**WITH APPLAUSE,
OF COURSE!!**

This can assess a student's research skills plus their knowledge of appropriate literature



EXAMPLE MIDDLE ASSESSMENTS

HUMAN CITATION PUZZLE

- Use an APA citation that's printed on large cards.
- Break it into authors name, date, title, journal, volume issue, page etc.
- Have the students put themselves in order.
- Students can hold cards or lay them on the floor.

This can assess a student's knowledge of formatting styles or any element that requires sequencing.





EXAMPLE MIDDLE ASSESSMENTS: WHAT'S ON YOUR FEET?

- When describing Boolean operators.
- Ask students to stand, if able.
- Have them sit as you say different types of shoes, separating with OR.
- “Sit if you’re wearing Vans.....Sit if you’re wearing Vans OR Converse...”
- For AND, follow with “Stand back up, if you’re wearing Vans AND Converse”

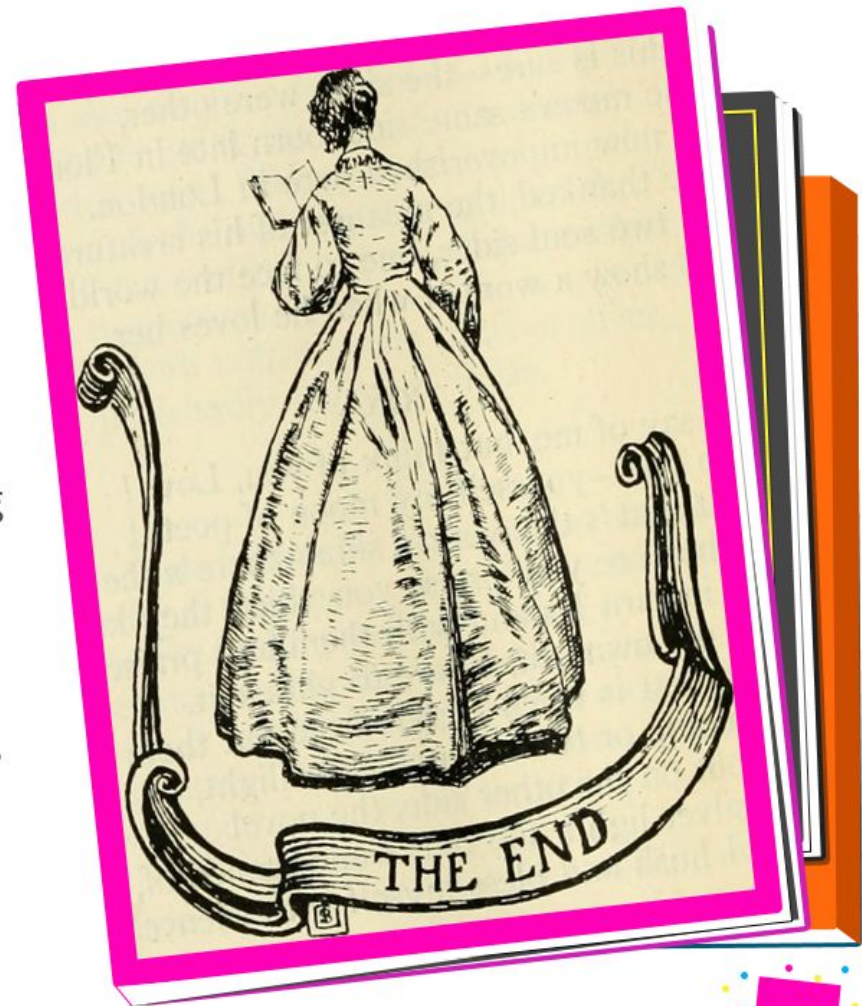
This exercise can help
to determine if
student's grasp tricky
Boolean operators



END:

A summative assessment or review, to gauge if students have understood the totality of the material.

- Aim for an assessment of the overall understanding of the session, grading or scoring optional!
- A great time to re-enforce main learning objectives.
- Provides feedback to the instructor as to how to improve or alter for next time!



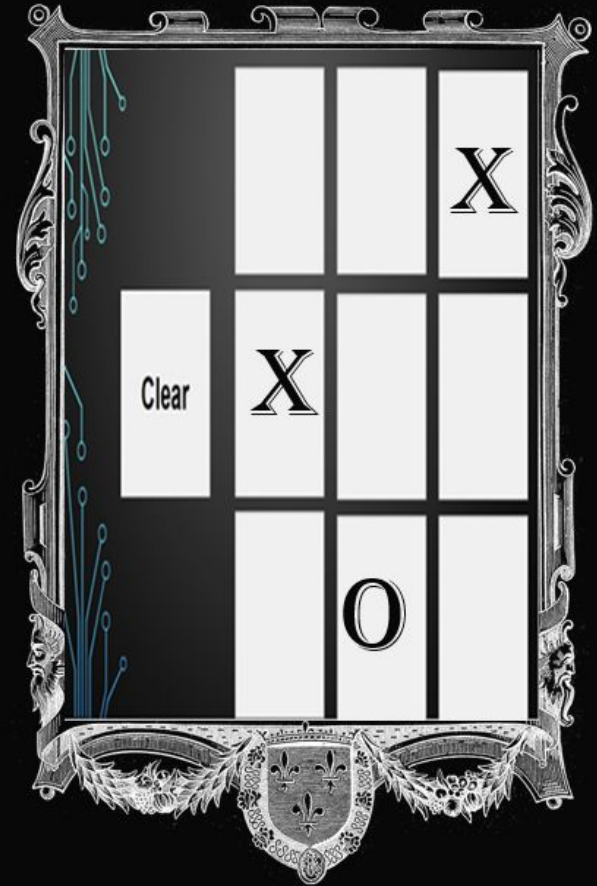
EXAMPLE END ASSESSMENT

COMPETITIVE TIC TAC TOE

- Break students into two teams
- I often divide them using each side of the room.
- Then ask them questions quiz style.
- First team with the right answer gets to place their letter.
- A student can only answer once to encourage engagement from everyone!



**KNOWLEDGE REVIEW WITH A
COMPETITIVE KICK**



EXAMPLE END ASSESSMENT

KAHOOT! REVIEW

- Use the Kahoot! App to generate a competitive quiz for students before your library session
- Provide students with code.
- As you progress through quiz, take time to review responses.
- Discuss what is or isn't the right answer.....maybe there is more than one!
- I recommend Kahoot!'s "PG" settings.



Kahoot! is a student favorite, they love the app and love to win!!



EXAMPLE END ASSESSMENT:

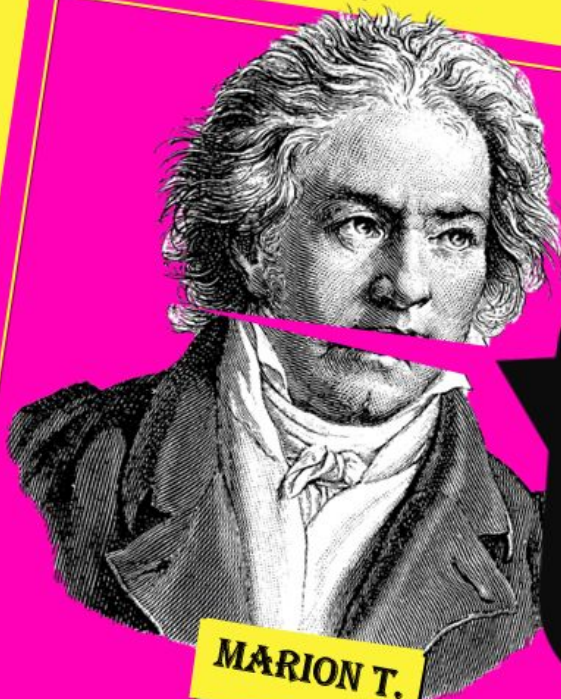
BINGO REVIEW



- Provide students with bingo cards
- Then ask quiz style questions, instead of calling letters and numbers
- The answers are the squares on the bingo card.
- This can be used for a variety of topics, even copyright bingo for faculty!

This one requires a bit more prep, I used a bingo card generator website to help.





MARION T.

LIBRARIAN

But Can I Use Active Assessments if I am Teaching Online??

**YES,
YES YOU
CAN!!**



ACTIVE ASSESSMENTS: IN THE TIME OF QUARANTINE



- To do active assessments in a virtual teaching environment you can skew some of the active assessments you would otherwise have tried in person.
- Instead of standing, ask for a thumbs up!
- Instead of groups, use break-out rooms!
- I am in the process of experimenting with them all!



ACTIVE ASSESSMENT ONLINE

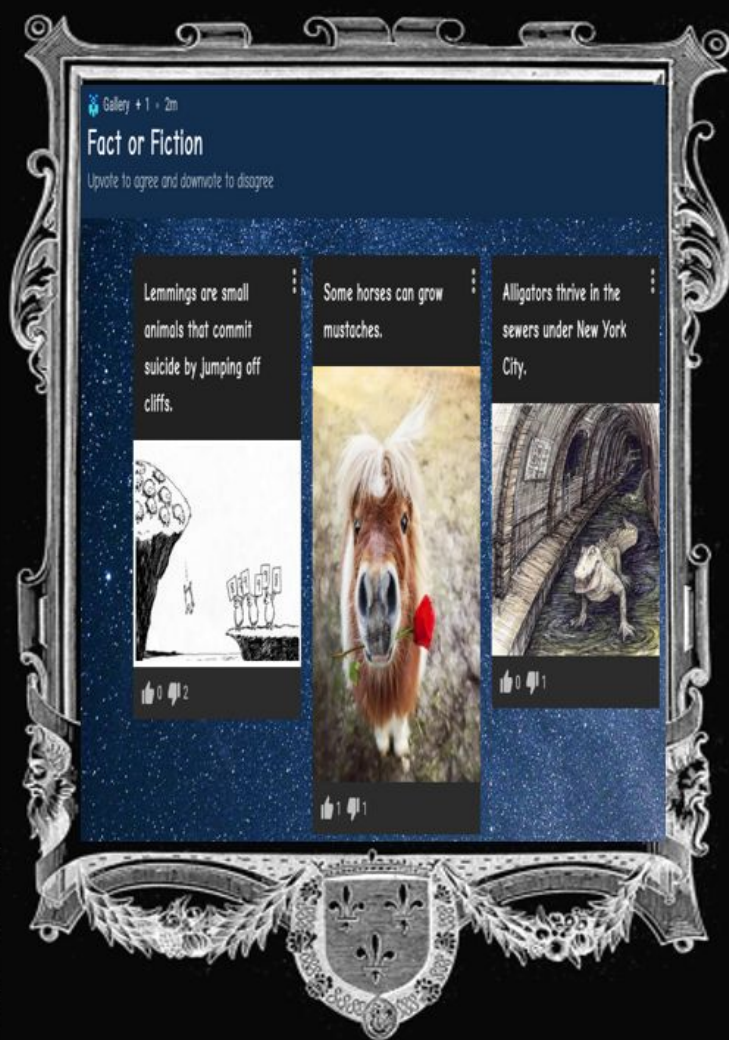
PADLET

- Compared to a 'virtual cork board'
- Share link with the class and then use 'share screen' to view results.
- Can be used for brainstorming activities allowing students to see in real time comments from the class.
- Allows for 'like' or 'dislike' feedback that could be used for a true or false style quiz.



CAUTIONARY TALE:

Use app settings to keep responses and names 'PG' (trust me)



ACTIVE ASSESSMENT ONLINE

Jam Board (G Suite)

- Similar to Padlet but with the addition of various drawing tools and an integrated google image search.
- Great for brainstorming synonyms!



If these apps are new to you, allow yourself time to experiment before teaching with them.



ACTIVE ASSESSMENT ONLINE

KAHOOT! ...AGAIN

- Yup, It's our ol' buddy Kahoot! again.
- Don't forget it works just as well in the virtual realm as it does in the real one.



Kahoot! is a favorite of mine but there are lots of online quiz options out there, even one in Google Forms!



ACTIVE ASSESSMENTS:

FINAL THOUGHTS



- Active assessment is very helpful in obtaining feedback from your students.
- It can highlight not only what they comprehend but more importantly, what they do not understand.
- It can keep them engaged and provoke a deeper understanding of the material.
- And, it's fun!





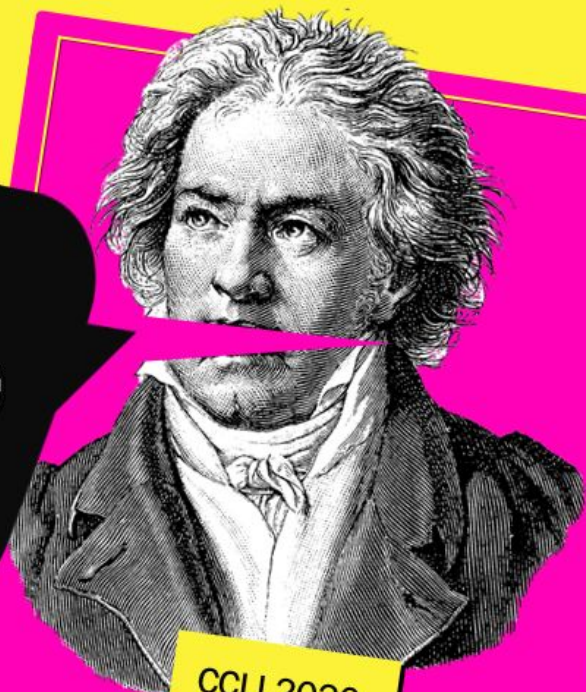
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THE END

THANKS FOR
PARTICIPATING!!



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Michelle M. DeMars
Health Science
Librarian
CSU Long Beach