

ATTENTION, ENGAGEMENT, & APPLICATION: THREE STEPS TO STUDENT LEARNING

CETL APPLIED PEDAGOGY WORKSHOP

INTERESTS AND OBSTACLES

Why does this topic matter to you?

What challenges can you identify?



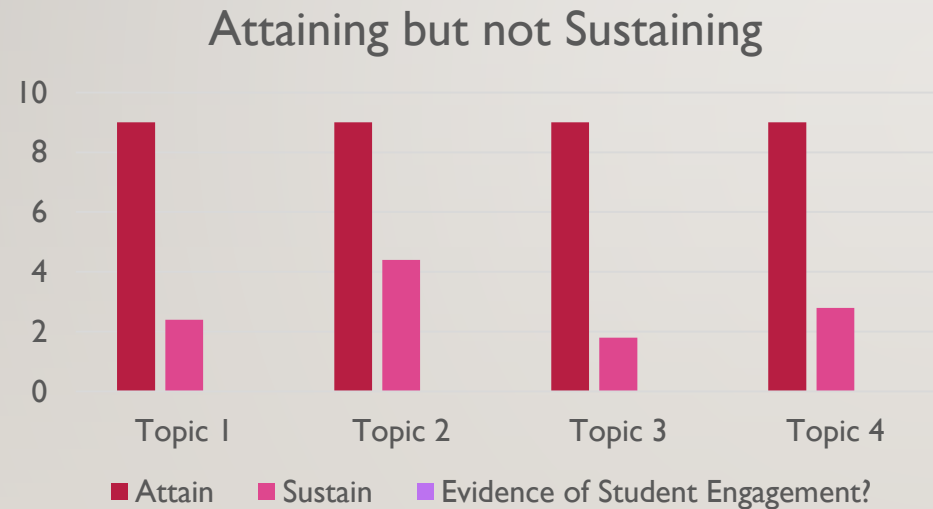
GOALS

- This session examines the proposition that all learning — even the silent stuff — is active learning and provides strategies for promoting, recognizing, and assessing it in its various forms. Based on research from the new science of learning, participants will learn a how to (1) gain and sustain attention, (2) facilitate cognitive engagement, and (3) provide opportunities for students to apply knowledge to different circumstances and contexts.
- <https://www.facebook.com/todd.zakrajsek/videos/10214484435256482/>

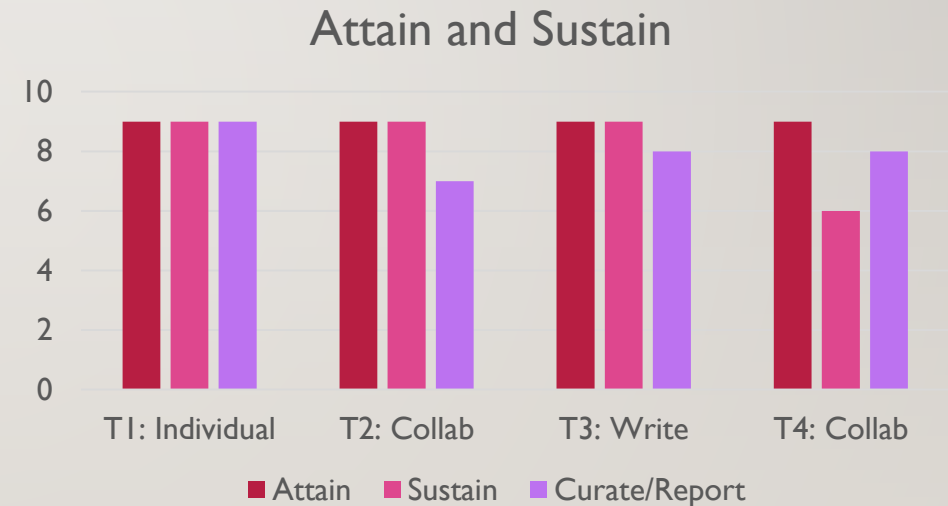
WHAT WE WANT TO AVOID: PEAKS AND VALLEYS

ATTENTION GIVES YOU A PEAK, BUT WHAT ABOUT THOSE VALLEYS?

AVOID THE HIT AND RUN



LINK ATTENTION TO ENGAGEMENT



A 3 (+1) STEP PROCESS/SOLUTION

1. Gain *and sustain* attention

- What do you do to get their attention?
- What do you do once you have it?

2. Provide an opportunity for students to process and for you to facilitate (cognitive) engagement

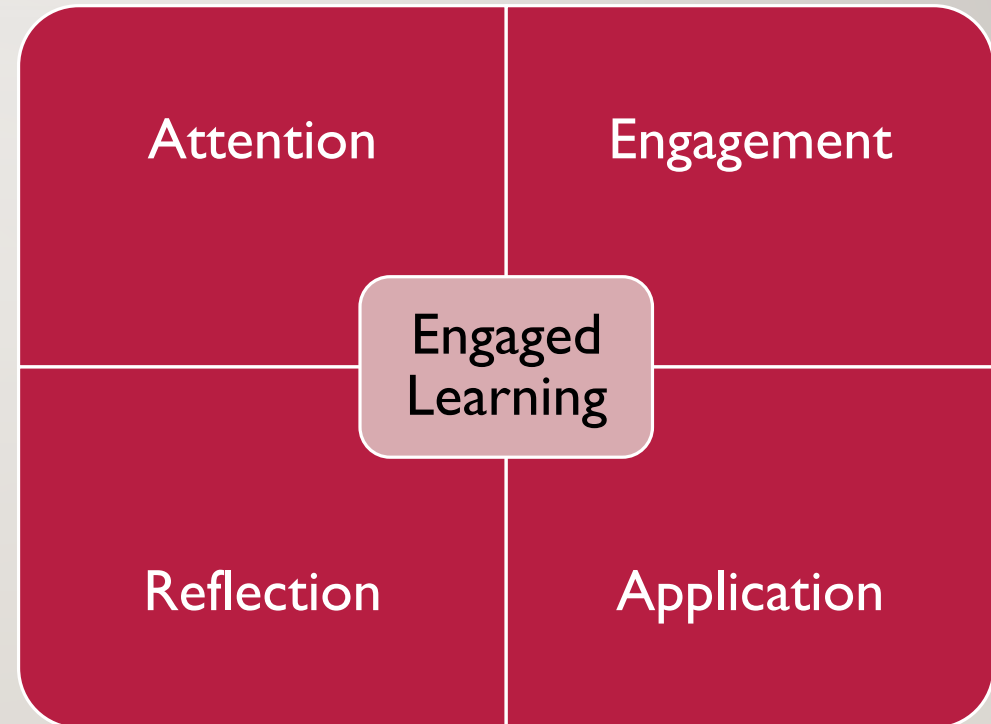
- Individual, collaborative, or both?
- How?

3. Provide opportunities for students to apply knowledge to different circumstances and contexts

- How?

4. Think about what's been learned and how it was learned

- When applied to something/reflected upon, it gains meaning.



THE ATTENTION PROBLEM



THE ATTENTION PROBLEM

- **The average attention span** of a student?
 - 8-15 minutes?
 - That's a fair, research-based range, but note that credible scholars of teaching and learning question some of the methods and therefore the results, and there is no uniformity of effect within and across learning environments and experiences. But we can agree, it's pretty short. How short?
 - 3-4 minutes? 30 seconds??
 - "Attention lapses" occur frequently, and in the 3-4 minute range, and even after about 30 seconds It gets worse the longer a class goes on
 - Why?
 - Distractions?
 - So, *what do we do?*

FACILITATE STUDENT FOCUS

- Maryellen Weimer calls on us to “facilitate student focus”
 - Think about what that entails
 - It’s more than cognitive: it requires us to think about space, time, technology, preparation, engagement, and inclusion.
 - It requires us to address attention enhancers and distractors
 - When is technology part of the solution, and when is it part of the problem?
 - F2F, online, and hybrid challenges?
 - Class size issues?

ATTENTION: SOME RESEARCH FINDINGS & SOLUTIONS

“Following student gaze patterns...”: https://www.usnews.com/pubfiles/PERC2011_Rosengrant.pdf.

- There is no “magical moment” when we have them and then lose them
 - Think about the start of every class --what you see and what you can do.
- Students in the back of the room exhibited the most distractions. So....?
- Instructor attention skews laterally but remains front-centered.
- Back benchers are often called on to “mix it up”, but is that really engagement?

Solutions:

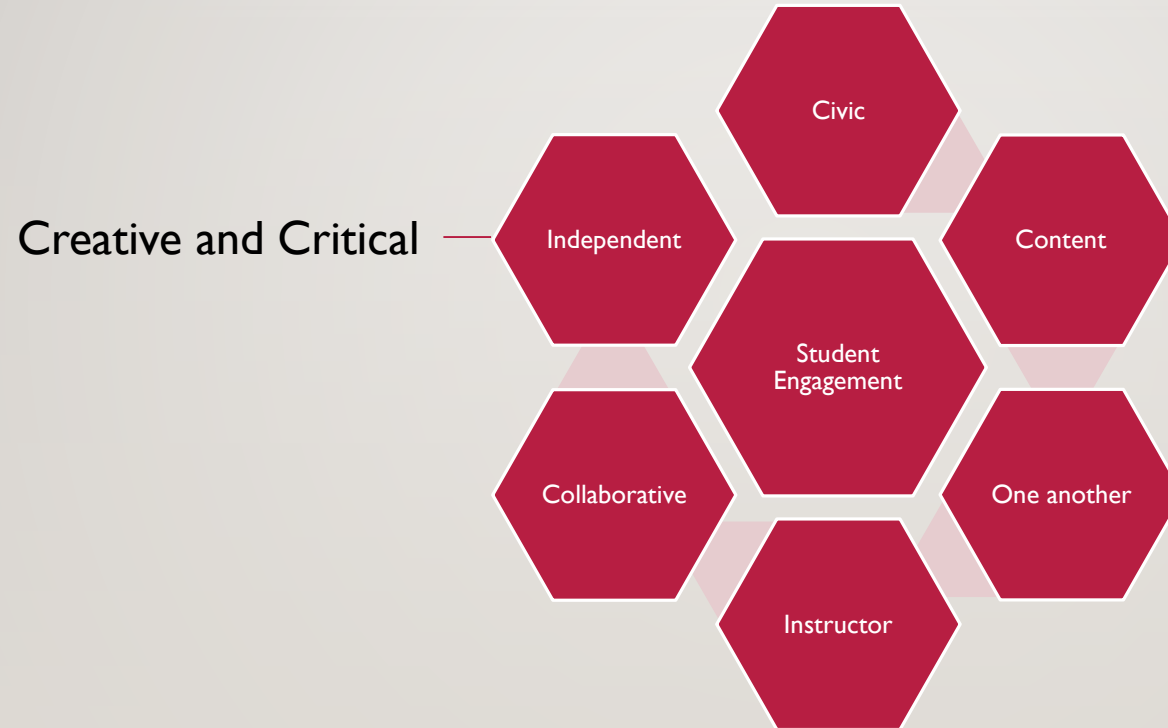
- Think *animation* not *recitation*. Write or draw on the board, inject humor or an example, switch the media/medium.
- Roam the room
- Use spatial map



ENGAGE, APPLY, REFLECT



ENGAGED LEARNING



ATTENTION, ENGAGEMENT, & APPLICATION STRATEGIES

- Get the students invested / shift the value proposition
 - Make it “their” class.
- Build a culture of engagement
- Establish expectations early and often
- Build confidence –the early win
- Use good questions and expect students to *work on* and deliver answers
- Facilitate discussion
- Be intentional about your use of time and space
- Institutionalize reflection
- Minimize distractions
- What about “there is no passive learning?”
- Short writes –keep or collect?
- Active Listening
- Note-taking
- Think-Pair-Share
- Brainstorming –learning outcomes and pathways to them
- Case-/Problem-based learning
- Lab work/mentality
- Group/teamwork
- Simulation
- Individual and collaborative demonstrations, presentations, written work, field work
- DEAL/Reflection

RECAP

If you want to have and to hold their attention, you have to make it –whatever it is– matter to the students. You need to give them the time to experience learning.

- For assessment: you don't always have to rely on or wait for an exam –you can get evidence of their learning on the spot and from the activities themselves.
- A common refrain/strategy is **Demonstration, Analyze, and Apply**. We can look for the evidence that they have analyzed something, but we can also examine them doing the analysis, for example.

