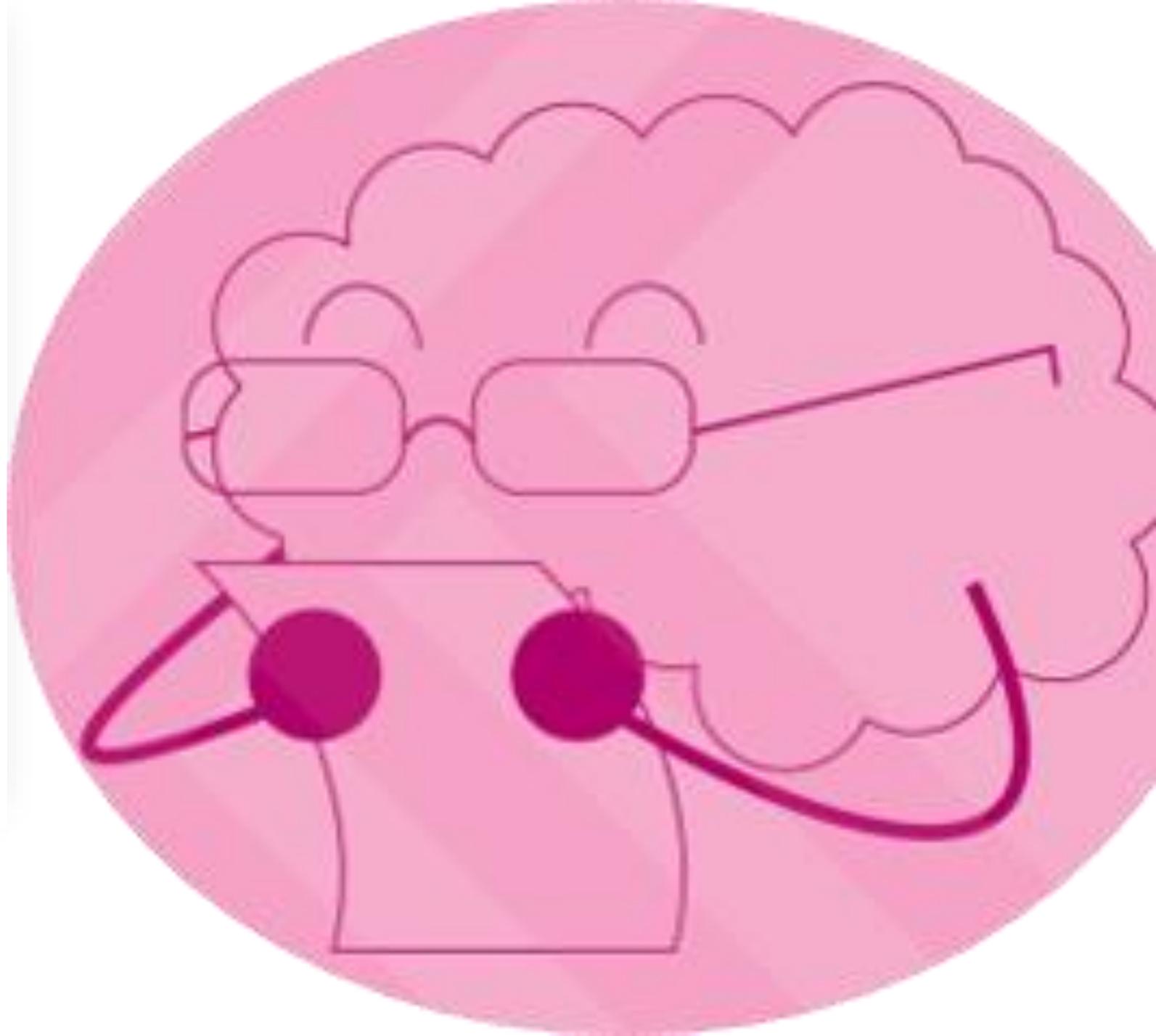


Thinking Critically About Teaching Critical Thinking



**Center for Teaching and
Learning at Kent State**



Agenda

01

What is
Critical
Thinking?

02

A critical
thinker is a
person who...

03

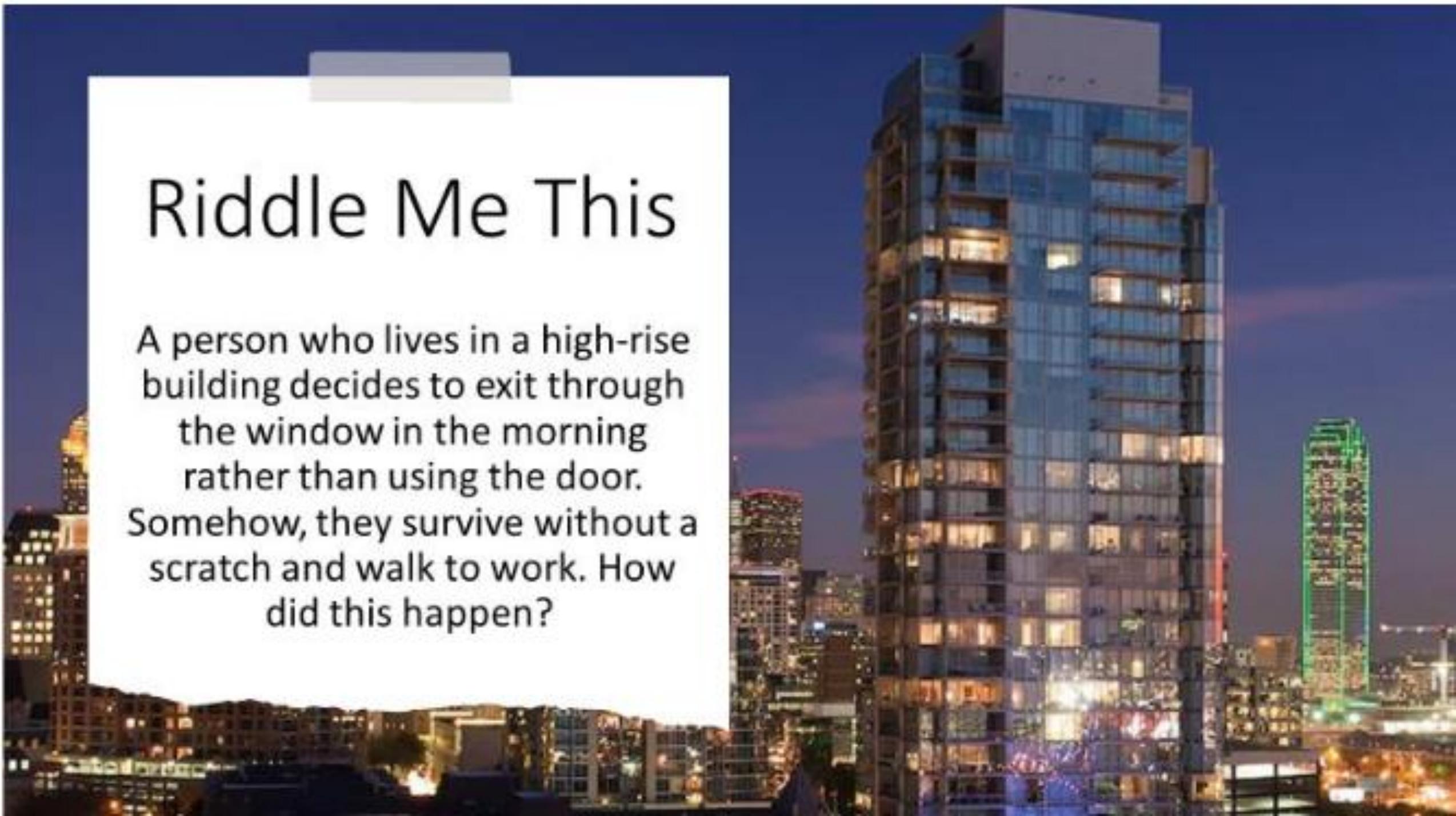
Ways you can
help students
think critically

04

Strategies for
developing
critical
thinkers

Riddle Me This

A person who lives in a high-rise building decides to exit through the window in the morning rather than using the door. Somehow, they survive without a scratch and walk to work. How did this happen?



What is Critical Thinking?



Value Rubric: Critical Thinking



- Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.
- Criteria:
 - Explanation of issues
 - Evidence
 - Influence of context and assumptions
 - Student's position (perspective, thesis/ hypothesis)
 - Conclusions and related outcomes (implications and consequences)



Why is critical thinking important?

- To fight bias and misinformation
- Real-world applications
 - Every day decision making
- Artificial intelligence
- Kent's Vision Statement:
 - To be an inclusive community whose collective commitment to learning sparks **transformative thinking**, meaningful voice and sustainable outcomes to better our world.

A Critical Thinker is a Person Who...

**1. Practices
active listening**

2. Asks questions

**3. Gathers and
assesses relevant
information**

**4. Develops logic
and reasoning**

**5. Thinks open-
mindedly**

Sharing Your Ideas Activity: How Do You Help Students Think Critically in Your Class?

- 1) Think about activities/assignments that help students to become critical thinkers
- 2) Pick the column that best fits that activity and post by clicking on the + under that column
- 3) Type a short description of the activity in the box that pops-up (title can include subject)

The screenshot shows the 'Critical Thinking in the Classroom' interface. At the top, the title 'Critical Thinking in the Classroom' is displayed, followed by the instruction: 'Think about activities/assignments that help students to become critical thinkers. Pick the column that best fits your activity and post. Feel free to add the subject you teach in the title.' Below this, there are five columns representing different critical thinking skills: 'Ask Questions', 'Proactive/active Listening', 'Gathers & Assesses Relevant Information', 'Develop Logic & Reasoning', and 'Think Open-mindedly'. Each column has a plus sign (+) below it. A yellow arrow points from the '2) Click to post' annotation to the plus sign under the 'Proactive/active Listening' column. Another yellow arrow points from the '3) Type here' annotation to a pop-up form that appears over the 'Develop Logic & Reasoning' column. The pop-up form has a 'Subject' field, a grid of colorful icons, and a text area with the placeholder 'Write something fantastic...'. A yellow arrow points from the 'Title' annotation to the 'Subject' field. At the bottom of the pop-up, there are two tabs: 'Develop Logic & Reasoning' (selected) and 'White'.

2) Click to post

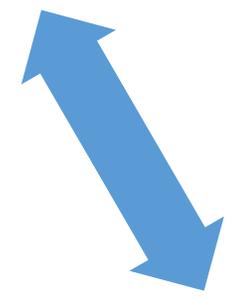
3) Type here

Title



Critical Thinking in Your Courses

Learning Objectives



Activities/
Assignments



Assessments



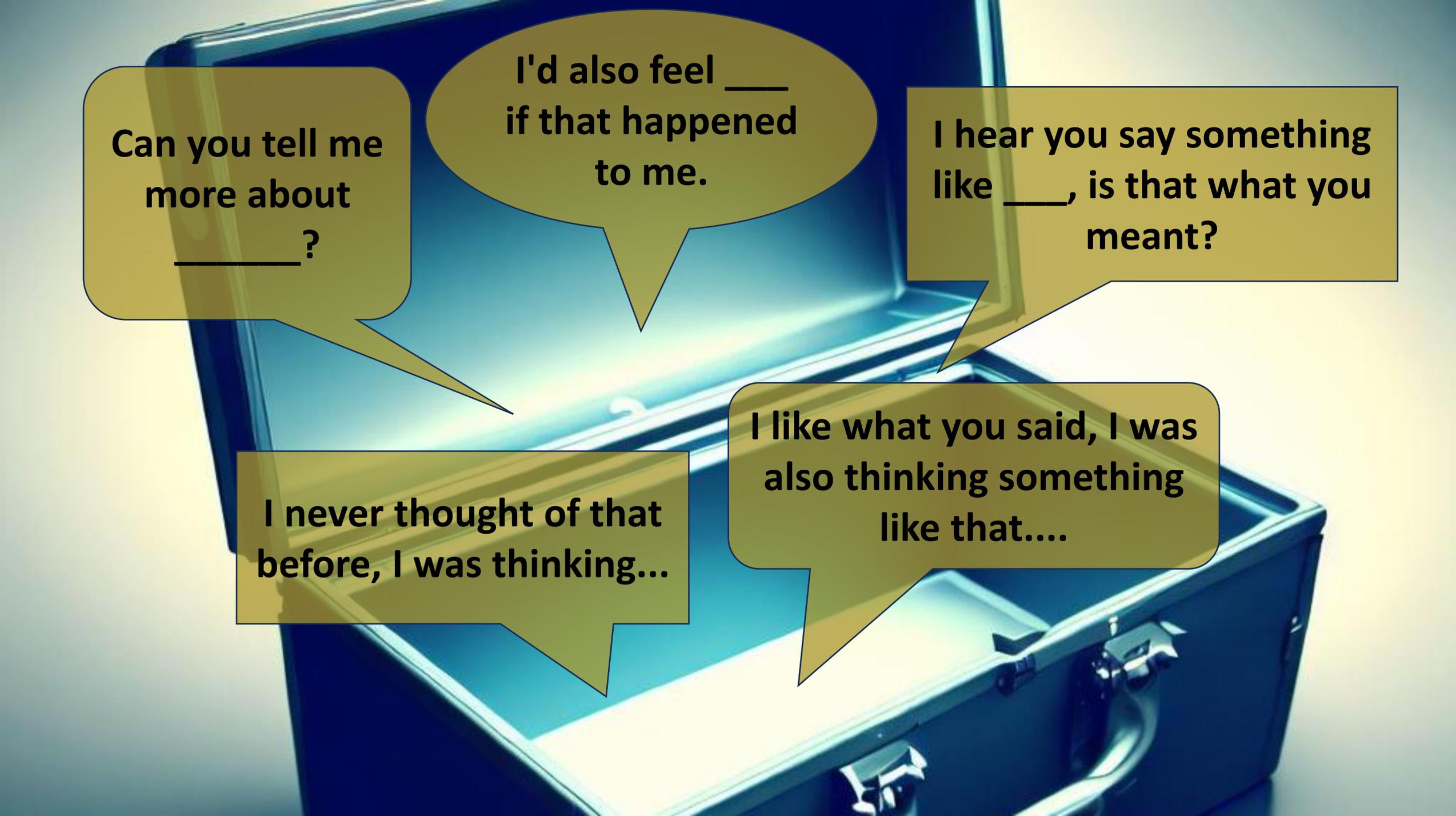
Characteristic 1: Active Listener

Discuss what it means to be an active listener...

- Avoiding distractions
- Body language
- Connect with what others say

Agree+, ask question, provide an alternative perspective





Can you tell me
more about
_____?

I'd also feel ____
if that happened
to me.

I hear you say something
like ____, is that what you
meant?

I never thought of that
before, I was thinking...

I like what you said, I was
also thinking something
like that....

Characteristic 2: Asks Questions

What can we do to encourage students to ask questions?

- Positive class space
 - Role-play (quiz master)
 - 20 questions or lightning round
- Develop questioning skills
 - Model
 - Practice
 - Analyze

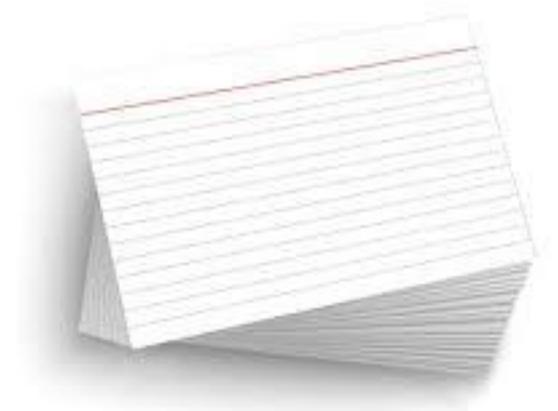
Examples for Skill Development

- Share your process
- How do experts in the field ask...?
 - Self or peer questioning
 - statements → questions
 - what was most important
 - How does this connect with...
- Question Formulation Technique
 - ask often & without judgement
 - label, characterize & improve
 - prioritize

Characteristic 2: Asks Questions

What can we do to encourage students to ask questions?

- Positive class space
- Develop questioning skills
- Multiple mechanisms to ask





Activity: Question Warm-up

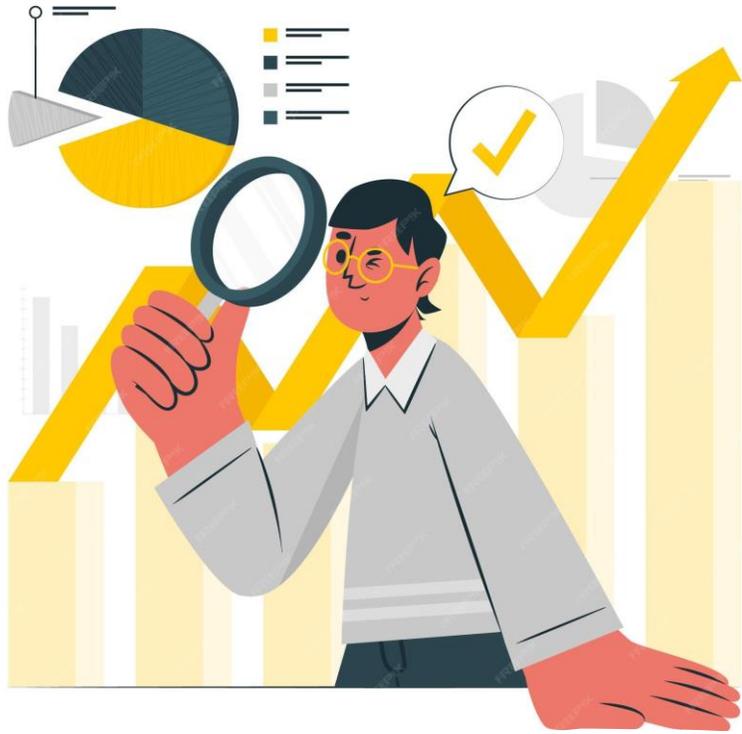
1. Instructor tells a story/riddle
2. Students ask yes/no questions to figure out answer
~if you know the answer, please wait and then maybe ask a question that helps the students (secret hint)

Example story: *A professional writer was sitting in his cabin writing a letter, there was an electrical storm outside & he suddenly died, how?*

Characteristic 3: Gather & Analyze Relevant Info

- Provide multiple sources (media, articles, visuals) for students
- Discuss how to gather information
 - Productive search queries (i.e. SITE, key words)
 - Model troubleshooting
 - Cues for “Alexa”
- Problem / story / article analysis breakdown

Advanced Gathering & Analyzing Relevant Info



Send students on a gathering adventure

- Topic specification
- Post
 - summarize what was found
 - where it was found
 - relevant, accurate, and valuable?
- Critically read: what it says + how & why

Mock debate with a twist (assigned perspectives)

A



C



B



Characteristic 4:

Develop Logic & Reason

- Help students to identify assumptions
 - ask questions
- Be aware of personal bias

A father & son are in a horrible car crash that kills the father. The son is rushed to the hospital; just as he's about to go under the knife, the surgeon says, "I can't operate—that boy is my son!" How is that possible?



COMMON LOGICAL FALLACIES

1

AD HOMINEM

Ignoring the content of an opponent's argument and instead attacking the opponent's character.

2

AMPHIBOLY

Depending the conclusion of an argument upon the wrong interpretation of a syntactically ambiguous statement.

3

APPEAL TO PITY

Attempting to evoke sympathy in your opponents in order to get your conclusion accepted.

4

BEGGING THE QUESTION

Assuming the truth of something that requires proving. Concealing an essential premise in an argument or basing a premise on a yet unknown conclusion. Reasoning in a circular fashion.

5

COMPLEX QUESTION

Asking multiple questions that carry built in

Characteristic 4: Develop Logic & Reason

- Develop steps / checks
- Define order/patterns
- Deconstruct the logic of a position

I do, We do, You do



Example: Word Connections

**What do all of these words
have in common?**

Antimony

Elephant

Intensity

Oranges

Underwater

Characteristic 5: Open-Minded Thinking

- Help students to not jump to judgement or conclusions
 - Challenge stereotyping & overgeneralizations - "what do you mean by that?"
 - Unfolding cases/problems
- Describe how schools of thought change over time
- Add the "human/real" element

Critical Thinking in the Classroom

Think about activities/assignments that help students to become critical thinkers. Pick the column that best fits your activity and post. Feel free to add the subject you teach in the title.

Ask Questions

Proactive/active
Listening

Gathers & Assesses
Relevant Information

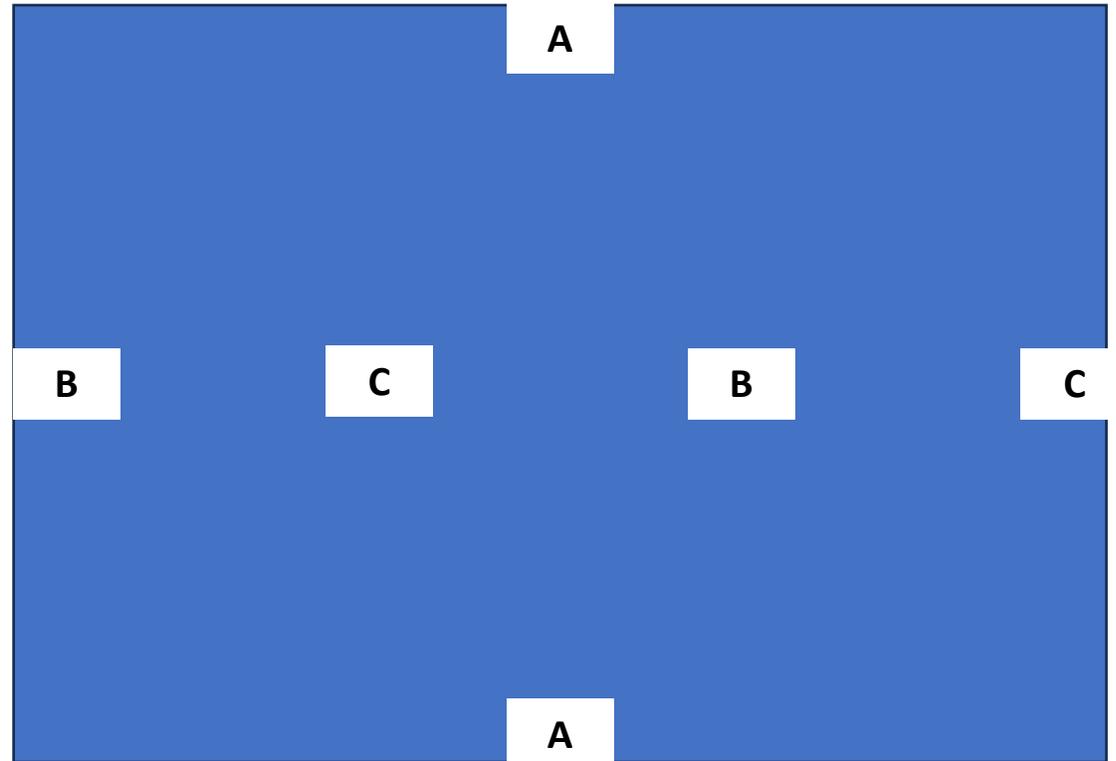
Develop Logic &
Reasoning

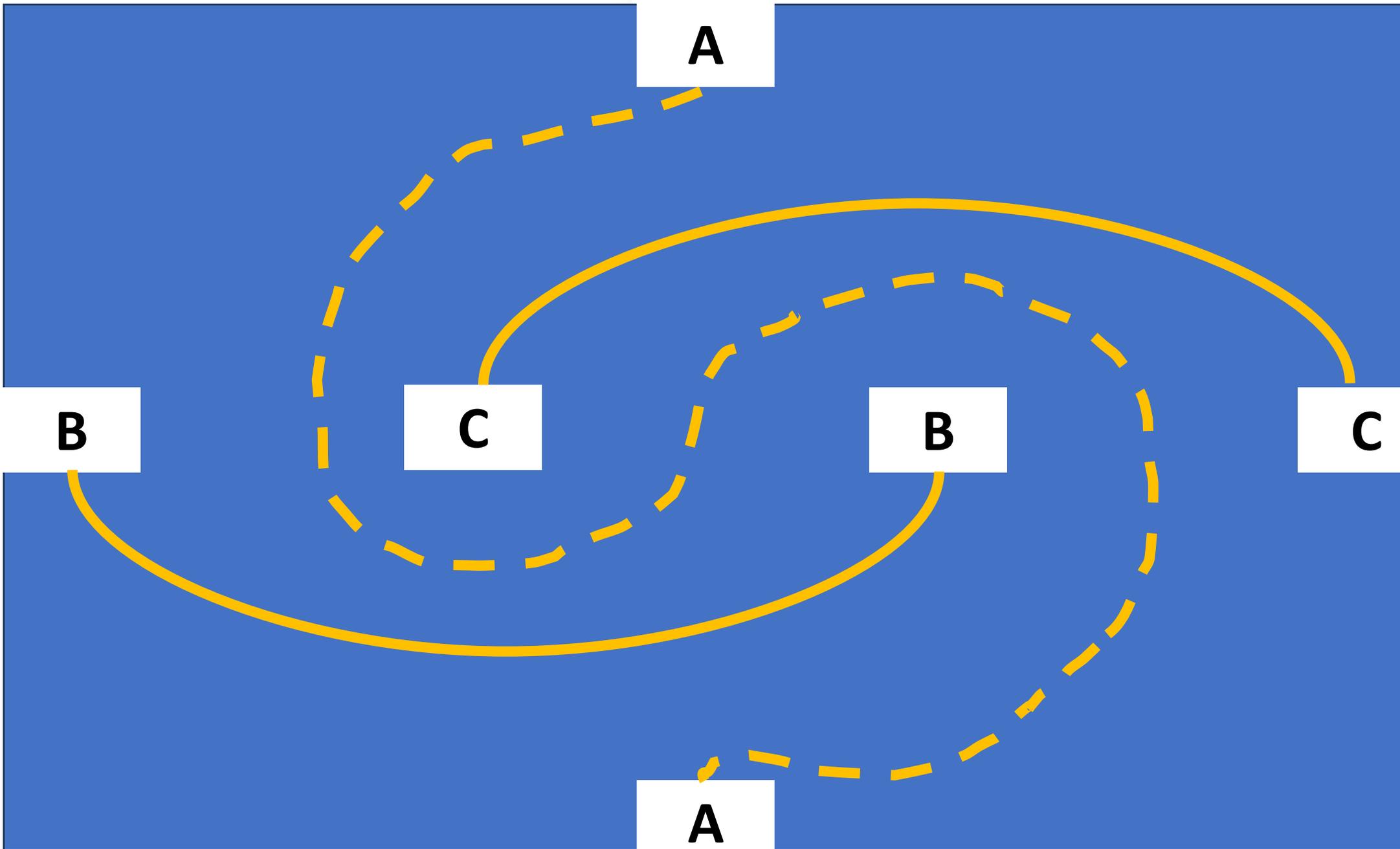
Think Open-mindedly

Characteristic 5: Open-Minded Thinking

- 1) Stay within the blue box
- 2) Connect all like letters
- 3) Do not cross lines

**Persistence + sometimes
we have to take a step to be
able to see a path forward**

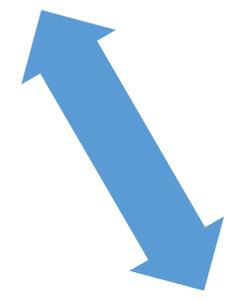






Critical Thinking in Your Courses

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What is “*One Small Thing*”?

Think about what aspects from this event might be most applicable to you. How can you translate this knowledge, skill or behavior into an action?

As you choose your “*One Small Thing*,” consider the following to guide your ideas:

1. **It’s manageable.** When you think about achieving your “*One Small Thing*,” you should feel energized – not overwhelmed.
2. **It’s specific.** You should be able to easily describe the steps you’d take to put your “*One Small Thing*” into action.
3. **You’ll know when you’ve done it.** It should be concrete and actionable, something you’ll be able to show or tell people about.
4. **It matters to you.** It should be something you’ll be proud to accomplish.

*adapted from Colleagues in Connection; WCCC meeting, Sept (2017)

Center for Teaching and Learning



- **Consultations**
- **Workshops/Events**
- **Programming**
- **Teaching Recognition Awards**



ctl@kent.edu



A Riddle Goodbye :)

