



*ENGAGING 21ST  
CENTURY STUDENTS AND  
THE PROMISE OF  
ACADEMIC SUCCESS*

Presentation by David Fuentes &

Liz Brown

Co-directors, Center for Teaching Excellence

November 30, 2021 @12:30-1:45

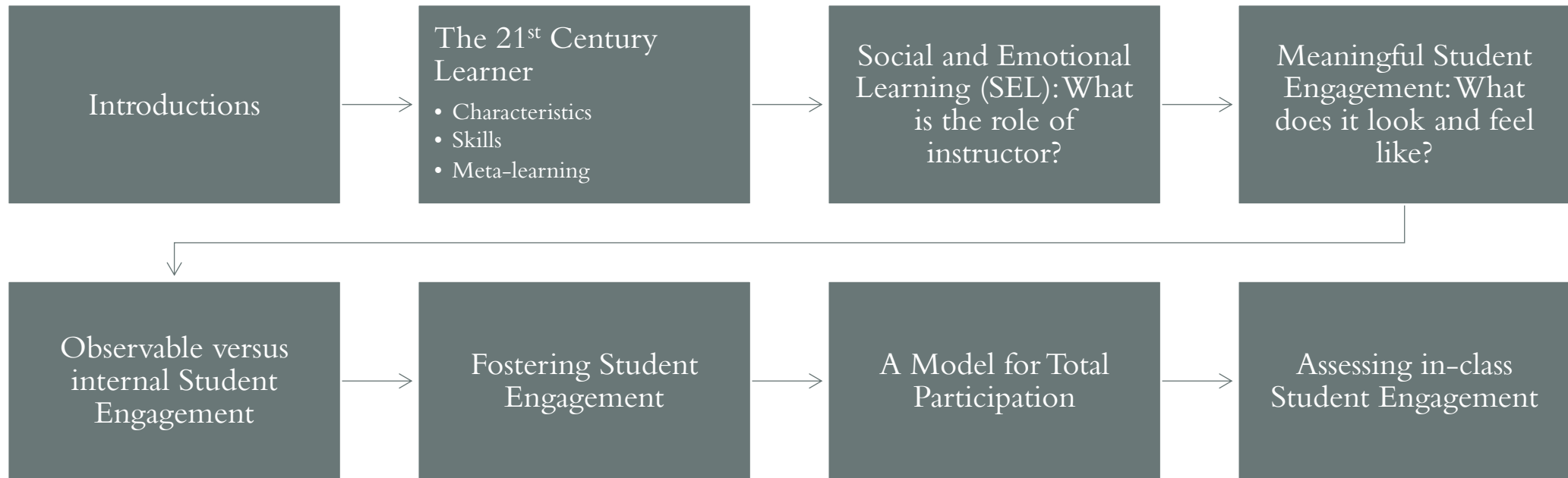
William Paterson University

**CTE**

CENTER FOR TEACHING EXCELLENCE



# TODAY'S AGENDA:



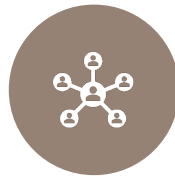
# WHO IS THE 21ST CENTURY LEARNER?



# HOW MIGHT OUR STUDENTS' PERSONAL EXPERIENCES CULTIVATE 21<sup>ST</sup> CENTURY SKILLS:



Broad, deep understanding of the world.



Makes interdisciplinary connections.



Thinks creatively and critically.



Communicates and collaborates with others.



Creates, evaluates and utilizes information.

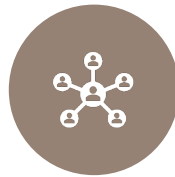


Career-ready and prepared for life!

HOW MIGHT OUR **IN-CLASS EXPERIENCES**  
CULTIVATE STUDENTS' 21<sup>ST</sup> CENTURY  
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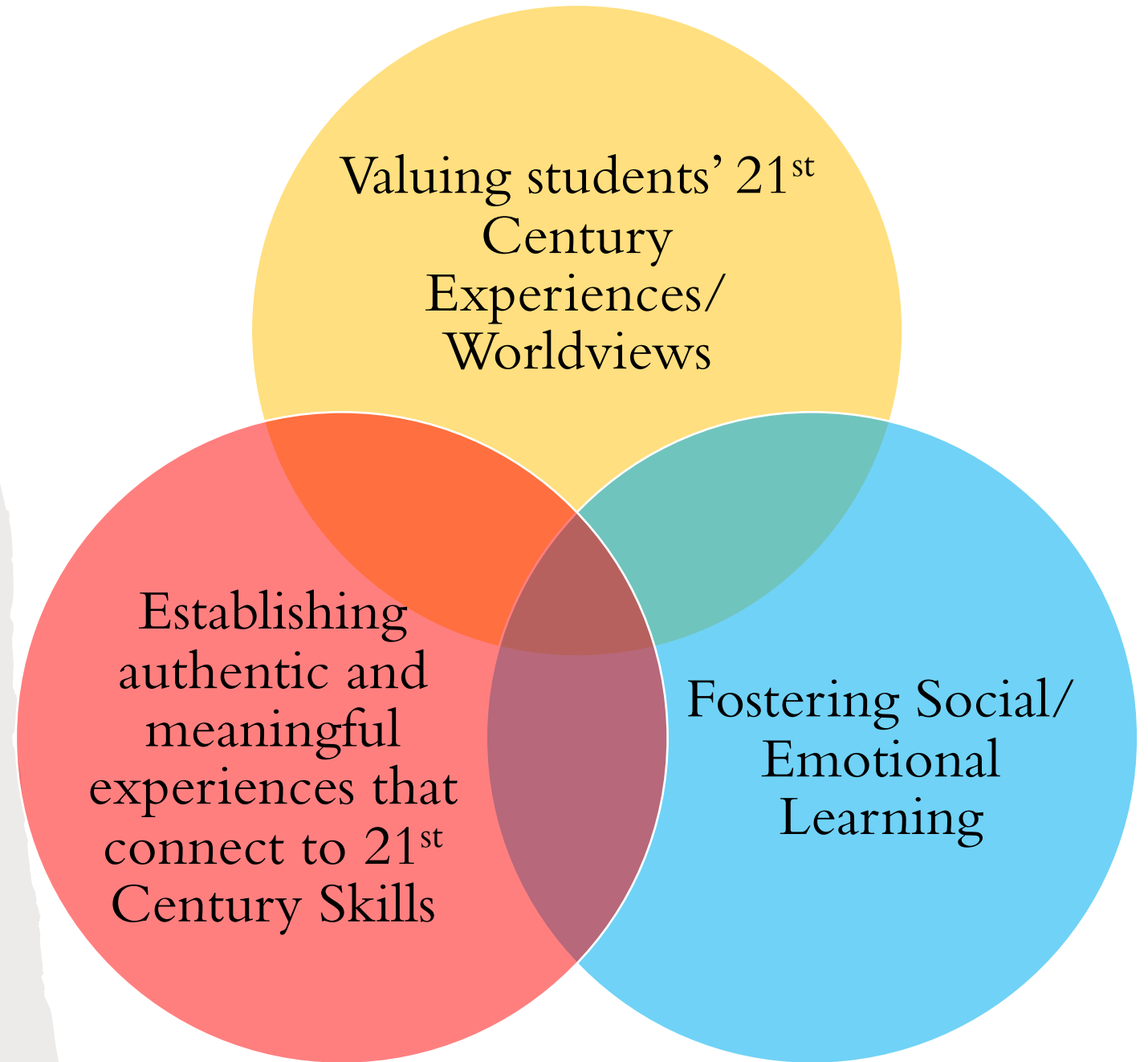


Career-ready and  
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SOCIAL AND  
EMOTIONAL  
LEARNING:  
HOW DO WE  
FOSTER  
AWARENESS?

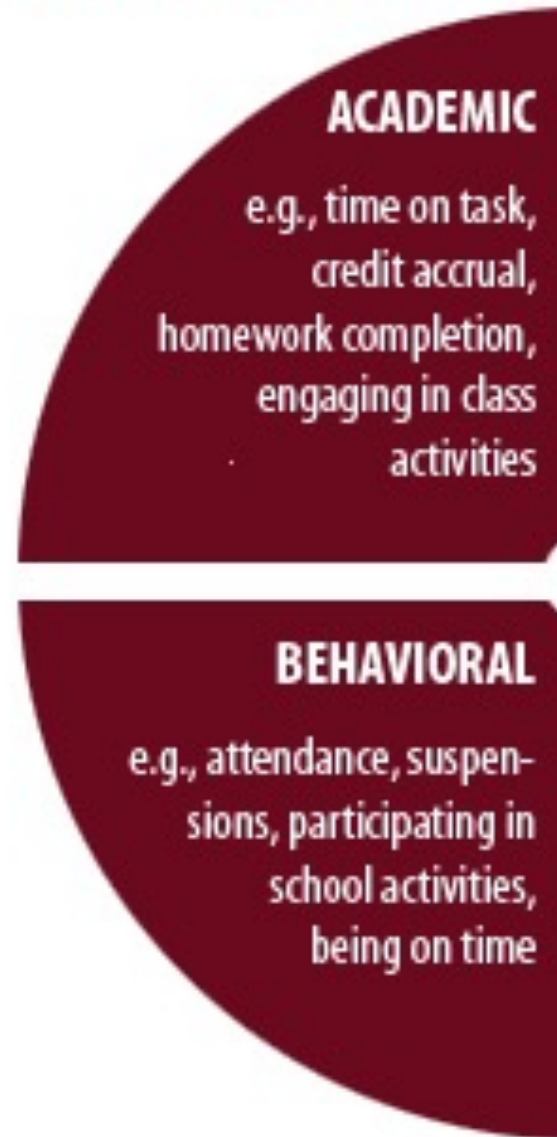


MEANINGFUL  
STUDENT  
ENGAGEMENT



*OBSERVABLE /  
INTERNAL  
ENGAGEMENT?*

**Observable Engagement**



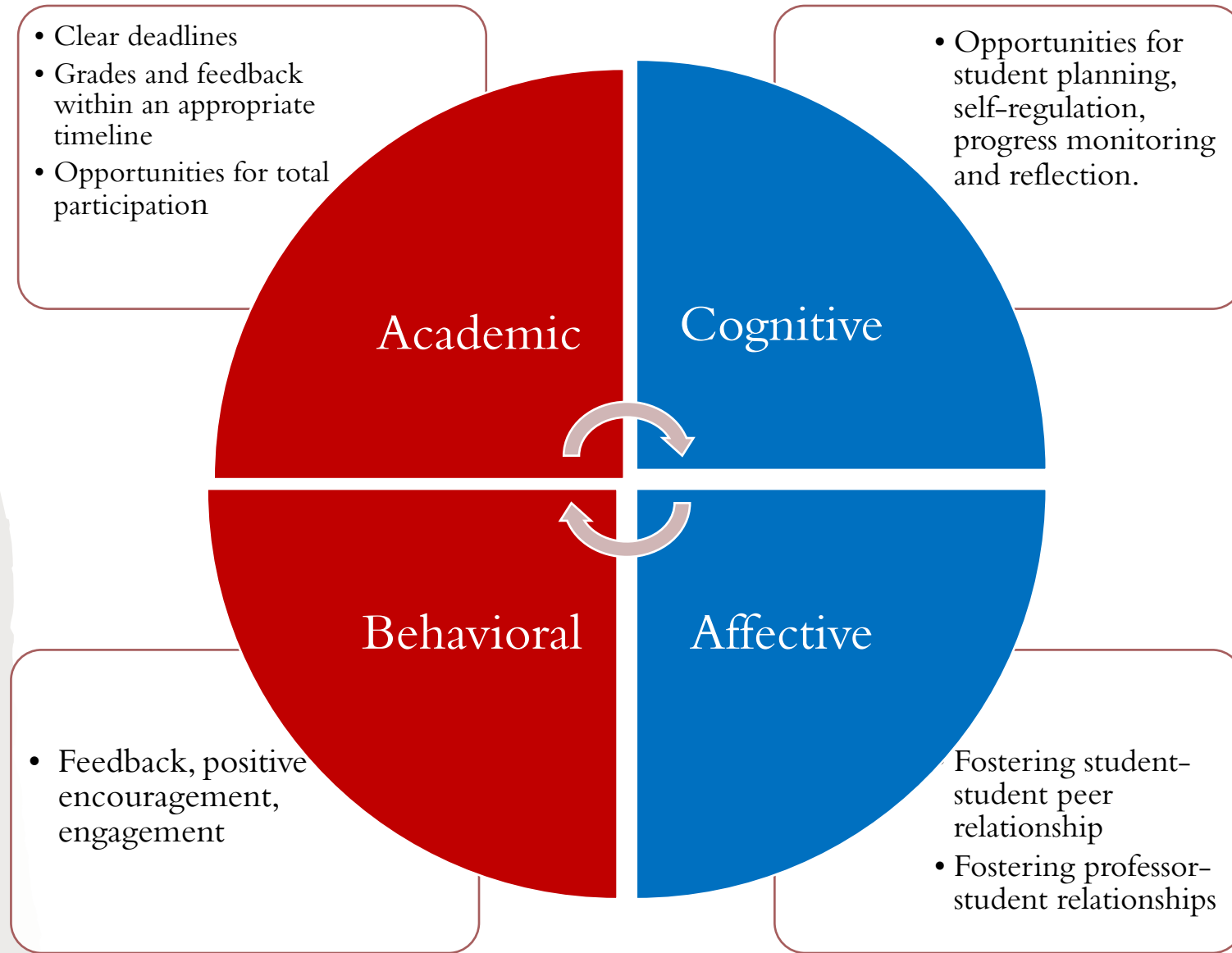
**Internal Engagement**



(Appleton et al., 2008)



# FOSTERING DIFFERENT FORMS OF ENGAGEMENT



Adapted from Fusco, J & Hardy, 2018

TELL ME AND I FORGET

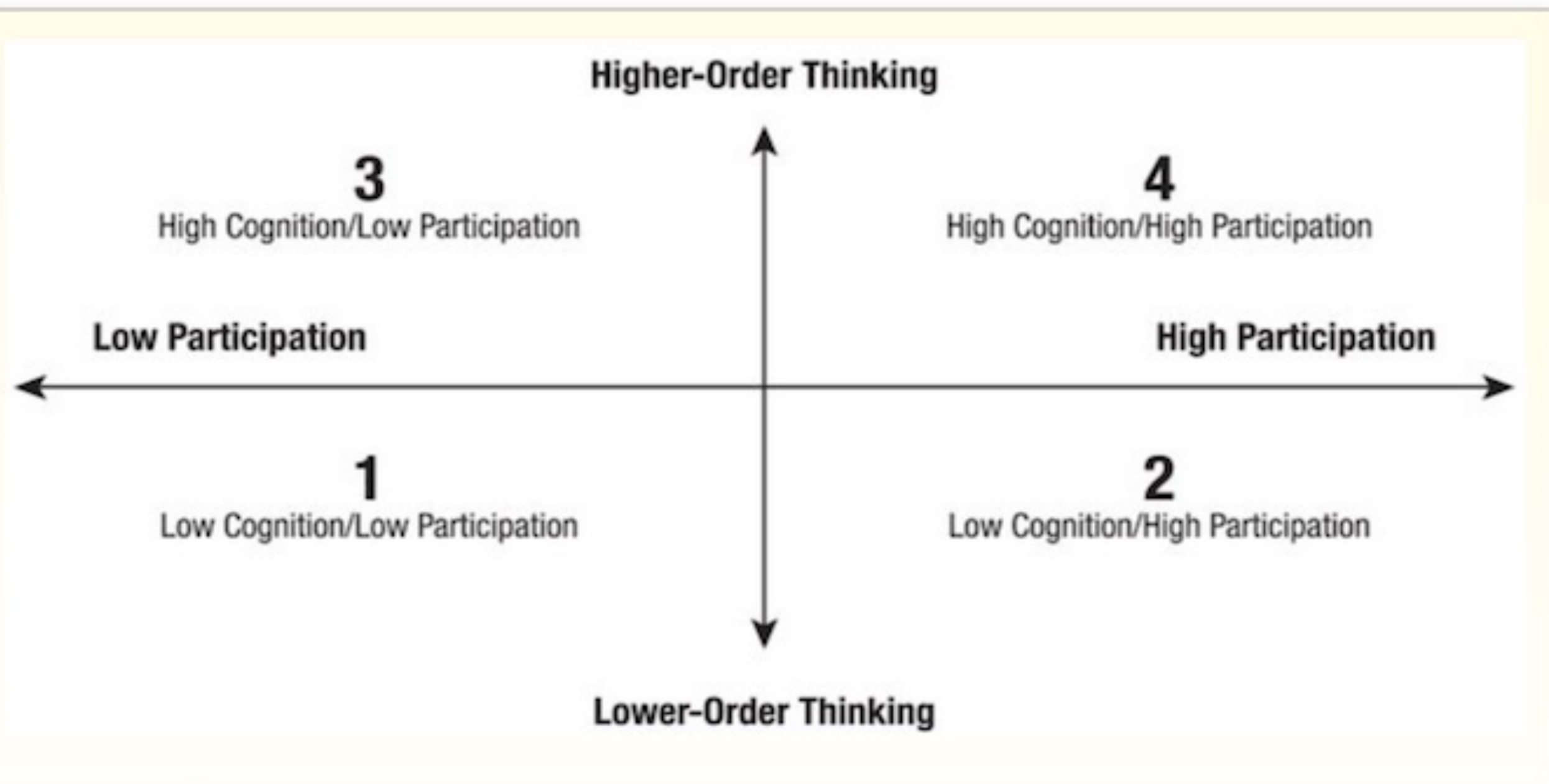
TEACH ME AND I REMEMBER

INVOLVE ME  
AND I LEARN

BENJAMIN FRANKLIN



Figure 2.1. TPT Cognitive Engagement Model and Quadrant Analysis



# Student Engagement Evaluation Criteria

	1	2	3	4	5
21 <sup>st</sup> Century Skill Development	Students passively listen or watch the professor present information.	Some students participate by taking notes and/or raising their hands.	Most students engage in the content by asking questions and working with peers.	All students collaborate with others to solve a problem or answer a question.	Students deepen their understanding by collaborating to solve a real-world problem or answer a question that require re-thinking and connecting their learning to another subject/topic.
Valuing Students' Experiences/ World Views	Professor presents content without context or connection to prior experience or prior knowledge.	Professor connects content with students' prior experience or prior knowledge.	Professor facilitates students in connecting connect with either prior experience or prior knowledge.	Students collaborate to learn new content and connect it with prior experiences or prior knowledge.	Students collaborate to learn new content and connect it with prior experiences and prior knowledge.
Academic/ Cognitive Development	Professor presents new content.	Professor presents new content and asks surface-level questions to evaluate binary responses.	Professor elicits students responses to probe higher level thinking.	Professor elicits students responses to probe higher level thinking and builds on their responses.	Students ask questions while the professor facilitates students to respond to one another's questions.
Fostering Social Emotional Learning / Affective Engagement	Students have low affect.	Grades motivate students. Students do not feel comfortable approaching peers.	Grades, feedback and words of affirmation motivate students. Students feel comfortable approaching peers.	Students plan their learning driven by an intrinsic drive to succeed. Students reflect on feedback. Students feel comfortable approaching peers and professor.	Students intrinsically enjoy learning. An authentic, positive environment results from a reciprocal relationship formed between students and teachers.

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# COGNITIVE CHALLENGES STUDENTS FACE AND HOW TO RESPOND

**FIGURE 1. Responses to Cognitive Challenges Students Face**

Challenge	Barrier	Teaching Approach
1. Student mental mindset	Doesn't see purpose in the topic or believe they have the ability to learn it.	Explain value of the learning, increase students' ownership of learning, and explore the habits of minds and mindsets.
2. Metacognition and self-regulation	May be over-confident about their knowledge or skills, so don't devote attention to it.	Create reflection assignments, teach students about planning, monitoring, and adjusting their learning, and use practice tests.
3. Student fear and mistrust	Teacher-student relationship is damaged.	Focus on teacher credibility, restructure feedback, and create a safe climate for learning and making mistakes.
4. Insufficient prior knowledge	Prerequisite skills or concepts needed for mastery of new content are missing.	Use initial assessments and provide necessary background knowledge and key vocabulary in advance.
5. Misconceptions	Has misconception about topic even when exposed to accurate information.	Use advance organizers, recognize common misconceptions for students at a specific age or in a content area, invite students to justify their responses.
6. Ineffective learning strategies	Utilizes sub-optimal learning or study skills.	Teach study skills, model effective strategies with think-alouds, teach about spaced practice.
7. Transfer of learning	Can't apply knowledge to new or novel situations.	Plan appropriate tasks, model application in different contexts, tailor feedback to include processing of the task.
8. Constraints of selective attention	Believes they can multitask or focuses on irrelevant stimuli.	Increase teacher clarity, use breaks, and teach students to avoid multitasking, especially with media.
9. Constraints of mental effort and working memory	Task is too complex or is trying to memorize too much information.	Organize information and chunk it, use both visual and auditory cues (dual coding), and use retrieval practice.

*Note:* Ideas in this figure are drawn from Stephen Chew and William Cerbin's work on cognitive barriers to learning.

# DISCUSSION - THANKS FOR JOINING!

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- Center for Teaching Excellence: [CTE@wpunj.edu](mailto:CTE@wpunj.edu)