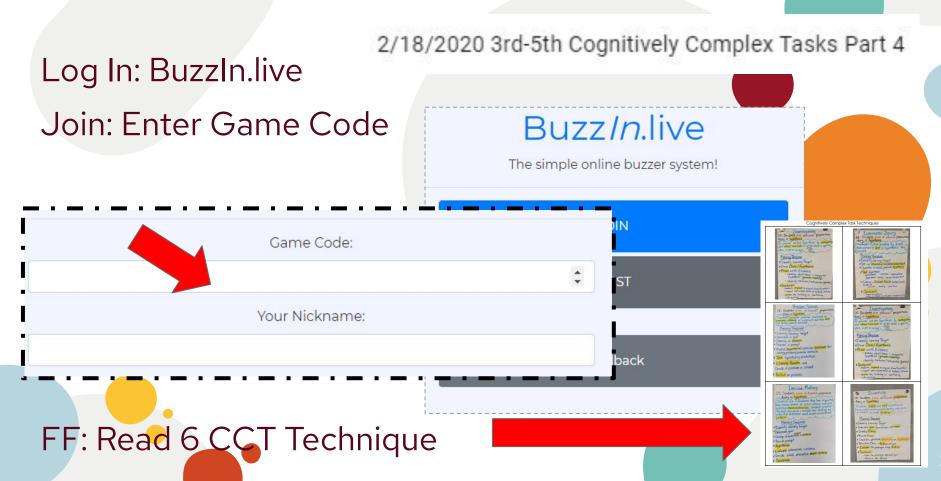
Decision Making

Ticket In

Please sign in for PLC



What is the desired effect of ALL Cognitively Complex techniques?

(investigating, experimental inquiry, problem solving, decision making, inventing, student designed tasks)

Which Cognitively Complex Task techniques ask students to investigate what others have said?

What type of CCT technique begins with a hook/demonstration that gets students excited about the upcoming lesson?

Which technique asks students to create a prototype that tests their hypothesis?

Which technique asks students to overcome an obstacle?

Which type(s) of CCT requires criteria?

What type of CCT have you tried in the classroom or would like to try?



Standards-Based Planning

- Planning Standards-Based Lessons/Units
- Aligning Resources to Standard(s)
- Planning to Close the Achievement Gap Using Data

Conditions for Learning

- Using Formative Assessment to Track Progress
- Providing Feedback and Celebrating Progress
- · Organizing Students to Interact with Content
- Establishing and Acknowledging Adherence to Rules and Procedures
- Using Engagement Strategies
- Establishing and Maintaining Effective Relationships in a Student-Centered Classroom
- Communicating High Expectations for Each
 Student to Close the Achievement Gap

Marzano Focused Teacher Evaluation Model

Standards-Based Classroom with Rigor

LearningSciences MARZANO C E N T E R

Standards-Based Instruction

- Identifying Critical Content from the Standards
- Previewing New Content
- Helping Students Process New Content
- Using Questions to Help Students Elaborate on Content
- Reviewing Content
- Helping Students Practice Skills, Strategies, and Processes
- Helping Students Examine Similarities and Differences
- Helping Students Examine Their Reasoning
- Helping Students Revise Knowledge
- Helping Students Engage in Cognitively Complex Tasks

Professional Responsibilities

 Adhering to School and District Policies and Procedures Maintaining Expertise in Content and Pedagogy Promoting Teacher Leadership and Collaboration Learning Target Teachers will develop understanding of Cognitively Complex Tasks (CCT) by: -review previously learned CCT techniques -examine Decision Making CCT -develop and plan CCT lessons

Helping Students Engage in Cognitively Complex Tasks

Focus Statement: Teacher coaches and supports students in complex tasks that require experimenting with the use of their knowledge by generating and testing a proposition, a theory, and/or a hypothesis.

Desired Effect: Evidence (formative data) demonstrates students prove or disprove the proposition, theory, or hypothesis.

Types of Cognitively Complex Tasks

Investigating- what others have said or written about a specific idea, event, or concept Problem Solving-students generate possible solutions to overcome an obstacle or constraint, and then test and defend their possible solutions. Conclusions are made based on evidence they document

> Cognitively Complex Tasks: Instructional Techniques

Experimental Inquiry-students determine the procedure to collect evidence by direct observation to test their hypothesis by reading a text, watching a video, feeling or observing a physical change, and listening to an interview. Knowing how and when to select, organize and analyze.

Inventing-the purpose of creating and testing a prototype (trial product-advertisement, painting, new game for example) to meet criteria Decision Making- where students use information they have acquired from critical content to select among various possible choices. Students predict the best alternative and analyze their thinking to judge that alternative based pre-established criteria.

> Student-Designed Tasks-students decide what their focus will be and have freedom to pursue specialized interests with your guidance and support

Decision Making

*Identify Learning Target

*Determine goal

*Develop alternatives & criteria

*Provide Prompt

*Hypothesize

*Evaluate alternatives & criteria

*Decide which alternative meets criteria

*Conclusion-reflect

Decision Making DE Students prove or disprove proposition, theory or hypothesis Students use information they have acquired. from critical content to select among various possible choices (alternatives). Students predict the best alternative + analyze their thinking to judge that alternative based on pre-established criteria.

Planning Template *Identify learning target * Determine goal * Develop al trinatives + oriteria * Provi de prompt * Hypothesize

* Evaluate alternatives + criteria * Decide which alternative meets criteria

* Conclusion

Decision Making- where students use information they have acquired from critical content to select among various possible choices. Students predict the best alternative and analyze their thinking to judge that alternative based pre-established criteria

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Task:

Route 1:

You leave school immediately <u>after Fitness</u> Club, which ends at 3:30 pm. Your mom drives you to your house to get a quick bite to eat. The drive from school to your house is 15 minutes. Inside your house, you make a peanut butter sandwich and change into a soccer jersey, which takes you a total of 15 minutes. Then, your mom drives you to soccer practice. The drive from your house to soccer practice is 50 minutes.

Route 2:

You leave school immediately after 2:20 pm dismissal. You walk to your neighbor's house to grab a quick snack before soccer practice. The walk takes you 18 minutes. You decide to watch *Frozen* while you eat your snack. Frozen running time is 102 minutes. After your snack and movie, you head to soccer practice, which is a 40 minute drive.

Route 3:

You leave school immediately after picking up your brother and sister from their classrooms. It takes you 10 minutes to find and collect them from their classrooms after 2:20 dismissal time. You ride the bus to the middle school which takes 15 minutes. Then, your mom drives you to soccer practice which is 42 minutes away.

Route 4: Your mom picks you up from Cubs Connection at 3:45. She takes you through the McDonald's drive thru for a Happy Meal which takes 15 minutes. Next, you drive home to change into your soccer uniform. The drive from McDonald's to your house is 19 minutes. Then, your mom takes you to soccer practice. The drive from your house to soccer is 48 minutes away.

Alternatives: A. Route 1 B. Route 2 C. Route 3 D. Route 4 E.			Criteria: 1. Soccer practice begi 2. a + 5: 00 pm 3. You have to stop an 4. get something to 4. get after leaving 5. the school				
Predict which thinking: I pred	halternative y dic.+	ou think will)	best meet the	criteria and ex	rplain your		
Criteria	Alternative A 1	Alternative B 2	Alternative C 3	Alternative D LL	Alternative E		
Soccer Ly Salap	-1						
2.54gg¢							
3.							
4.							
5.							
Notes and e (WOrk	space.	>					
The b	est ro	ute w	as	becar	rsc—		

ELA Decision Making

Decision-Matrix								
Criteria	Alternatives							
	Romeo & Juliet	One Flew Over the Cukoo's Nest	To Kill a Mockingbird	Failsafe	The Most Dangerous Game	2011: A Space Odyssey		
Recognized by Literary Scholars	x	x	x	0	?	x		
Required Reading for High School or College	x	0	x	x	x	?		
Story Line is Applicable over Decades	x	0	?	0	0	x		

What literary work qualifies as a classic (based on criteria)?

Which novel possesses the most criteria?

ELA Decision Making

Criteria	Alternatives							
	Romeo & Juliet	One Flew Over the Cukoo's Nest	To Kill a Mockingbird	Failsafe	The Most Dangerous Game	2011: A Space Odyssey		
Recognized by Literary Scholars	(2) x 3 =6	(2) × 2 =4	(2) x 3 = 6	(2) x 1 = 2	(2) × 2 =4	(2) x 3 = 6		
Required Reading for High School or College	(1) x 2 = 2	(1) x 1 = 1	(1) x 3 = 3	(1) x 3 = 3	(1) x 3 = 3	(1) x 1 = 1		
Story Line is Applicable over Decades	(3) x 2 = 6	(3) x 1 = 3	(3) x 2 = 6	(3) x 0 = 0	(3) x 1 = 3	(3) x 3 = 9		
Total	14	8	15	5	10	16		

3 critically important 2 important, not critical 1 not very important

2nd number= 3 completely possesses criteria 2 possesses criteria but not completely 1 possesses the criteria a little bit **Develop and Apply** Brainstorm ideas on how to incorporate CCT: *Decision Making *Inventing *Investigating *Problem Solving *Experimental Inquiry *Student Designed Tasks Ask yourself,

- Are my students proving or disproving hypothesis, theory, or proposition?
- Does the standard lend itself to higher level thinking?
 - Does this technique best support students proving or disproving their hypothesis?

Ticket Out

Video Reflection: Stop and Jot

Why is it essential that we engage students in CCT?

