Higher Order Thinking Questions



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ESSENTIAL QUESTION (SESSION QUESTION):

How do we use questions to guide instruction and challenge our students?



ACTIVATING STRATEGY

On a sheet of construction paper with your partner (5 minutes)

SIDE 1: Define High Order Thinking

* SIDE 2: High Order Thinking in a classroom is like _____ (must include an illustration)

+ (Ex: Waves in an Ocean because.....)

TYPES OF QUESTIONS:

THE ESSENTIAL QUESTION

-VS-

HIGH ORDER THINKING QUESTIONS



WHAT IS AN ESSENTIAL QUESTION?

- Concepts or skills in the form of a question (replaces the objective).
- Organizes and sets the focus of the lesson.
- *A tool to help teachers to gather evidence of learning.

ASK YOURSELF...

What is the intended goal of the lesson?

What do I expect my students to know by the conclusion of the lesson?

ESSENTIAL QUESTION REMINDERS...

Goal- to be answered by the end of the lesson

- One per lesson
- May take more than a day (or two) to answer
- Cannot be a answered with a simple "yes" or "no"

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ESSENTIAL (examples)....

- How do readers use authors' clues to make inferences?
- Why are carbohydrates important for your body?
- What were the advantages of both the North and South during the Civil War?
- How do you distinguish between a habitat and a niche?
- How do I graph quadratic functions?

NOT ESSENTIAL ...

- What is an inference?
- List 10 carbohydrates
- Who was involved in and won the Civil War?
- What is a habitat? What is a niche?
- Can you graph a quadratic equation?

NOW YOU TRY...

Write an essential question that reflects a concept or skill you will teach in the upcoming week.

HIGH ORDER THINKING QUESTIONS...

- Questions that are embedded into the lesson at certain points during instruction.
- Provide opportunities for students to be challenged.
- May be used to determine direction of instruction.

JUST A NOTE...

Present your students with at least 3 high order thinking questions per lesson. This is "proof" that you are presenting your students with challenging questions and meeting the needs of your advanced learners!

NEW BLOOMS





EVALUATION QUESTION (LEVEL 5)

- What criteria would you use to assess......
- + How would you determine...
- + How could you verify....
- What information would you use.....
- *What data was used to evaluate...

CREATING STEMS (LEVEL 6)

- How would you generate a plan to....
- What facts can you gather.....
- + How would you explain the reason...
- What alternative would you suggest for...
- * What would happen if...

CREATING HOT Q'S

EQUATION:

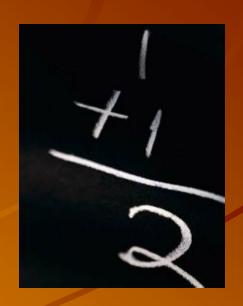
Question Stem

- + What you want them to know
 - = High Order Thinking Question

EXAMPLE:

How would you improve

- your muscular endurance to become a better football player?
- = How would you improve your muscular endurance to become a better football player? (creating)



RESPONSES

How would you improve your muscular endurance to become a better football player?

(What type of products would your students create in response to this question?)

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GRAPHIC ORGANIZER

STEM	KNOWLEDGE	HOT OR NOT
		(JUSTIFY)
How can you classify/categorize	triangles according to their characteristics?	
What facts can you compile	to support that idea that if the slaves were never set free, our country would be very different from what it is today?	
Can you identify	all the planets in the solar system?	
What is	the function of the heart as an organ?	
What are	databases used for?	



-VS-

WHAT'S NOT!





WHAT'S HOT!!



- How can you evaluate the impact the signing of the emancipation proclamation had on the estates of southern slave owners?
- What is the most important part of the circulatory system? Why? Give evidence to support.
- this composer may have chosen to use whole notes at the end of each bar in this song? Elaborate on your reason.



WHAT'S NOT!! (3)



- What is the Emancipation Proclamation?
- Can you identify the irrational number in this equation?
- * What are the parts of the circulatory system and what is it's function?
- How many whole notes are in each bar?

LET'S MAKE IT HOT!!

Using the 3 highest levels of New Bloom's, create 3 high order thinking questions that will support a lesson you plan to teach next week.

SUMMARIZING STRATEGY

"A good teacher makes you think even when you don't want to."

(Fisher, 1998, Teaching Thinking)



(How does this quote relate to how we must instruct our students?)

