

Common Formative Assessment

Constructed Response Items Powerpoint Handout Packet



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Critique Form for Open-ended CR Items

Except Mathematics

- 1. Forces students to demonstrate an in-depth understanding of content
- 2. Requires the use of complex cognitive processes or higher level thinking skills
- 3. Elicits diverse answers
- 4. Allows for multiple points of view and interpretations
- 5. Requires support, justification, evidence, and/or explanation of reasoning
- 6. Requires the student to refer to specific places in the text that justify their conclusions or claims
- 7. Requires students "interfere" or interpret information
- 8. Is worded in a clear, concise manner
- 9. Prompts the student to do everything required b the rubric for the highest rating
- 10. Avoids teaching in the item stem (giving clues in the item stem)
- 11. If support is elicited, there is ample information (in story, graph, etc.) for students to use as support
- 12. Is written in the simplest language possible



Professional Development to Practice



Critique Form for Higher-Level Math CR Items

- 1. The problem allows for multiple solution processes or may be solved in more than one way. (This does not necessarily mean that there are multiple answers; instead there are multiple ways to arrive at the answer).
- 2. The problem allows for application of knowledge and/or is set in a real world scenario.
- 3. The solution process or how one goes about finding the answer is not apparent.
- 4. The problem involves multiple steps.
- 5. The problem contains enough information to find a solution and have clarity, but not too much to diminish the problem-solving approach to learning.
- 6. The problem is written in such a way to clearly elicit the desired evidence of the student's problem-solving approach.
- 7. When feasible, the problem promotes connections between and among concepts.
- 8. When feasible, the problem requires supporting reasoning/data/and/or justification/explanation.
- 9. When feasible, the problem allows for conjecture.
- 10. The problem accurately assesses the learning target.
- 11. The problem is appropriate in terms of grade-level difficulty, cognitive complexity, and reading-level.
- 12. The content and terms used are mathematically accurate.
- 13. The problem asks students to show a process, communicate a process, and/or explain a problem-solving approach.
- 14. The wording used is clear, concise, and to the point.



Items That Are Not Considered Quality Speculate the Reasons!

- 1. Create a pamphlet to advertise a country. Include the country's flag, anthem, imports, exports, etc.
- 2. Write an essay to explain what the country of Canada is like.
- 3. Create a PowerPoint Presentation about the novel Red Badge of Courage.
- 4. Draw a chart showing the three branches of government.
- 5. Draw a picture of a cell. Be sure to add labels.
- 6. Write five events that happened in the story.
- 7. Draw a picture of the food pyramid.
- 8. Explain the causes of the Civil War.





Find two major flaws in this open-ended CR item and how might it be revised?

In class, we learned that when supply goes down, cost goes up. Explain what would happen to the price of hula-hoops if the largest supplier in the United States went out of business. Use four details to support your answer.





What are the flaws in these items? Describe how to revise each item.

- 1. Did you like the story? Explain why or why not using three details and/or examples from the story.
- 2. Explain, what you think will happen to John (the main character) after the end of the story.
- 3. Predict what will happen to Mary if she disobeys her mother? Use two details and/or examples from the story in your answer.
- 4. What are two historical reasons to explain the present-day appearance of our national flag?





Possible Stimulus Materials

Print	Technology	Other
Newspaper articles	Video clip	Released Items





Possible Stimulus Materials

ELA	Mathematics	Other
Readings	Graphs	Any items used in ELA
video clips	Pictures	and Mathematics.
audio clips	Models	
research topic/issue/	Tables	Any items used in
problem	Figures	your subject area.
graphs, charts, other	Scenarios	
visuals	Data Bases	
	Video Clips	
	Maps	
	Spreadsheets	
	Photos	
	Research Reports	



Scoring a Closed CR Item

Generic Rubric for Closed CR Item

1 Point

The response demonstrates the knowledge necessary to complete the prompted purpose and contains the correct or acceptable answer.

O Points

The response demonstrates little to no evidence of knowledge that is appropriate to the intent of the prompted purpose and does not contain the correct answer.



Scoring Guide

Complete Answer

Student response provides two correct advantages of fusion power plants compared to fission power plants.

Partial Answer

☐ Student response provides one advantage of fusion power plants.

Unsatisfactory/Incorrect Answer

■Student response is inadequate or incorrect.



Generic Scoring Guide for an Open-ended CR Math Problem

2 Points: The response contains an acceptable/correct answer and a valid solution process. The response shows an understanding of the process needed to find the answer.

1 Point: The response contains an acceptable/correct answer.

OR

1 Point: The response contains a valid solution process but had minor computational errors. The response shows an understanding of the process needed to find the answer.

O Points: The response shows severe misunderstanding.





Advantages and Disadvantages of Different Types of Rubrics

Type of Scoring Guide	Definition	Advantages	Disadvantages
Analytic	Each criterion (dimension, trait) is evaluated separately.	 Gives diagnostic information to teacher. Gives formative feedback to students. Easier to link to instruction than holistic scoring guides. Good for formative assessment; if you need an overall score for grading, you can combine the scores. 	 Takes more time to score than holistic scoring guides. Takes more time to achieve inter-rater reliability than with holistic scoring guides.
Holistic	All criteria are evaluated simultaneously.	 Scoring is faster than with analytic rubrics. Requires less time to achieve inter-rater reliability. Good for summative assessment. 	 Single overall score does not communicate information about what to do to improve. Not good for formative assessment.
General	Description of work gives characteristics that apply to a whole family of tasks (e.g., writing, problem solving).	 Can share with students, explicitly linking assessment and instruction. Reuse same scoring guides with several tasks or assignments. Supports learning by helping student see "good work" as bigger than one task. Supports student self-evaluation. Student can help construct general rubrics. 	 Lower reliability at first than with task-specific scoring guides. Requires practice to apply well.
Task- Specific	Description of work refers to the specific content of a particular task (e.g., gives an answer, specifies a conclusion).	 Teacher sometimes say using these makes scoring "easier." Requires less time to achieve inter-rater reliability. 	 Cannot share with students (would give away answers). Need to write new scoring guides for each task. For open-ended tasks, good answers not listed in scoring guides may be evaluated poorly.

(Brookhart, 2013)

Desired Characteristics of Criteria for Classroom Scoring Guides

Characteristics The criteria are	Explanation
Appropriate	Each criterion represents an aspect of a standard, curricular goal, or instructional goal or objective that students are intended to learn.
Definable	Each criterion has a clear, agreed-upon meaning that both students and teacher understand.
Observable	Each criterion describes a quality in the performance that can be perceived (seen or heard, usually) by someone other than the person performing.
Distinct from one another	Each criterion identifies a separate aspect of the learning outcomes the performance is intended to assess.
Complete	All the criteria together describe the whole of the learning outcomes the performance is intended to assess.
Able to support descriptions along a continuum of quality	Each criterion can be described over a range of performance levels.
	(Brookhart, 2013)