High Quality Assessment Content Validity Review Tool

Content Area: Science

Name of Assessment: Soil and Water New England Released Inquiry Task

Reviewer: Content Collaborative

Date of Review: 10-24-12

Abstract: This is a review of a New England Common Assessment Program Released Science Inquiry Task for "Soil and Water". It is targeted for New England Grade 4 but we correlated it to CAS Grade 5 Standard 3.1 and 3.2. Students conduct an experiment to compare how much water each of 3 soils can hold. They are then asked to apply this knowledge to how it affects plant life adaptability. It also can be extended to incorporate natural resources. Following the scientific process , conducting an experiment, creating graphs, and explaining results are all tasks that have direct scoring guides for the assessment component. We highly recommend this inquiry task.

Assessment Profile

Item Types - check all that apply (note: there is often overlap among certain item types):	Check All That Apply
Selected Response (multiple choice, true-false, matching, etc.)	
Short Answer (short constructed response, fill in a graphic organizer or diagram, explain your thinking or solution, make and complete a table, etc.)	x
Extended Response (essay, multi-step response with explanation and rationale required for tasks)	
Product (research paper, editorial, log, journal, play, poem, model, multimedia, art products, script, musical score, portfolio pieces, etc.)	
Performance (demonstration, presentation, science lab, dance or music performance, athletic performance, debate, etc.)	x
Process (creation, development, design, exploration, imagining, visualization, experimentation, invention, revision)	x

The assessment includes:	Check All That Apply
Teacher directions (may include prerequisites/description of instruction before giving the assessment e.g., this assessment should be given after students have learned …)	
Scoring Guide/Rubric	x
Sample evidence to show what student performance might look like	x
Materials (if needed to complete the assessment) listed at the beginning of inquiry booklet: common items in any science classroom.	x
Estimated time for administration	
Student Directions & Assessment Task/Prompt – what does the student see/use: explicit instructions for completing the performance task, for the experiments including data templates, scientific inquiry templates and materials needed.	x
Other:	

A high quality assessment should be...Aligned

Alignment	Rating Column	Comments
1a.		
Grade Level(s): The test states 4th grade VT, RI, NH,		
Indicate the Colorado Academic Standards and Grade Level Expectations evaluated by the Assessment: SC09-GR.5-S.3-GLE.1-EO.b; SC09-GR.5-S.3-GLE.2-EO.b; Also see the Nature of Science, Relevance and Application and Inquiry Questions in these GLE's		
Indicate the intended DOK range of the Grade Level Expectations: 1-3		
Indicate the intended DOK of the assessment (list DOK levels) : 2-3		
1b. Describe the content knowledge/concepts assessed by the set of items or the performance task: Natural resources, changes to the Earth's surface		

1c. List the skills/performance assessed: perform an experiment, graph data, explain experiment, justify and compare results and conclude.		
1d. To what extent do you see a strong content match between the set of items reviewed or the task and the corresponding Colorado Academic Standard/s? **Use the definitions below to select your rating.** **X Full match –** all tasks or items fully address or exceed the relevant skills and knowledge described in the corresponding state standard/s. □ **Close match –** most tasks or items address the relevant skills and knowledge described in the corresponding state standard/s. □ **Partial match –** many tasks or items partially address the skills and knowledge described in the corresponding state standard/s. □ **Minimal match –** some tasks or items match some relevant skills and knowledge described in the corresponding state standard/s. □ **No match –** task or most items are not related to the skills and knowledge described in the corresponding state standard/s. **Please provide evidence from both the standards and assessment to support your response: The assessment asks the student to apply both knowledge and skills.**		
	Full Match=5; Close Match=4; Partial Match=3; Minimal Match=2; No Match= 1	
Aligned to Colorado Academic Standards Rating	**5**	

	Rating Column	Comments
1e. Are the set of items or tasks reviewed as cognitively challenging as the grade level expectations? **Use the definitions below to select your rating.** □ **More rigorous –** most items or the tasks reviewed are at a higher DOK level than the range indicated for the grade level expectations. x **Similar rigor –** most items or the task reviewed are similar to the DOK range indicated for the grade level expectations. □ **Less rigor –** most items or the task reviewed are lower than the DOK range indicated for the grade level expectations. **Please provide evidence from both the grade level expectations and assessment to support your response: The assessment asks students to follow the scientific process, conduct an experiment, create graphs, and explain results.**		
	Similar Rigor=2, More Rigor=2, Less Rigor=1	
Rigor Level Rating	**2**	

A high quality assessment should be…Scored using Clear Guidelines and Criteria

	Check all that apply:	Comments
Scoring Guide Present x **Answer key, scoring template, computerized/machine scored** **Generalized Rubric** (e.g., for persuasive writing, for all science labs) x **Task-Specific Rubric** (only used for the particular task) x **Checklist** (e.g., with score points for each part) x **Teacher Observation Sheet/ Observation Checklist** 10/24/2012 Support notes Exemplary responses included for each constructed response.		
	Rating Column	
	Yes=3, Somewhat=2, No=1	
Scoring Guide Appropriate to Task Rating	**3**	
2a.Does the rubric/scoring criteria align to Colorado Academic Standards in this assessment. **Provide an explanation of your response: correlates to evaluating to the earth's geosphere, the rubric is concept based seems to be a direct match.**	**Yes=3, Somewhat=2, No=1**	
Rubric Aligned to Standards Rating	**3**	
2b. Are the score categories clearly defined and coherent across performance levels? **Provide an explanation of your response: Yes, the scoring categories are coherent.**	**Yes=3, Somewhat=2, No=1**	

Rubric/Scoring Coherent Rating	3	
2c. To what degree does the rubric/scoring criteria address all of the demands within the task or item? Provide and explanation of your response. Each question ahs a task specific rubric defining student performance levels	**High=3, Moderate=2, Low or None=1**	
Rubric/Scoring Aligned with Task Rating	3	
2d. Based on your review of the rubric/scoring criteria, do you think the scoring rubric would most likely lead different raters to arrive at the same score for a given response. Student performance levels are very specific and lead to consistency for inter rater reliability.	**Yes=3, Somewhat=2, No=1**	
Rubric/Scoring Different Raters Same Rating	3	
2e. Is there student work (e.g., anchor papers, video, portfolio) which illustrates student mastery? If so, describe. If not, what student work would be needed? Student work provided.	**Yes=3, Somewhat=2, No=1**	
Student Work Samples Rating	3	

A high quality assessment should be...FAIR and UNBIASED

FAIR and UNBIASED *(the areas below should be discussed relative to the needs of ELLs, gifted and talented students, and students with disabilities)*	Rating Column	Comments
3a. To what extent are most of the items or the tasks designed and formatted to be visually clear and uncluttered (e.g., use of white space, graphics, and illustrations)? **Provide an explanation of your response: Includes a word bank, strong reading component could bias this assessment, however there is a word bank.**	High=3, Moderate=2, Low=1	
Clear & Uncluttered Rating	**2**	
3b. To what extent are most of the items or the task presented in as straightforward a way as possible for a range of learners? **Provide an explanation of your response: Strong reading component.**	High=3, Moderate=2, Low=1	
Straight Forward Rating	**2**	
3c. To what degree is the vocabulary and context(s) presented by most of the items or task free from cultural or other unintended bias? **Provide an explanation of your response: Word bank included, use of vocabulary, use of vocabulary is standard science content vocabulary**	High=3, Moderate=2, Low=1	
Free of Cultural or Unintended Bias Rating	**3**	
3d. Does the assessment use appropriate levels of academic language for the grade and content area? Provide an explanation of your response. See above	Yes=3, Somewhat=2, No=1	
Academic Language Rating	**3**	
3e. Does the assessment limit the usage of words that can be confused with one another (homonyms)? (Examples: ate/eight; sell/cell; allowed/aloud; beet/beat; by/buy). None noted.	Yes=3, Somewhat=2, No=1	
Confusing Language Rating	**3**	
Please reference "Defining Features of Academic Language in WIDA's Standards" (http://wida.us/searchResults.aspx?cx=0001878867407992537742:bjkids4qwcy&cof=FORID:10&q=Defining%20Features%20of%20Academic%20Language)		
3f. If applicable, what type of accommodations are provided to ensure that English Learners and/or Students with Disabilities can fully access the content represented by the task or set of items reviewed?		
Accommodations are commonly categorized in five ways: presentation, response, setting, and timing and scheduling: o ***Presentation Accommodations*** *—Allow students to access information in ways that do not require them to visually read standard print. These alternate modes of access are auditory, multi-sensory, tactile, and visual.* o ***Response Accommodations*** *—Allow students to complete activities, assignments, and assessments in different ways or to solve or organize problems using some type of assistive device or organizer.* o ***Setting Accommodations*** *—Change the location in which a test or assignment is given or the conditions of the assessment setting.* o ***Timing and Scheduling Accommodations*** *—Increase the allowable length of time to complete an assessment or assignment and perhaps change the way the time is organized.* o ***Linguistic Accommodations****—Allow English language learners (ELLs) to access academic construct measured by reducing the linguistic load of an assessment. The accommodation is based on an ELL's limited English language proficiency, which is different than an accommodation based on a student's disability or a cognitive need.*		
3g: Are there adequate accommodations permitted for this assessment? Provide an explanation of your response: Accommodations are not specified.	Yes, Several allowed=3; Yes, Some allowed=2; None allowed =1	
Adequate Accommodations Allowed Rating	**N/A**	

A high quality assessment...Increases Opportunities to Learn

Opportunities to Learn *(the areas below should also be discussed relative to the needs of ELLs, gifted and talented students, and students with disabilities)*	Rating Column	Comments

4a. Does this assessment engage a student in thinking that connects to a real world, new context, situation, problem or challenge? **Provide an explanation of your response: Yes, there is teacher opportunity to connect the concepts to changing earth surface and natural resources.**	High=3; Moderate=2; Low or None=1	
Engagement Rating	3	
4b. To what extent do you think the knowledge and skills tested by the assessment can provide good information about what students have learned in the classroom? **Provide an explanation of your response: Close match with inquiry questions, relevance and application as well as nature of science.**	High=3; Moderate=2; Low or None=1	
Classroom Learning Rating	3	
4c. To what degree do the results from this assessment (scores and student work analysis) foster meaningful dialogue about learning expectations and outcomes with students and parents? **Provide an explanation of your response: The scoring guide for each item provides meaningful information about what the student knows and is able to do.**	High=3; Moderate=2; Low or None=1	
Learning Expectations/Outcomes Rating	3	
4d. To what extent do you believe the assessment can clearly communicate expectations for academic excellence to students? **Provide an explanation of your response: A scoring guide is included for students.**	High=3; Moderate=2; Low or None=1	
Communicate Academic Excellence Rating	3	
4e. Based on the content evaluated by the task or the set of items reviewed, to what extent do you think teachers can use the results (scores and student work analysis) to understand what competency on standard/s look like? **Provide an explanation of your response: Strong correlation with living systems interacting with environment, (Life Science),Nature of science, interpreting results, science process, Nature of Science and real world Applications, Trials.**	High=3; Moderate=2; Low or None=1	
Competency on Standards Rating	3	
4f: Based on the content evaluated by the task or the set of items reviewed, to what extent do you think teachers can locate where the assessment evidence is represented within the curriculum, student learning objectives, or lesson? **Provide an explanation of your response: Teachers must be able to transfer the information located in the 21st century skills and readiness competencies as well as connect those with evidence outcomes.**	High=3; Moderate=2; Low or None=1	
Locate Evidence Rating	2	

Summary	Earned	Possible
Standards Rating	5	5
Rigor Rating	2	3
Subtotal	7	8
		87.5%
Scoring Guide Appropriate Rating	3	3
Rubric Aligned w/Standards Rating	3	3
Rubric/Scoring Coherent Rating	3	3
Rubric/Scoring Aligned with Task Rating	3	3
Inter-rater Reliability Rating	3	3
Student Work Samples Rating	3	3
Subtotal	18	18
		100.0%
Clear & Uncluttered Rating	2	3
Straight Forward Rating	2	3
Free of Cultural or Unintended Bias Rating	3	3
Academic Language Rating	3	3
Confusing Language Rating	3	3
Adequate Accommodations Allowed Rating	N/A	3
Subtotal	13	18
		72.2%

Engagement Rating	3	3
Reflects Classroom Learning Rating	3	3
Reflects Learning Expectations/Outcomes Rating	3	3
Communicates Academic Excellence Rating	3	3
Competency on Standards Rating	3	3
Locate Evidence Rating	2	3
Subtotal	17	18
		94.4%
Grand Total	55	62
		88.7%

This assessment is: Place an 'X' in the appropriate box

Fully Recommended	x
Partially Recommended	
Not Recommended	