High Quality Assessment Content Validity Review Tool

To understand the review process and the use of the review tool, go to:

How to use the Assessment Review Tool

Content Area: Science

Name of Assessment: BSCS Human Approach - Cells in Action - pg 212-219

Reviewer: Content Collaborative

Date of Review: Nov 14, 2012

This assessment is Partially Recommended for Life Science GLE 5. It does not fully address all of the components of GLE 5 due to the nature of the task being strictly around passive transport. A scoring guide must be developed as well in order for this assessment to be utilized within a classroom for different assessment purposes.

Assessment Profile	
Item Types - check all that apply (note: there is often overlap among certain item types): Selected Response (multiple choice, true-false, matching, etc.)	Check All That Apply
Short Answer (short constructed response, fill in a graphic organizer or diagram, explain your thinking or solution, make and complete a table, etc.)	х
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.)	х
Process (creation, development, design, exploration, imagining, visualization, experimentation, invention, revision)	х
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)	х
Scoring Guide/Rubric	
Sample evidence to show what student performance might look like Materials (if needed to complete the assessment)	X
Estimated time for administration	
Student Directions & Assessment Task/Prompt – what does the student see/use?	х
Other:	

A high quality assessment should be...Aligned

Alignment	Rating Column	Comments
1 a.		This performance assessment can
Grade Level(s): High School		be found in other resources as
Indicate the Colorado Academic Standards and Grade Level Expectations evaluated by		well. The review team had access
the Assessment: SC09-GR.HS-S.2-GLE.5-EO.a; SC09-GR.HS-S.2-GLE.5-EO.d; SC09-GR.HS-		to the BSCS version. The review
S.2-GLE.5-NO.1; SC09-GR.HS-S.2-GLE.5-NO.2		team also looked specifically at
Indicate the intended DOK range of the Grade Level Expectations: 1-3		Part A of the activity, as they felt
Indicate the intended DOK of the assessment (list DOK levels) :1-3		that this portion captured more

		•
1b. Describe the content knowledge/concepts assessed by the set of items or the performance task: Students are tasked with an "eggs-periment" in which they dissolve an eggshell and then put the egg into different environments. Part A involves students creating their own experiment within certain parameters of hypotonic, hypertonic and isotonic solutions. Students will understand osmosis, passive transport and diffusion through this assessment.		standard components.
1c. List the skills/performance assessed (what are students expected to do?): experimental design, scientific communication of results, inquiry based learning, making predictions, analyzing data, describing observations, suggesting explanations		
 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. 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: This performance assessment addresses passive transport only. Active transport across cell membranes is not assessed, and only assesses portions of the full GLE making this a partial match of Life Science GLE 5.		
	Full Match=5; Close Match=4; Partial Match=3; Minimal Match=2; No Match= 1	
Aligned to Colorado Academic Standards Rating		
	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. □ 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 different components of the performance task have different DOK levels, as do the standard components. This task has similar rigor to the standards due to the mixed DOK levels.		
Standards due to the mixed box seres.	Similar Rigor=2, More Rigor=1, Less Rigor=1	
Digor Lovel Poting	2	

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

Scoring Guide Present	Check all that apply:	Comments
 Answer key, scoring template, computerized/machine scored 		The review team had access to
☐ Generalized Rubric (e.g., for persuasive writing, for all science labs)		the student and teacher texts,
 Task-Specific Rubric (only used for the particular task) 		which do not have scoring guides
□ Checklist (e.g., with score points for each part)		or rubrics included. There are
□ Teacher Observation Sheet/ Observation Checklist		some basic teacher guides and
	Rating Column	explanations within the margins

2a. Does the rubric/scoring criteria align to Colorado Academic Standards in this assessment. Provide an explanation of your response: No scoring guide was available.	Yes=3, Somewhat=2, No=1	of the teacher edition. Teachers, schools and districts would need to develop an appropriate
Rubric Aligned to Standards Rating	1	scoring guide for this
2b. Are the score categories clearly defined and coherent across performance levels? Provide an explanation of your response: No scoring guide was available.	Yes=3, Somewhat=2, No=1	performance task.
Rubric/Scoring Coherent Rating	1	
2c. To what degree does the rubric/scoring criteria address all of the demands within the task or item? Provide an explanation of your response. No scoring guide was available.	High=3, Moderate=2, Low or None=1	
Rubric/Scoring Aligned with Task Rating	1	
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. Provide an explanation of your response. No scoring guide was available.	Yes=3, Somewhat=2, No=1	
Rubric/Scoring Different Raters Same Rating	1	
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? No student work was available.	Yes=3, Somewhat=2, No=1	
Student Work Samples Rating	1	

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

A high quality assessment...Increases Opportunities to Learn

Opportunities to Learn

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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: This performance task goes across multiple pages within a textbook which makes it slightly cluttered. Students have multiple tasks to accomplish within the task as well that are spread across multiple pages.	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: Most of the tasks and items are straightforward. Some additional support may be needed for different types of learners.	High=3, Moderate=2, Low=1	
Straight Forward Rating	3	
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: No cultural or unintended bias was found.	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. As this is a high school level performance task, the academic language is appropriate.	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). Provide an explanation of your response. No homonyms were easily found.	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:bikids4qwcy&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? Provide an explanation of your response. No specific accommodations were provided. 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. No specific accommodations were provided.	Yes, Some identified=2; None identified =1	
Adequate Accommodations Allowed Rating	1	

Rating Column

Comments

(the areas below should also be discussed relative to the needs of ELLs, gifted and		In order to provide good
talented students, and students with disabilities) 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: This performance task allows students to easily see passive transport and design an experiment. The size of the egg and application of the concepts allows students to connect to a real world challenge.	High=3; Moderate=2; Low or None=1	information about knowledge and skills, foster meaningful dialogue and demonstrate academic excellence, a scoring guide and rubric should be
Engagement Rating	3	developed and utilized by teachers, schools and/or districts.
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: This performance task can be used as a formative, interim or summative assessment in a classroom, allowing for information to be gathered easily around student understanding of passive transport across cell membranes.	High=3; Moderate=2; Low or None=1	teachers, schools and/or districts.
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: Results from this assessment can foster meaningful dialogue about learning expectations and outcomes with both students and parents when a developed scoring guide is developed and utilized.	High=3; Moderate=2; Low or None=1	
Learning Expectations/Outcomes Rating	2	
4d. To what extent do you believe the assessment allows students to demonstrate academic excellence (e.g., creativity, transference to other content areas or 21st Century skills) to students? Provide an explanation of your response: This performance task incorporates many components of the nature of science and scientific literacy, allowing students to demonstrate academic excellence.	High=3; Moderate=2;	
Communicate Academic Excellence Rating	3	1
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 (<i>scores and student work analysis</i>) to understand what competency on standard/s look like? Provide an explanation of your response: Teachers would be able to use results from this performance task to understand what competency on standards looks like if a rubric and scoring guide is developed and utilized.	High=3; Moderate=2; Low or None=1	
Competency on Standards Rating	2	
4f: Based on the content evaluated by the task or the set of items reviewed, to what extent do you think teachers can identify what purpose the assessment serves (e.g. diagnostic, report card grades, adjusting instruction, etc.)? Provide an explanation of your response: This performance task can be used in the classroom as a formative,	High=3; Moderate=2; Low or None=1	
interim and summative assessment depending on teacher and classroom needs.		
interim and summative assessment depending on teacher and classroom needs.		
interim and summative assessment depending on teacher and classroom needs.		Possible
interim and summative assessment depending on teacher and classroom needs. Clarity of Purpose Rating Summary	3 <u>Earned</u>	<u>Possible</u> 5
interim and summative assessment depending on teacher and classroom needs. Clarity of Purpose Rating	3 <u>Earned</u> 3	
interim and summative assessment depending on teacher and classroom needs. Clarity of Purpose Rating Summary Standards Rating	3 <u>Earned</u> 3 2	5
Interim and summative assessment depending on teacher and classroom needs. Clarity of Purpose Rating Summary Standards Rating Rigor Rating	3 <u>Earned</u> 3 2	5 2
interim and summative assessment depending on teacher and classroom needs. Clarity of Purpose Rating Summary Standards Rating Rigor Rating	3 <u>Earned</u> 3 2 5	5 2 7
Clarity of Purpose Rating Summary Standards Rating Rigor Rating	3 Earned 3 2 5	5 2 7 71.4%
Clarity of Purpose Rating Summary Standards Rating Rigor Rating Subtotal Rubric Aligned w/Standards Rating	3 Earned 3 2 5 1 1	5 2 7 71.4%
Clarity of Purpose Rating Summary Standards Rating Rigor Rating Subtotal Rubric Aligned w/Standards Rating	3 Earned 3 2 5 1 1 1 1	5 2 7 71.4% 3 3
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Summary Standards Rating Rigor Rating Subtotal Rubric Aligned w/Standards Rating Rubric/Scoring Coherent Rating Rubric/Scoring Aligned with Task Rating Rubric-rater Reliability Rating Subtotal Student Work Samples Rating Subtotal	3 Earned 3 2 5 1 1 1 1 5 2 3	5 2 7 71.4% 3 3 3 3 3 3 15

Academic Lenguage Poting	3	3
Academic Language Rating		3
Confusing Language Rating	3	3
Adequate Accommodations Allowed Rating	1	2
Subtotal	15	17
		88.2%
Engagement Rating	3	3
Reflects Classroom Learning Rating	3	3
Reflects Learning Expectations/Outcomes Rating	2	3
Communicates Academic Excellence Rating	3	3
Competency on Standards Rating	2	3
Locate Evidence Rating	3	3
Subtotal	16	18
		88.9%
Grand Total	41	57
		71.9%

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

Fully Recommended	
Partially Recommended	х
Not Recommended	