High Quality Assessment Content Validity Review Tool

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

ABSTRACT: Fully Recommended: This assessment option was fully recommended due to its alignment with the GLE for 8th grade science related to force and motion (8.1.1). This interactive computer-based assessment tests students at varying levels of difficulty related to their evaluation of forces impacting the motion of objects. The assessment puts students into a real-life situation, providing them with opportunities to experiment and interact with the curriculum; this resulted in very high marks for this assessment with regard to accommodations and opportunities for student learning through the assessment.

Content Area: Middle School Science

Name of Assessment: SimScientists: WestEd: http://simscientists.org/sci_topics/index.php

Reviewer: Content Collaborative

Date of Review: 09/19/2012

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.)	x
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	
Sample evidence to show what student performance might look like	
Materials (if needed to complete the assessment)	
Estimated time for administration	
Student Directions & Assessment Task/Prompt – what does the student see/use?	x
Other: Computer-based, student's manipulate variables to demonstrate mastery of science content and processes, assessment is extremely student-led	

A high quality assessment should be...Aligned

Alignment	Rating Column	Comments
1a.		
Grade Level(s): 8th		
Indicate the Colorado Academic Standards and Grade Level Expectations evaluated by the Assessment: SC09-GR.8-S.1-GLE.1		
Indicate the intended DOK range of the Grade Level Expectations: 1-4		
Indicate the intended DOK of the assessment (list DOK levels) : 1-4		
1b. Describe the content knowledge/concepts assessed by the set of items or the performance task: Forces and Motion		

	Rating Column	Comments
1c. List the skills/performance assessed (what are students expected to do?): Predicting the movement of an object, designing an experiment around forces		
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: The assessment does not measure EO 8-1.1b, in which students use mathematical expressions to describe motion. The assessment is excellent with regard to students evaluating real life situations about how different forces interact to impact the motion of an object.**		
	Full Match=5; Close Match=4; Partial Match=3; Minimal Match=2; No Match= 1	
Aligned to Colorado Academic Standards Rating	**4**	

	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 DOK range of the assessment matches that of the GLE for 8-1.1. The questions range from simple predictions of motion (DOK 1-2) to more complex evaluation and interpretation of how multiple forces would interact to result in particular motions (DOK 3-4). Additionally, students are expected to manipulate variables to experiment with cause and effect of forces on motion.**		
	Similar Rigor=2, More Rigor=1, Less Rigor=1	
Rigor Level Rating	**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**	x	
□ **Generalized Rubric** (e.g., for persuasive writing, for all science labs)		
□ **Task-Specific Rubric** (only used for the particular task)		
□ **Checklist** (e.g., with score points for each part)		
□ **Teacher Observation Sheet/ Observation Checklist**		
	Rating Column	
2a. Does the rubric/scoring criteria align to Colorado Academic Standards in this assessment. **Provide an explanation of your response: The assessment content matches the CAS, however, the evaluation is not explicit.**	Yes=3, Somewhat=2, No=1	
Rubric Aligned to Standards Rating	**2**	

2b. Are the score categories clearly defined and coherent across performance levels? **Provide an explanation of your response: There are reports that show the scoring categories, but it is not defined as to how a student falls into a given category.**	**Yes=3, Somewhat=2, No=1**
Rubric/Scoring Coherent Rating	2
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: The reports generated break down the tasks into specific categories that were assessed on the test. The students performance on each category is shown.**	**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. **Provide an explanation of your response: This assessment is computer generated and scored.**	**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? There are not student exemplars, however, the teacher reports clearly indicate what student mastery looks like.**	**Yes=3, Somewhat=2, No=1**
Student Work Samples Rating	1

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: The computer walks students through the assessment in a clear, visually appealing way. Graphics are clear and easy to understand.**	High=3, Moderate=2, Low=1	Regarding WIDA standards--the language in the assessment matches the purpose and amount, structure, and density of the text is appropriate. There is some technical language, but it is a necessary piece for assessing this particular content.
Clear & Uncluttered Rating	3	
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: The assessment is to the point and it is very clear what students are expected to do on each question.**	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: The assessment sets up real life application of the content and skills without including vocabulary or situations that would result in bias for certain students.**	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. The academic language matches that of the GLE and question stems are short and concise.**	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. The questions clearly and concisely indicate what students are expected to do to show their understanding of content and skills.**	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? **Provide an explanation of your response.**		
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.*		

	Rating Column	
3g: Are there adequate accommodations permitted for this assessment? **Provide an explanation of your response. The assessment provides two optional accommodations for delivery: screen magnification and text-to-voice. In addition to these presentation accommodations, students provide responses on the computer in various ways (explain thinking, choose multiple answers from a list, interact with pictures), students could take the assessment in different settings since it is on a computer, the teacher can set the timing or it can be completely student-led, and the linguistic accommodations include the text-to-voice and the interactive pictures that assess students on certain content and skills.**	Yes, Some identified=2; None identified =1	
Adequate Accommodations Allowed Rating	2	

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: Real world simulations--scenario of fire truck driving to a fire in the forest, students evaluate the forces and motion.**	High=3; Moderate=2; Low or None=1	This assessment provides students with immediate feedback on each question, so it is potentially instructive as well as evaluative. It is not apparent how the assessment is evaluated and student reports generated, so it is not clear how students that fix responses to make them correct would be scored on that content later.
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: The assessment evaluates students' knowledge of forces and motion, which is the focus of this GLE. However, the assessment does not require students to use mathematical expressions.**	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 electronically generated report breaks down the content and skills into specific categories and shows where a student is at on each, leading to meaningful dialogue with students and parents.**	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 (e.g., creativity, transference to other content areas or 21st Century skills) to students? **Provide an explanation of your response: The assessment is excellent for communication of expectations for 21st Century skills in that it asks students to apply their learning in various contexts and solve problems related to the content. However, the assessment does not have any creativity component or transference to other content areas.**	High=3; Moderate=2; Low or None=1	
Communicate Academic Excellence Rating	2	
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: The reports generated show student competency in the various categories assessed, however, they do not necessarily indicate competency on the standards. This would take some additional work by the teacher to match the report pieces to the standards.**	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: The assessment can fit many roles, pre-test, interim, summative. A teacher should notice that the assessment could provide data to serve these various purposes.**	High=3; Moderate=2; Low or None=1	
Clarity of Purpose Rating	3	

Summary	Earned	Possible
Standards Rating	4	5
Rigor Rating	2	2
Subtotal	6	7
		85.7%
Rubric Aligned w/Standards Rating	2	3
Rubric/Scoring Coherent Rating	2	3
Rubric/Scoring Aligned with Task Rating	3	3
Inter-rater Reliability Rating	3	3
Student Work Samples Rating	1	3
Subtotal	11	15
		73.3%
Clear & Uncluttered Rating	3	3
Straight Forward Rating	3	3
Free of Cultural or Unintended Bias Rating	3	3
Academic Language Rating	3	3
Confusing Language Rating	3	3
Adequate Accommodations Allowed Rating	2	2
Subtotal	17	17
		100.0%
Engagement Rating	3	3
Reflects Classroom Learning Rating	3	3
Reflects Learning Expectations/Outcomes Rating	3	3
Communicates Academic Excellence Rating	2	3
Competency on Standards Rating	2	3
Locate Evidence Rating	3	3
Subtotal	16	18
		88.9%
Grand Total	50	57
		87.7%

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

Fully Recommended	X
Partially Recommended	
Not Recommended	