

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: Uncovering Student Ideas in Life Science - Ecosystems and Adaptation Grouping - published by NSTA, written by Page Keeley: http://www.nsta.org/store/product_detail.aspx?id=10.2505/9781936137176
Reviewer: Content Collaborative
Date of Review: Oct 25, 2012

These assessment probes are **Partially Recommended for Life Science GLE 1**. Three out of seven EO statements are covered with these assessment probes. The review team must emphasize that these probes are to be used as a group, not as individual formative assessments.

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.)	<input type="checkbox"/>
Short Answer (short constructed response, fill in a graphic organizer or diagram, explain your thinking or solution, make and complete a table, etc.)	<input checked="" type="checkbox"/>
Extended Response (essay, multi-step response with explanation and rationale required for tasks)	<input type="checkbox"/>
Product (research paper, editorial, log, journal, play, poem, model, multimedia, art products, script, musical score, portfolio pieces, etc.)	<input type="checkbox"/>
Performance (demonstration, presentation, science lab, dance or music performance, athletic performance, debate, etc.)	<input type="checkbox"/>
Process (creation, development, design, exploration, imagining, visualization, experimentation, invention, revision)	<input type="checkbox"/>
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 ...)	<input checked="" type="checkbox"/>
Scoring Guide/Rubric	<input type="checkbox"/>
Sample evidence to show what student performance might look like	<input type="checkbox"/>
Materials (if needed to complete the assessment)	<input type="checkbox"/>
Estimated time for administration	<input type="checkbox"/>
Student Directions & Assessment Task/Prompt – what does the student see/use?	<input checked="" type="checkbox"/>
Other: There are detailed explanations for different levels of students (primary, middle and high) for each probe.	<input type="checkbox"/>

A high quality assessment should be...Aligned

Alignment	Rating Column	Comments
1a.		Teachers need to make sure to use the "High Schools Students" recommendations while administering these probes. The review team also suggests that all the probes within the grouping are utilized within a classroom to fully grasp overall student understanding on the GLE, rather than using them piecemeal.
Grade Level(s): High School 9-12		
Indicate the Colorado Academic Standards and Grade Level Expectations evaluated by the Assessment: SC09-GR.HS-S.2-GLE.1		
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: ecosystems, consumers, energy in tropic levels, adaptation, cycling of matter, flow of energy, food, food chain, food web, interdependence, natural selection, producer (list was populated using the table on page 84 of the book)		

<p>1c. List the skills/performance assessed (what are students expected to do?): Is It a Consumer? - students are asked to choose consumers and explain; Food Chain Energy - explain why a specific response is chosen related to energy in a food chain; Ecosystem Cycles - explain why a specific response is chosen related to matter and energy in an ecosystem; No More Plants - explain why a specific response is chosen related to removing plants from an island; Changing Environment - explain why a specific response is chosen related to how a changing environment causes adaptation</p>		<p>These assessment probes are designed to be used formatively, but when used collectively make a summative assessment.</p>
<p>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.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Full match – all tasks or items fully address or exceed the relevant skills and knowledge described in the corresponding state standard/s. <input type="checkbox"/> Close match – most tasks or items address the relevant skills and knowledge described in the corresponding state standard/s. <input type="checkbox"/> Partial match – many tasks or items partially address the skills and knowledge described in the corresponding state standard/s. <input type="checkbox"/> Minimal match – some tasks or items match some relevant skills and knowledge described in the corresponding state standard/s. <input type="checkbox"/> No match – task or most items are not related to the skills and knowledge described in the corresponding state standard/s. 		
<p>Please provide evidence from both the standards and assessment to support your response: See the above description of what students need to accomplish. These assessments probes are a partial match as 3 out of 7 EO are used from GLE 1.</p>		
	<p>Full Match=5; Close Match=4; Partial Match=3; Minimal Match=2; No Match= 1</p>	
<p>Aligned to Colorado Academic Standards Rating</p>	<p>3</p>	
	<p>Rating Column</p>	<p>Comments</p>
<p>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.</p> <ul style="list-style-type: none"> <input type="checkbox"/> More rigorous – most items or the tasks reviewed are at a higher DOK level than the range indicated for the grade level expectations. <input type="checkbox"/> Similar rigor – most items or the task reviewed are similar to the DOK range indicated for the grade level expectations. <input type="checkbox"/> Less rigor – most items or the task reviewed are lower than the DOK range indicated for the grade level expectations. 		
<p>Please provide evidence from both the grade level expectations and assessment to support your response: These assessment probes have a similar rigor to the standards based on previous descriptions above.</p>		
	<p>Similar Rigor=2, More Rigor=1, Less Rigor=1</p>	
<p>Rigor Level Rating</p>	<p>2</p>	

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

<p>Scoring Guide Present</p> <ul style="list-style-type: none"> <input type="checkbox"/> Answer key, scoring template, computerized/machine scored <input type="checkbox"/> Generalized Rubric (e.g., for persuasive writing, for all science labs) <input type="checkbox"/> Task-Specific Rubric (only used for the particular task) <input type="checkbox"/> Checklist (e.g., with score points for each part) <input type="checkbox"/> Teacher Observation Sheet/ Observation Checklist 	<p>Check all that apply:</p>	<p>Comments</p>
<p>2a. Does the rubric/scoring criteria align to Colorado Academic Standards in this assessment. Provide an explanation of your response: No scoring criteria specifically available.</p>	<p>Yes=3, Somewhat=2, No=1</p>	<p>While there is no specific scoring rubric or scoring guide, there is detailed information about the probe and the scientific explanation is detailed and usable by educators. There is also detailed information available in each probe which should be used to match the grade level expectations to the probes.</p>
<p>Rubric Aligned to Standards Rating</p>	<p>N/A</p>	

2b. Are the score categories clearly defined and coherent across performance levels? Provide an explanation of your response: No scoring criteria available.	Yes=3, Somewhat=2, No=1	
Rubric/Scoring Coherent Rating	N/A	
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 criteria specifically available.	High=3, Moderate=2, Low or None=1	
Rubric/Scoring Aligned with Task Rating	N/A	
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 criteria specifically available.	Yes=3, Somewhat=2, No=1	
Rubric/Scoring Different Raters Same Rating	N/A	
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 is available, but there is guidance on what level of explanations are expected for different grade bands.	Yes=3, Somewhat=2, No=1	
Student Work Samples Rating	N/A	

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
<p>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: Each probe is a single page and includes a simple diagram and space for student responses making the items clear and uncluttered.</p>	<p>High=3, Moderate=2, Low=1</p>	
<p>Clear & Uncluttered Rating</p>	<p>3</p>	
<p>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: Each item is straightforward for different learners. There is an initial question to be answered, followed by space and lines for student explanations.</p>	<p>High=3, Moderate=2, Low=1</p>	
<p>Straight Forward Rating</p>	<p>3</p>	
<p>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: There are specific names used in many of the probes (such as Tatyana, Molly, Amos and Ursula) which may increase some unintended bias, but overall there is limited bias in the probes.</p>	<p>High=3, Moderate=2, Low=1</p>	
<p>Free of Cultural or Unintended Bias Rating</p>	<p>3</p>	
<p>3d. Does the assessment use appropriate levels of academic language for the grade and content area? Provide an explanation of your response. The initial probe uses fairly "simple" academic language as they were designed to be used in multiple grade bands. The information provided in the explanation section details the level of language and scientific explanation expected for high school. This is dependent on teachers pushing students towards the use of the higher academic language in their response.</p>	<p>Yes=3, Somewhat=2, No=1</p>	
<p>Academic Language Rating</p>	<p>2</p>	
<p>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 specific confusing words were found.</p>	<p>Yes=3, Somewhat=2, No=1</p>	
<p>Confusing Language Rating</p>	<p>3</p>	
<p><u>*Please reference "Defining Features of Academic Language in WIDA's Standards" (http://wida.us/searchResults.aspx?cx=0001878867407992537742:bjkids4qwc&cof=FORID:10&q=Defining%20Features%20of%20Academic%20Language)</u></p>		
<p>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 accommodations given.</p>		
<p><i>Accommodations are commonly categorized in five ways: presentation, response, setting, and timing and scheduling:</i></p> <ul style="list-style-type: none"> 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 accommodations given.	Yes, Some identified=2; None identified =1	
Adequate Accommodations Allowed Rating	1	

A high quality assessment...Increases Opportunities to Learn

Opportunities to Learn <i>(the areas below should also be discussed relative to the needs of ELLs, gifted and talented students, and students with disabilities)</i>	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: Each probe connects to new contexts and situations.	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: When these probes are used as a summative assessment set, these probes can provide clear information about what students have learned in the classroom.	High=3; Moderate=2; Low or None=1	
Classroom Learning Rating	3	
4c. To what degree do the results from this assessment (<i>scores and student work analysis</i>) foster meaningful dialogue about learning expectations and outcomes with students and parents? Provide an explanation of your response: While these probes are designed to be formative in nature, when used collectively at the end of a unit, the student responses can be used to foster meaningful dialogue about learning expectations.	High=3; Moderate=2; Low or None=1	
Learning Expectations/Outcomes Rating	3	
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: Each probe expects students to explain their thinking and reasoning.	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 (<i>scores and student work analysis</i>) to understand what competency on standard/s look like? Provide an explanation of your response: When used a summative assessments, as a group, these probes can allow teachers to understand what competency looks like on standards. The explanations provided within the book also help teachers understand competency.	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 identify what purpose the assessment serves (e.g. diagnostic, report card grades, adjusting instruction, etc.)? Provide an explanation of your response: These assessments taken alone are formative in nature. The review team suggests that these probes be used as a group, making them summative as well. The nature of the probes allow for a clear understanding of student thinking and understanding.	High=3; Moderate=2; Low or None=1	
Clarity of Purpose Rating	3	

Summary	Earned	Possible
Standards Rating	3	5
Rigor Rating	2	2
Subtotal	5	7
		71.4%
Rubric Aligned w/Standards Rating	N/A	3
Rubric/Scoring Coherent Rating	N/A	3
Rubric/Scoring Aligned with Task Rating	N/A	3
Inter-rater Reliability Rating	N/A	3
Student Work Samples Rating	N/A	3

Subtotal	0	15
		0.0%
Clear & Uncluttered Rating	3	3
Straight Forward Rating	3	3
Free of Cultural or Unintended Bias Rating	3	3
Academic Language Rating	2	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	3	3
Communicates Academic Excellence Rating	2	3
Competency on Standards Rating	3	3
Locate Evidence Rating	3	3
Subtotal	17	18
		94.4%
Grand Total	37	57
		64.9%

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

Fully Recommended	
Partially Recommended	X
Not Recommended	