



Bullhead City School District #15

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## Curriculum & Professional Development Committee

Monday, March 23, 2026

4:30 pm

Video call link: <https://meet.google.com/ehy-xipb-ijm>

- I. Welcome
  - a. Notice of Recording
  - b. Attendance
- II. Items for Discussion
  - a. Review Amplify, HMH, and Savvas Rubrics for recommendation of adoption of a science program
  - b. Updates on Math/ELA Screener
- III. Adjourn

### Members

Lindsey Abbott  
Monica Costa  
Lorge Mae Dulandon  
Cynthia Ferguson  
Adonica Johnson  
Jennifer Lott  
Amy Morstad  
Francis Naluz-Blakely  
Krentz Salise  
Marie Christine Villegas  
Sherri Vorak  
Michele Werchau

**EQIP Rubric for Lessons & Units: Science (Version 3.1)**

Reviewer Name or ID: \_\_\_\_\_ Grade: \_\_\_\_\_ Lesson/Unit Title: \_\_\_\_\_

**Category I: NGSS 3D Design (lessons and units):** *The lesson/unit is designed so students make sense of phenomena and/or design solutions to problems by engaging in student performances that integrate the three dimensions of the NGSS.*

<b>Lesson and Unit Criteria</b> Lessons and units designed for the NGSS include clear and compelling evidence of the following:	<b>Specific evidence from materials</b> (what happened/where did it happen) <b>and reviewer’s reasoning</b> (how/why is this evidence)		<b>Evidence of Quality?</b>	<b>Suggestions for improvement</b>
<b>A. Explaining Phenomena/Designing Solutions:</b> Making sense of phenomena and/or designing solutions to a problem drive student learning. <ul style="list-style-type: none"> <li>i. Student questions and prior experiences related to the phenomenon or problem motivate sense-making and/or problem solving.</li> <li>ii. The focus of the lesson is to support students in making sense of phenomena and/or designing solutions to problems.</li> <li>iii. When engineering is a learning focus, it is integrated with developing disciplinary core ideas from physical, life, and/or earth and space sciences.</li> </ul>			<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
<b>B. Three Dimensions:</b> Builds understanding of multiple grade-appropriate elements of the science and engineering practices (SEPs), disciplinary core ideas (DCIs), and crosscutting concepts (CCCs) <i>that are deliberately selected to aid student sense-making of phenomena and/or designing of solutions.</i> <ul style="list-style-type: none"> <li>i. Provides opportunities to <i>develop and use</i> specific elements of the SEP(s).</li> <li>ii. Provides opportunities to <i>develop and use</i> specific elements of the DCI(s).</li> <li>iii. Provides opportunities to <i>develop and use</i> specific elements of the CCC(s).</li> </ul> <p><b>Evidence needs to be at the <i>element level</i> of the dimensions (see rubric introduction for a description of what is meant by “element”)</b></p>	Document evidence and reasoning, and evaluate whether or not there is sufficient evidence of quality for each dimension separately	<b>Evidence of Quality?</b> <input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive  <b>(All 3 dimensions must be rated at least “adequate” to mark “adequate” overall)</b>	
i.	i.	<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive		
ii.	ii.	<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive		
iii.	iii.	<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive		

<p><b>C. Integrating the Three Dimensions:</b> Student sense-making of phenomena and/or designing of solutions requires student performances that integrate elements of the SEPs, CCCs, and DCIs.</p>		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
<p><b>Rating for Category I. NGSS 3D Design—lessons</b>  After carefully weighing the evidence, reasoning, and suggestions for improvement, rate the degree to which there is enough evidence to support a claim that the lesson meets these criteria.</p> <p><i>If you are evaluating an instructional unit rather than a single lesson, continue on to evaluate criteria D-F and rate Category I overall below.</i></p>	<p><b>Lesson Rating scale for Category I (Criteria A–C only):</b></p> <p><b>3:</b> Extensive evidence to meet at least two criteria (and at least adequate evidence for the third)</p> <p><b>2:</b> Adequate evidence to meet all three criteria in the category</p> <p><b>1:</b> Adequate evidence to meet at least one criterion in the category, but insufficient evidence for at least one other criterion</p> <p><b>0:</b> Inadequate (or no) evidence to meet any of the criteria in the category</p>		<p><b>Circle Rating</b></p> <p><b>0 1 2 3</b></p> <p>After rating the lesson, read below for next steps</p>

**Category I: NGSS 3D Design (additional criteria for units only):**

*If you are evaluating a lesson, it is not necessary to evaluate criteria D–F. Please enter your rating for a single lesson above (after C).*

<b>Unit Criteria</b> A unit or longer lesson designed for the NGSS will also include clear and compelling evidence of the following:	<b>Specific evidence from materials and reviewers' reasoning</b>	<b>Evidence of Quality?</b>	<b>Suggestions for improvement</b>
D. <b>Unit Coherence:</b> Lessons fit together to target a set of performance expectations. <ul style="list-style-type: none"> <li>i. Each lesson builds on prior lessons by addressing questions raised in those lessons, cultivating new questions that build on what students figured out, or cultivating new questions from related phenomena, problems, and prior student experiences.</li> <li>ii. The lessons help students develop toward proficiency in a targeted set of performance expectations.</li> </ul>		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
E. <b>Multiple Science Domains:</b> <i>When appropriate</i> , links are made across the science domains of life science, physical science and Earth and space science. <ul style="list-style-type: none"> <li>i. Disciplinary core ideas from different disciplines are used together to explain phenomena.</li> <li>ii. The usefulness of crosscutting concepts to make sense of phenomena or design solutions to problems <i>across science domains</i> is highlighted.</li> </ul>		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
F. <b>Math and ELA:</b> Provides grade-appropriate connection(s) to the Common Core State Standards in Mathematics and/or English Language Arts & Literacy in History/Social Studies, Science and Technical Subjects.		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
<b>Rating for Category I. NGSS 3D Designed—units</b> After carefully weighing the evidence, reasoning, and suggestions for improvement, rate the degree to which the criteria are met across the unit.	<b>Unit Rating Scale for Category I (Criteria A–F):</b> <b>3:</b> At least adequate evidence for all of the unit criteria in the category; extensive evidence for criteria A–C <b>2:</b> At least some evidence for all unit criteria in Category I (A–F); adequate evidence for criteria A–C <b>1:</b> Adequate evidence for some criteria in Category I, but inadequate/no evidence for at least one criterion A–C <b>0:</b> Inadequate (or no) evidence to meet any criteria in Category I (A–F)		<b>Circle Rating</b>  <b>0 1 2 3</b>

**Category II: NGSS Instructional Supports (lessons and units):** *The lesson/unit supports three-dimensional teaching and learning for ALL students by placing the lesson in a sequence of learning for all three dimensions and providing support for teachers to engage all students.*

<b>Lesson and Unit Criteria</b> Lessons and units designed for the NGSS include clear and compelling evidence of the following:	<b>Specific evidence from materials and reviewers' reasoning</b>	<b>Evidence of Quality?</b>	<b>Suggestions for improvement</b>
A. <b>Relevance and Authenticity:</b> Engages students in authentic and meaningful scenarios that reflect the practice of science and engineering as experienced in the real world. <ol style="list-style-type: none"> <li>i. Students experience phenomena or design problems as directly as possible (firsthand or through media representations).</li> <li>ii. Includes suggestions for how to connect instruction to the students' home, neighborhood, community and/or culture as appropriate.</li> <li>iii. Provides opportunities for students to connect their explanation of a phenomenon and/or their design solution to a problem to questions from their own experience.</li> </ol>		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
B. <b>Student Ideas:</b> Provides opportunities for students to express, clarify, justify, interpret, and represent their ideas and respond to peer and teacher feedback orally and/or in written form as appropriate.		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
C. <b>Building Progressions:</b> Identifies and builds on students' prior learning <u>in all three dimensions</u> , including providing the following support to teachers: <ol style="list-style-type: none"> <li>i. Explicitly identifying prior student learning expected for all three dimensions</li> <li>ii. Clearly explaining how the prior learning will be built upon.</li> </ol>		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	

<p>D. <b>Scientific Accuracy:</b> Uses scientifically accurate and grade-appropriate scientific information, phenomena, and representations to support students’ three-dimensional learning.</p>		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
<p>E. <b>Differentiated Instruction:</b> Provides guidance for teachers to support differentiated instruction by including:</p> <ul style="list-style-type: none"> <li>i. Supportive ways to access instruction, including appropriate linguistic, visual, and kinesthetic engagement opportunities that are essential for effective science and engineering learning and particularly beneficial for multilingual learners and students with disabilities.</li> <li>ii. Extra support (e.g., phenomena, representations, tasks) for students who are struggling to meet the targeted expectations.</li> <li>iii. Extensions for students with high interest or who have already met the performance expectations to develop deeper understanding of the practices, disciplinary core ideas, and crosscutting concepts.</li> </ul>		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
<p><b>Rating for Category II: Instructional Supports—lessons</b>  After carefully weighing the evidence, reasoning, and suggestions for improvement, rate the degree to which the lesson met this category.</p> <p><i>If you are evaluating an instructional unit rather than a single lesson, continue on to evaluate criteria F–G and rate Category II overall below.</i></p>	<p><b>Lesson Rating scale for Category II (Criteria A-E only):</b></p> <p><b>3:</b> At least adequate evidence for all criteria in the category; extensive evidence for at least one criterion</p> <p><b>2:</b> Some evidence for all criteria in the category and adequate evidence for at least four criteria, including A</p> <p><b>1:</b> Adequate evidence of quality for at least two criteria in the category</p> <p><b>0:</b> Adequate evidence of quality for no more than one criterion in the category</p>		<p><b>Circle Rating</b></p> <p><b>0 1 2 3</b></p>

**Category II: NGSS Instructional Supports (additional criteria for units only)**

*If you are evaluating a lesson, it is not necessary to evaluate criteria F–G. Please enter your rating for a lesson above (after E).*

<b>Unit Criteria</b> A unit or longer lesson designed for the NGSS will also include clear and compelling evidence of the following:	<b>Specific evidence from materials and reviewers' reasoning</b>	<b>Evidence of Quality?</b>	<b>Suggestions for improvement</b>
<b>F. Teacher Support for Unit Coherence:</b> Supports teachers in facilitating coherent student learning experiences over time by: <ul style="list-style-type: none"> <li>i. Providing strategies for linking student engagement across lessons (e.g. cultivating new student questions at the end of a lesson in a way that leads to future lessons, helping students connect related problems and phenomena across lessons, etc.).</li> <li>ii. Providing strategies for ensuring student sense-making and/or problem-solving is linked to learning in all three dimensions.</li> </ul>		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
<b>G. Scaffolded differentiation over time:</b> Provides supports to help students engage in the practices as needed and gradually adjusts supports over time so that students are increasingly responsible for making sense of phenomena and/or designing solutions to problems.		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
<b>Rating for Category II: NGSS Instructional Supports—units</b> After carefully weighing the evidence, reasoning, and suggestions for improvement, rate the degree to which the criteria are met across the unit.	<b>Unit rating scale for Category II (Criteria A-G):</b> <b>3:</b> At least adequate evidence for all criteria in the category; extensive evidence for at least two criteria <b>2:</b> Some evidence for all criteria in the category and adequate evidence for at least five criteria, including A <b>1:</b> Adequate evidence for at least three criteria in the category <b>0:</b> Adequate evidence for no more than two criteria in the category		<b>Circle Rating</b>  <b>0   1   2   3</b>

**Category III: Monitoring NGSS Student Progress (lessons and units)** *The lesson/unit supports monitoring student progress in all three dimensions of the NGSS as students make sense of phenomena and/or design solutions to problems.*

<b>Lesson and Unit Criteria</b> Lessons and units designed for the NGSS include clear and compelling evidence of the following:	<b>Specific evidence from materials and reviewers' reasoning</b>	<b>Evidence of Quality?</b>	<b>Suggestions for improvement</b>
<b>A. Monitoring 3D student performances:</b> Elicits direct, observable evidence of three-dimensional learning; students are using practices with core ideas and crosscutting concepts to make sense of phenomena and/or to design solutions.		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
<b>B. Formative:</b> Embeds formative assessment processes throughout that evaluate student learning to inform instruction.		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
<b>C. Scoring guidance:</b> Includes aligned rubrics and scoring guidelines that provide guidance for interpreting student performance along the three dimensions to support teachers in (a) planning instruction and (b) providing ongoing feedback to students.		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
<b>D. Unbiased tasks/items:</b> Assesses student proficiency using methods, vocabulary, representations, and examples that are accessible and unbiased for all students.		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
<b>Rating for Category III. Monitoring NGSS Student Progress—lessons</b> After carefully weighing the evidence, reasoning, and suggestions for improvement, rate the degree to which the lesson met this category.  <i>If you are evaluating an instructional unit rather than a single lesson, continue on to evaluate criteria E–F and rate Category III overall below.</i>	<b>Lesson Rating scale for Category III (Criteria A–D only):</b> <b>3:</b> At least adequate evidence for all criteria in the category; extensive evidence for at least one criterion <b>2:</b> Some evidence for all criteria in the category and adequate evidence for at least three criteria, including A <b>1:</b> Adequate evidence for at least two criteria in the category <b>0:</b> Adequate evidence for no more than one criterion in the category		<b>Circle Rating</b>  <b>0 1 2 3</b>

**Category III: Monitoring NGSS Student Progress (additional criteria for units only)**

*If you are evaluating a lesson, it is not necessary to evaluate criteria E–F. Please enter your rating for a lesson above (after D).*

<b>Unit Criteria</b> A unit or longer lesson designed for the NGSS will also include clear and compelling evidence of the following:	<b>Specific evidence from materials and reviewers’ reasoning</b>	<b>Evidence of Quality?</b>	<b>Suggestions for improvement</b>
E. <b>Coherent Assessment system:</b> Includes pre-, formative, summative, and self-assessment measures that assess three-dimensional learning.		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
F. <b>Opportunity to learn:</b> Provides multiple opportunities for students to demonstrate performance of practices connected with their understanding of disciplinary core ideas and crosscutting concepts and receive feedback		<input type="checkbox"/> None <input type="checkbox"/> Inadequate <input type="checkbox"/> Adequate <input type="checkbox"/> Extensive	
<b>Rating for Category III: Monitoring NGSS Student Progress—units</b> After carefully weighing the evidence, reasoning, and suggestions for improvement, rate the degree to which the criteria are met across the unit.	<b>Unit Rating scale for Category III (Criteria A–F):</b> <b>3:</b> At least adequate evidence for all criteria in the category; extensive evidence for at least one criterion <b>2:</b> Some evidence for all criteria in the category and adequate evidence for at least five criteria, including A <b>1:</b> Adequate evidence for at least three criteria in the category <b>0:</b> Adequate evidence for no more than two criteria in the category		<b>Circle Rating</b>  <b>0 1 2 3</b>

## Category Ratings:

Transfer your team's ratings from each category to the following chart and add the scores together for the overall score:

Category ratings			Total Score
Category I: NGSS 3D Design	Category II: NGSS Instructional Supports	Category III: Monitoring NGSS Student Progress	
0 1 2 3	0 1 2 3	0 1 2 3	

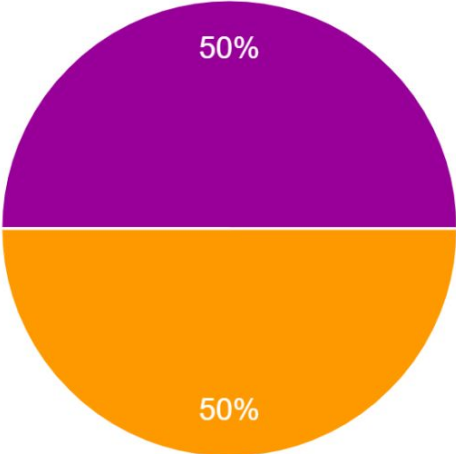
<p><b>Overall ratings:</b> The score total is an <i>approximate</i> guide for the rating. Reviewers should use the evidence of quality across categories to guide the final rating. In other words, the rating could differ from the total score recommendations if the reviewer has evidence to support this variation.</p>	<p><b>E: Example of high quality NGSS design</b>—High quality design for the NGSS across all three categories of the rubric; a lesson or unit with this rating will still need adjustments for a specific classroom, but the support is there to make this possible; exemplifies most criteria across Categories I, II, &amp; III of the rubric. (total score ~8–9)</p> <p><b>E/I: Example of high quality NGSS design if Improved</b>—Adequate design for the NGSS, but would benefit from some improvement in one or more categories; most criteria have at least adequate evidence (total score ~6–7)</p> <p><b>R: Revision needed</b>—Partially designed for the NGSS, but needs significant revision in one or more categories (total ~3–5)</p> <p><b>N: Not ready to review</b>—Not designed for the NGSS; does not meet criteria (total 0–2)</p>	Circle the overall rating below:
		<p><b>E      E/I      R      N</b></p>

Overall Summary Comments:

Amplify

Grade:

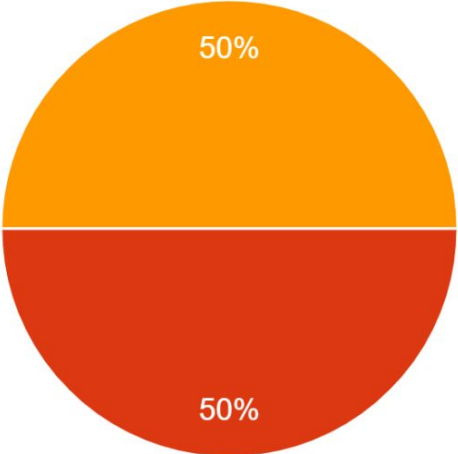
2 responses



- K
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

# Category I: NGSS 3D Design - Explaining Phenomena/Designing Solutions (Criteria A)

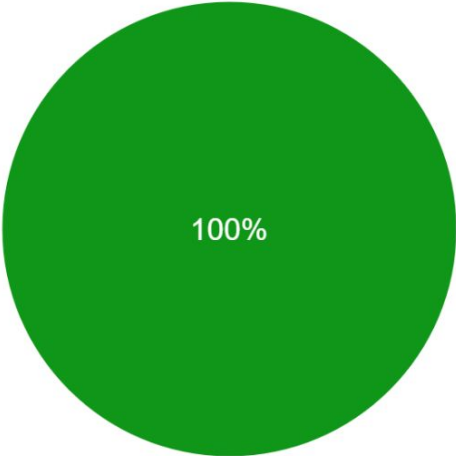
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

Category I: NGSS 3D Design - Three Dimensions - Provides opportunities to develop and use specific elements of the SEP(s). (Criteria B.i)

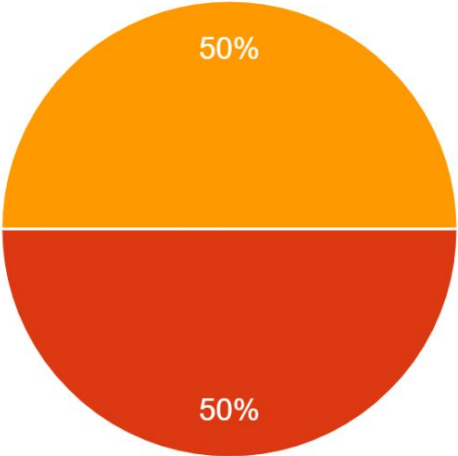
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

Category I: NGSS 3D Design - Three Dimensions - Provides opportunities to develop and use specific elements of the DCI(s). (Criteria B.ii)

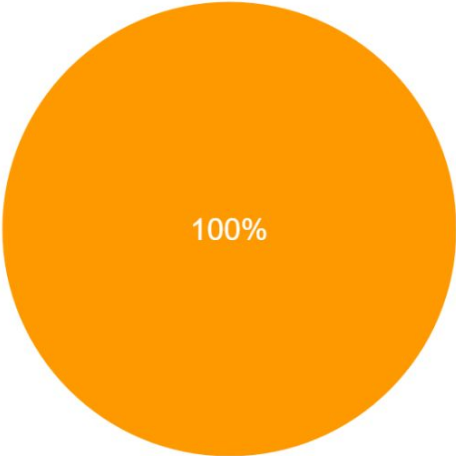
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

Category I: NGSS 3D Design - Three Dimensions - Provides opportunities to develop and use specific elements of the CCC(s). (Criteria B.iii)

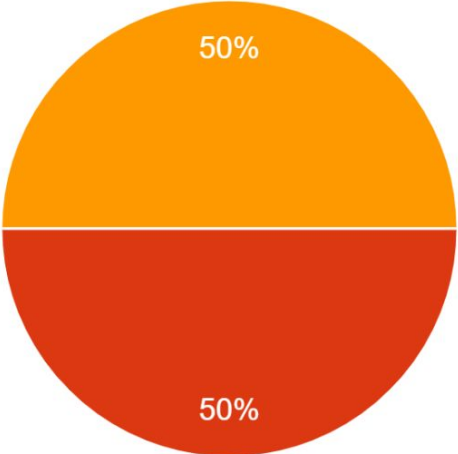
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

# Category I: NGSS 3D Design - Integrating the Three Dimensions (Criteria C)

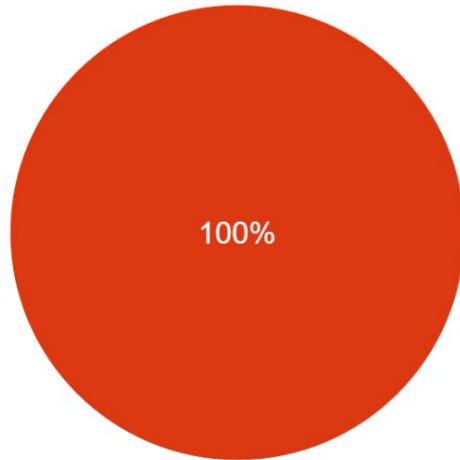
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

## Rating for Category I. NGSS 3D Design - Lesson Rating (Criteria A-C only)

2 responses



- 0: Inadequate (or no) evidence to meet any of the criteria in the category
- 1: Adequate evidence to meet at least one criterion in the category, but insufficient evidence for at least one ot...
- 2: Adequate evidence to meet all three criteria in the category
- 3: Extensive evidence to meet at least two criteria (and at least adequate evidence for the third)

### Specific evidence and reasoning for Category I (Criteria A-C):

2 responses

A. Each unit has phenomena and/or problem/solution

Bi. To much information to adequately teach nad meet our needs in the time given.

Bii. Time and resources are a challenge

A. Too much to cover in the time allowed in the schedule & Amplify knowledge

B. i. Lots of practice. almost too much to pick and choose

ii. Has experiments but we do not have a way to heat, cool, etc. Hard to get full unit replacement resources

C. Don't cover grade level standards even when unit would seem to fit

### Suggestions for improvement for Category I (Criteria A-C):

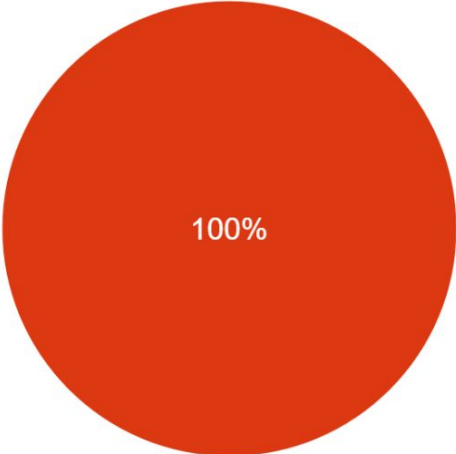
2 responses

Teachers' manuals need to be more teacher friendly. Too much to prepare each lesson.

Not aligned to AZ standards. Too much for students in the time allotted. 3 lenses one of 22.

# Category I (Unit Only): Unit Coherence (Criteria D)

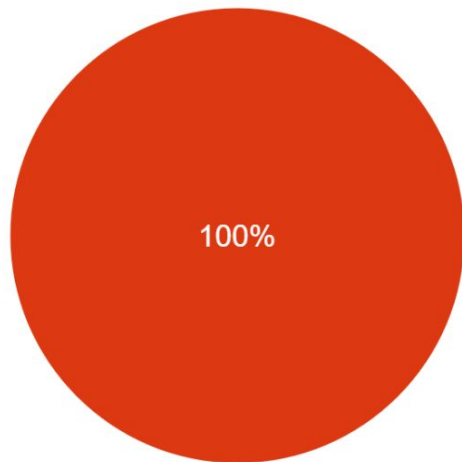
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

## Category I (Unit Only): Multiple Science Domains (Criteria E)

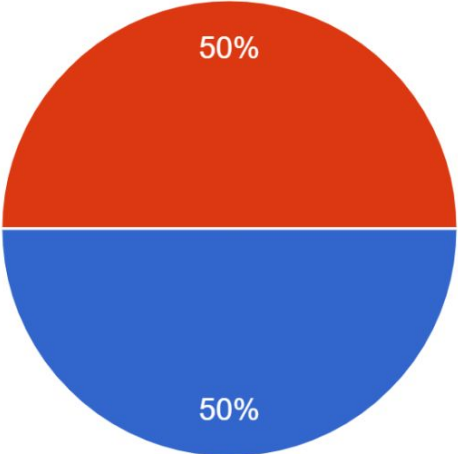
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

# Category I (Unit Only): Math and ELA Connections (Criteria F)

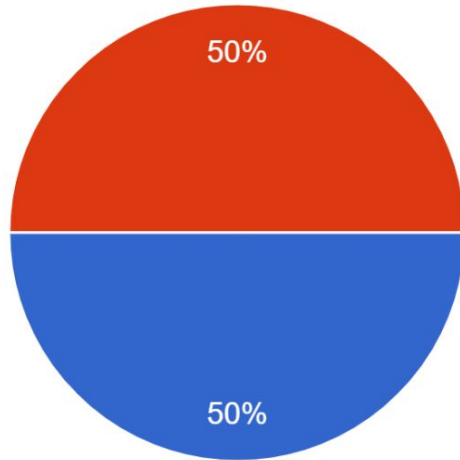
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

## Rating for Category I. NGSS 3D Design - Unit Rating (Criteria A-F)

2 responses



- 0: Inadequate (or no) evidence to meet any criteria in Category I (A-F)
- 1: Adequate evidence for some criteria in Category I, but inadequate/no evidence for at least one criterion A-C
- 2: At least some evidence for all unit criteria in Category I (A-F); adequate evidence for criteria A-C
- 3: At least adequate evidence for all of the unit criteria in the category; extens...

### Specific evidence and reasoning for Category I Unit Criteria (D-F):

2 responses

D. Some standards are not covered. Earth and Science standards are covered well.

Unit sounds like it would cover standards for Earth and Space but only 3/22 lessons fit the standards. Because of grade level standards, entire units needed to be shifted to other grade levels. Because of grade level units not always connected, plus Amplify CKLA has science units in knowledge

### Suggestions for improvement for Category I Unit Criteria (D-F):

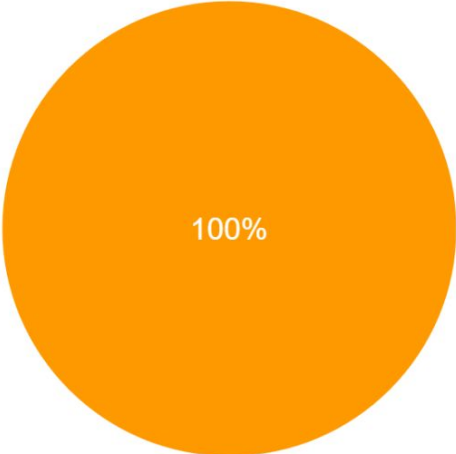
2 responses

Align to AZ standards

N/A

# Category II: NGSS Instructional Supports - Relevance and Authenticity (Criteria A)

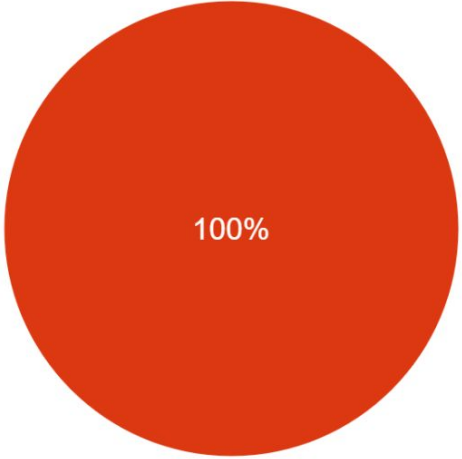
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

# Category II: NGSS Instructional Supports - Student Ideas (Criteria B)

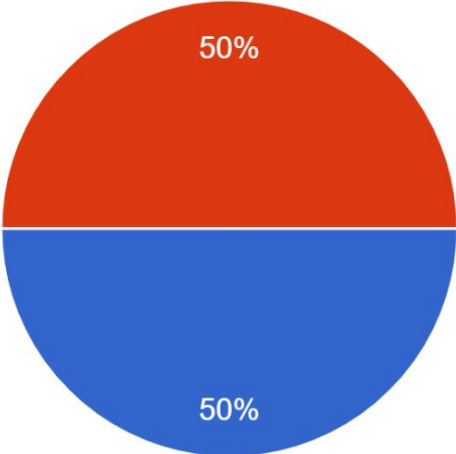
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

# Category II: NGSS Instructional Supports - Building Progressions (Criteria C)

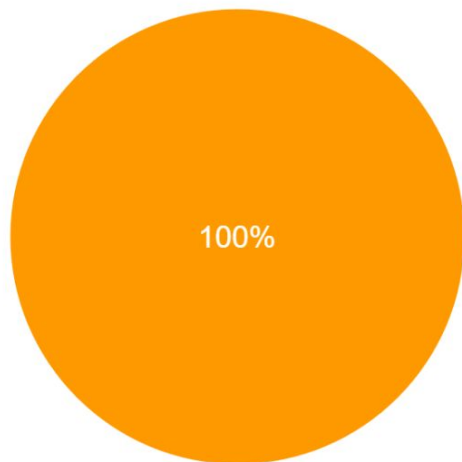
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

## Category II: NGSS Instructional Supports - Scientific Accuracy (Criteria D)

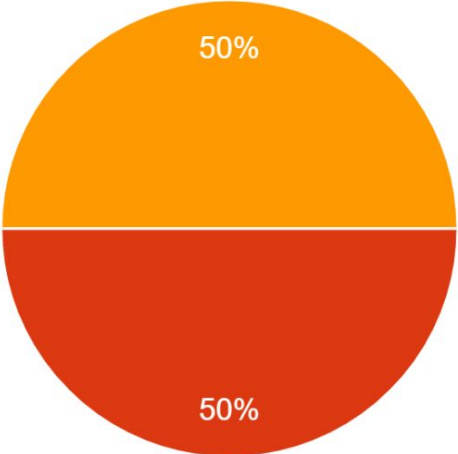
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

# Category II: NGSS Instructional Supports - Differentiated Instruction (Criteria E)

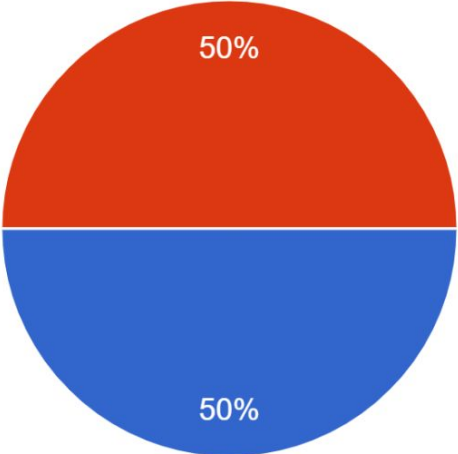
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

# Rating for Category II: Instructional Supports - Lesson Rating (Criteria A-E only)

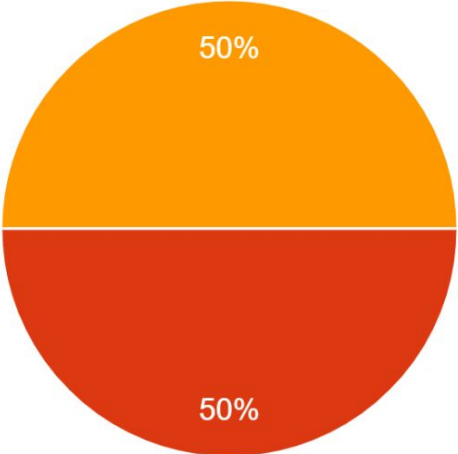
2 responses



- 0: Adequate evidence of quality for no more than one criterion in the category
- 1: Adequate evidence of quality for at least two criteria in the category
- 2: Some evidence for all criteria in the category and adequate evidence for at least four criteria, including A
- 3: At least adequate evidence for all criteria in the category; extensive evidence for at least one criterion

# Category II (Unit Only): Teacher Support for Unit Coherence (Criteria F)

2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

## Specific evidence and reasoning for Category II (Criteria A-E):

2 responses

A. The experiments are authentic and meaningful. Kids get to explore and play with different ideas. It was supplemented with local organizations.

B. It does it well for some earth and space but have to also use 3rd grade materials

C. No. We have 2 units from 4th grade and one from 3rd grade and one from 5th grade

E. The manual has differentiated instruction. However, the manual is not user friendly.

A. Properties of materials - not enough materials for each student. Overall has lessons to teach the standard

B. Step by step following directions not an exploration unit to learn science

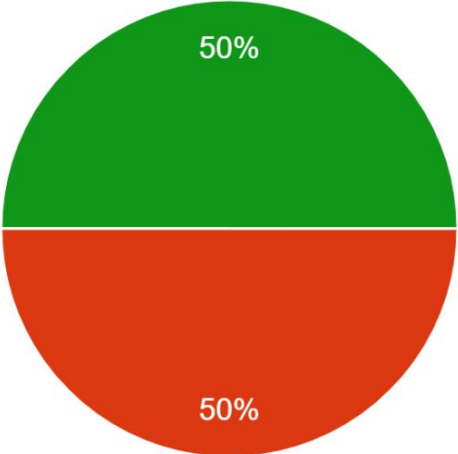
C. The program builds on grade level by grade level but units were moved to fit grade level standards which interrupted the flow.

D. Lessons teach accurate info but students had difficulty grasping because some of the science terms are not used in 2nd grade.

E. Differentiated instruction was difficult to provide to all students who haven't had background knowledge in science terms and are not reading at grade level.

# Category II (Unit Only): Scaffolded differentiation over time (Criteria G)

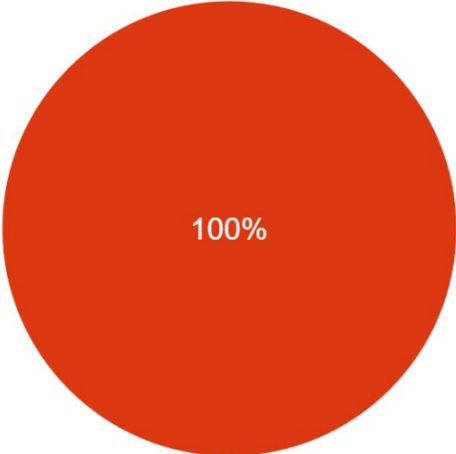
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

# Rating for Category II: NGSS Instructional Supports - Unit Rating (Criteria A-G)

2 responses



- 0: Adequate evidence for no more than two criteria in the category
- 1: Adequate evidence for at least three criteria in the category
- 2: Some evidence for all criteria in the category and adequate evidence for at least five criteria, including A
- 3: At least adequate evidence for all criteria in the category; extensive evidence for at least two criteria

### Specific evidence and reasoning for Category II Unit Criteria (F-G):

2 responses

F. Planning for unit helps with teaching the lessons coherently over time.

G. Each lesson has a differentiation section.

F. Materials do not support 2nd grade standards which make students struggle with connecting new learning

G. Teachers need more guidance on how to scaffold all targeted learning objectives that gradually decrease support to help students become independent.

### Suggestions for improvement for Category II Unit Criteria (F-G):

2 responses

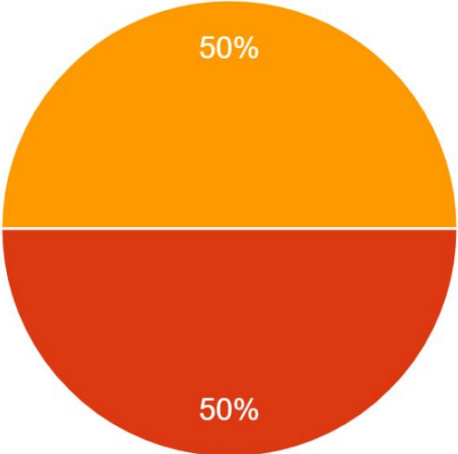
Embed into the lessons **and** provide all needed materials

Too much! There are a lot of manuals that should be in a different book. Lots of good information but not needed to teach the lessons to students.

N/A

# Category III: Monitoring NGSS Student Progress - Monitoring 3D student performances (Criteria A)

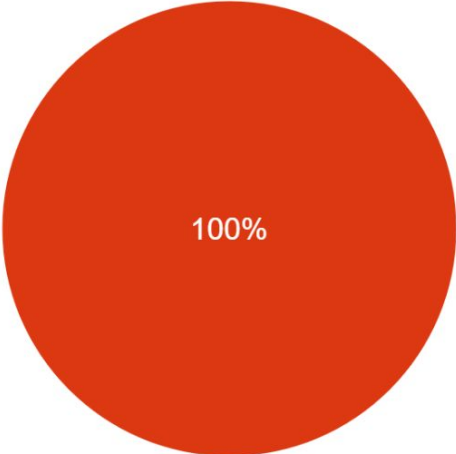
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

# Category III: Monitoring NGSS Student Progress - Formative assessment processes (Criteria B)

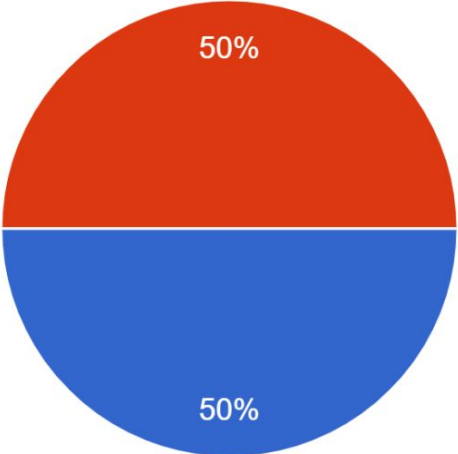
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

# Category III: Monitoring NGSS Student Progress - Scoring guidance (Criteria C)

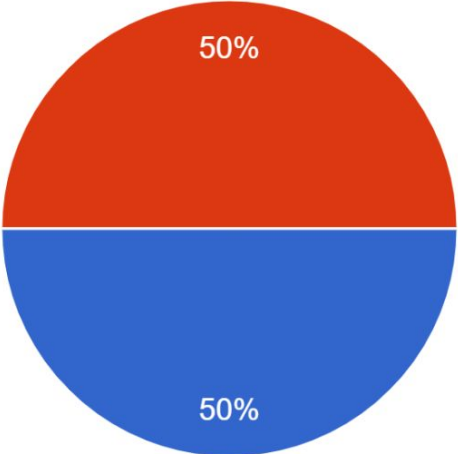
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

# Category III: Monitoring NGSS Student Progress - Unbiased tasks/items (Criteria D)

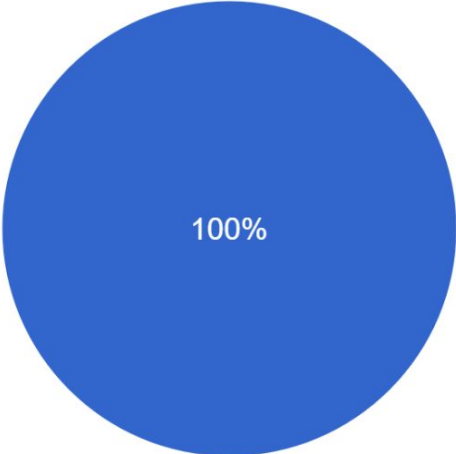
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

# Rating for Category III. Monitoring NGSS Student Progress - Lesson Rating (Criteria A-D only)

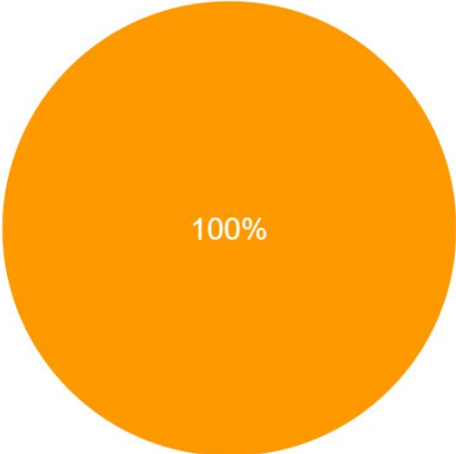
2 responses



- 0: Adequate evidence for no more than one criterion in the category
- 1: Adequate evidence for at least two criteria in the category
- 2: Some evidence for all criteria in the category and adequate evidence for at least three criteria, including A
- 3: At least adequate evidence for all criteria in the category; extensive evidence for at least one criterion

# Category III (Unit Only): Coherent Assessment system (Criteria E)

2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

### Specific evidence and reasoning for Category III (Criteria A-D):

2 responses

- A. Again in every lesson along with NGSSS disciplinary core ideas nad crosscutting concepts
- B. There are experiments for students to do. Some are not that high quality or are too difficult for students
- C. I see focuses but not rubrics
- D. There are not any traditional paper assessments per se.

- A. Students have a difficult time integrating the three dimensions due to lack of differentiated instruction guidance
- B. Program provides formative assessment but not evaluating second grade standards
- C. Difficult to use with 2nd grade standards
- D. Majority of students lack background knowledge to access concepts

### Suggestions for improvement for Category III (Criteria A-D):

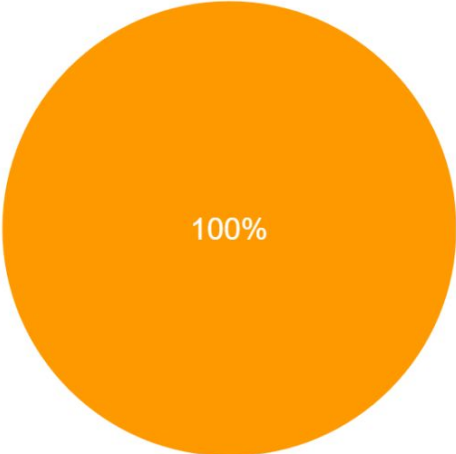
2 responses

- Make rubrics for writing arguments.
- Have chapter tests to assess learning with rubrics for writing.

N/A

# Category III (Unit Only): Opportunity to learn and receive feedback (Criteria F)

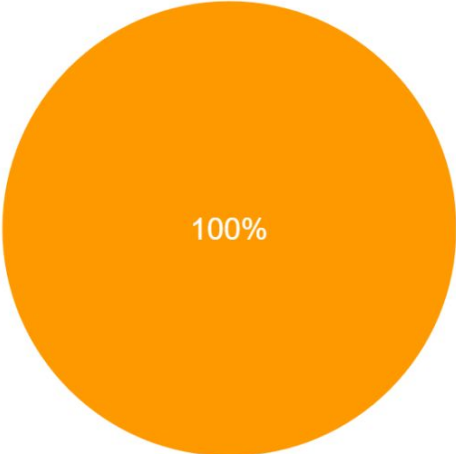
2 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

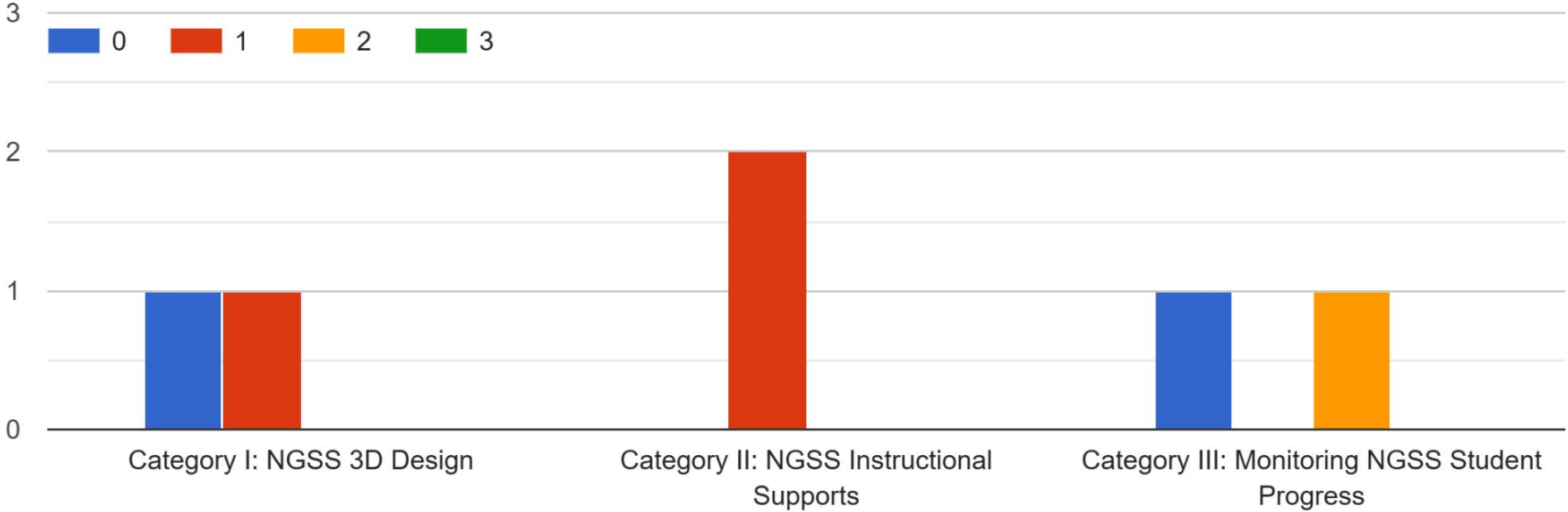
# Rating for Category III: Monitoring NGSS Student Progress - Unit Rating (Criteria A-F)

2 responses



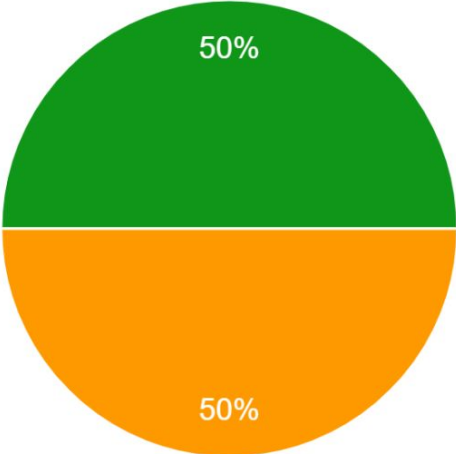
- 0: Adequate evidence for no more than two criteria in the category
- 1: Adequate evidence for at least three criteria in the category
- 2: Some evidence for all criteria in the category and adequate evidence for at least five criteria, including A
- 3: At least adequate evidence for all criteria in the category; extensive evidence for at least one criterion

# Category Ratings Summary: Transfer the rating score for each category



# Overall Rating (Based on Total Score and Evidence)

2 responses



- E: Example of high quality NGSS design (Total Score ~8-9)
- E/I: Example of high quality NGSS design if Improved (Total Score ~6-7)
- R: Revision needed (Total Score ~3-5)
- N: Not ready to review (Total Score 0-2)

Specific evidence and reasoning for Category III Unit Criteria (E-F):

2 responses

I do not like them, but they are in all units.

Yes it contains the assessment system

Suggestions for improvement for Category III Unit Criteria (E-F):

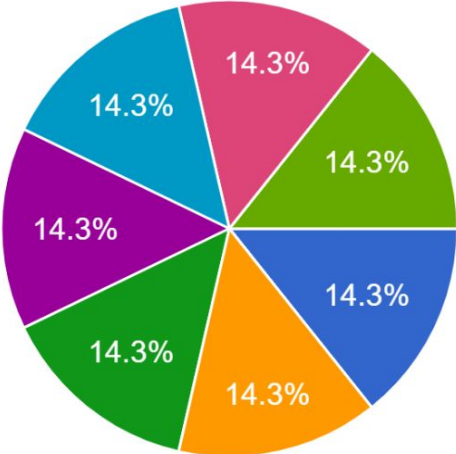
2 responses

N/A

Savvas

Grade:

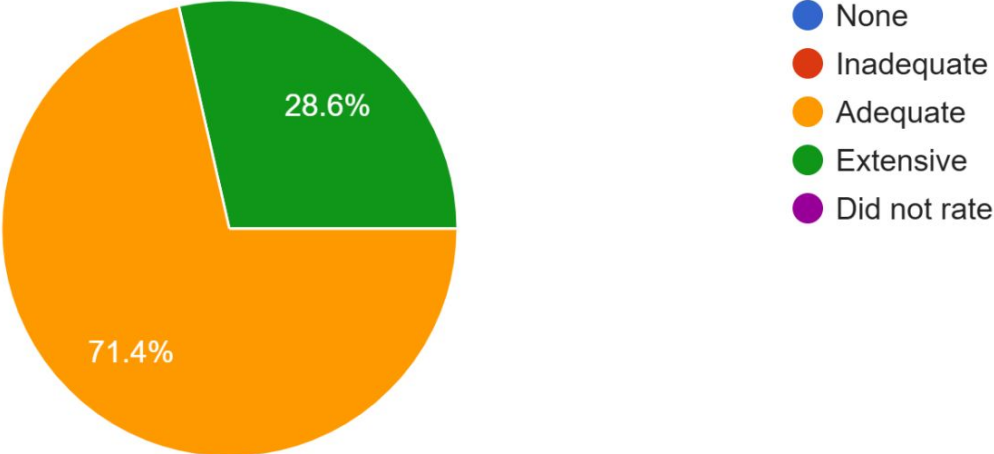
7 responses



- K
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

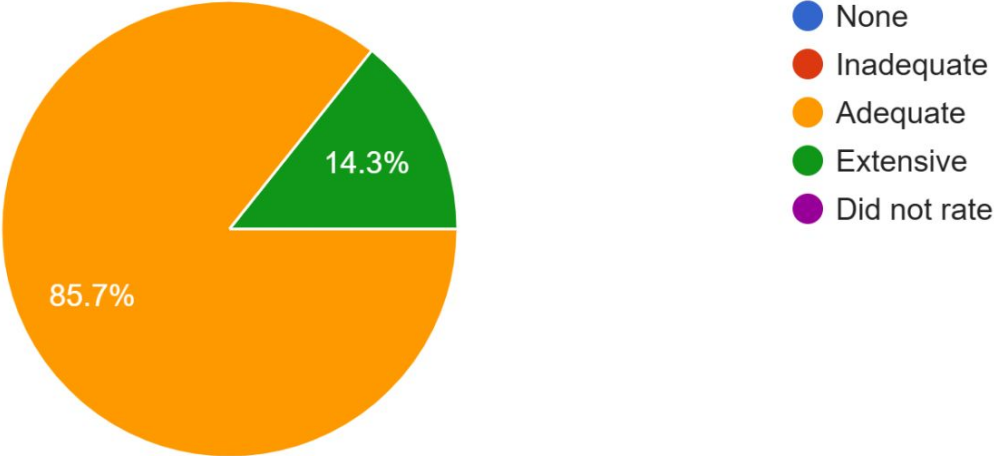
# Category I: NGSS 3D Design - Explaining Phenomena/Designing Solutions (Criteria A)

7 responses



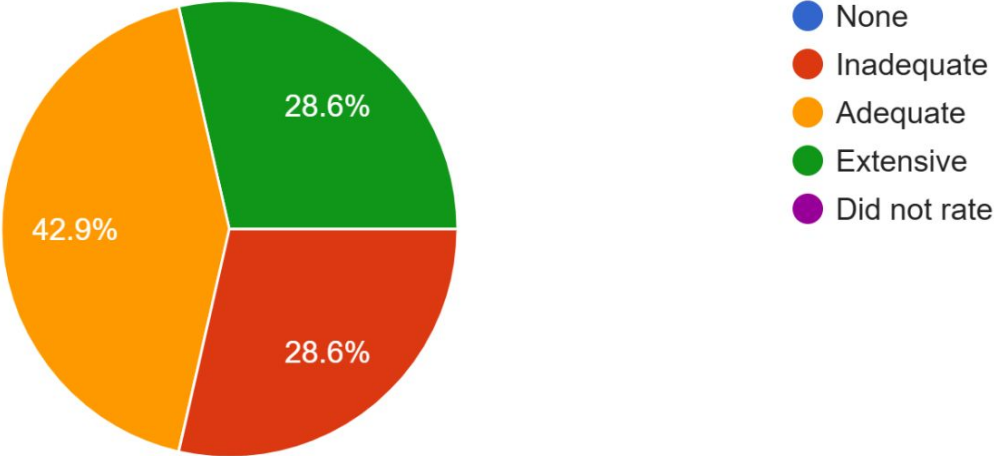
Category I: NGSS 3D Design - Three Dimensions - Provides opportunities to develop and use specific elements of the SEP(s). (Criteria B.i)

7 responses



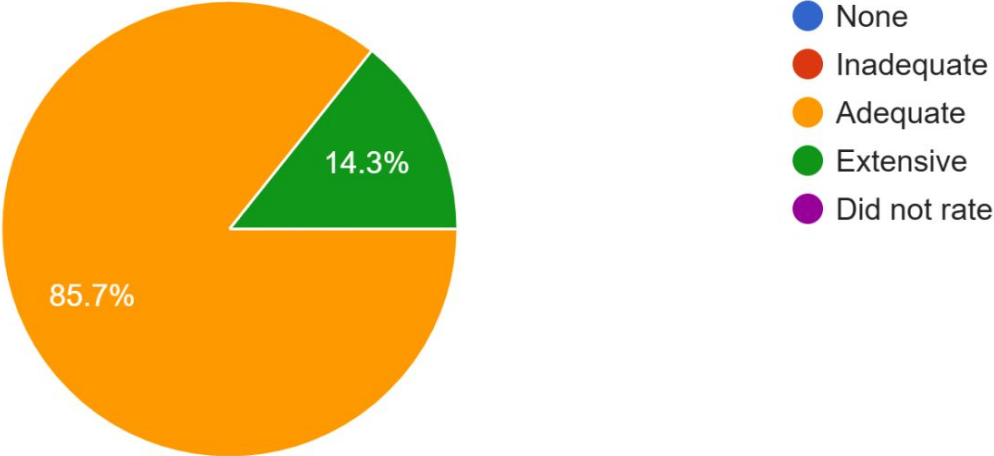
Category I: NGSS 3D Design - Three Dimensions - Provides opportunities to develop and use specific elements of the DCI(s). (Criteria B.ii)

7 responses



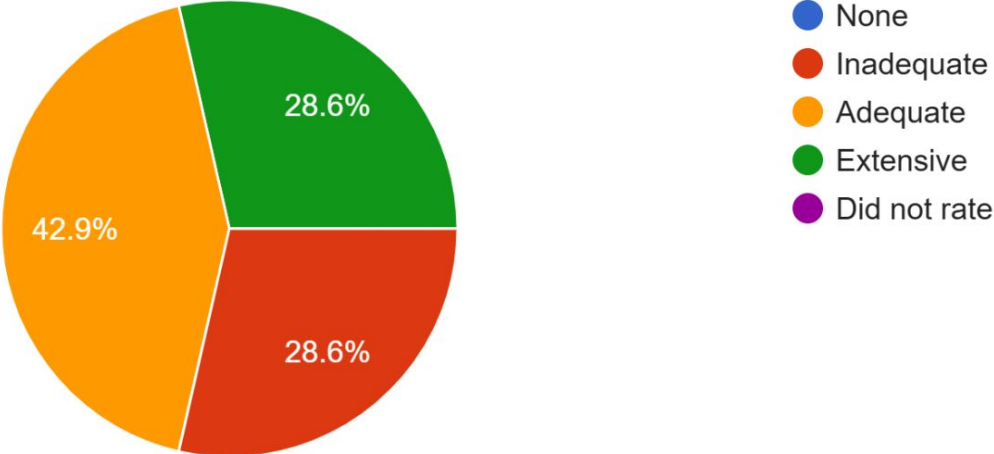
Category I: NGSS 3D Design - Three Dimensions - Provides opportunities to develop and use specific elements of the CCC(s). (Criteria B.iii)

7 responses



# Category I: NGSS 3D Design - Integrating the Three Dimensions (Criteria C)

7 responses

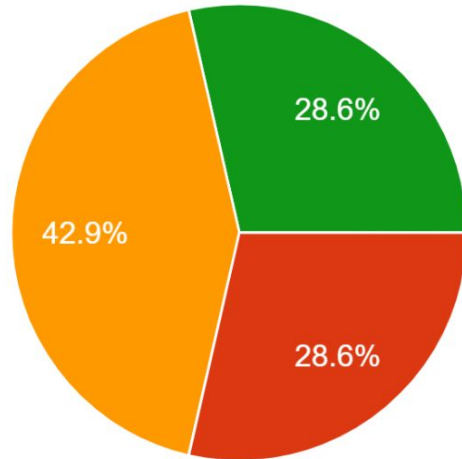


- **Phenomena and Engagement:** Lessons begin with relevant, real-world, or overarching phenomena (often presented as videos, images, or scenarios) to engage students, activate prior knowledge, and provide opportunities for students to relate to the concept, ask questions, and make sense of the topic (e.g., using a "See-Think-Ask" chart).
- **Three-Dimensional Learning (3D) Integration:** Lessons consistently identify and use Science and Engineering Practices (SEPs), Disciplinary Core Ideas (DCIs), and Crosscutting Concepts (CCCs) in the teacher resources and activities. SEPs are developed through clear, hands-on activities, lab work, and opportunities to develop and use models; CCCs are promoted through open-ended questions that encourage connections across ideas, such as Cause and Effect; and DCIs are developed through introductory phenomena and opportunities to revise ideas.
- **Integrated Sense-Making Activities:** Students make sense of phenomena and integrate the three dimensions through various activities, including workbook activities, online activities (like SAVVAS), "Hands-on Science Stations," and "Read About It" sections. Activities often follow a 5E pattern and allow students to show understanding through hands-on work, simulations, textual evidence, and opportunities to design solutions (e.g., STEAM activities).
- **Curriculum Alignment:** While SAVVAS materials align with NGSS standards, a respondent noted that some topics covered in Arizona science standards (AZSci), such as homeostasis, are not always included in the materials, and one respondent noted DCIs for magnetism were not in the 4th-grade curriculum.

- **Alignment and Content Updates:** The materials need to align with AZ standards, and it would be beneficial for SAVVAS to regularly update materials to keep content timely and relevant to current scientific topics and student experiences.
- **Emphasis on Phenomena:** Students enjoyed the phenomenon videos, and there is a suggestion for more videos instead of teacher demonstrations. One respondent noted that some lessons lack the advertised phenomenon videos (e.g., Lesson 2: Weather Patterns).
- **Prior Experience and Connection:** Materials could better emphasize students' prior experiences and include revisiting the phenomenon after the lesson so students can clearly connect their learning to it.
- **Integration of Scientific Practices:** Suggested adding a section that introduces students to the SEPs (Science and Engineering Practices) and CCCs (Crosscutting Concepts) and how they are integrated into scientific inquiry.

## Rating for Category I. NGSS 3D Design - Lesson Rating (Criteria A-C only)

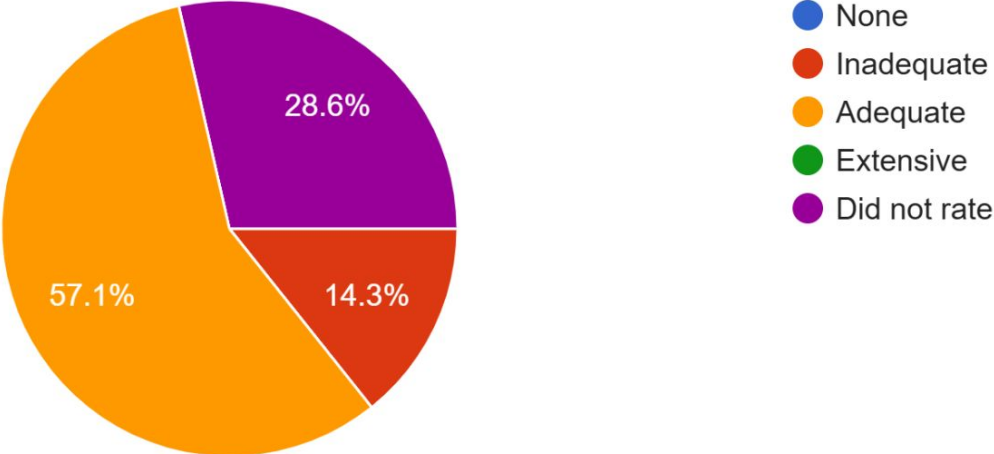
7 responses



- 0: Inadequate (or no) evidence to meet any of the criteria in the category
- 1: Adequate evidence to meet at least one criterion in the category, but insufficient evidence for at least one other
- 2: Adequate evidence to meet all three criteria in the category
- 3: Extensive evidence to meet at least two criteria (and at least adequate evidence for the third)

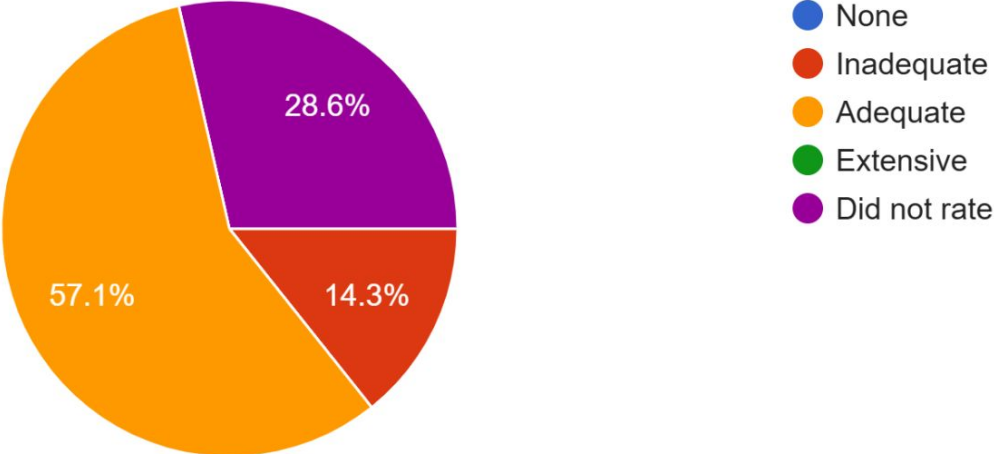
# Category I (Unit Only): Unit Coherence (Criteria D)

7 responses



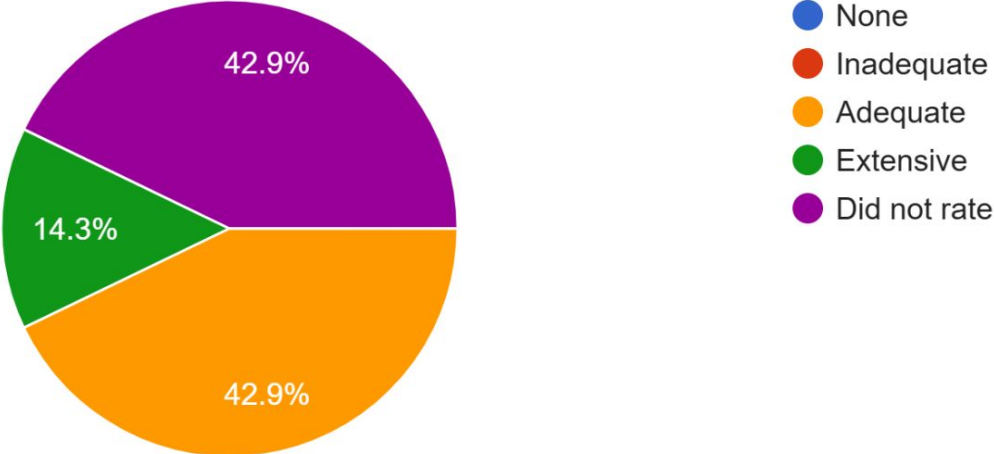
# Category I (Unit Only): Multiple Science Domains (Criteria E)

7 responses



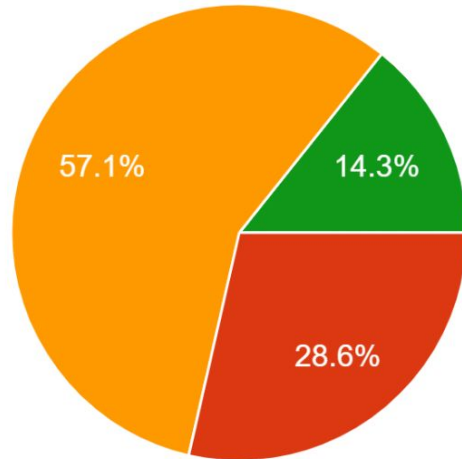
# Category I (Unit Only): Math and ELA Connections (Criteria F)

7 responses



## Rating for Category I. NGSS 3D Design - Unit Rating (Criteria A-F)

7 responses



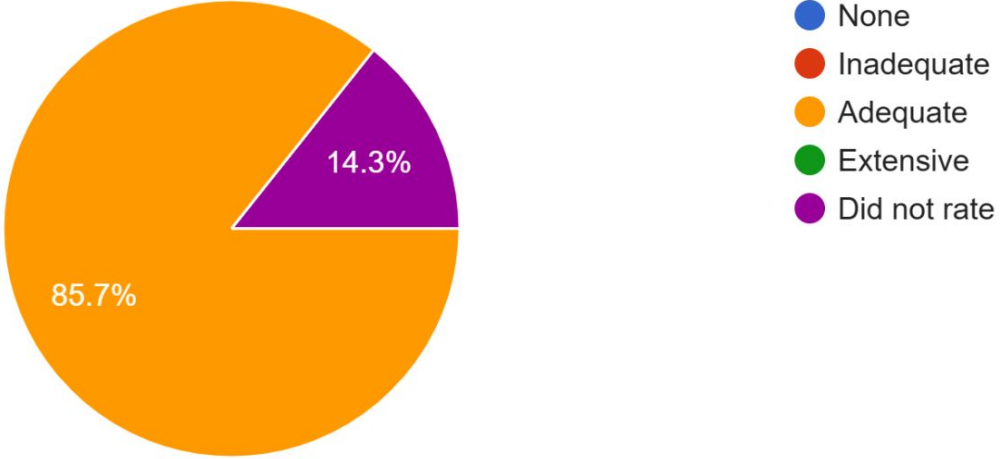
- 0: Inadequate (or no) evidence to meet any criteria in Category I (A-F)
- 1: Adequate evidence for some criteria in Category I, but inadequate/no evidence for at least one criterion A-C
- 2: At least some evidence for all unit criteria in Category I (A-F); adequate evidence for criteria A-C
- 3: At least adequate evidence for all of the unit criteria in the category; extends...

- **Unit Coherence (Criteria D):** Lessons are structured to build upon prior knowledge and concepts, often using a 5E format (Engage, Explore, Explain, Elaborate, Evaluate). Each lesson typically starts with a phenomenon, which is revisited at the end, allowing students to develop a driving question and connect learning through sequential "Experiences."
- **Multiple Science Domains (Criteria E):** The curriculum aligns and connects concepts across different science domains (Life Science, Physical Science, and Earth/Space Science). Examples include linking the energy flow (CCC of Energy) in life science ecosystems to physical science, or relating plant growth (Life Science) to sunlight energy (Physical Science) and soil resources (Earth Science).
- **Cross-Curricular Connections (Criteria F):** The curriculum, specifically SAVVAS, provides grade-appropriate connections to Common Core State Standards in Math (e.g., collecting/measuring data, creating charts/graphs/tables, and lessons on ratios/proportions) and ELA (e.g., writing summaries and explanations, "Read About It" texts, literacy stations, and vocabulary lessons).
- **Areas for Improvement (Criteria D/E):** One response indicated that certain topics were missing or misplaced in the 4th-grade curriculum, specifically mentioning that Magnetism was not provided, Physical Science was missing, and Weather/Climate were listed as a 3rd-grade topic.

- **Accessibility of Materials:** The primary suggestion for improvement is to ensure that all referenced materials within the online program—including videos, documents, and other resources—are fully accessible online, as several materials listed are currently unavailable.
- **No Further Suggestions:** A majority of responses indicated "N/A" or "n/a," suggesting no specific improvements for Category I Unit Criteria (D-F) were offered by most respondents.

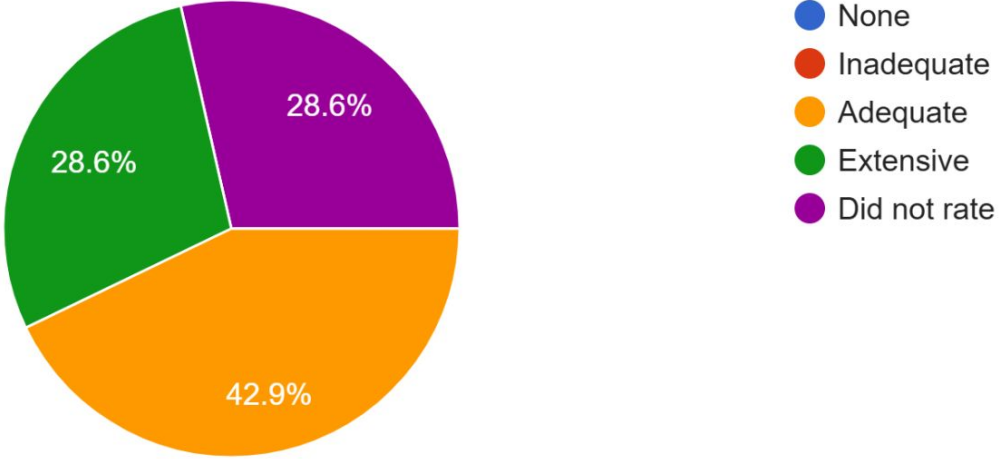
# Category II: NGSS Instructional Supports - Relevance and Authenticity (Criteria A)

7 responses



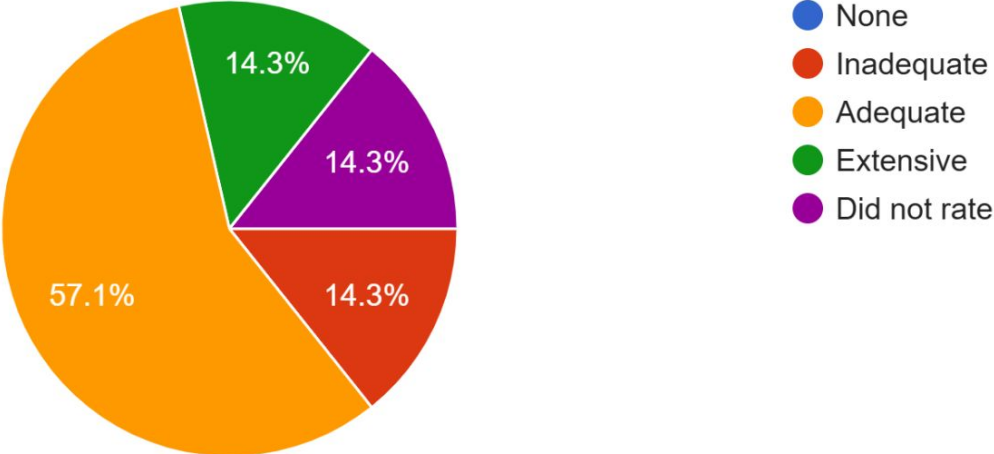
# Category II: NGSS Instructional Supports - Student Ideas (Criteria B)

7 responses



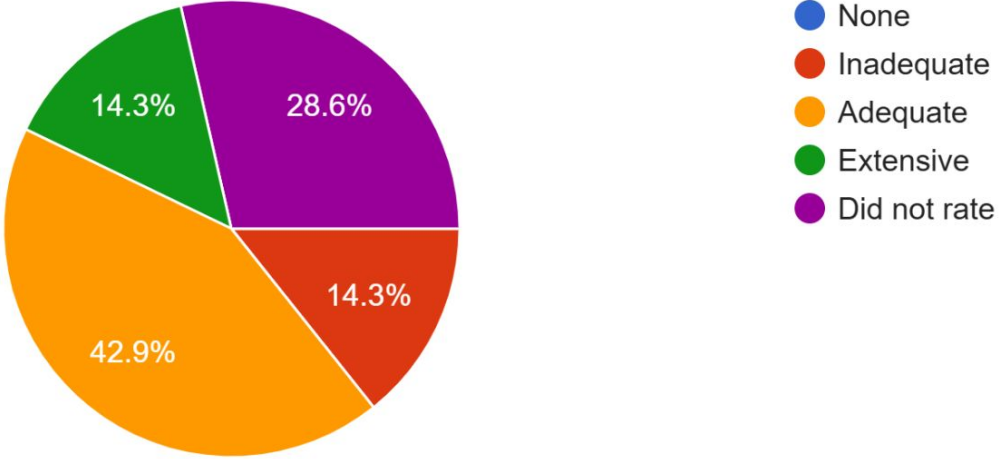
# Category II: NGSS Instructional Supports - Building Progressions (Criteria C)

7 responses



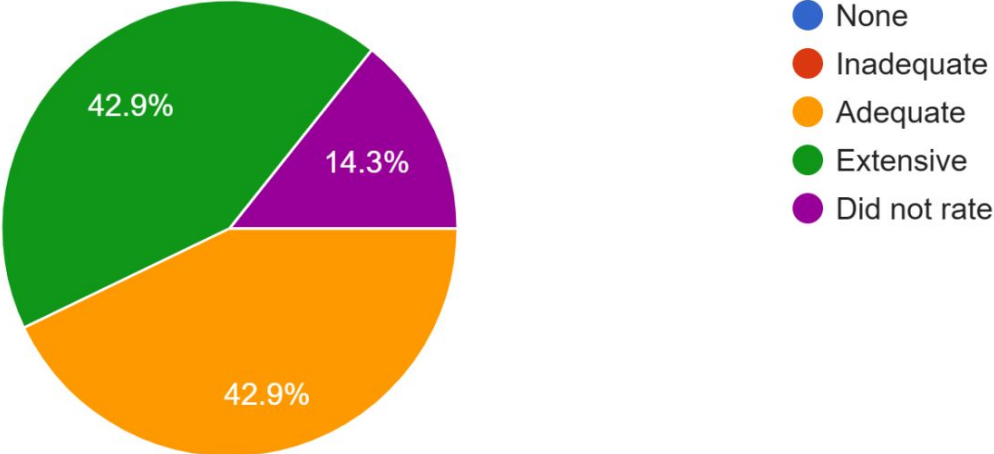
# Category II: NGSS Instructional Supports - Scientific Accuracy (Criteria D)

7 responses



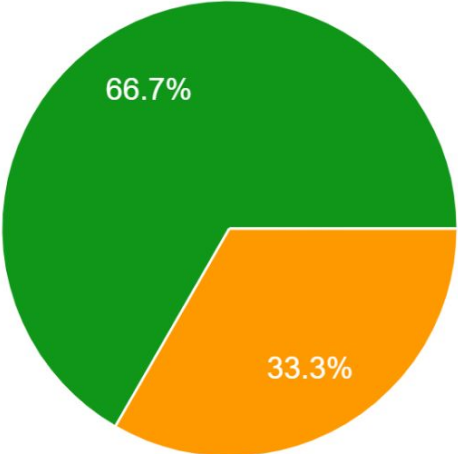
# Category II: NGSS Instructional Supports - Differentiated Instruction (Criteria E)

7 responses



# Rating for Category II: Instructional Supports - Lesson Rating (Criteria A-E only)

6 responses



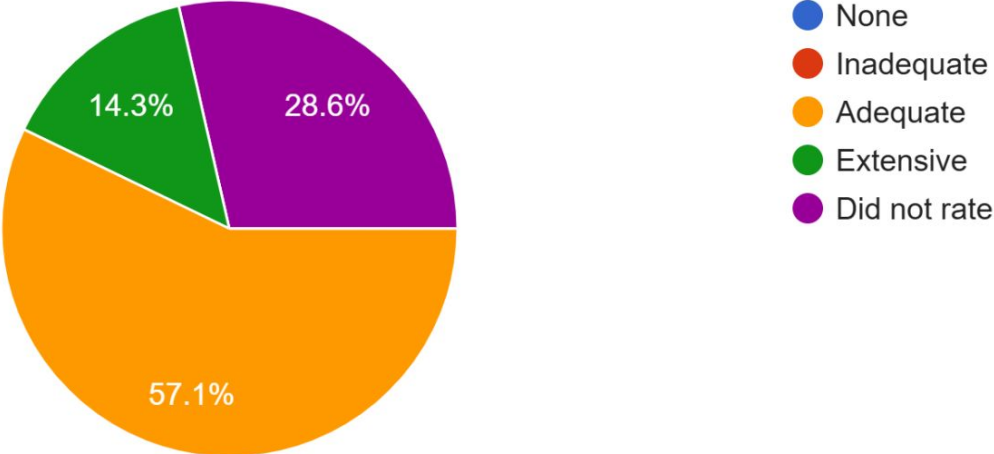
- 0: Adequate evidence of quality for no more than one criterion in the category
- 1: Adequate evidence of quality for at least two criteria in the category
- 2: Some evidence for all criteria in the category and adequate evidence for at least four criteria, including A
- 3: At least adequate evidence for all criteria in the category; extensive evidence for at least one criterion

- **Differentiated Instruction and Support (E):** The SAVVAS curriculum is highly praised for providing guidance for differentiated instruction, including multilingual learner support sections, 3-dimensional differentiated instruction options for striving, challenge-ready, and diverse learners, and alternate assignments with added supports. Teachers are given flexibility to choose different pathways (fast track or regular) and modify the unit for various learners, with resources like lower-level text and extension activities for enrichment.
- **Relevance and Authenticity (A):** The materials present phenomena and scenarios that reflect real-world science, often through images and videos, that students can recognize and relate to their prior experiences, community, and home life. Students engage with the phenomena through investigations where they observe, notice, and ask questions, often collaborating and enjoying the hands-on activities.
- **Building Progressions and Prior Knowledge (C):** Lessons are structured to build upon prior knowledge and previously learned concepts, ensuring students deepen their understanding over time. This is accomplished through initial teacher questions to activate prior knowledge, phenomena that build on existing ideas, and activities that help students connect personal experiences to the scientific topic.
- **Student Expression and Collaboration (B):** Students are given daily opportunities to work in teams, discuss findings, and interpret what has been learned. Activities and open-ended questions throughout each lesson encourage students to express, clarify, justify, and represent their ideas, and opportunities are provided for creating and revising models and using CER graphic organizers to construct argumentative essays.
- **Standards Alignment (D):** The curriculum aligns with the Next Generation Science Standards (NGSS) and provides scientifically accurate, grade-appropriate information to support students' three-dimensional learning, with the SAVVAS material noted as appropriate for grades 6-8.

**Accessibility for Multilingual Learners** The main suggestion for improvement is to include translation options in the online materials to ensure multilingual learners can better access and understand the content.

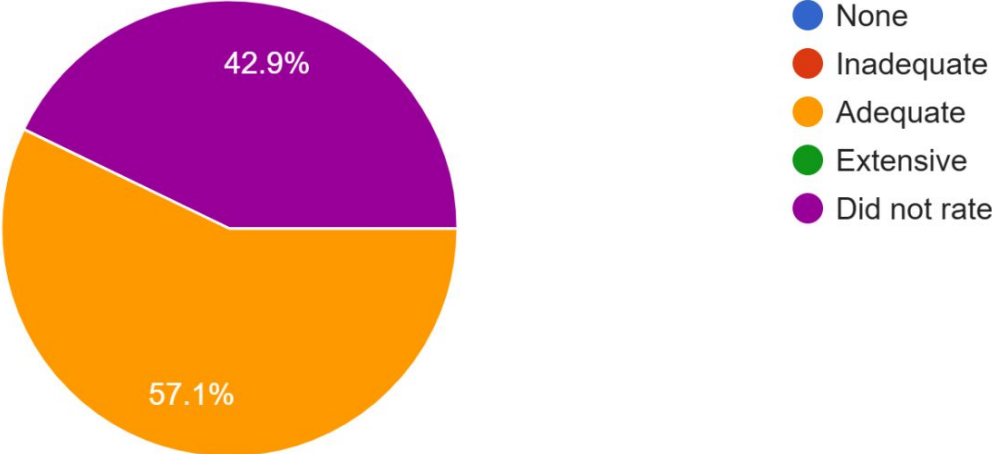
# Category II (Unit Only): Teacher Support for Unit Coherence (Criteria F)

7 responses



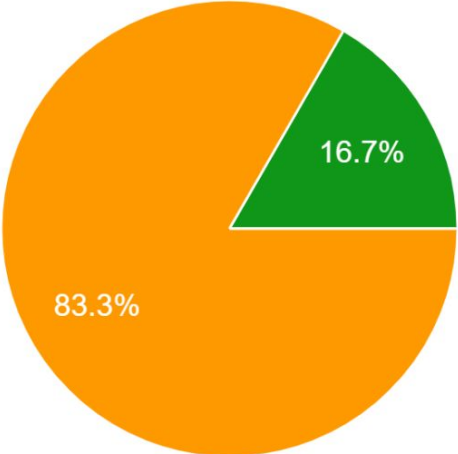
# Category II (Unit Only): Scaffolded differentiation over time (Criteria G)

7 responses



# Rating for Category II: NGSS Instructional Supports - Unit Rating (Criteria A-G)

6 responses



- 0: Adequate evidence for no more than two criteria in the category
- 1: Adequate evidence for at least three criteria in the category
- 2: Some evidence for all criteria in the category and adequate evidence for at least five criteria, including A
- 3: At least adequate evidence for all criteria in the category; extensive evidence for at least two criteria

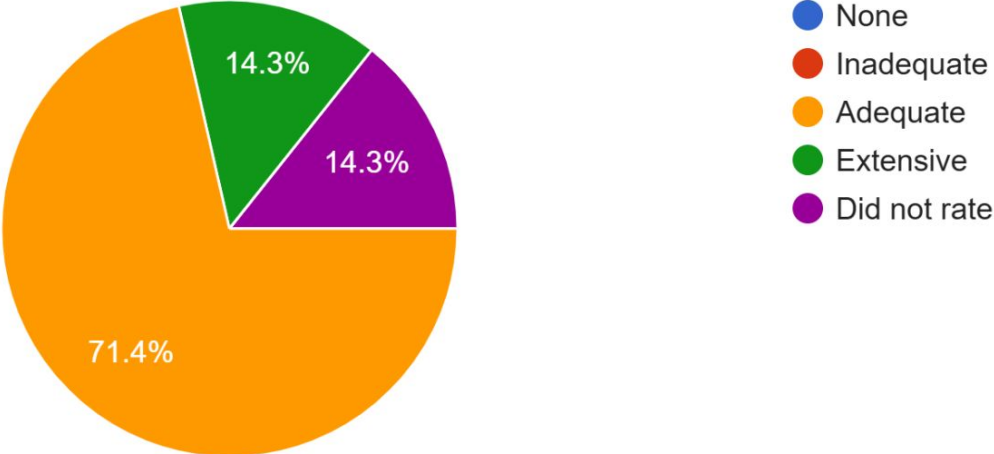
- **Coherence and Linking Ideas (F):** The SAVVAS materials provide a clear structure (through experiences) that helps teachers connect lessons and guide student learning across the unit, linking ideas from one lesson to the next. The curriculum supports student engagement through anchoring and everyday phenomena, and includes activities that promote student sense-making and problem-solving linked to learning in all three dimensions. One observation noted that while the teacher is directed to revisit the anchoring phenomenon at the end of a topic, the curriculum does not show where students create a new question at the end of the topic.
- **Building Understanding (G):** SAVVAS uses the 5Es instructional model (Engage, Explore, Explain, Elaborate, Evaluate) to help students progress, build on prior knowledge, and gain new learning. Lessons are scaffolded with gradually adjusted supports, including resources for English Learners (EL) and remediation, ensuring alignment and connection through topics.
- **Student Responsibility (G):** The lessons are designed so that students should eventually understand the progression from the engage "Anchoring phenomenon" to the "Evaluate" stage, becoming responsible for making sense of the phenomena and designing solutions with the support of online resources and workbooks.

**Curriculum and Standards:** One response suggested there could be a better connection from topic to topic and noted that curriculum is difficult to find for grade level standards.

**No Changes Recommended:** Five out of six responses indicated no suggestions for improvement (N/A or n/a).

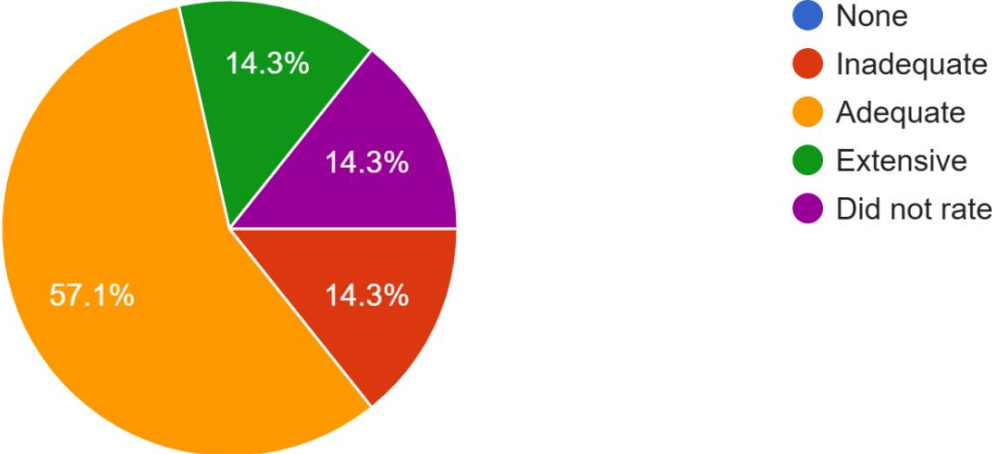
# Category III: Monitoring NGSS Student Progress - Monitoring 3D student performances (Criteria A)

7 responses



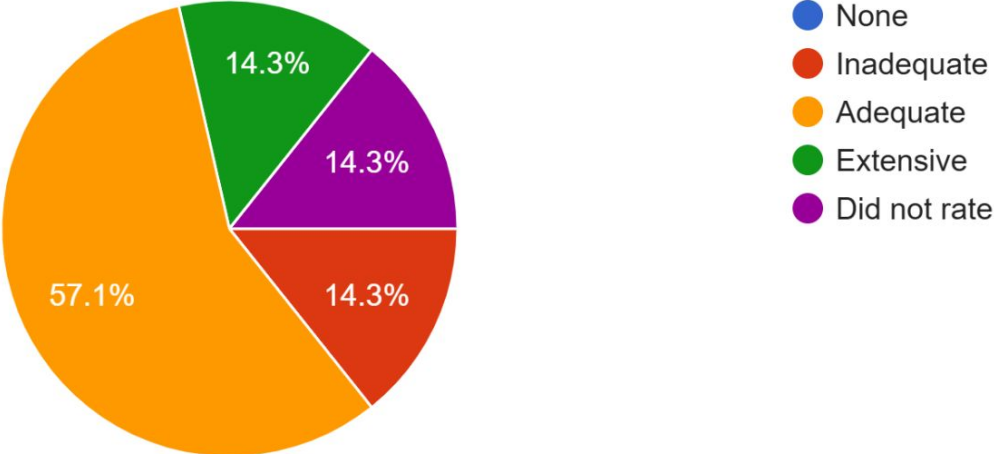
# Category III: Monitoring NGSS Student Progress - Formative assessment processes (Criteria B)

7 responses



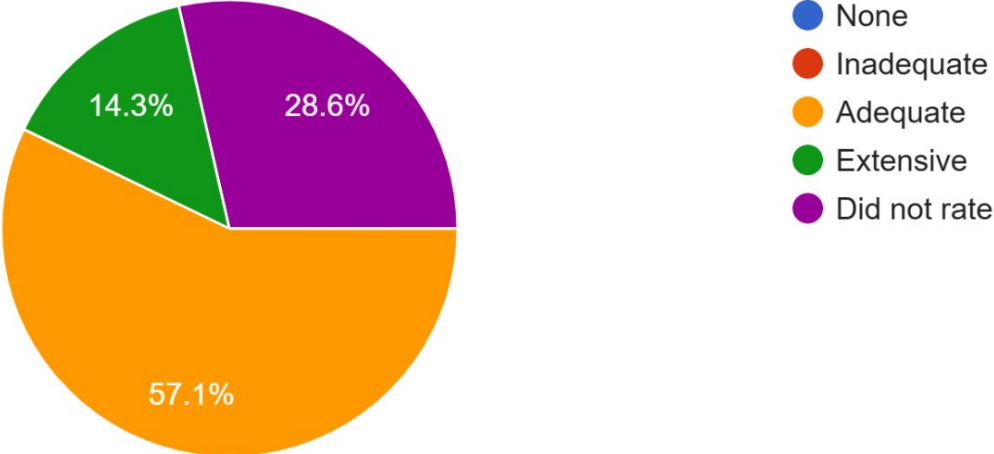
# Category III: Monitoring NGSS Student Progress - Scoring guidance (Criteria C)

7 responses



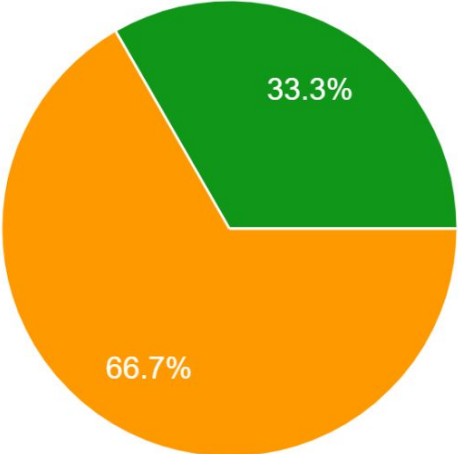
# Category III: Monitoring NGSS Student Progress - Unbiased tasks/items (Criteria D)

7 responses



# Rating for Category III. Monitoring NGSS Student Progress - Lesson Rating (Criteria A-D only)

6 responses



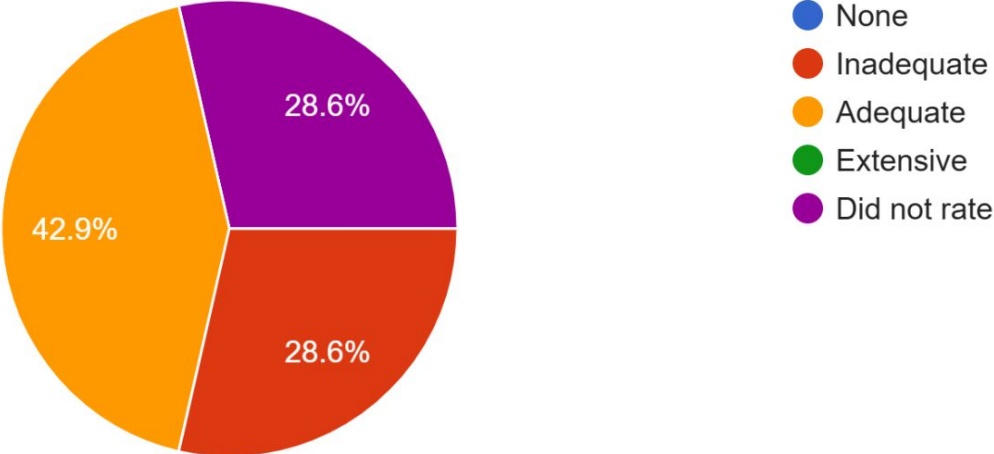
- 0: Adequate evidence for no more than one criterion in the category
- 1: Adequate evidence for at least two criteria in the category
- 2: Some evidence for all criteria in the category and adequate evidence for at least three criteria, including A
- 3: At least adequate evidence for all criteria in the category; extensive evidence for at least one criterion

- **Monitoring 3D Student Performance (Criteria A):** Lessons frequently include hands-on activities, investigations (like "How light affects plants"), virtual labs, and online quizzes, particularly within the SAVVAS curriculum, which allow students to demonstrate understanding by applying scientific practices, core ideas, and crosscutting concepts. These tasks are designed with 3D learning in mind and provide observable evidence of student learning.
- **Formative Assessment and Tools (Criteria B):** Formative assessments are embedded throughout the lessons, including well-constructed exit tickets (both digital and paper/pencil), quizzes, and end-of-lesson formative assessments to monitor student learning and inform instruction. These assessments are described as teacher-friendly and easy to use.
- **Scoring and Support (Criteria C):** SAVVAS provides support for planning, with prepared lesson plans, remediation/reteach directions, and success criteria included in lessons to guide feedback. However, while some assessments provide a rubric, some activities, such as hands-on stations or literacy activities, do not include clear rubrics for scoring student work. Answer keys were also noted as being difficult to access.
- **Accessibility and Equity (Criteria D):** Tasks and assessments are generally considered unbiased, accessible, and student-friendly, ensuring all students are able to complete and participate. Supports include 3-Dimensional differentiated instruction, multilingual learner support, vocabulary activities, and the use of workbooks and online materials to accommodate all learners.

- **Virtual Labs:** One respondent suggested including more virtual labs, as only one was provided for a topic taught over several weeks.
- **Teacher Resources:** A respondent requested that answer keys be included in the teacher's guide.
- **No Suggestions:** Five out of six respondents indicated that they had no suggestions for improvement, using responses such as "N/A" or "n/a."

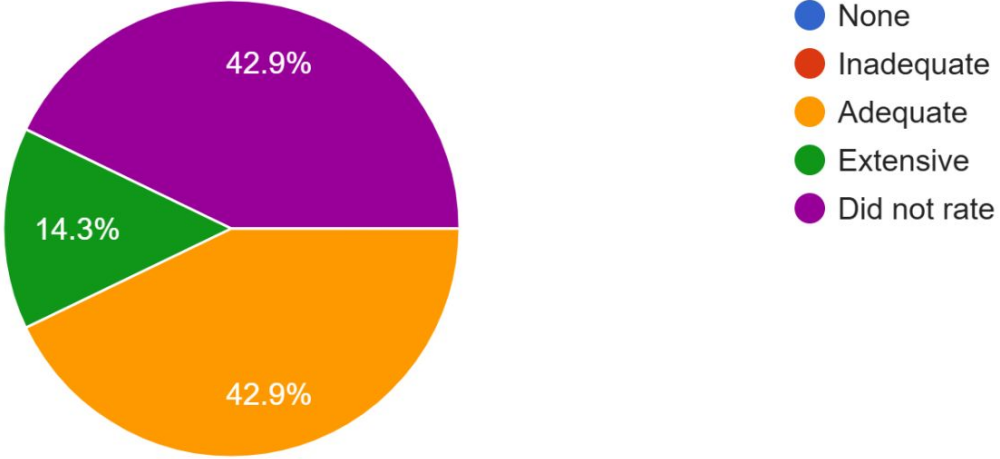
# Category III (Unit Only): Coherent Assessment system (Criteria E)

7 responses



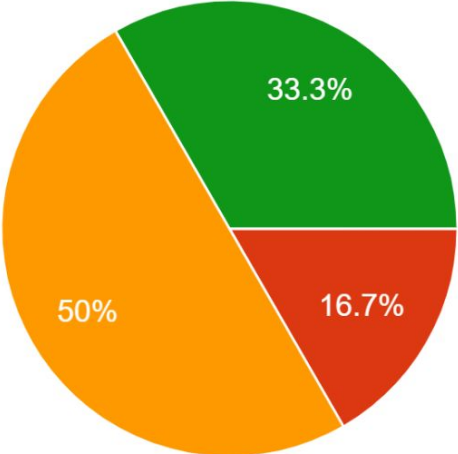
# Category III (Unit Only): Opportunity to learn and receive feedback (Criteria F)

7 responses



# Rating for Category III: Monitoring NGSS Student Progress - Unit Rating (Criteria A-F)

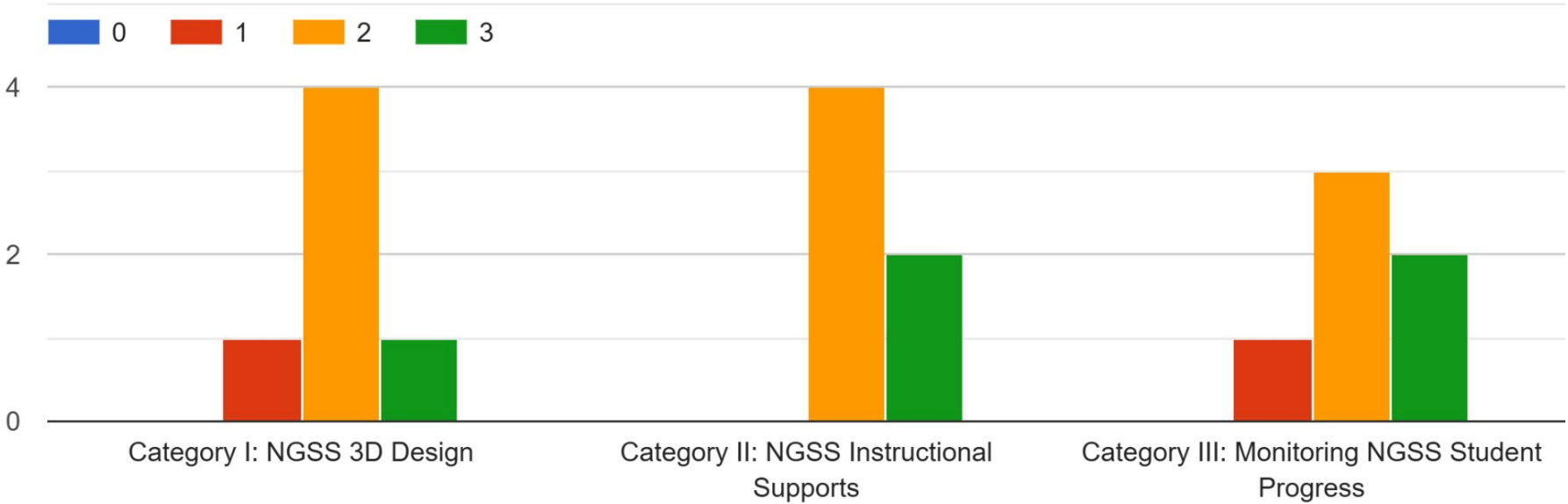
6 responses



- 0: Adequate evidence for no more than two criteria in the category
- 1: Adequate evidence for at least three criteria in the category
- 2: Some evidence for all criteria in the category and adequate evidence for at least five criteria, including A
- 3: At least adequate evidence for all criteria in the category; extensive evidence for at least one criterion

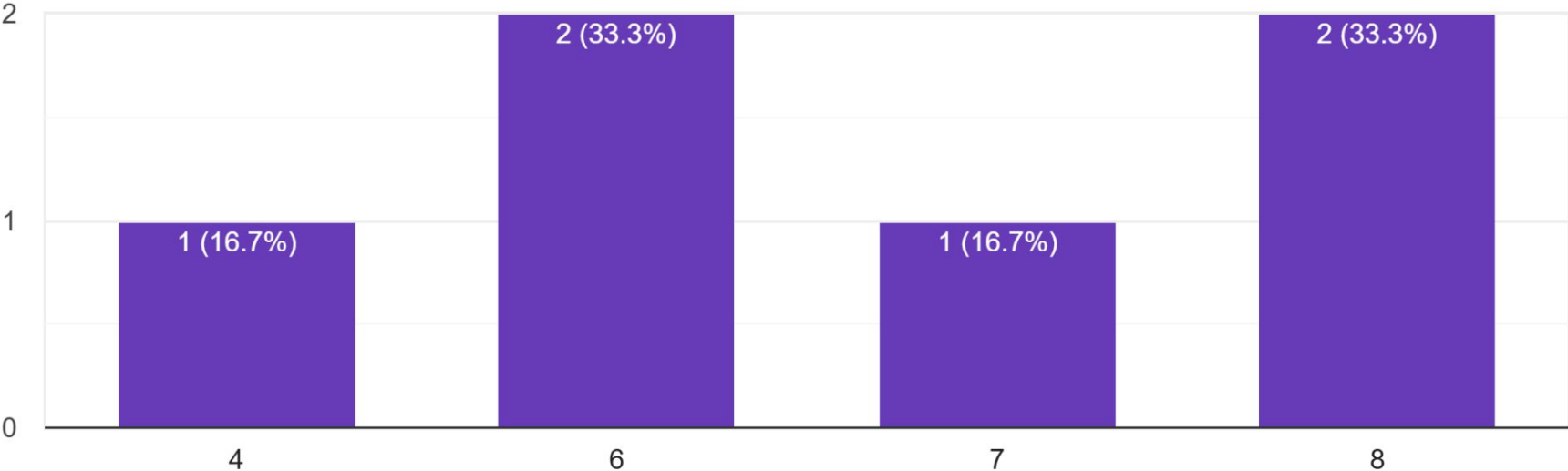
- **Coherent Assessment System (E):** SAVVAS includes various assessment types such as pre-assessments, formative assessments (like exit tickets online), and summative assessments (quizzes or end-of-lesson/unit assessments) to monitor student learning. Pre-assessment activities involve the teacher asking questions before a phenomenon or literacy station, and students sharing ideas about the phenomena, though one respondent noted the everyday phenomenon activity is not an adequate pre-assessment for content knowledge. Students self-assess through activities like "Sense making" argumentative essays or using emojis to indicate understanding.
- **Students' Learning Experiences (F):** Students have multiple learning opportunities, including hands-on group investigations, computer-based simulations, STEAM engineering activities, and using textual evidence. These experiences allow students to discuss and show their understanding of disciplinary core ideas and crosscutting concepts and receive feedback.
- **Curriculum Alignment:** The curriculum is generally viewed as good, with the assessment being highly aligned and easy for teachers to use, ensuring alignment with Arizona standards. There are opportunities for students to collaborate, share, explore, and understand topics.

# Category Ratings Summary: Transfer the rating score for each category



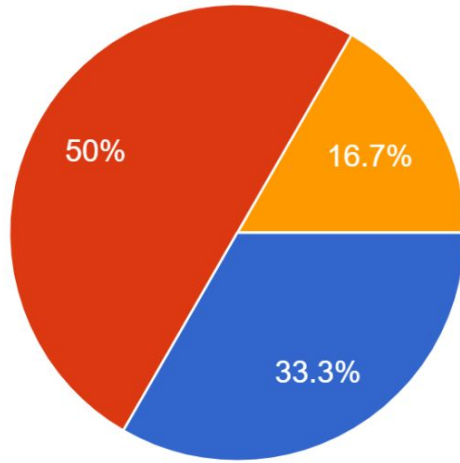
# Calculate Total Score:

6 responses



## Overall Rating (Based on Total Score and Evidence)

6 responses

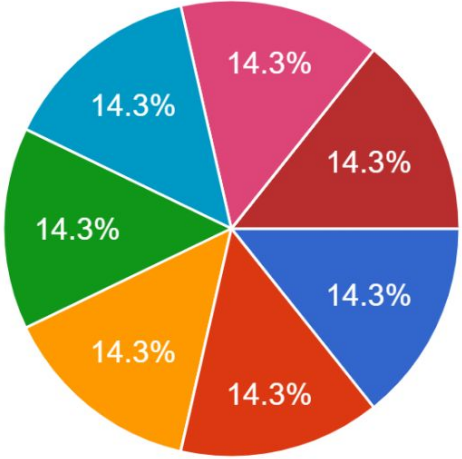


- E: Example of high quality NGSS design (Total Score ~8-9)
- E/I: Example of high quality NGSS design if Improved (Total Score ~6-7)
- R: Revision needed (Total Score ~3-5)
- N: Not ready to review (Total Score 0-2)

HMH

# HMH Grade:

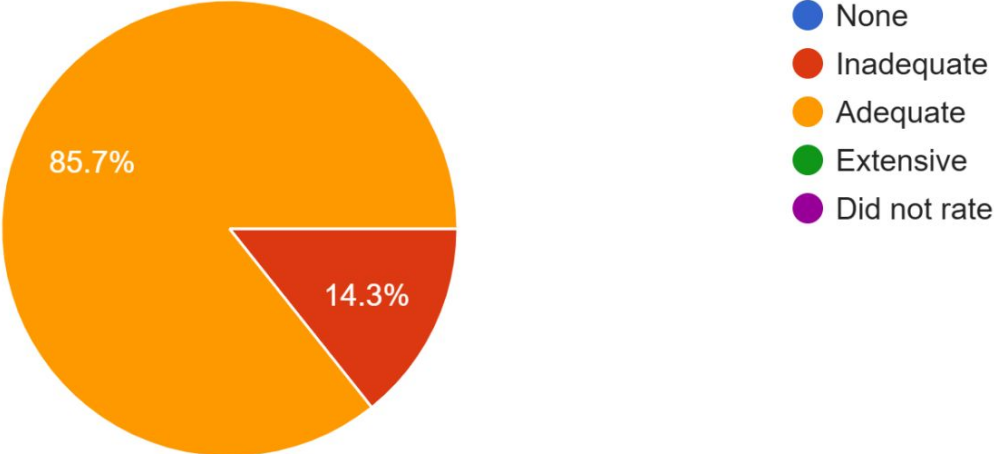
7 responses



- K
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

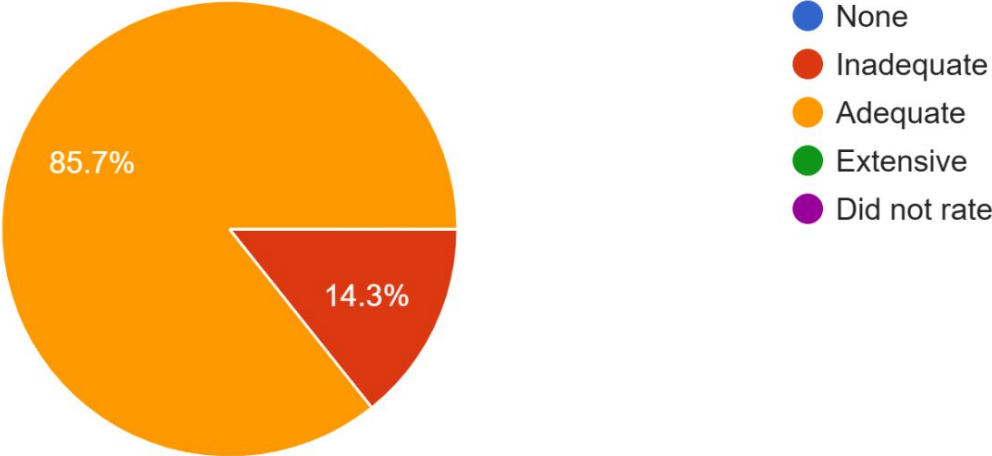
# HMH Category I: NGSS 3D Design - Explaining Phenomena/Designing Solutions (Criteria A)

7 responses



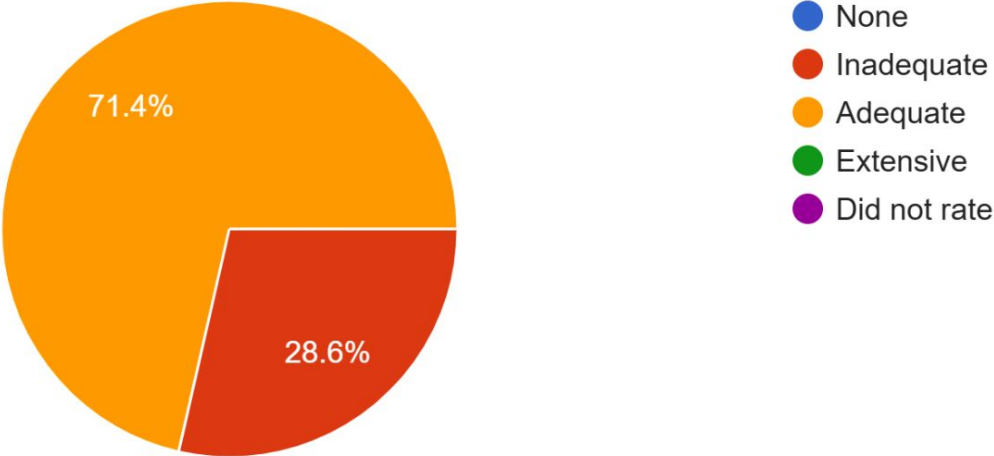
HMH Category I: NGSS 3D Design - Three Dimensions - Provides opportunities to develop and use specific elements of the SEP(s). (Criteria B.i)

7 responses



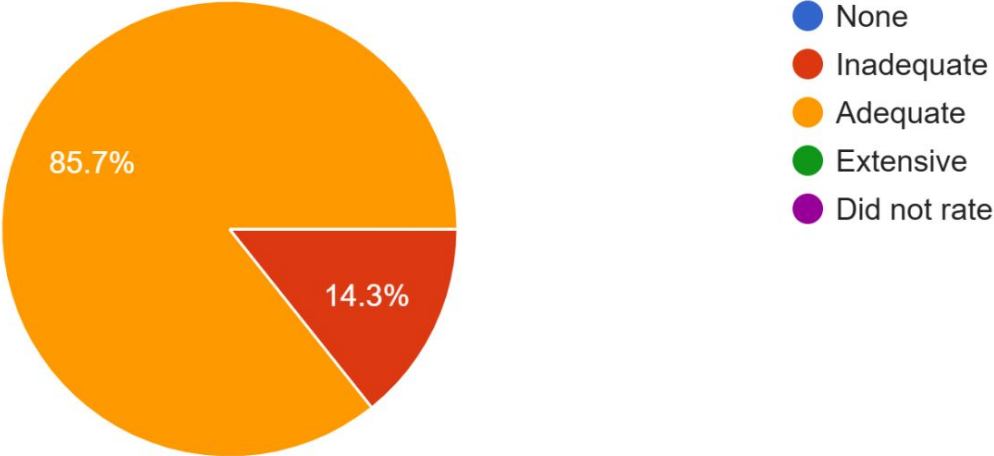
HMH Category I: NGSS 3D Design - Three Dimensions - Provides opportunities to develop and use specific elements of the DCI(s). (Criteria B.ii)

7 responses



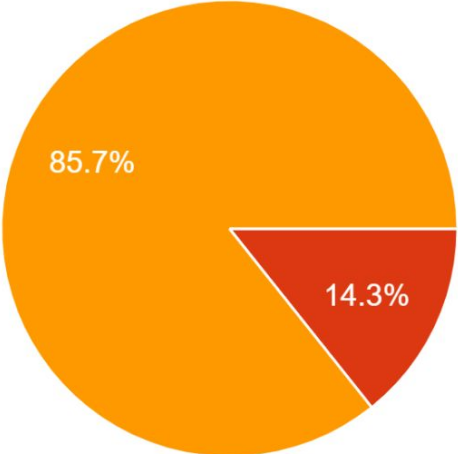
HMH Category I: NGSS 3D Design - Three Dimensions - Provides opportunities to develop and use specific elements of the CCC(s). (Criteria B.iii)

7 responses



# HMH Category I: NGSS 3D Design - Integrating the Three Dimensions (Criteria C)

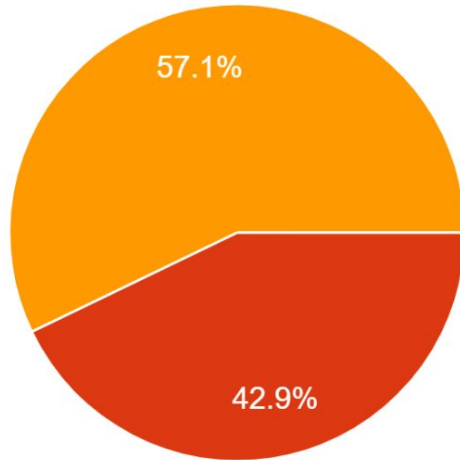
7 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

## HMH Rating for Category I. NGSS 3D Design - Lesson Rating (Criteria A-C only)

7 responses



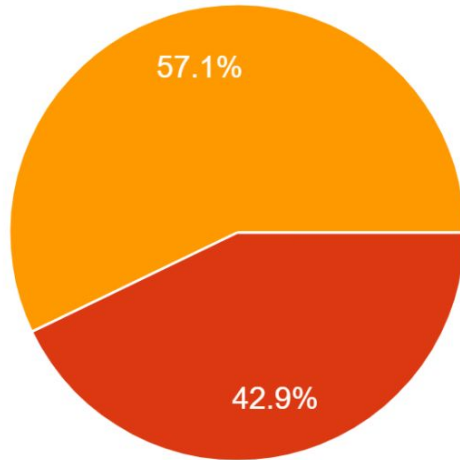
- 0: Inadequate (or no) evidence to meet any of the criteria in the category
- 1: Adequate evidence to meet at least one criterion in the category, but insufficient evidence for at least one other criterion
- 2: Adequate evidence to meet all three criteria in the category
- 3: Extensive evidence to meet at least two criteria (and at least adequate evidence for the third)

- **Integration of Dimensions (C):** Lessons integrate Science and Engineering Practices (SEPs), Disciplinary Core Ideas (DCIs), and Crosscutting Concepts (CCCs), allowing students to make sense of phenomena, but the integration is sometimes inconsistent or emerging, requiring teacher support rather than fully independent application. For example, students use particle models (SEP) to explain changes in matter (DCI), but the focus can shift more to completing models than using evidence and CCCs for explanation.
- **Phenomena and Engagement (A):** Students are engaged with observable phenomena through hands-on activities, investigations, and videos, often beginning with phenomenon-based questions that connect to prior experiences. Students are prompted to ask questions, write about what they notice and wonder, and use engineering designs involving trial and error with various materials (e.g., creating bubble wands).
- **Science/Engineering Practices (B.i):** Components for SEPs are present in every lesson and activity, with students observing, recording data, developing and using models, constructing explanations, analyzing data, and sharing explanations through discussions (e.g., turn-and-talks). However, some felt there were not enough opportunities in the form of simulations, and labs could be more in depth.
- **Core Ideas and Crosscutting Concepts (B.ii & B.iii):** Lessons address DCIs suitable for the grade level, such as the structure and properties of matter, plant/animal needs, and weather patterns. While the content is built progressively, one reviewer noted a lack of core ideas at the grade level, necessitating searching for topics in other grade levels or outside resources. CCCs (e.g., cause and effect, scale, proportion, quantity) are included but are often implied rather than clearly identified or discussed by students.
- **Cross-Curricular Connections:** There are explicit connections to reading (through readers) and math.

- **Curriculum Focus:** One response noted that the biggest issue was a lack of instruction on core concepts, despite ample opportunities for hands-on activities.
- **Three-Dimensional Learning:** Suggestions include revising performance tasks so students must combine a Science and Engineering Practice (SEP), a Disciplinary Core Idea (DCI), and a Crosscutting Concept (CCC) in a single, evidence-based explanation.
- **Phenomena and Crosscutting Concepts:** Improvements suggested using a single, clear phenomenon as the core of Lessons 1–4, and including clear prompts to highlight crosscutting concepts, such as cause and effect, directly within student tasks.
- **Design Challenges:** Adding more structured design challenges, even simple ones for 1st grade, was suggested.

## HMH Rating for Category I. NGSS 3D Design - Lesson Rating (Criteria A-C only)

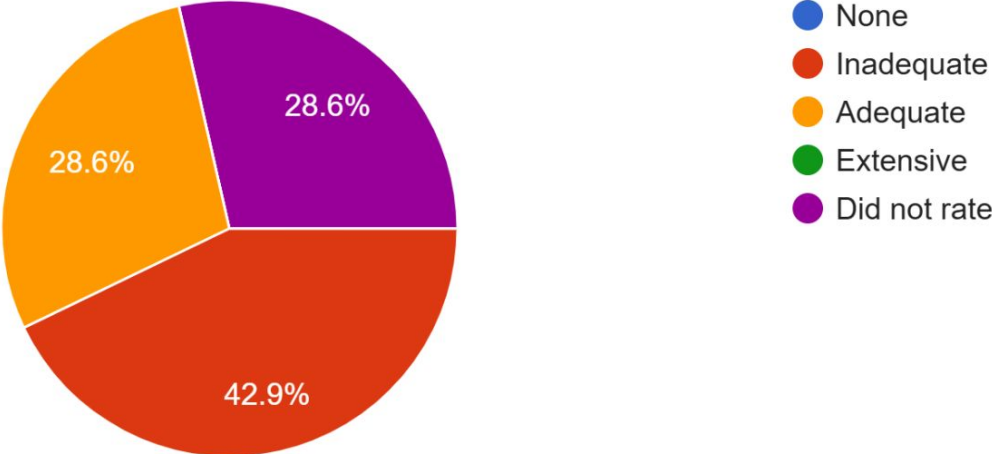
7 responses



- 0: Inadequate (or no) evidence to meet any of the criteria in the category
- 1: Adequate evidence to meet at least one criterion in the category, but insufficient evidence for at least one other criterion
- 2: Adequate evidence to meet all three criteria in the category
- 3: Extensive evidence to meet at least two criteria (and at least adequate evidence for the third)

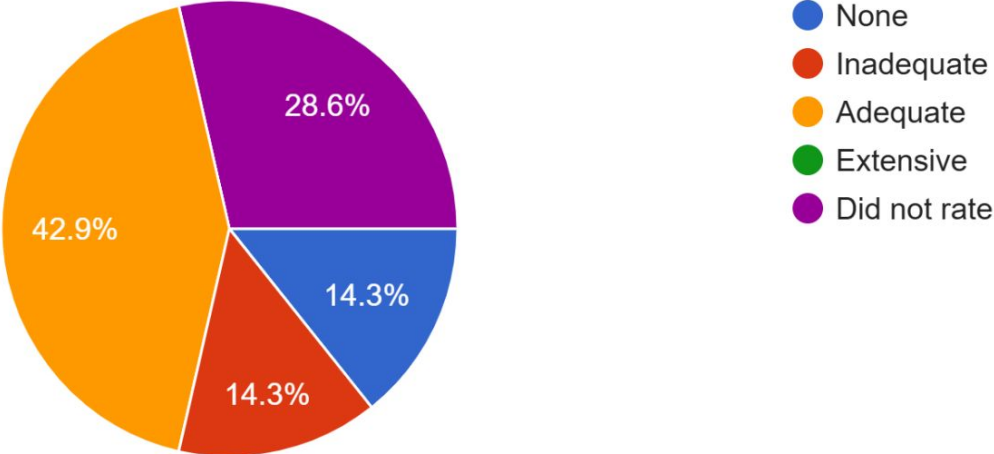
# HMH Category I (Unit Only): Unit Coherence (Criteria D)

7 responses



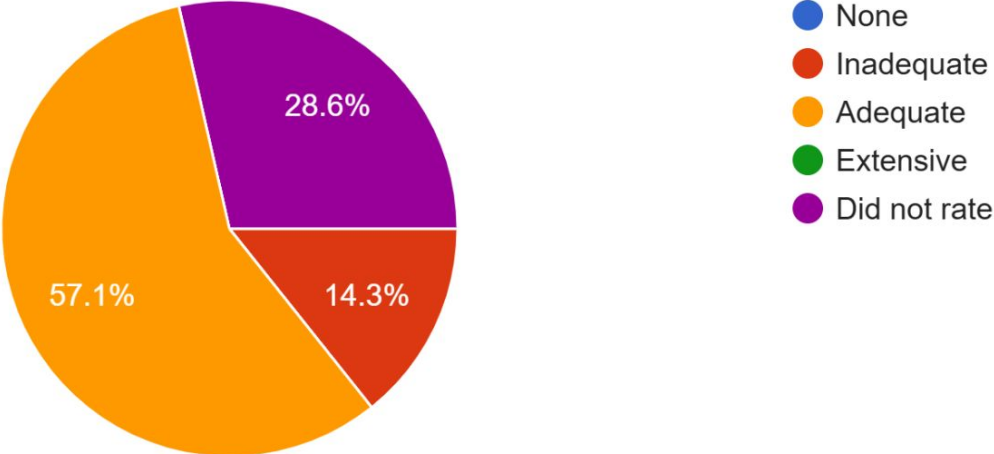
# HMH Category I (Unit Only): Multiple Science Domains (Criteria E)

7 responses



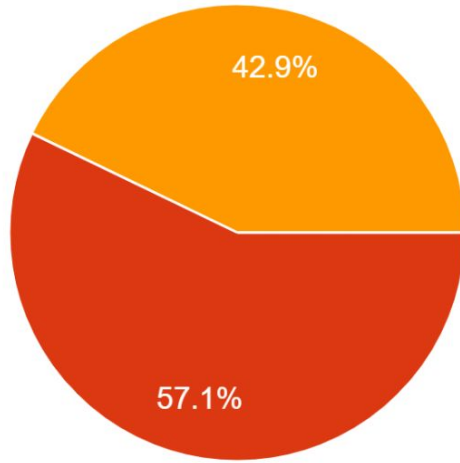
# HMH Category I (Unit Only): Math and ELA Connections (Criteria F)

7 responses



## HMH Rating for Category I. NGSS 3D Design - Unit Rating (Criteria A-F)

7 responses



- 0: Inadequate (or no) evidence to meet any criteria in Category I (A-F)
- 1: Adequate evidence for some criteria in Category I, but inadequate/no evidence for at least one criterion A-C
- 2: At least some evidence for all unit criteria in Category I (A-F); adequate evidence for criteria A-C
- 3: At least adequate evidence for all of the unit criteria in the category; extens...

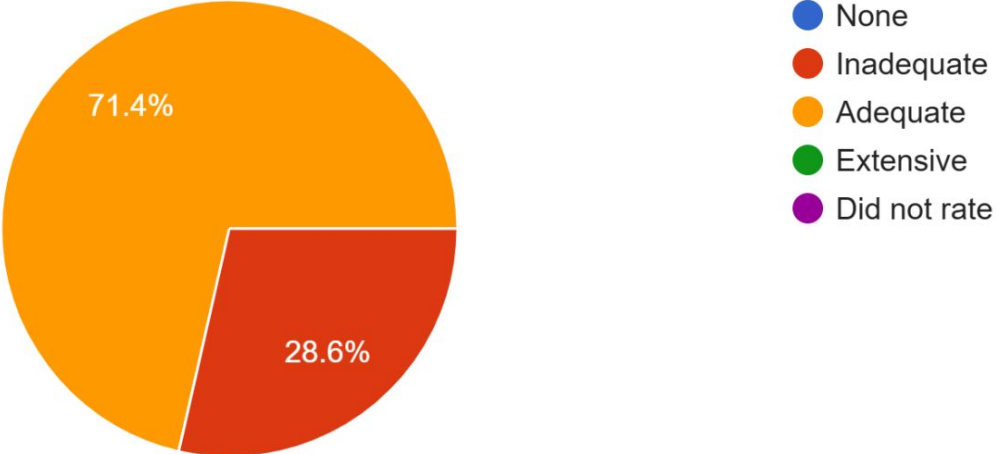
**Unit Cohesion and Progression (D):** While some units flow well, with lessons building on previous learning toward standards (e.g., life science topics, revisiting prior learning), others noted that lessons don't always build or that some topics did not seem to fit. Key issues include lessons not relating directly to the phenomenon until the end of the unit, and one respondent noted a lack of physical science and Earth/space standards, though these were accessible online. Opportunities for students to generate and track their own questions across the unit were limited.

**Integration of Disciplines/Domains (E):** Integration across domains was described as somewhat limited, mostly teacher-directed, and not deeply integrated throughout the unit, although some meaningful connections exist. One respondent noted that Earth and space science was connected to life science through discussions of weather and its effect on living things. Another pointed out that links to different domains are sometimes found during the anchoring phenomena but not always, and the core ideas align with the NGSS framework. Crosscutting concepts are sometimes listed (e.g., on page 33 of the teacher guide).

**Connections to ELA and Math (F):** ELA connections are more consistently embedded than Math, often featuring activities like listening/speaking, using sentence frames, writing/drawing, and incorporating informational and leveled readers. Math connections were present in a limited way, such as observing patterns and using simple data/charts, but were not consistently strong or explicit across the unit; one respondent mentioned that math connections are harder to find in the Teacher Edition. Connections are generally considered grade-level appropriate.

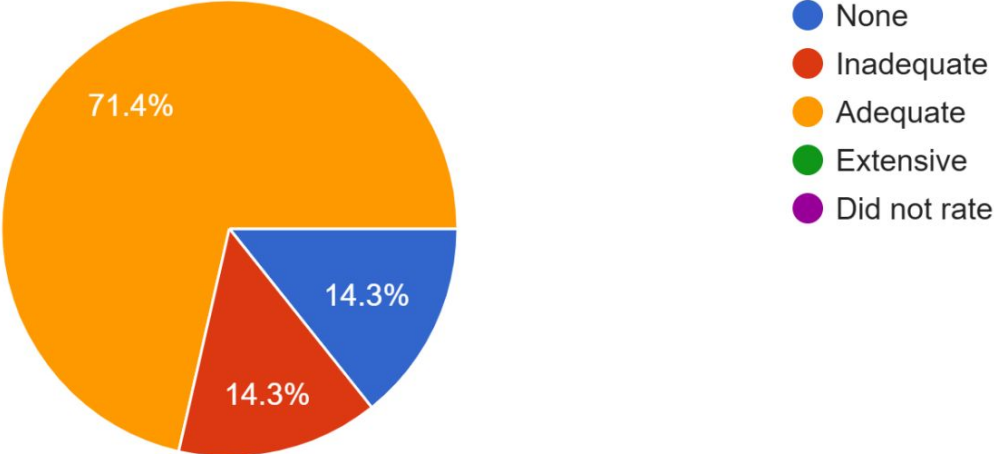
# HMH Category II: NGSS Instructional Supports - Relevance and Authenticity (Criteria A)

7 responses



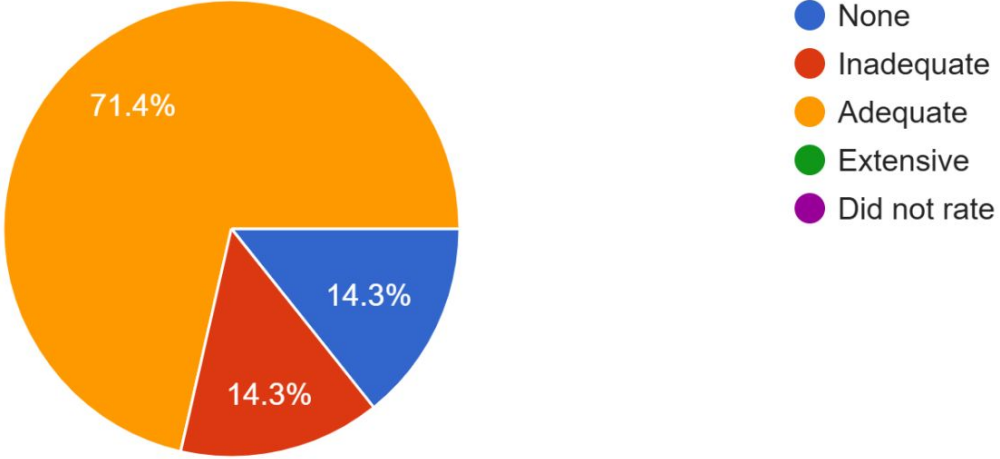
# HMH Category II: NGSS Instructional Supports - Student Ideas (Criteria B)

7 responses



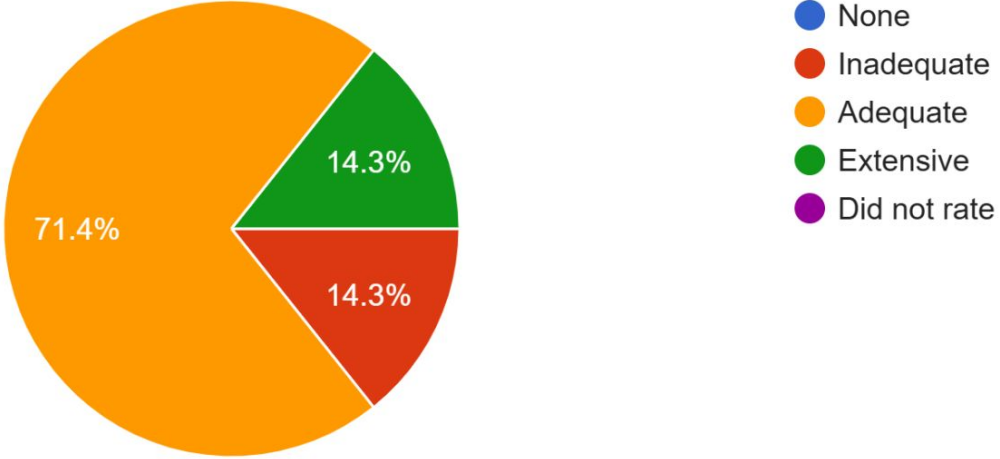
# HMH Category II: NGSS Instructional Supports - Building Progressions (Criteria C)

7 responses



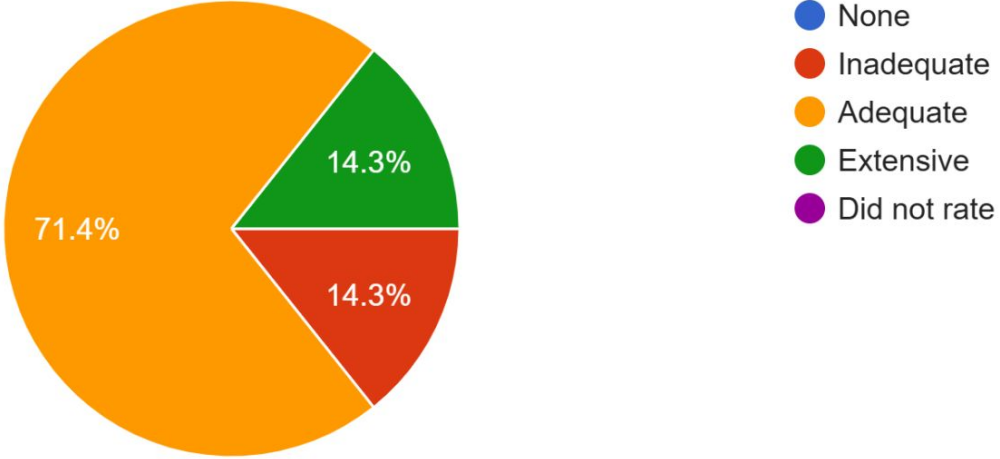
# HMH Category II: NGSS Instructional Supports - Scientific Accuracy (Criteria D)

7 responses



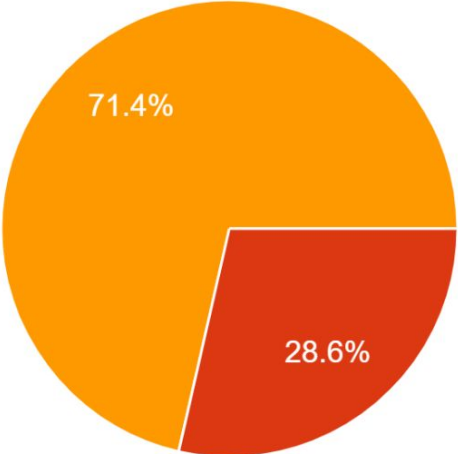
# HMH Category II: NGSS Instructional Supports - Differentiated Instruction (Criteria E)

7 responses



# HMH Rating for Category II: Instructional Supports - Lesson Rating (Criteria A-E only)

7 responses



- 0: Adequate evidence of quality for no more than one criterion in the category
- 1: Adequate evidence of quality for at least two criteria in the category
- 2: Some evidence for all criteria in the category and adequate evidence for at least four criteria, including A
- 3: At least adequate evidence for all criteria in the category; extensive evidence for at least one criterion

**A. Phenomenon and Real-World Connection:** Students generally enjoyed watching phenomena, making connections to prior knowledge, and writing down their observations, wonders, and explanations, often noting that these experiences were developmentally appropriate and helped make content more concrete. However, some materials limited community and cultural connections, and while phenomena were good, they did not always flow through the entire lesson or directly reflect the labs.

**B. Student Voice and Communication:** Students frequently had opportunities to share ideas and thinking orally through discussions (e.g., turn-and-talks, partner sharing) and writing, making claims, and justifying their thinking, often using structures like Science Logs for Claim-Evidence-Reasoning explanations. Materials provided support with kid-friendly definitions and opportunities to express ideas using both real photos and drawings, but some respondents noted that independent justification and structured peer feedback needed further development, and grading/leaving feedback within the platform was difficult.

**C. Building on Prior Learning and Coherence:** Lessons often progressed logically, sometimes starting with readiness checks, prior knowledge sections in the Teacher's Guide (TE), and prompts (e.g., "What do you already know?"). However, some respondents found that the curriculum did not always clearly state what students should know across all three dimensions of NGSS before starting a lesson, occasionally requiring teachers to re-teach or fill in gaps.

**D. Scientific Accuracy and Depth:** Content was consistently accurate and grade-level appropriate, often reinforced through hands-on investigations and modeling activities aligned with scientific process and NGSS physical science standards. Challenges included a need for additional teacher clarification or simplification of concepts, insufficient depth for higher-grade levels (e.g., 8th grade), and a lack of opportunities for practice of procedural skills.

**E. Differentiation and Instructional Support:** The curriculum was strong in providing different pathways for teachers and students, including varied time options, leveled readers, visual supports (images, simulations, modeling), and extension activities for enrichment. However, specific scaffolding and resources were often missing, with some differentiation suggestions being dependent on the teacher adapting instruction rather than being fully developed or consistently connected to the three dimensions within the curriculum.

**Difficulty in Providing Evidence:** One respondent noted that providing evidence is challenging for kindergarten students, especially English Learner (EL) students, who often respond with "just because" or a blank stare when asked to support their answers.

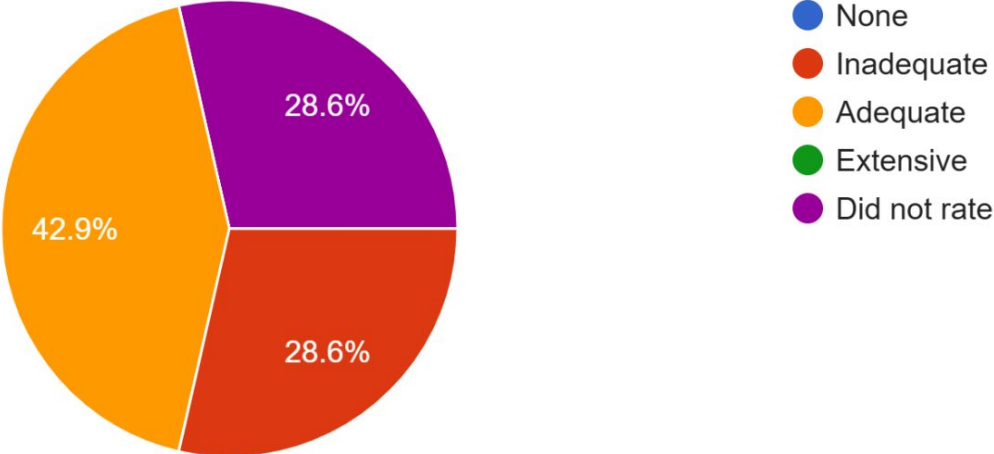
**Suggestions for Improvements:** Recommendations for Category II improvements included: providing guidance for connecting particle-level concepts to students' home, community, and life experiences; increasing opportunities for students to revise explanations and models after new evidence; making learning progressions explicit (e.g., using "What we figured out so far"); and incorporating more simulations.

**Relevance of Reflection:** One respondent did not feel that the reflection on social-emotional goals was relevant.

**No Suggestions:** Four responses indicated "N/A," offering no suggestions for improvement.

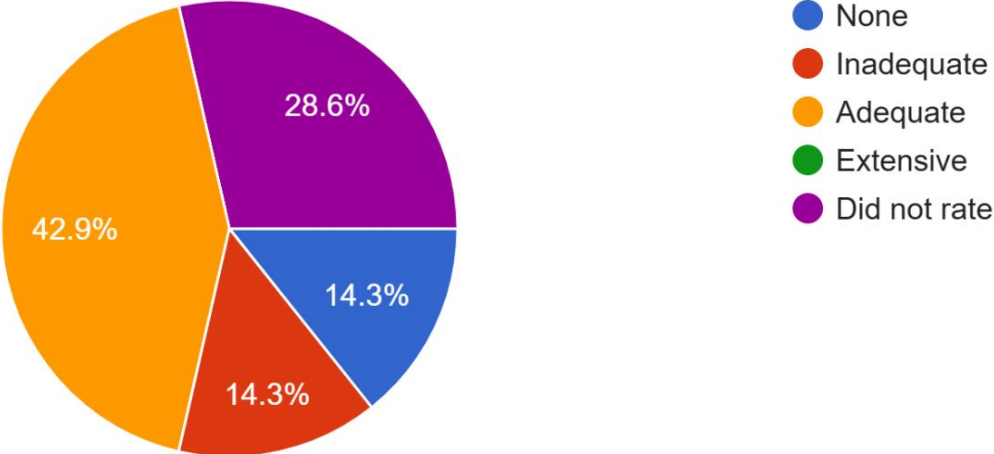
# HMH Category II (Unit Only): Teacher Support for Unit Coherence (Criteria F)

7 responses



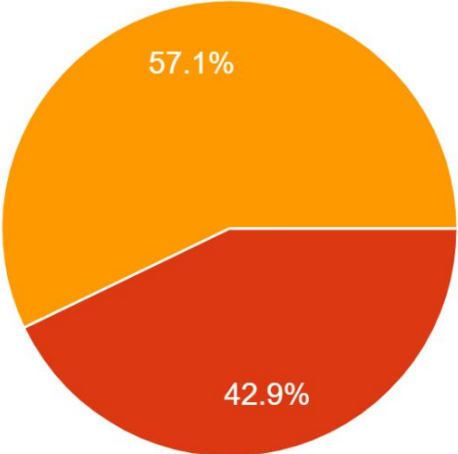
# HMH Category II (Unit Only): Scaffolded differentiation over time (Criteria G)

7 responses



# HMH Rating for Category II: NGSS Instructional Supports - Unit Rating (Criteria A-G)

7 responses



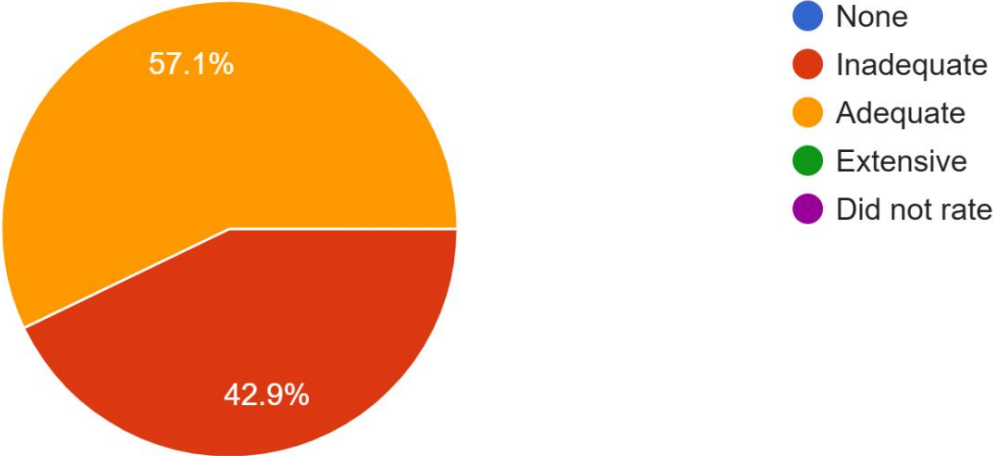
- 0: Adequate evidence for no more than two criteria in the category
- 1: Adequate evidence for at least three criteria in the category
- 2: Some evidence for all criteria in the category and adequate evidence for at least five criteria, including A
- 3: At least adequate evidence for all criteria in the category; extensive evidence for at least two criteria

**F. Coherence and Conceptual Progression** The curriculum provides a clear, sequential organization of lessons, which helps guide students through learning over time, often linking student engagement through reviewing prior work, revisiting the anchoring phenomenon, and prompting new questions. However, the consistent structure does not always lend itself to deeper learning, and the unit does not consistently support teachers with strategies to actively connect student thinking across lessons in a cohesive, student-driven way.

**G. Differentiation and Scaffolding** Initial supports like visuals, vocabulary scaffolds, and guided discussions are included to help students access content; one respondent noted that the only part differentiated was the leveled readers. Scaffold supports help students gradually take responsibility for exploring phenomena, but these supports tend to remain consistent rather than intentionally decreasing over time to promote independence, often requiring teachers to adjust scaffolds or provide additional support/challenge.

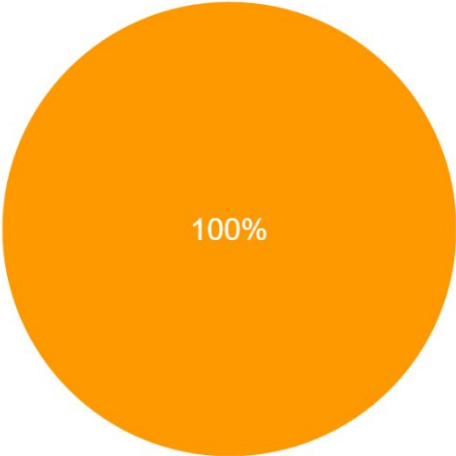
# HMH Category III: Monitoring NGSS Student Progress - Monitoring 3D student performances (Criteria A)

7 responses



# HMH Category III: Monitoring NGSS Student Progress - Formative assessment processes (Criteria B)

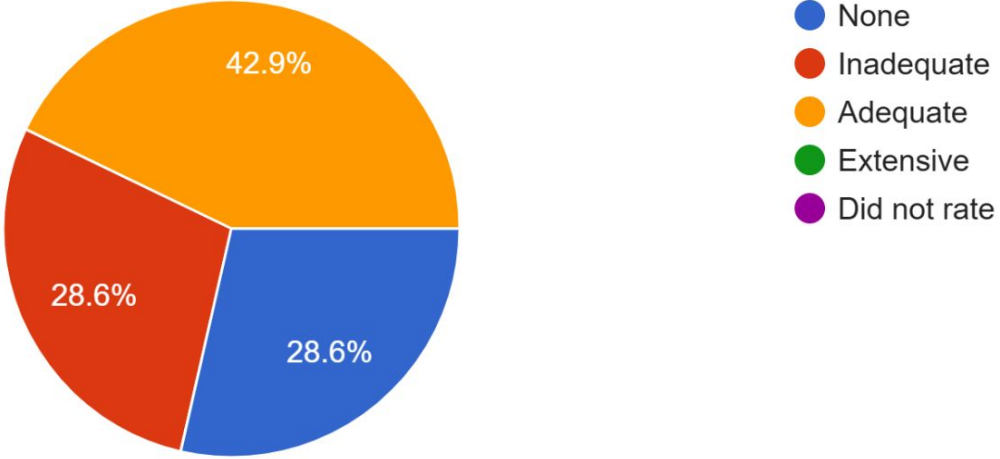
7 responses



- None
- Inadequate
- Adequate
- Extensive
- Did not rate

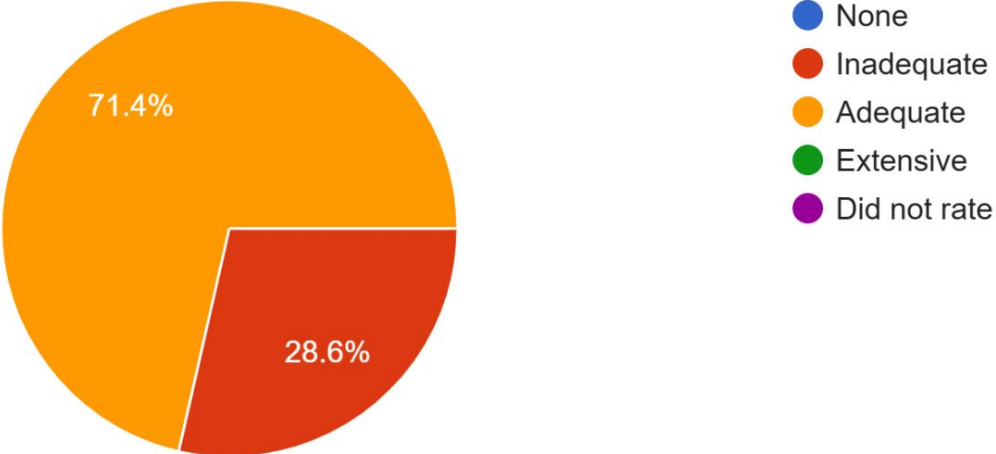
# HMH Category III: Monitoring NGSS Student Progress - Scoring guidance (Criteria C)

7 responses



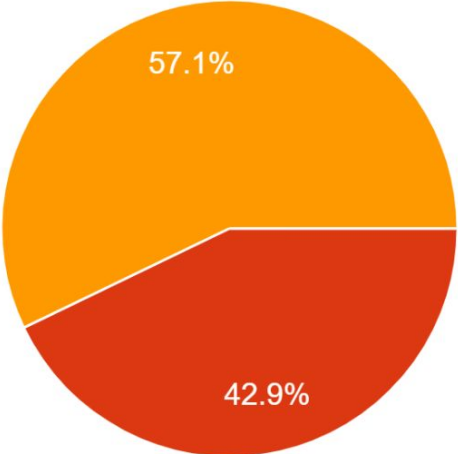
# HMH Category III: Monitoring NGSS Student Progress - Unbiased tasks/items (Criteria D)

7 responses



# HMH Rating for Category III. Monitoring NGSS Student Progress - Lesson Rating (Criteria A-D only)

7 responses



- 0: Adequate evidence for no more than one criterion in the category
- 1: Adequate evidence for at least two criteria in the category
- 2: Some evidence for all criteria in the category and adequate evidence for at least three criteria, including A
- 3: At least adequate evidence for all criteria in the category; extensive evidence for at least one criterion

**Monitoring Student Progress (Criterion A):** Students demonstrate learning through observations, discussions, drawings, simple written responses (like Science Log CER entries), hands-on models, and documentation of findings, with readiness checks available at the start of each unit. Evidence of understanding is often informal, and the curriculum does not consistently elicit clear, observable evidence of all three dimensions (SEPs, DCIs, CCCs) together in a structured way; for example, one respondent noted that not all cross-cutting concepts/Science and Engineering Practices (SEPs) are covered or developmentally appropriate for Kindergarten.

**Assessment Design (Criterion B):** Formative assessments, such as discussion questions, exit tasks, ongoing checks for understanding (questioning, quick activities), and lesson quizzes (available both online and on paper), are integrated into the lessons. However, one respondent felt the summative assessments were very wordy and confusing, with some questions/pictures not aligning with the content, while another frequently added their own exit tickets to better gauge understanding.

**Scoring and Performance Indicators (Criterion C):** Guidance and answer keys are provided, including scoring and performance indicators (e.g., on page 23 in the teacher guide), and online quizzes are automatically scored unless they are short-answer questions. Detailed rubrics aligned to three-dimensional learning are limited; one respondent noted the rubrics focus more on content accuracy than on students demonstrating integrated three-dimensional reasoning, and minimal support is available for interpreting student responses across SEPs, DCIs, and CCCs together, requiring teachers to often use their own judgment or create additional criteria.

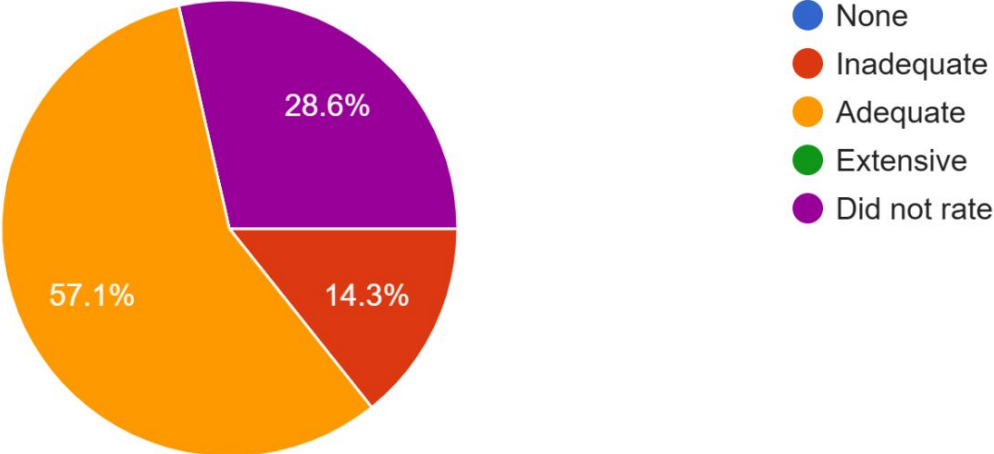
**Accessibility and Equity (Criterion D):** Tasks, language, and stimuli (including experiments, the workbook, and online portions) are generally accessible, clear, engaging, and tailored to students (e.g., appropriate for 6th grade or using simple, age-appropriate language for younger students), allowing all students to participate without problems. Teacher support is still necessary to ensure equity for all learners.

**Graphic Organizer:** Suggestions included the creation of a more kid-friendly graphic organizer.

**Rubric Revision:** One respondent recommended revising the rubrics to clearly evaluate how well students integrate Science and Engineering Practices (SEP), Disciplinary Core Ideas (DCI), and Crosscutting Concepts (CCC) in their explanations and models.

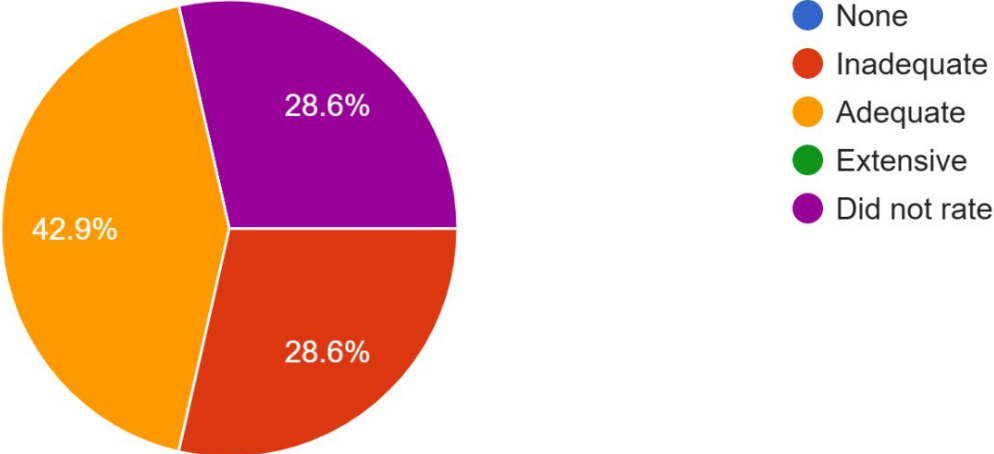
# HMH Category III (Unit Only): Coherent Assessment system (Criteria E)

7 responses



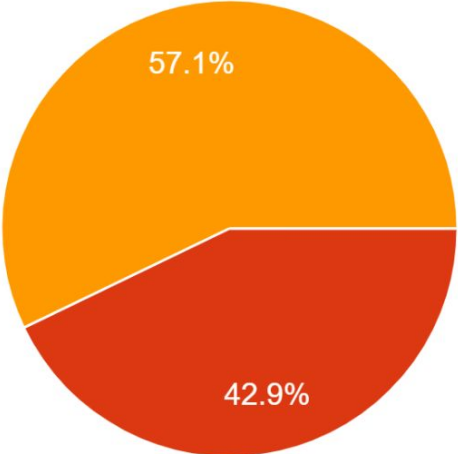
# HMH Category III (Unit Only): Opportunity to learn and receive feedback (Criteria F)

7 responses



# HMH Rating for Category III: Monitoring NGSS Student Progress - Unit Rating (Criteria A-F)

7 responses

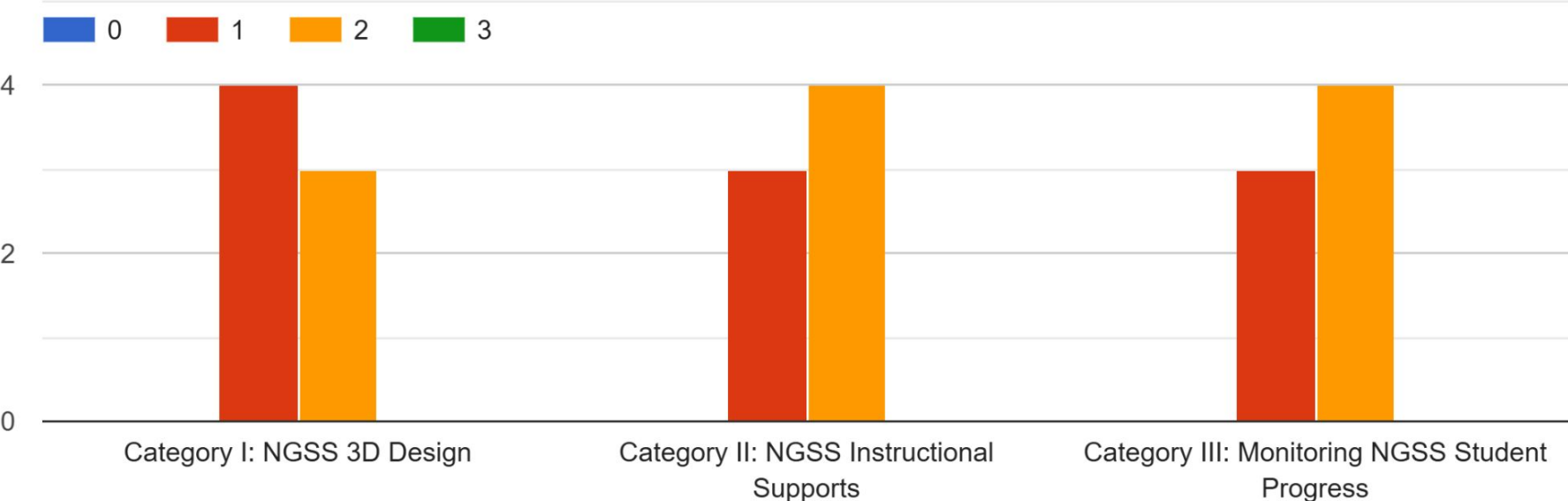


- 0: Adequate evidence for no more than two criteria in the category
- 1: Adequate evidence for at least three criteria in the category
- 2: Some evidence for all criteria in the category and adequate evidence for at least five criteria, including A
- 3: At least adequate evidence for all criteria in the category; extensive evidence for at least one criterion

**Category III Unit Criteria E: Assessment System** The curriculum includes beginning, middle, and end-of-unit tasks, such as a readiness check, lesson checks/quizzes, and a culminating unit test, but these are not consistently connected as a coherent system of assessment. While formative assessments are embedded, opportunities for pre-assessments and self-assessments are limited, and summative tasks do not always fully assess three-dimensional learning. One respondent noted difficulty in locating all components since they are split between online and manual resources.

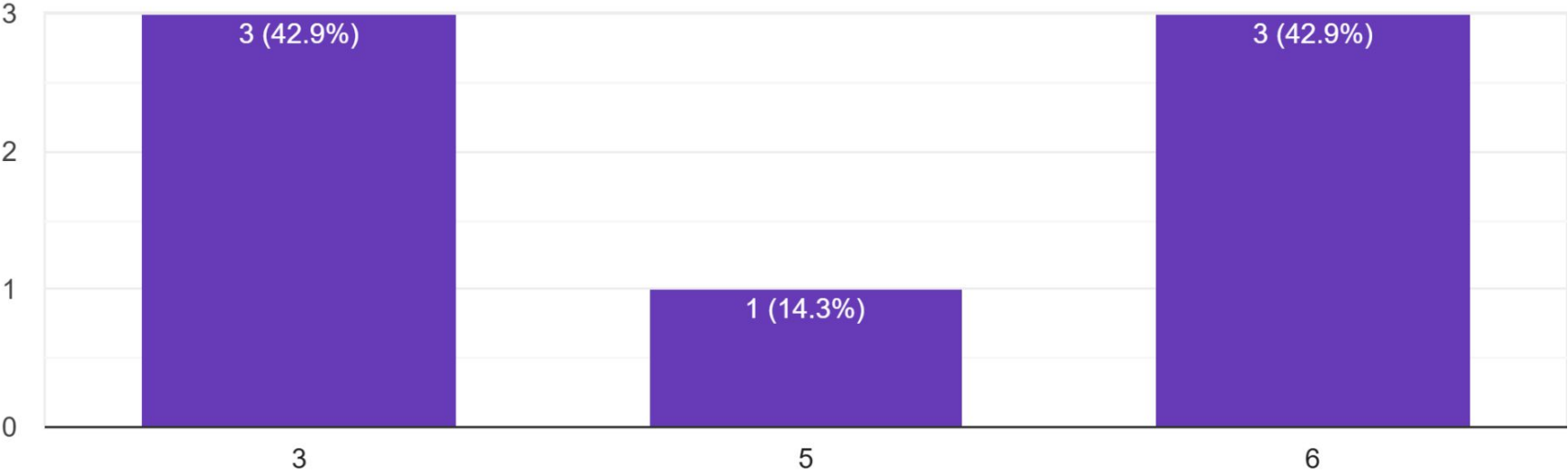
**Category III Unit Criteria F: Feedback and Practice** Students had multiple opportunities to engage in science practices (observing, discussing, explaining) and learning experiences were repeated and built over time. Feedback was primarily received through teacher questioning and discussion/prompts, but more structured feedback opportunities were limited. One respondent noted a lack of simulations and insufficient opportunities for practice through lesson questions and prompts, while another mentioned only having group explorative tasks and quizzes. Opportunities to demonstrate understanding were present, but often informal rather than performance-based.

# HMH Category Ratings Summary: Transfer the rating score for each category



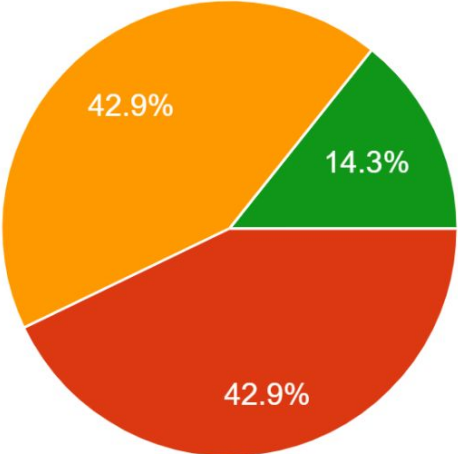
# HMH Calculate Total Score:

7 responses



# HMH Overall Rating (Based on Total Score and Evidence)

7 responses



- E: Example of high quality NGSS design (Total Score ~8-9)
- E/I: Example of high quality NGSS design if Improved (Total Score ~6-7)
- R: Revision needed (Total Score ~3-5)
- N: Not ready to review (Total Score 0-2)