

## SESSION: Assessing in Multiple Dimensions 3-5

### Session Description:

In this session, we will use a graphic organizer tool to analyze three assessments, one from each grade level 3 - 5, to determine whether they are 1, 2, or 3-dimensional. We will then compare them, focusing on two non-negotiable aspects of the assessments: how they support equitable learning and how they support sensemaking.

### Session Goals:

1. Analyze strengths and limitations of 1-dimensional vs. 2-dimensional vs. 3-dimensional assessments
2. Explore what equitable multidimensional assessments can tell us about student thinking
3. Understand how equitable phenomenon-based 3D assessment can inform instruction and student learning both prior to and after the assessment

### Session Length:

Part 1 Slides 1-9

Part 2 Slides 10-15

Part 3 Slides 16-22

**90 minutes**

20 minutes

48 minutes

22 minutes

### Pre-work for the Session:

1. Make sure to make/receive a [\[LINK\]](#) to a clean copy of each activity before that session, this keeps the older responses for data while making space to collect more. This includes:
  - o Sign-in Spreadsheet
  - o Notice and Wonders Organizer
  - o Gots & Needs Jamboard

### Session Resources:

#### Slides (S)

- <https://docs.google.com/presentation/d/1nP4SS7V8AKNjRDmExHs5qO1ZtLREne3UtOMQqAZdcvg/edit>

#### Session Landing Page

- <https://docs.google.com/document/d/1TaaQtogim-RT7h20cidGagk5s54uSAdOqWZGOMvDKEI/edit>

#### Sample Task: Planning to Study Bowling (Slide 13):

- <https://authoring.concord.org/activities/10446/pages/132820/89b0c3e8-f4e7-49dc-8456-535091e936b7>

#### Technology Tools (T)

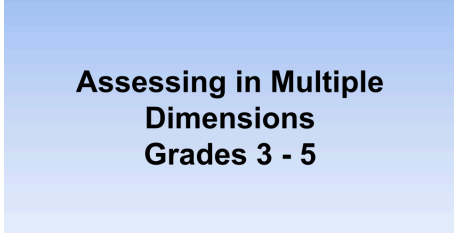
- Sign-in Spreadsheet link (T1 Slide 1)  
[\[LINK\]](#)
- Graphic Organizer: Notice and Wonders (T2 Slide 14)  
[\[LINK\]](#)
- CA NGSS PL#2 - Parking Lots / Gots&Needs (T3 Slide 23)  
[\[LINK\]](#)

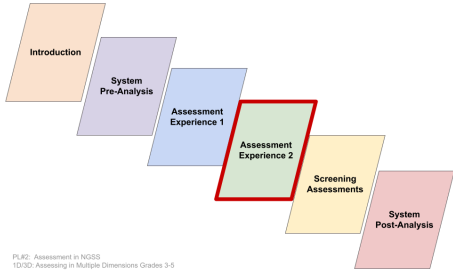

#### Handouts/Group Handouts (H/G)

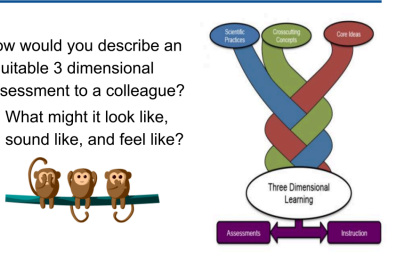
- H1 Shifts in Assessment Task (Slides 9, 17)  
[https://docs.google.com/document/d/1K\\_oP6wL37iJ9N2zX7mErjiU8Je0AQ3GXTJGgXgABgwM/edit](https://docs.google.com/document/d/1K_oP6wL37iJ9N2zX7mErjiU8Je0AQ3GXTJGgXgABgwM/edit)
- H8 Non-Negotiables & Variables (Slide 18)  
[https://drive.google.com/file/d/1nzDBxU2H\\_TtKgbWcmKJzWJjQEJBwos\\_K/view](https://drive.google.com/file/d/1nzDBxU2H_TtKgbWcmKJzWJjQEJBwos_K/view)

## Planning to Present and Facilitate the Session

1. Presenters will run their own shared screens to display slides.


Part 1 (21 minutes)	
Slide	Facilitator Notes
<p><b>S1 Title</b></p>  <p><b>Assessing in Multiple Dimensions Grades 3 - 5</b></p> <p><small>Presented by the California County Superintendents Educational Services Association/County Offices of Education, California Association of Science Educators, K-12 Alliance @WestEd, California Science Project, and the California Department of Education</small></p> <p><b>Technology Notes:</b> Sign-in spreadsheet in chat: <a href="#">[LINK]</a> *** There will be breakout rooms needed throughout the session; set the timer for return from breakout rooms to 30 sec.</p>	<p>TIME: Less than 1 min.</p> <p>Explain that this professional learning was developed through the collaboration of the partners displayed here. Welcome to CA NGSS Professional Learning #2. Say, “During this series of professional learning, we will be focusing on assessment. Please use the sign-in that is being placed into the chat to let us know that you are here today and collect any items you need to support your learning with us.”</p> <p>“The CA NGSS Professional Learning series is brought to you by the CA NGSS Collaborative. We represent a community of science education leaders from across the state. Your facilitators today are . . . (share your names, district/county job). If you run across any issues with technology or learning, please be sure to use the chat function to let us know so that we can provide help.”</p> <p><i>Facilitator Note: None</i></p>
<p><b>S2 CA NGSS PL #2 Outcomes</b></p> <p><u>CA NGSS PL #2 Outcomes</u></p> <ul style="list-style-type: none"> <li>Build awareness of equitable NGSS assessment systems <ul style="list-style-type: none"> <li>Describe the elements of equitable NGSS assessments</li> <li>Learn about a tool to screen assessments for equity and utility</li> <li>Understand the CA assessment system continuum</li> <li>Develop NGSS assessment literacy</li> </ul> </li> </ul> <p><small>PL#2: Assessment in NGSS 12/20: Assessing in Multiple Dimensions Grades 3-5</small></p> <p><b>Technology Notes: None</b></p>	<p>TIME: About 1 min.</p> <p>Ask the participants to take a moment to read the outcomes for the whole professional learning series. 1 min wait time. Remind the participants that their participation across all of the sessions will build toward these outcomes, though if they could only attend some of the sessions, they can take those portions back with them.</p> <p><i>Facilitator Notes: This slide exists to set expectations for the participants for the full training. In particular, this session will support the final outcome listed above.</i></p>
<p><b>S3 Participant Professional Learning Flow</b></p>	<p>TIME: 1 min.</p> <p>Let participants know that this is the suite of sessions they are participating in during the professional learning series. Ask participants to take a moment to orient with which session they are in now and remember what they have engaged in so far.</p> <p>Say, “To recap, in the previous sessions, we experienced the introduction to assessment, practiced with several tools that measured assessment quality and equity, and then experienced an assessment in a deeper dive as a student. We then put back on</p>

<p><b>Participant Professional Learning Flow</b></p>  <p><small>PL#2: Assessment in NGSS 12/20: Assessing in Multiple Dimensions Grades 3-5</small></p> <p><b>Technology Notes:</b> None</p>	<p>our science teacher hats to evaluate that assessment with tools focusing on sense-making and student advocacy and how it fits into the different cycles of the assessment system continuum.”</p> <p><i>Facilitator Notes: This slide fits this session into the overall narrative of the training.</i></p>
<p><b>S4 Community Agreements</b></p> <p><b>Community Agreements</b></p> <ul style="list-style-type: none"> <li>• Keep students at the center of the work.</li> <li>• Be present, be curious, and be open to possibilities.</li> <li>• Balance advocacy of own ideas &amp; inquiry of others.</li> <li>• Create a safe environment for individuals to productively struggle with ideas and tools.</li> </ul> <p>Are any other agreements needed?</p> <p><small>PL#2: Assessment in NGSS 12/20: Assessing in Multiple Dimensions Grades 3-5</small></p> <p><b>Technology Notes:</b> None</p>	<p>TIME: 1 min.</p> <p>Read the community agreements out loud to the participants or ask a participant to read them to the group. Remind participants that these agreements are in place to help all of us engage in the sessions with a focus on learning together. Ask participants if there are any agreements they would like to add. If so, they can type those into the chat.</p> <p><i>Facilitator Note: You may already know what participants would like to add from the previous session. Feel free to add those to the slide prior to beginning the session.</i></p>
<p><b>S5 Writer's Credit</b></p> <p><b>Writer's Credit</b></p> <ul style="list-style-type: none"> <li>• Katie Beck, Orange County Department of Education</li> <li>• Kyla BradyLong, MS, Santa Rosa City Schools</li> <li>• Debbie Gordon, Palm Springs USD</li> <li>• Andrea Hochevar, Colton Joint Unified</li> <li>• Philip Hudec, K-12 Alliance at WestEd</li> <li>• Jared Marr, Tulare County Office of Education</li> <li>• Christina Miramontes, Palm Springs USD</li> <li>• Brenda Mueller, San Diego Unified School District</li> <li>• Stephanie Sanchez, Vista Unified School District</li> <li>• Tara Sikorski, Santa Clara County Office of Education</li> <li>• Robert Terrill, San Marcos Unified</li> <li>• Dave Tupper, Lakeside Union School District</li> <li>• Claudio Vargas, Sci-Lingual Education</li> </ul> <p><small>PL#2: Assessment in NGSS 12/20: Assessing in Multiple Dimensions Grades 3-5</small></p> <p><b>Technology Notes:</b> None</p>	<p>TIME: Less than 1 min.</p> <p>Say, “This session was jointly developed by a group of educators from across the state. They represent several educational stakeholders, including teachers, districts teacher leaders, science specialists, and other partners. We want to be sure to acknowledge their work. We want to give credit to those who worked to create this learning experience.”</p> <p><i>Facilitator Notes: A lot of time, effort, &amp; energy went into the preparation of today's session. These are all the folks that worked on these sessions.</i></p>
<p><b>S6 Connection to Previous Sessions</b></p> <p><b>Connection to Previous Sessions...</b></p> <p>What were your <b>takeaways</b> from the previous sessions?</p> <p>or</p> <p>What <b>ideas</b> do you plan on <b>sharing</b> with your colleagues?</p>  <p><small>PL#2: Assessment in NGSS 12/20: Assessing in Multiple Dimensions Grades 3-5</small></p> <p><b>Technology Notes:</b></p>	<p>TIME: 3 min.</p> <p>Ask participants to answer one of the questions in the chat. Make connections between participants' answers and the content of this session and the prior sessions. Have participants type in the chat without clicking Enter/Return until promoted to create a Waterfall in the chat.</p> <p><i>Facilitator Notes: The goal of this slide is to create a strong link between the ideas in earlier presentations and this one. To recap, in the previous sessions, we experienced the introduction to assessment, practiced with several tools that measured assessment quality and equity, and then experienced an assessment in a deeper dive as a student. We then put back on our science teacher hats to evaluate that assessment with tools</i></p>

<p>Monitor the chat closely. One option for this activity is to ask for a “waterfall chat” where everyone immediately enters their response but waits for the direction to hit “enter”.</p>	<p><i>focusing on sense-making and student advocacy and how it fit into the different cycles of the assessment system continuum.</i></p>
<p><b>S7 Session Goals</b></p> <p><u>Session Goals</u></p> <p>Participants will:</p> <ul style="list-style-type: none"> <li>Analyze strengths and limitations of 1-dimensional vs. 2-dimensional vs. 3-dimensional assessments</li> <li>Explore what equitable assessments can tell us about student thinking</li> <li>Understand how equitable phenomenon-based 3D assessment can inform instruction and student learning both prior to and after the assessment</li> </ul> <p><small>PLUR2: Assessment in NGSS 1D/3D: Assessing in Multiple Dimensions Grades 3-5</small></p> <p><b>Technology Notes:</b> None</p>	<p>TIME: 1 min.</p> <p><b>Bottom line / Key takeaway / Main idea:</b> Share the goals and outcomes.</p> <p><i>Facilitator Notes: Just as it is important to share the learning goals with students/learners, we will share the learning goals with the participants.</i></p>
<p><b>S8 What is a 3 Dimensional Assessment</b></p> <p><small>4 minutes</small></p> <p><u>What is a 3 Dimensional Assessment?</u></p> <p>How would you describe an equitable 3 dimensional assessment to a colleague?</p> <ul style="list-style-type: none"> <li>What might it look like, sound like, and feel like?</li> </ul>  <p><small>PLUR2: Assessment in NGSS 1D/3D: Assessing in Multiple Dimensions Grades 3-5</small></p> <p><b>Technology Notes:</b> Set up breakouts: Random pairs of 2, 4 minutes total.</p> <p><b>CHAT MESSAGE:</b></p> <p>Before opening rooms, copy &amp; paste question in the chat: <i>How would you describe an equitable 3- dimensional assessment to a colleague? What might it look like, sound like, and feel like? 4- minutes to discuss.</i></p> <p><b>BROADCAST MESSAGES:</b></p> <p>(Copy &amp; Paste into broadcast for breakout groups)</p> <p><i>Time reminder: 1 minute reminder...select someone in your team to be your reporter when we come back to the main room :)</i></p>	<p>TIME: 6 min. (2- instructions/slide + 4 breakout rooms)</p> <p><b>Breakout discussion (4 min.)</b></p> <p>Pairs of 2 discuss their description of a 3D assessment. Introduce yourself to each other and then respond to the questions. Ask groups to select a reporter. Remind participants of the connection to how equitable assessments showcase student sense-making.</p> <p><b>Short Whole group Open Discussion (2 min.)</b></p> <p>Have a couple of breakout groups share their discussion</p> <p><b>Bottom line / Key takeaway / Main idea:</b> 3D Assessments are used as a sense-making tool and impact instruction</p> <p><i>Facilitator Note: None</i></p>

## S9 Handout 1

H1. Shifts in assessment tasks required by the CA NGSS for equitable learning. (Table adapted from the Achieve's Task Annotation Project in Science)



NGSS Assessments should look less like...	NGSS Assessments should look more like...
Tasks that are generic and have no authentic purpose, and/or disconnected from the lived experience of the student taking the task.	Tasks that authentically connect to students' lives, including those that are rooted in common learning experiences and are grounded in students' cultural and linguistic backgrounds.
Tasks designed to be punitive or prevent students who do not have developed understanding material from engaging in it.	Tasks that value student ideas, provide students with evidence to use and sharing a phenomenon or real opportunities for something that matters to them.
Tasks that are heavily reliant on vocabulary and well-developed English language skills (e.g., reading and writing), and/or confusing or difficult to understand.	Tasks that use accessible language, easy-to-understand words, sentence structure, and provide several avenues across the turn to make their thinking verbal responses, drawings, etc.
Tasks that require students to demonstrate knowledge with ideas, facts, or procedures outside the expected level of experiences.	Tasks that require students to demonstrate knowledge with ideas, facts, or procedures in a way that is relevant to their experiences.
Tasks that ask students to memorize and regurgitate information or to provide a phenomenon or problem already fully understood.	Tasks that ask students to connect and apply their knowledge and experience to a phenomenon or problem, and to make their thinking visible through models, diagrams, or other representations.
Tasks that allow students just provide factually correct answers, or predictions.	Tasks that allow students to make their thinking visible through models, diagrams, or other representations.

PLR2: Assessment in NGSS  
10/20/20: Assessing in Multiple Dimensions Grades 3-5

### Technology Notes:

#### Share the link to H1:

[https://docs.google.com/document/d/1K\\_oP6wL37iJ9N2zX7mErjU8Je0AQ3GXTJGgXgABgwM/edit](https://docs.google.com/document/d/1K_oP6wL37iJ9N2zX7mErjU8Je0AQ3GXTJGgXgABgwM/edit)

### Questions for the chat:

How does this further refine our definition of assessment in science?  
How does it clarify assessment literacy?

TIME: 5 min. (3-independent read + 2 discussion)

Participants open the link individually and read H1 to themselves. Then discuss whole group by coming off mute or sharing in the chat the shifts what NGSS assessments should look “less like” and, on the other side, what they should look “more like.” Then share that these key terms (the purple highlighted terms that will be animated when presenting) are what we may have noticed after reading how assessment is more like \_\_\_\_ and less like \_\_\_\_.

Prompts for this →

How does this further refine our definition of assessment in science?

How does it clarify assessment literacy?

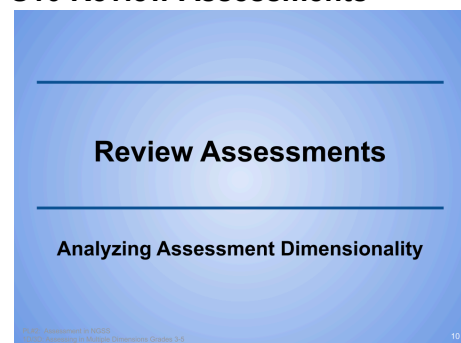
\*\*\*Remind participants that with science instruction shifting from what it was to what it is now using NGSS, the assessments need to also shift to match that instruction to be more equitable.

*Facilitator Note: Animated Slide*

## Part 2 (47 minutes)

### Slide

### S10 Review Assessments



**Review Assessments**

**Analyzing Assessment Dimensionality**

PLR2: Assessment in NGSS  
10/20/20: Assessing in Multiple Dimensions Grades 3-5

Technology Notes: **None**

### Facilitator Notes

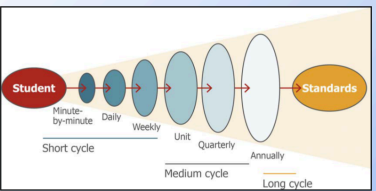
TIME: Less than 1 min.

*Facilitator Note: None*

### S11 Review

**Review**

When would each of these assessments be appropriate in your instruction?



CA Science Framework Chapter 9  
Adapted from Herman and Heritage, 2007.

PLR2: Assessment in NGSS  
10/20/20: Assessing in Multiple Dimensions Grades 3-5

TIME: 1 min.

Remind participants that assessments can occur at different checkpoints within the instructional year.

This visual is called the “CA **Coherent** Assessment System.” Reminder from the previous sessions that it has three main categories, broken into short, medium, and long cycles assessments, all serving a specific purpose at that time for measuring student understanding. The colored ovals relate to the amount of feedback provided on the assessment at that time.



Technology Notes: *None*

Facilitator notes: *1-D, and 2-D assessments do have a place...they are ok! They can be a quick check on content, such as just finding the concepts or choosing a practice to showcase...*

## S12 Let's Look at Some Assessments

### Let's Look at Some Assessments



Use **Notice and Wonders** graphic organizer to analyze:

- 1-D, 2-D, 3-D assessments
- Which dimensions are being addressed by the assessment questions?
  - o Evidence
  - o Strengths
  - o Limitations
- Role in learning sequence (short, medium, or long cycle)



PL#2: Assessment in NGSS  
1D/3D: Assessing in Multiple Dimensions Grades 3-5

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TIME: 1 min.

Intro of Task

3 assessments, 1 of each grade, 3rd, 4th, and 5th.

Participants analyze the 3 assessments using this graphic organizer.

Facilitator Note: *None*

Technology Notes: *None*

## S13 Let's Examine an Assessment Together!

### Let's Examine an Assessment Together!



#### Planning to Study Bowling

El loves bowling. He set up a game at home to practice with the objects he has. He uses a soccer ball, and for pins, he uses 6 plastic bottles filled with sand.



	# of Dimensions assessed (1D, 2D, 3D)	Dimension Being Assessed (SEP, DCI, CCC)	Evidence	Strengths	Limitations	Role within learning sequence - Short Cycle - Medium Cycle
SAMPLE	3	DCI SEP CCC	Asks about "forces," students plan an investigation, and predict the changes (cause & effect)	Students might have similar experiences prior knowledge, predictions make thinking visible	Doing this virtually makes it hard to test	Short cycle

PL#2: Assessment in NGSS  
1D/3D: Assessing in Multiple Dimensions Grades 3-5

13

TIME: 7 min. (1-2 min. instructions/show task + 5 min. discussion)

Go through an online sample assessment (facilitator modeling from the link, while participants follow from the shared screen or by using the link provided in the chat for better viewability). Then, complete the possible response for each column in the table as a whole group. Use the waterfall chat strategy to ask for responses on # of Dimensions, Dimension being assessed, Evidence, Strengths, Limitations, and Role within a learning sequence. Acknowledge responses as they come up.

Facilitator note: *(Facilitator will first click on the image of the task to view the task and then the table row with responses will be animated to be revealed after each item in the whole group discussion until the facilitator clicks to reveal sample responses.) Show the completed table after the discussion through the animated slide and remind participants that this is an example of what they will do with the assessments in the next activity.*

Technology Notes:

Share the link to the assessment to follow along with better viewability:  
<https://authoring.concord.org/activities/10446/pages/132820/89b0c3e8-f4e7-49dc-8456-535091e936b7>

## S14 Notice and Wonders- Your Turn

21 minutes

### Notice and Wonders - Your Turn



Click below to open the link to the assessment	# of Dimensions assessed (1D, 2D, 3D)	Which dimension is being assessed? (SEP, DCI, CCC)	Evidence	Strengths	Limitations	Role within learning sequence - Short Cycle (minute to minute, daily, weekly) - Medium Cycle (unit, quarterly)
Assessment A Static Electricity Grade 3						
Assessment B Lego Buffer Grade 4						
Assessment C Gravity Task Grade 5						

PL#2: Assessment in NGSS  
1D/3D: Assessing in Multiple Dimensions Grades 3-5

14

TIME: 25 total min. (3 min. Instructions + 21 min. breakout)

### Breakout discussion

Create breakout groups of 3 participants each; different participants than previous breakout.

Have the breakout groups find the pages in the Google Doc with their **group's number based on their current breakout room number**.

Explain that they will analyze and categorize the 3 assessments using the **Notice and Wonder** Graphic Organizer. In this organizer, they will find 3 links to the 3 assessments, one from each grade level - 3, 4, and 5. There are also links to the Physical Sciences PEs for the three grades. Encourage participants to spend less time

Technology Notes:

Set up breakouts: same random groups of 3 as before, 21 minutes. Provide link upon facilitator request. Send out broadcasts as indicated below. Before going to breakout rooms, paste the link to the organizer in the chat:

**[LINK] TO ORGANIZER:**

**BROADCAST MESSAGES:**  
(Copy & Paste into broadcast for breakout groups.)

*Instructions reminder: Look at each assessment, complete each category in the rows on your template for each one.*

*Time reminder: 15 minutes left. :)*

*Time reminder: 10 minutes left. :)*

*Time reminder: 5 minutes left. :)*

with the 3rd grade assessment.

*Facilitator Note: If in the whole group discussion there is a disagreement, ask what evidence they have for that response.*

## S15 Quick-Write & Share Out

### Share Out

Click below to open the links to the assessments	# of Dimensions assessed (1D, 2D, 3D)	Dimension Being Assessed (SEP, DC, CCC)	Evidence	Strengths	Limitations	Role within learning sequence - Short Cycle (minute to minute, daily, weekly) - Medium Cycle (unit, quarterly)
Assessment A Static Electricity Grade 3						
Assessment B Lego Ruffler Grade 4						
Assessment C Gravity Task Grade 5						

PL12 Assessment in NGSS  
1D/3D Assessing in Multiple Dimensions Grades 6-8

15

**Technology Notes:** *None*

TIME: 10 min total (3 min quick-write, 7 min discussion)

Ask participants to take a few moments to think or write down some notes about the differences and similarities between the assessments in terms of their impact on teaching and learning. Explain that we will have a discussion after 3 or 4 min.

Ask participants to raise their virtual hands if they would like to volunteer to share their reflections. They can share their screen for a one-minute recap of their analysis of an assessment if they want.

*Facilitator Note: See key for the sample assessments in 1D/3D Assessment Sample Key slide deck in the Planning Documents Folder*

## Part 3 (22 minutes)

### Slide

### Facilitator Notes

## S16 A Deeper Dive Title

TIME: 0

*Facilitator Note: None*

# 3 Dimensional Assessment

A deeper dive

Assessing in Multiple Dimensions K-2  
CA NGSS PL12 - Assessment

16

Technology Notes: *None*

## S17 Analysis of Equity and Sensemaking

### Analysis of Equity and Sensemaking

Questions to think about:

- Which assessments show examples of tasks for equitable learning? Why?
- Which and how do these assessments support sense making?

PL12: Assessment in NGSS  
1D3D: Assessing in Multiple Dimensions Grades 3-5

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Technology Notes:

*None*

TIME: 1 min.

Explain that now we will focus on two aspects of the assessments: how they support equitable learning and how they support sensemaking using the 3-dimensions.

We will use a new tool (draft), called **Non-Negotiables & Variables in an Assessment System**, to dive deeper into one assessment.

*Facilitator Note: Ask a couple of participants to read the bullet points.*

## S18 Non-Negotiables & Variables

### Non-Negotiables & Variables - H8

Non-Negotiables (Constants) and Variables (Krobs) in an Assessment System

Non-Negotiables (Constants) in Assessment	(1) Assessments are Equitable and Fair to All Students	(2) Assessments are Phenomena/Problem Focused	(3) Assessments Require Sensemaking Using The Three Dimensions of NGSS	(4) Assessments Provide The Right Information To The Right Stakeholders
The four non-negotiables in assessment represent the "must have" and provide an assessment system. These constants should be thoughtfully and carefully considered when designing an assessment experience and learning opportunities.	Assessments should be fair and equitable to all students, especially to those students who traditionally may not see science as a space in which they are important contributors. Assessments should be relevant, authentic, meaningful, and empowering to students by being aligned to the specific interests, backgrounds, ideas, and needs they bring to the classroom. Equity transcends all aspects of 3D assessment and is a focus of all the other non-negotiables (constants) and variables (krobs).	Assessments are perhaps the most critical predictor of whether instruction and assessment can be meaningful for all students. Instruction and assessment grounded in phenomena and solving problems should be relevant, compelling, and accessible while attending to the values, ideas, and backgrounds of students.	Perhaps the most important shift in NGSS is that students must be actively engaged in sensemaking as a central goal of instruction and assessment. This means learning activities and assessment tasks should emphasize reasoning as the way students show their understanding of science ideas and practices, rather than rote ideas and procedures.	From lesson and slide to end of course exam, assessment experiences have different purposes. It is important that each assessment opportunity is designed to provide evidence which meets the intended purpose, and that useful information and feedback is accessible to the right stakeholders. It is critical that assessments are transparent about what is being assessed and what not.
Possible Variables (Krobs) in Assessment	Variables (krobs) to attend to when designing and modifying assessment experiences that are Phenomena/Problem Focused include: <ul style="list-style-type: none"><li>• Relevance and Engagement</li><li>• Local or Global Connections</li><li>• Social and Environmental Justice</li><li>• Integration Across Disciplines</li><li>• Other (Specify)</li></ul>	Variables (krobs) to attend to when designing and modifying assessment experiences that require Sensemaking Using The Three Dimensions of NGSS include: <ul style="list-style-type: none"><li>• DEEP Sophistication</li><li>• CCC Sophistication</li><li>• Scientific and Logical Supports</li><li>• Degree of Transfer</li><li>• Other (Specify)</li></ul>	Variables (krobs) to attend to when designing and modifying assessment experiences that provide The Right Information To The Right Stakeholders include: <ul style="list-style-type: none"><li>• Teacher Feedback</li><li>• Student Feedback</li><li>• Peer Feedback</li><li>• Self-Assessment (Metacognitive)</li><li>• Evidence of Learning and Growth</li><li>• Other (Specify)</li></ul>	

PL12: Assessment in NGSS  
1D3D: Assessing in Multiple Dimensions Grades 3-5

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Technology Notes:

Share in the chat:

H8: Non-Negotiables & Variables in an Assessment System:

[https://drive.google.com/file/d/1nzDBxU2H\\_TtKgbWcmKJzWJjQJEJBwos\\_K/view](https://drive.google.com/file/d/1nzDBxU2H_TtKgbWcmKJzWJjQJEJBwos_K/view)

TIME: 3 min.

The **H8 (Non-Negotiables & Variables in an Assessment System)** is a tool that helps us think more closely about how we assess learning; it focuses on things that are considered tight & loose: Non-negotiables and Variables. We will use part one of this tool, the yellow row, to look deeper at an assessment.

*Facilitator Note: This is the first encounter of participants with this resource. Give them a couple of minutes to scan the tool and explain that we will focus on the yellow row in the next slide.*

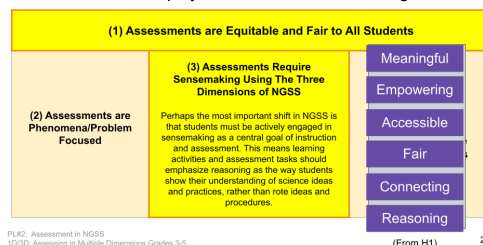
## S19 Non-Negotiables Comparative Analysis

TIME: 8 min.



## Non-Negotiables Comparative Analysis

Compare the 3 assessments reviewed: How do they attend to equity and student sensemaking?



### Technology Notes:

Share the link to the Notice and Wonder graphic organizer: [\[LINK\]](#)

Share the link to H1:

[https://docs.google.com/document/d/1K\\_oP6wL37iJ9N2zX7mErjiU8Je0AQ3GXTJGgqxgABgwM/edit](https://docs.google.com/document/d/1K_oP6wL37iJ9N2zX7mErjiU8Je0AQ3GXTJGgqxgABgwM/edit)

Questions to paste in the chat: *Which assessments show examples of tasks for equitable learning? Why? (Refer to the H1-Shifts in Assessment). Which assessments show examples of tasks for sensemaking using 3-dimensional learning*

Explain that we will compare the previous assessments from the perspective of section (1) equity and section (3) sensemaking using the 3 dimensions (the highlighted sections).

Think back to the assessments that your team looked at in your breakout room.

Which assessment shows examples of tasks for equitable learning? Why? (You can refer back to the H1-Shifts in Assessment).

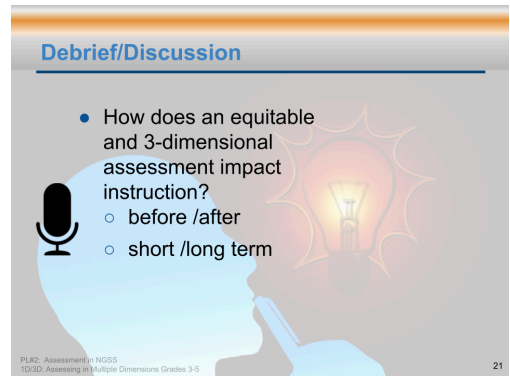
Which assessment shows examples of tasks for sensemaking using 3-dimensional learning?

[Link to H1 - Shifts in Assessment Tasks.](#)

Link to put in the chat:

[https://docs.google.com/document/d/1K\\_oP6wL37iJ9N2zX7mErjiU8Je0AQ3GXTJGgqxgABgwM/edit](https://docs.google.com/document/d/1K_oP6wL37iJ9N2zX7mErjiU8Je0AQ3GXTJGgqxgABgwM/edit)

## S20 Debrief/Discussion



### Technology Notes:

None

TIME: 4 min.

Participants hold a short discussion of this prompt by coming off mute or using the chat to share if they choose.

*Facilitator Note: None*

## S21

TIME: Less than 1 min.

*Facilitator Note: None*

## Closing and Next Steps

PL#2: Assessment in NGSS  
S22: Assessing in Multiple Dimensions Grades 3-5

23

*Technology Notes: none*

### S22 Closing

#### Closing

Think back to the session goals.

1. What did you **get** about assessment from participating in this session?
2. What do you still **need** to support your understanding of NGSS assessment?

#### Session Goals

- Analyze strengths and limitations of 1-D vs. 2-D vs. 3-D assessments
- Explore what equitable assessments can tell us about student thinking
- Understand how equitable phenomenon-based 3D assessment can inform instruction and student learning before/ after the assessment

PL#2: Assessment in NGSS  
S22: Assessing in Multiple Dimensions Grades 3-5

23

*Technology Notes:*

Share the Gots & Needs Jamboard in the chat: **[LINK]**

Show the participants which frame of the jamboard they should be working on for this session.

TIME: 2 min.

Remind participants that this is an opportunity to share their growth with us from this session, as well as help the team understand what we may not have discussed yet that participants would like to understand about assessment. If appropriate, participants might also want to go back to add comments to previous sessions based on their understanding now. Share the Jamboard link in the chat and also pull it up on the shared screen to show the gots and needs for this session.

Please also let participants know that they will have a break for X MIN prior to the next session OR that we will see them again on X DAY to discuss \_\_\_\_ (give a one sentence summary of the upcoming session). If this is the last session, please thank participants for their time and energy, as well as encourage them to complete the PL#2 survey, which will be sent to them this week.

*Facilitator Note: None*