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:		**90 minutes**
Part 1	Slides 1-9	20 minutes
Part 2	Slides 10-15	48 minutes
Part 3	Slides 16-22	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:
    - Sign-in Spreadsheet
    - Notice and Wonders Organizer
    - 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-RT7h20cidGaqk5s54uSAdOqWZGOmvDKEI/edit

Sample Task: Planning to Srtudy Bowling (Slide 13):

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

Technology Tools (T)

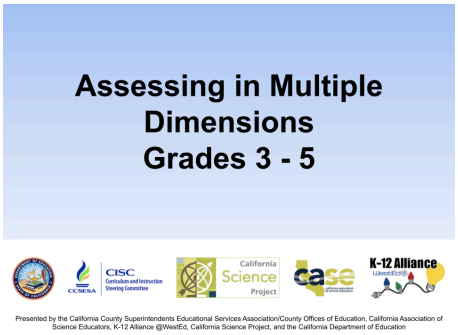
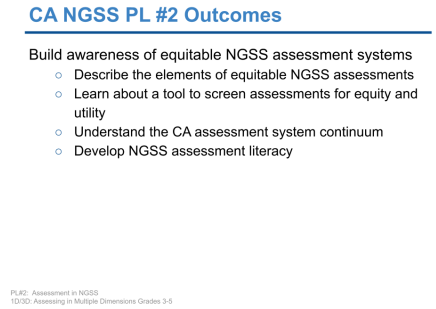
- Sign-in Spreadsheet link (T1 Slide 1)
  [LINK]
- Graphic Organizer: Notice and Wonders (T2 Slide 14)
  [LINK]
- CA NGSS PL#2 - Parking Lots / Gots&Needs (T3 Slide 23)
  [LINK]

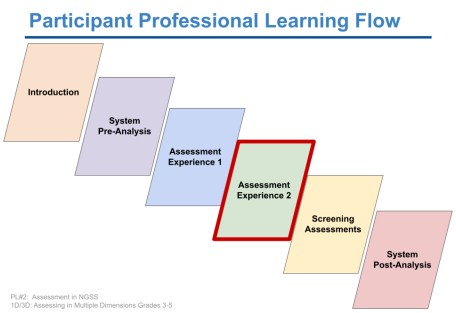
Handouts/Group Handouts (H/G)

- H1 Shifts in Assessment Task (Slides 9, 17)
  https://docs.google.com/document/d/1K_oP6wL37iJ9N2zX7mErjiU8Je0AQ3GXTJGgxgABgwM/edit
- H8 Non-Negotiables & Variables (Slide 18)
  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**
S1 Title  *Technology Notes:* Sign-in spreadsheet in chat: [LINK] *** There will be breakout rooms needed throughout the session; set the timer for return from breakout rooms to 30 sec.	TIME: Less than 1 min. 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." "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." *Facilitator Note: None*
S2 CA NGSS PL #2 Outcomes  *Technology Notes:* None	TIME: About 1 min. 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. *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.*
S3 Participant Professional Learning Flow	TIME: 1 min. 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. 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

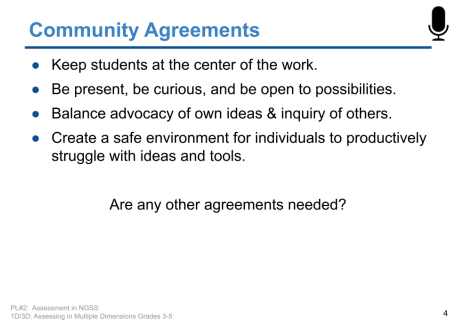


Technology Notes: None

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."

Facilitator Notes: This slide fits this session into the overall narrative of the training.

S4 Community Agreements



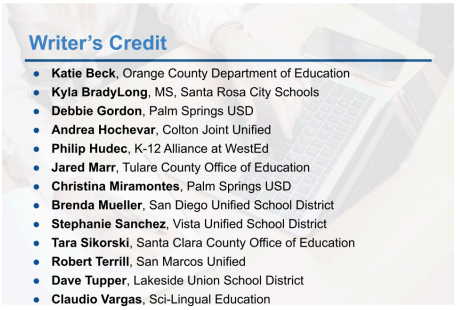
Technology Notes: None

TIME: 1 min.

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.

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.***

S5 Writer's Credit



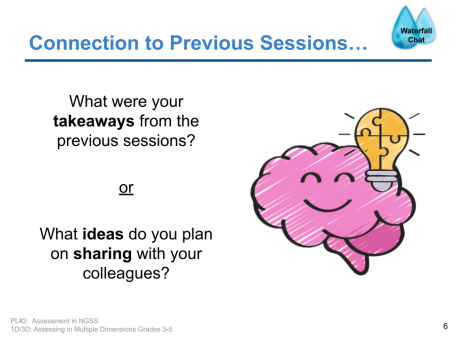
Technology Notes: None

TIME: Less than 1 min.

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."

Facilitator Notes: A lot of time, effort, & energy went into the preparation of today's session. These are all the folks that worked on these sessions.

S6 Connection to Previous Sessions

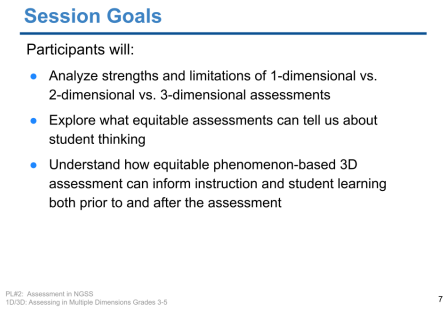
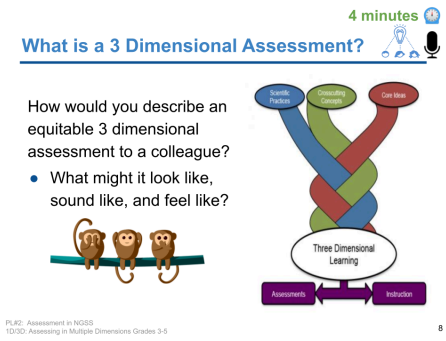


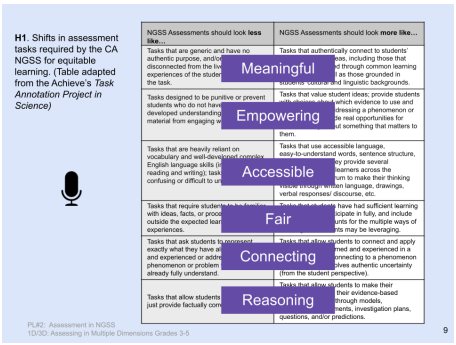
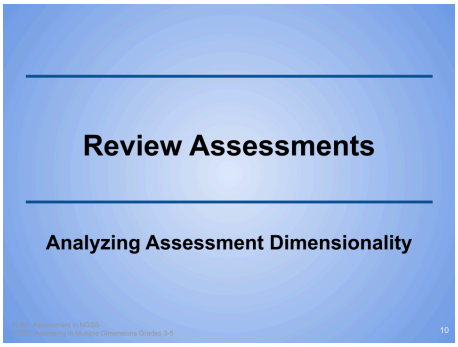
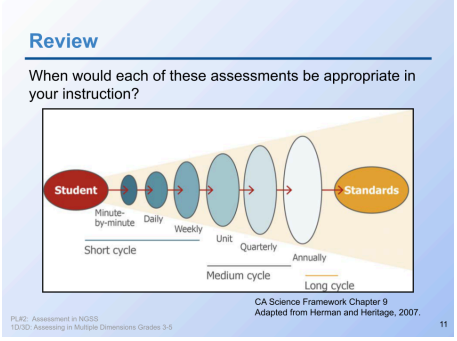
Technology Notes:

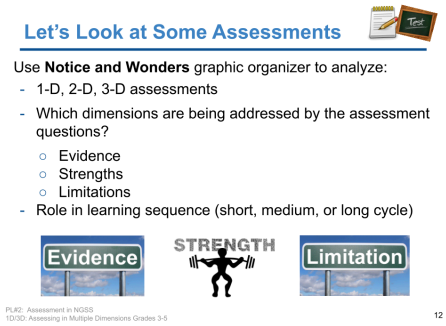
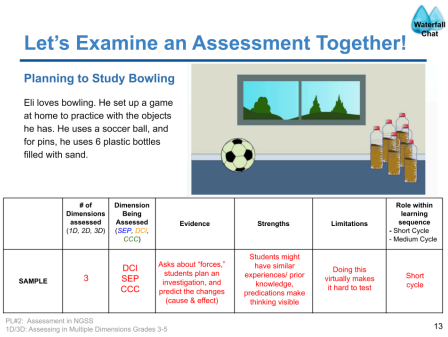
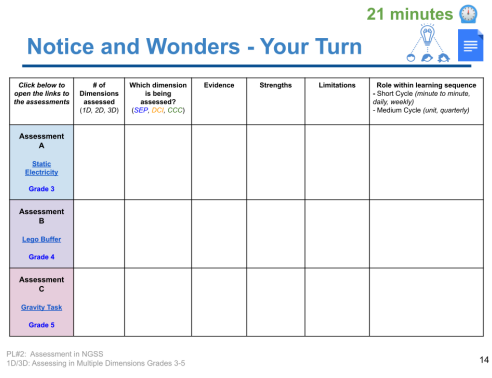
TIME: 3 min.

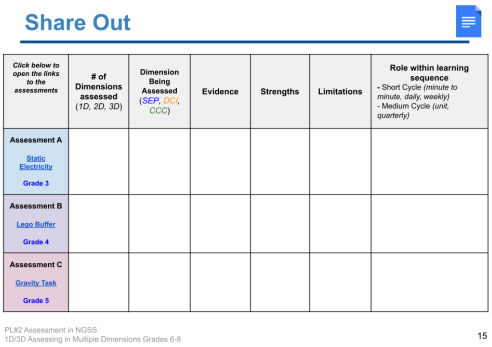
Ask participants to answer one of the questions in the chat. Make connections between participants' answers and the content of this session and the prior sessions. Have participants type in the chat without clicking Enter/Return until promoted to create a Waterfall in the chat.

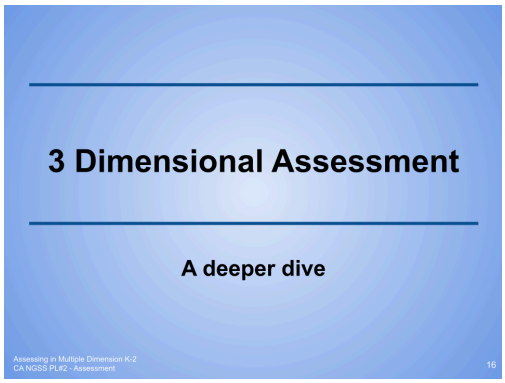
Facilitator Notes: The goal of this slide is to create a strong link between the ideas in earlier presentations and this one.
To recap, in the previous sessions, we experienced the introduction to assessment, practiced with several tools that measured assessment quality and equity, and then experienced an assessment in a deeper dive as a student. We then put back on our science teacher hats to evaluate that assessment with tools

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".	*focusing on sense-making and student advocacy and how it fit into the different cycles of the assessment system continuum.*
S7 Session Goals  *Technology Notes:* None	TIME: 1 min. **Bottom line / Key takeaway / Main idea:** Share the goals and outcomes. *Facilitator Notes: Just as it is important to share the learning goals with students/learners, we will share the learning goals with the participants.*
S8 What is a 3 Dimensional Assessment  *Technology Notes:* Set up breakouts: Random pairs of 2, 4 minutes total. CHAT MESSAGE: Before opening rooms, copy & paste question in the chat: *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.* BROADCAST MESSAGES: (Copy & Paste into broadcast for breakout groups) *Time reminder: 1 minute reminder…select someone in your team to be your reporter when we come back to the main room :)*	TIME: 6 min. (2- instructions/slide + 4 breakout rooms) **Breakout discussion (4 min.)** 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. **Short Whole group Open Discussion (2 min.)** Have a couple of breakout groups share their discussion **Bottom line / Key takeaway / Main idea:** 3D Assessments are used as a sense-making tool and impact instruction *Facilitator Note: None*

S9 Handout 1  *Technology Notes:* Share the link to H1: https://docs.google.com/document/d/1K_oP6wL37iJ9N2zX7mErjiU8Je0AQ3GXTJGgxgABgwM/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	**Facilitator Notes**
S10 Review Assessments  *Technology Notes:* None	TIME: Less than 1 min. *Facilitator Note: None*
S11 Review 	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.

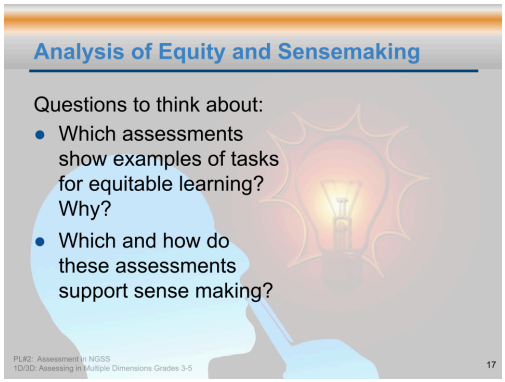
Technology Notes: None	*Facilitator notes: 1-D, and 2-D assessments do have a place…they are ok! They can be a quick check on content, such as just finding the concepts or choosing a practice to showcase…*
S12 Let's Look at Some Assessments  *Technology Notes: None*	TIME: 1 min. Intro of Task 3 assessments, 1 of each grade, 3rd, 4th, and 5th. Participants analyze the 3 assessments using this graphic organizer. *Facilitator Note: None*
S13 Let's Examine an Assessment Together!  *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	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.*
S14 Notice and Wonders- Your Turn  *Technology Notes:*	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

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, 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 PLW2 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*



Technology Notes: None

S17 Analysis of Equity and Sensemaking



Technology Notes:
None

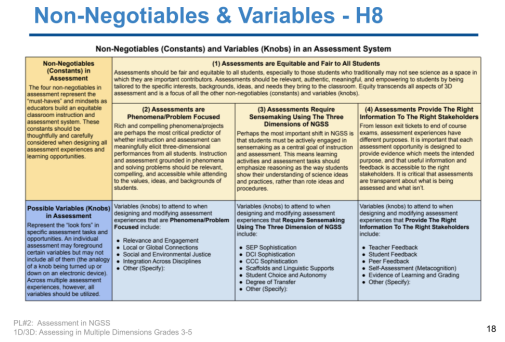
TIME: 1 min.

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



Technology Notes:
Share in the chat:
H8: Non-Negotiables & Variables in an Assessment System:
https://drive.google.com/file/d/1nzDBxU2H_TtKgbWcmKJzWJjQEJBwos_K/view

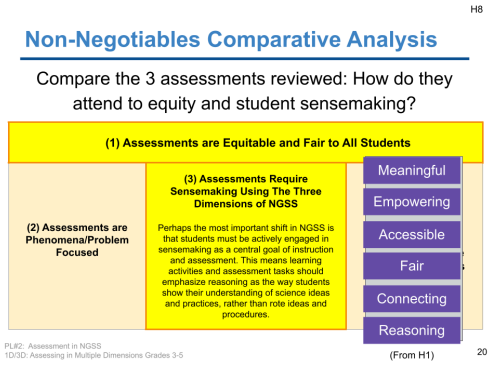
TIME: 3 min.

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.



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_oP6wL37iJ9N2zX7mErjiU8Je0AQ3GXTJGgxgABgwM/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*

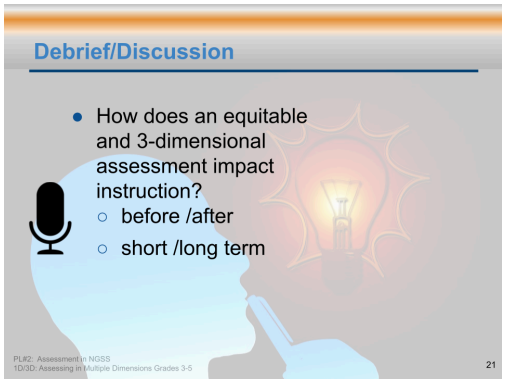
Explain that we will compare the previous assessments from the perspective of section (1) equity and section (3) sensemaking using the 3 dimensions (the highlighted sections).

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_oP6wL37iJ9N2zX7mErjiU8Je0AQ3GXTJGgxgABgwM/edit

S20 Debrief/Discussion



Technology Notes:
None

TIME: 4 min.

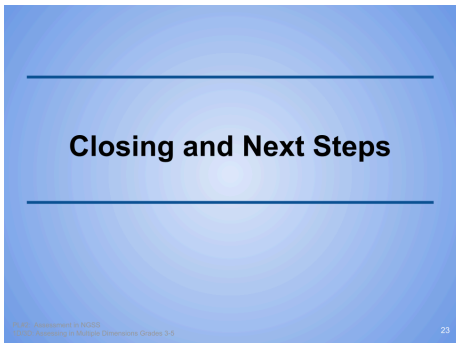
Participants hold a short discussion of this prompt by coming off mute or using the chat to share if they choose.

Facilitator Note: None

S21

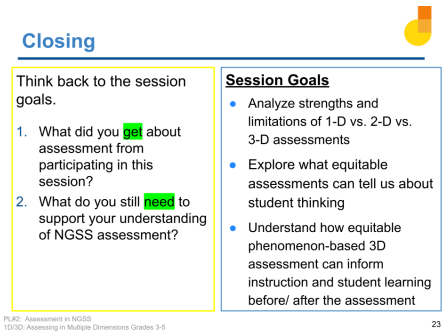
TIME: Less than 1 min.

Facilitator Note: None



Technology Notes: none

S22 Closing



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