Formative Assessment

Room 1

Strengths

What resources do we have?

- NGSS Assessment Equity Cohort
- Lots of connections to county and state offices of ed, collaboration across districts
- Stanford SCALE resources
- Assessments connected to HQ curricula –starting point

What is working well?

- Assessment cohorts
- Exchange of information nationwide through virtual learning opportunities
- Helping teachers tease out student demonstration of each dimension so they can respond accordingly
- Using some assessments to target specific dimensions when that's appropriate at that point in the unit
- Being aware of the purpose of a given assessment

Weaknesses

What resources/tools are we lacking?

- Time for teacher PD
- District requirements for regular grades; standards based
- Lack of admin knowledge about formative assessment, burden falls on teachers

What improvements are needed?

- We need to scale up the opportunities for PL (especially some of the virtual ones)
- Better communication across ES, MS, HS, and Institutes of higher ed
- Making science a priority
- More time to collaborate (PLCs)

Opportunities

What are the most immediate needs?

- Assessment Literacy for Leaders - short, virtual PD sessions
- Flexibility with pacing guides/ scope and sequence to allow for NGSS learning
- Continued collaboration with outside agencies (community partners) around student learning (cohesive)

Room 2

Strengths

What resources do we have?

- Assessment that come packaged in curriculum (Amplify progress build related to DCIs; MI-Star)
- Achieve resources for designing assessments
- Open Education Resources (e.g., NGSA; SCALE (Stanford); etc)
- Page Keeley Assessment Probes
- STEM Teaching Tools
- OERs resources have the opportunities to improve over time
- iHUB and SEET work

What is working well?

- Opportunity for teachers to see 3D examples of assessment tasks to plan for instruction
- 2D DCI/SEP assessments
- Somewhat coherent use of phenomenon, tasks
- STEM teaching tools for SEPs and CCCs with prompts

Weaknesses

What resources/tools are we lacking?

- Follow up to the task. If-then chart for feedback.
- OER resources assessments that are added to the curriculum. The teacher is having to make modifications for those to fit in the instructional sequence
- Tracking growth over time for the SEPs or CCCs without separating the multidimensional structure
- Build better feedback cycles with assessments. Students should feel OK if they are not meeting the full expectations of a PE.
- Admin/Parent Communication

What improvements are needed?

- All assessment can be formative so that they are helpful for learning. Less high-stakes
- More student-centered assessment opportunities
- Flexibility in the way assessments are given and how to manage the instructional time
- More instructional minutes
- Change the view that the way OpenSciEd provides redundancy in activities and assessment opportunities thinking it should be done a different way

Opportunities

What are the most immediate needs?

- Teacher professional learning, examples, regarding how to implement 3D assessment
- Validating what teachers already do and how that could provide evidence for classroom assessment
- Ways to help teachers to value formative assessment. How to resolve the tension between grading/grading systems and formative assessment without grades
- Develop ways to understand how SEPs/CCCs build over time for standards-based grading
- Stress on the formative nature of assessment tasks to give opportunities for students to learn

Room 3

Strengths

What resources do we have?

- STEM Teaching Tools
- ACESSE modules
- Open Sci Ed
- Increased rubrics for task evaluation (TAPS)

What is working well?

- A document showing formative assessment throughout unit/lesson
- More focus on sense-making and not rote memorization

Weaknesses

What resources/tools are we lacking?

- Scaffolding teachers with tasks that are focused only on SEPs
- Reporting tools that are realistic for teachers
- How to USE the info that is gleaned from assessments

What improvements are needed?

- More clear rubrics to determine student performance that pinpoints proficiency in each of the dimensions.
- Teasing out SEPs and CCCs within tasks
- PL on how to create and use rubrics and 3d assessment

Opportunities

What are the most immediate needs?

- Define what coherence means! :)
- Intermediate steps to bridge teachers from 1D to 3D assessments
- Learn from assessment materials that are currently available
- PL around new assessment practices
- Teachers need the opportunity to wear a “scientist” hat and understand why this need for sense-making and assessing in 3D is needed

Room 4

Strengths

What resources do we have?

- Work of Margaret Heritage in OR, MI
  - (Jamie) How are we co-designing alongside our students? How are we creating feedback loops with students and that these are just part of the culture of classrooms and FA expectations (elevating student voice)
- SPA-LC

What is working well?

- In Portland, K-5 educators are working with Assessment specialists in a process to learn more about FA and using it in the classroom
- Question boards/Summary tables (can be an FA practice in action) can be used with brilliance. (Jessica's HS example) which is one way for students to give feedback and to see what others are thinking.
  - Rachel agrees that summary tables provide a look into students thinking. But then says - How do we document that as sensemaking (grades come up again)

Weaknesses

What resources/tools are we lacking?

- FA that is framed around the practices in the classroom - not tasks - and how teachers and students frame the experiences and what the experience uncovers
- FA needs to be a process not a singular event and in that process students should see FA as consistent with good instruction
- Instructional routines that go with the "task"

What improvements are needed?

- We need to assess assessments for interest and identity/community connections/contexts How well are we achieving this? How is achieving or not achieving this an equity focus
- Additional high-quality assessments that have students show their ideas through collaboration and sensemaking that promote equitable experiences. This is a challenge in the classroom and from developers. Paucity of examples.
- 3D FA
- Time - Arthur shares that making sense of student thinking and then responding to it only happens slowly - and so TIME is a big issue (along with the time that takes to implement NGSS curriculum)
  - Rachel suggests the importance of continuous feedback and the time to collaborate is not there. Through collaboration we develop better ideas for ways to implement/design FA. There is just not this time allocated to these parts of teaching (especially truy this year)
- Need for more localized phenomenon to use what is relevant for them. (this is coming up in our conversation many times)
- We need to get to "feedback" not judgement. If we were framing FA as feedback we would be focused on equity. By focusing on judgement we are inequitable

Opportunities

What are the most immediate needs? What questions do we have?

- What do we know and think about coherence in assessment? Arthur: Tied to curriculum materials and teacher and student expectations; if teachers need to give grades but know they shouldn't for FA then we have a coherence problem Jamie: coherence across the system, right assessment right purpose/where we can see Ss building their sensemaking Ellen - thinking about coherence is challenging
- We need conversations with FA and Instructional materials IN THE SAME ROOM! The more we think about assessment separate from curriculum design the weaker our work will be and the FA process is also weakened. The "moments" of giving evidence of learning can be called out in HQIM to support teachers in effective use of FA
- We need to remember that the underlay of everything we are doing is an equitable and asset based vision of students and their learning

Room 5

Strengths

What resources do we have?

- Ambitious Science Teaching
- Interim assessments
- Explanation checklist to help students with model development
- OER - built in storylines
- Driving Question board

What is working well?

- Do now: a question from the previous day to assess retention or sharing initial ideas about a new phenomenon
- Talk routines/Productive talk
- Student questioning
- Gallery walk with comments from students
- Give students the opportunity to think individually before group talk
- Formative assessment routines
- Stem Teaching Tools

Weaknesses

What resources/tools are we lacking?

- Time is a resource that is lacking - for deep thinking around assessment (Planning, implementation, analysis)
- Provide experiences for teachers that makes formative assessment processes a must do - experience it for themselves so that they believe in it for their students and make it a priority

What improvements are needed?

- What to do with the formative assessment information
- Teachers need to be really clear in their own minds about what they are looking for.
- Need more FREE and sustained learning opportunities for teacher (pay the teachers to do it)

Opportunities

What are the most immediate needs?

- Use SEPs to shore up formative assessments and the interpretation using an asset-based lens
- Allow students to use their own language to express their thinking and honor their thinking as it is

Summary Slide

Strengths

What resources do we have?

- **Examples** to look at and learn from (e.g. OER resources)
- **Information** to learn from and apply generally in local contexts (e.g STEM Teaching Tools)
- Specific **routines** that create space to reveal student sense-making

What is working well?

- **Professional Learning Communities** that allow teachers to collaborate and learn together
- **Research Practice Partnerships**
- Using tools and resources across a variety of contexts (e.g. routines, use of phenomena)

Weaknesses

What resources/tools are we lacking?

- Resources that support **localization** in ways that are usable (e.g. guidance and support for quality feedback, communication tools for all system shareholders)
- Deep understanding of **assessment literacy** and the role of and importance of formative assessment
- Robust examples/resources that demonstrate appropriate interpretation, use, adaptation based on evidence, and articulated instructional next steps

What improvements are needed?

- **Coherence** across PK-16 systems
- Attention to **student-centered** assessment systems that attend to equity
- **Usability** of and accessibility to formative assessment resources

Opportunities

What are the most immediate needs?

- Working directly with instructional materials developers
  - This can be an avenue to adaptation processes
- Usability of formative assessment materials (e.g. one-pagers)
- Rethinking the role of formative assessment in the criteria for high quality instructional materials (built-in guidance for meaningful use of formative assessment)