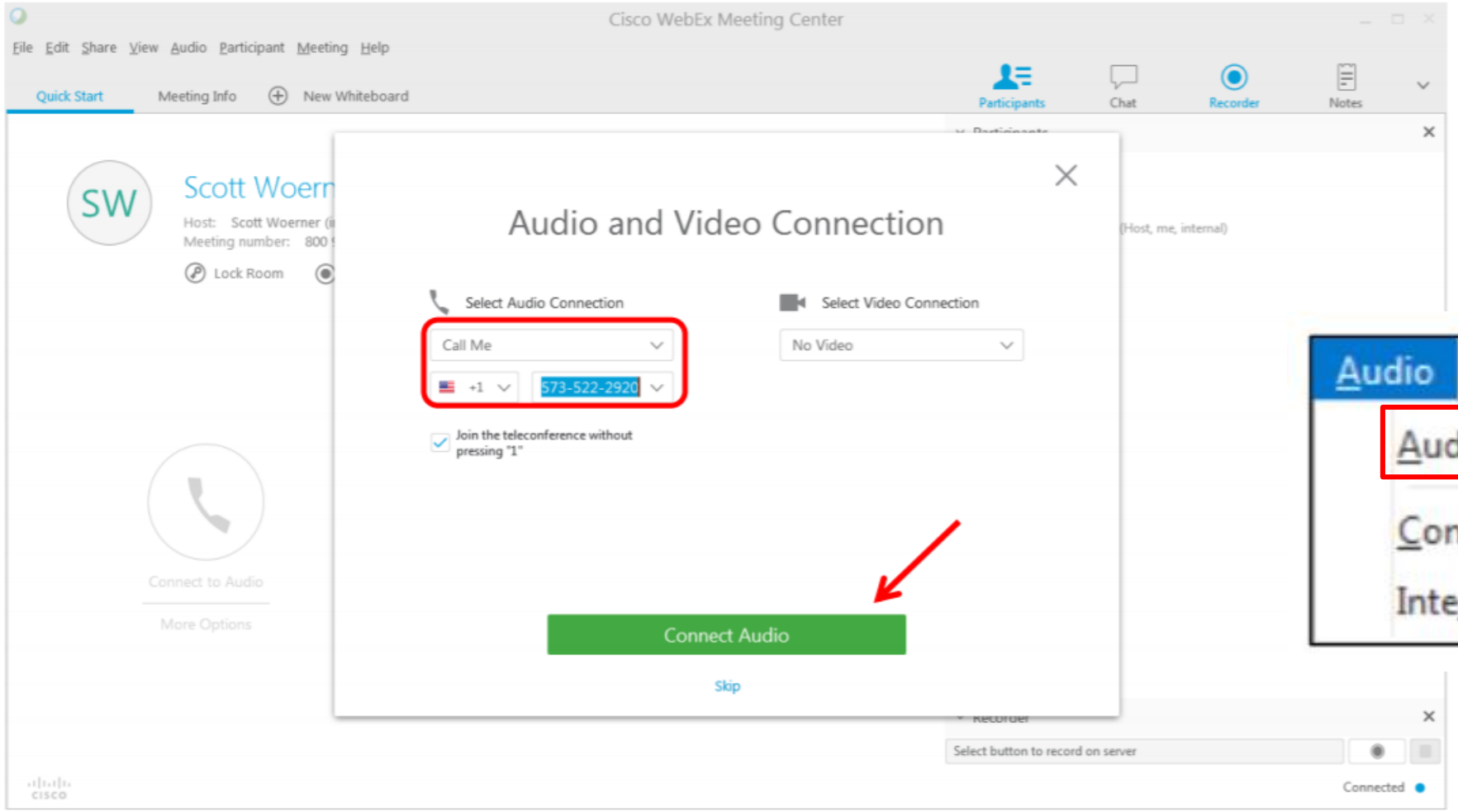
Teaching and Learning Led by Evidence Session 3: *Leading Instructional Decisions with Evidence*

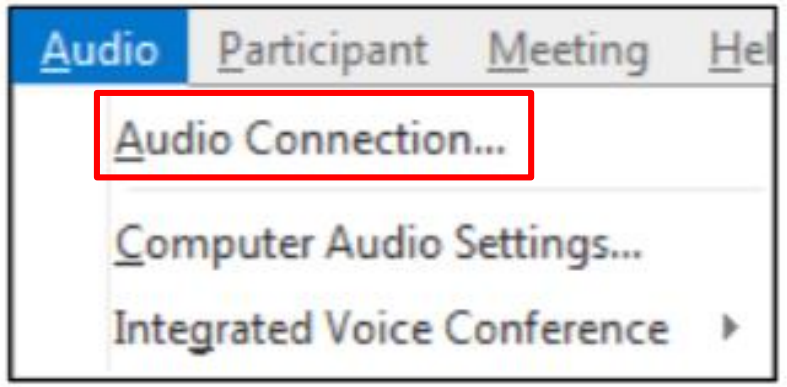
Kendra Olsen | Statewide Student Assessment and Data Analytics

Outreach and Training Specialist

September 24, 2020

Connect to Audio





Teaching and Learning Led by Evidence

Welcome!

- Introduce yourself in the chat:
  - Who are you? Where are you from?
  - What barriers do you have in using evidence to guide instruction?
- Download today's materials and slides in the Google Drive:
  - Google drive link

Learning Outcomes

By the end of today's session, you will be able to:

- ✓ Explain key elements of data-informed differentiated instruction
- ✓ Apply a question-driven framework to data use for making decisions about student learning and instruction
- ✓ Use or modify an ORID framework to facilitate staff discussions about data

Success Criteria:

Identify strategies you can use to strengthen the data use culture in your school

Agenda

- Using different types of assessment data to differentiate instruction (20 min.)
- Overview of framework for making decisions based on evidence (15 min.)
- Overview of ORID protocol for discussing summarized student data (5 min.)
- Break out group discussion (10 min.)
- Closing and Questions (10 min.)

Ten Minnesota Commitments to Equity

1. Prioritize equity.
2. Start from within.
3. Measure what matters.
4. Go local.
5. Follow the money.
6. Start early.
7. Monitor implementation of standards.
8. Value people.
9. Improve conditions for learning.
10. Give students options.

Data Literacy Definition

"Data-literate educators continuously, effectively, and ethically access, interpret, act on, and communicate multiple types of data from state, local, classroom, and other sources to improve outcomes for students."

-The Data Quality Campaign, 2014 Policy Brief, *Teacher Data Literacy: It's About Time*

School Culture

How would you define the term “school culture”?

Type response in chat

School Culture, cont'd

"The way things are done when nobody is looking"

-Jeffrey Wayman, 2012 REL-NEI Webinar, *The Data-Informed District, Research on Using Data to Inform Practice*

How does data intersect with school culture?

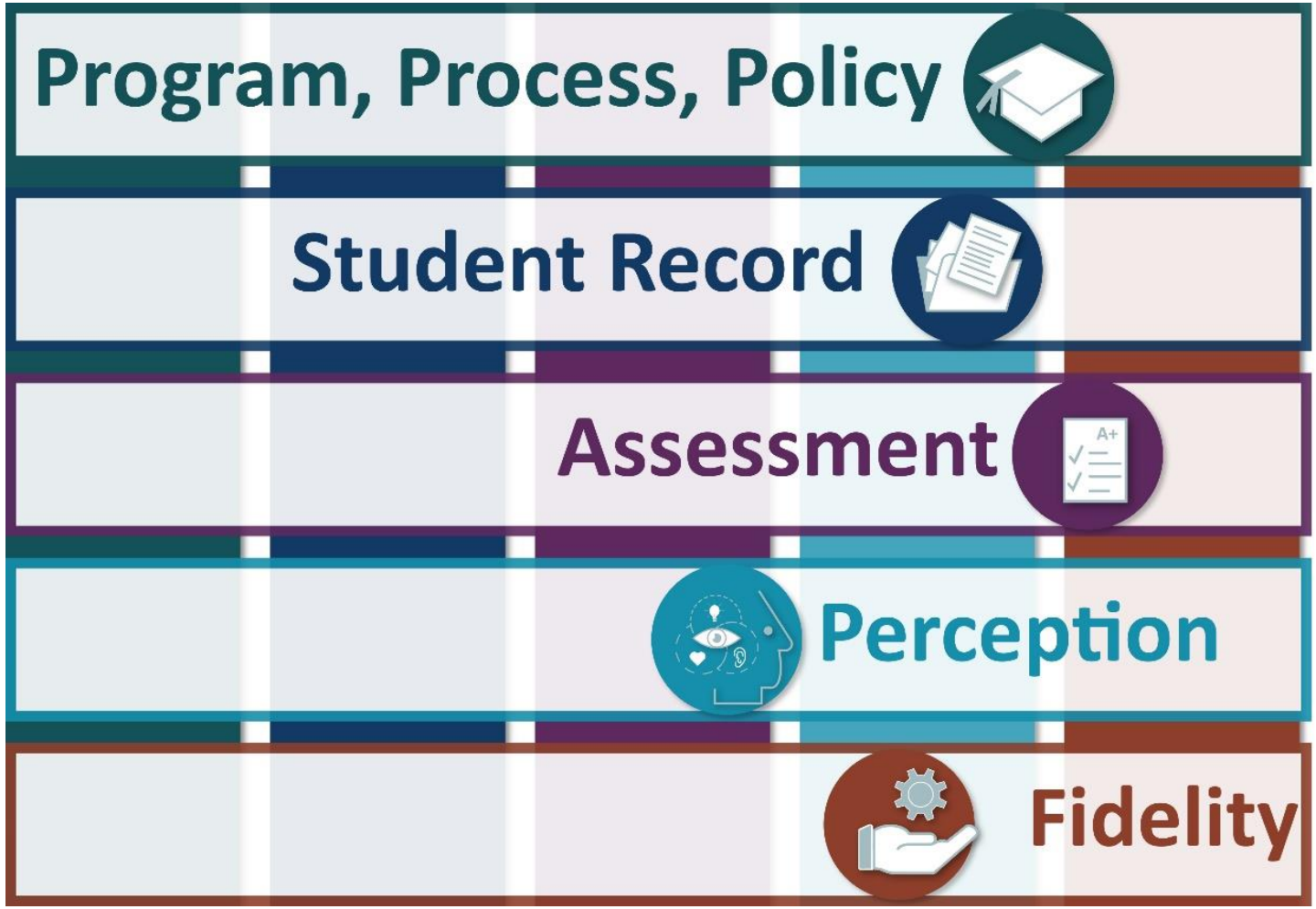
"Data-literate educators continuously, effectively, and ethically access, interpret, act on, and communicate multiple types of data from state, local, classroom, and other sources to improve outcomes for students."

-The Data Quality Campaign, 2014 Policy Brief, *Teacher Data Literacy: It's About Time*

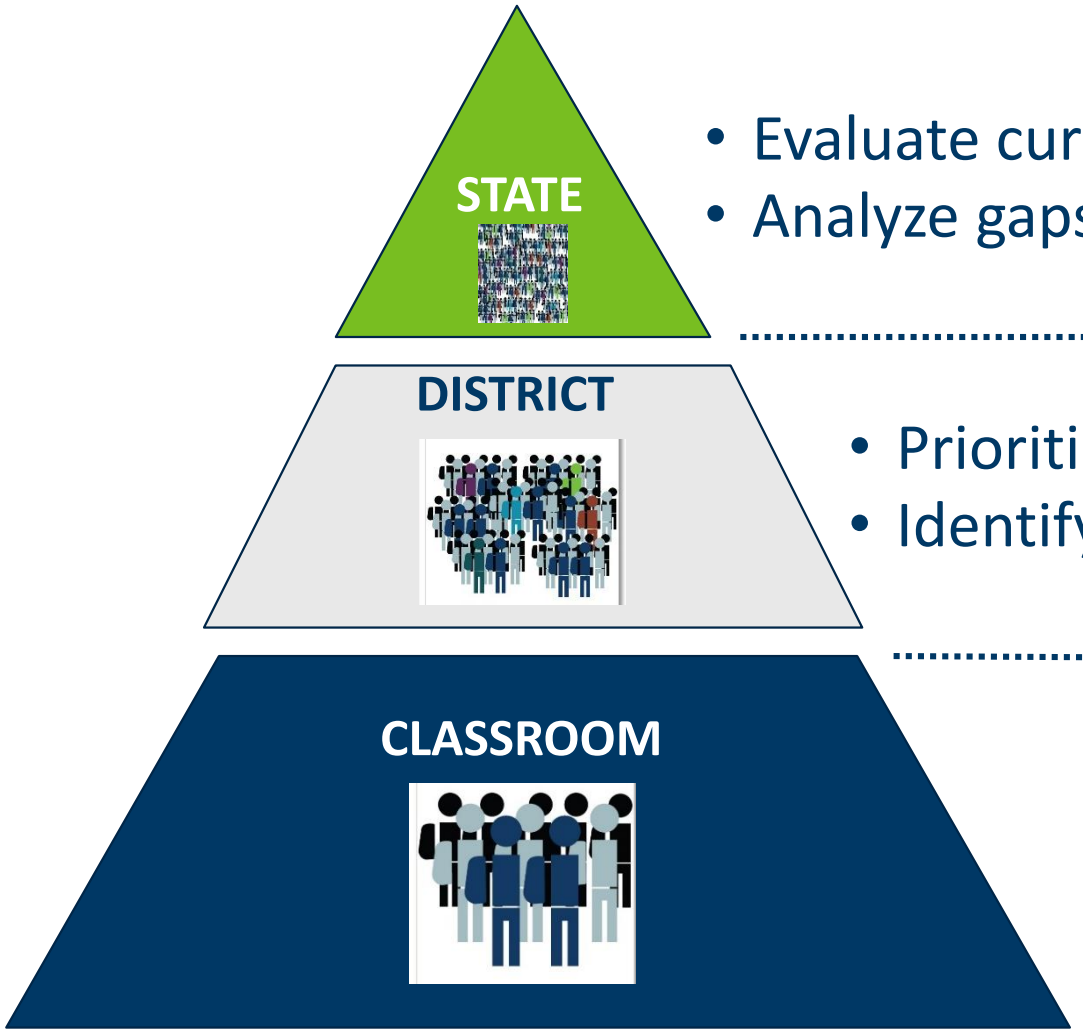
"The way things are done when nobody is looking"

-Jeffrey Wayman, 2012 REL-NEI Webinar, *The Data-Informed District, Research on Using Data to Inform Practice*

Types of Educational Data



Assessment Data Uses



- Evaluate curriculum alignment to state standards
- Analyze gaps in achievement across student groups

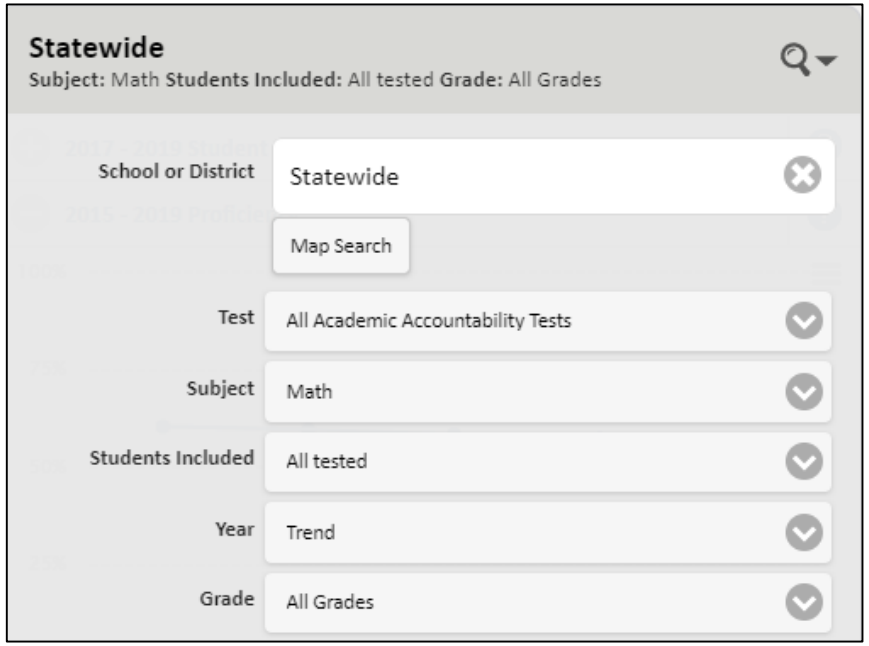
- Prioritize topics for professional learning time
- Identify students for support or interventions

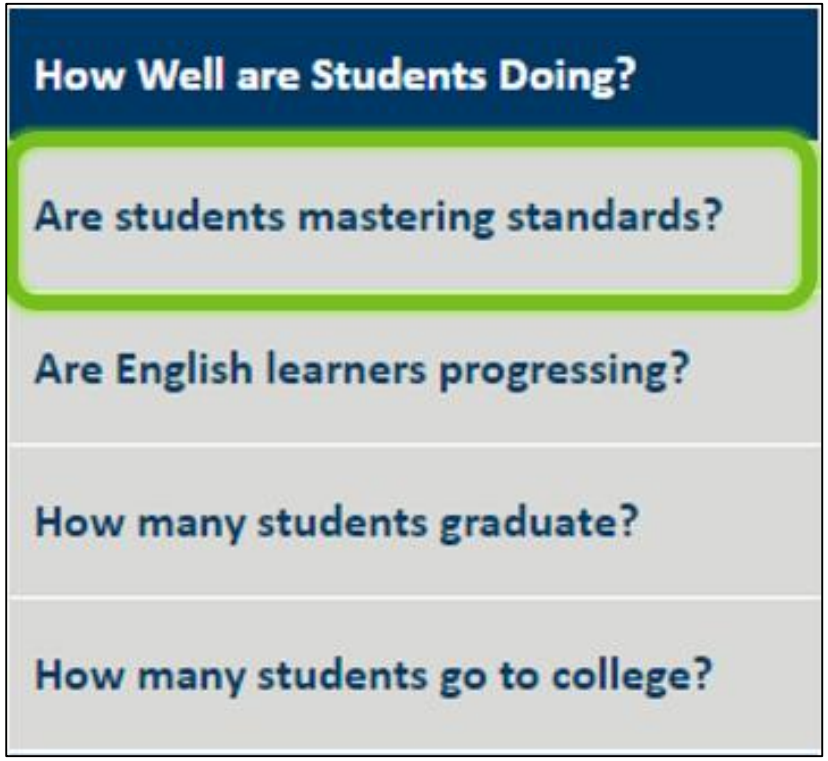
- Identify misconceptions and scaffold instruction for partial understandings
- Communicate feedback about learning to students and families

Question: To what extent are your students mastering state standards?

Where might you get evidence to explore this question?

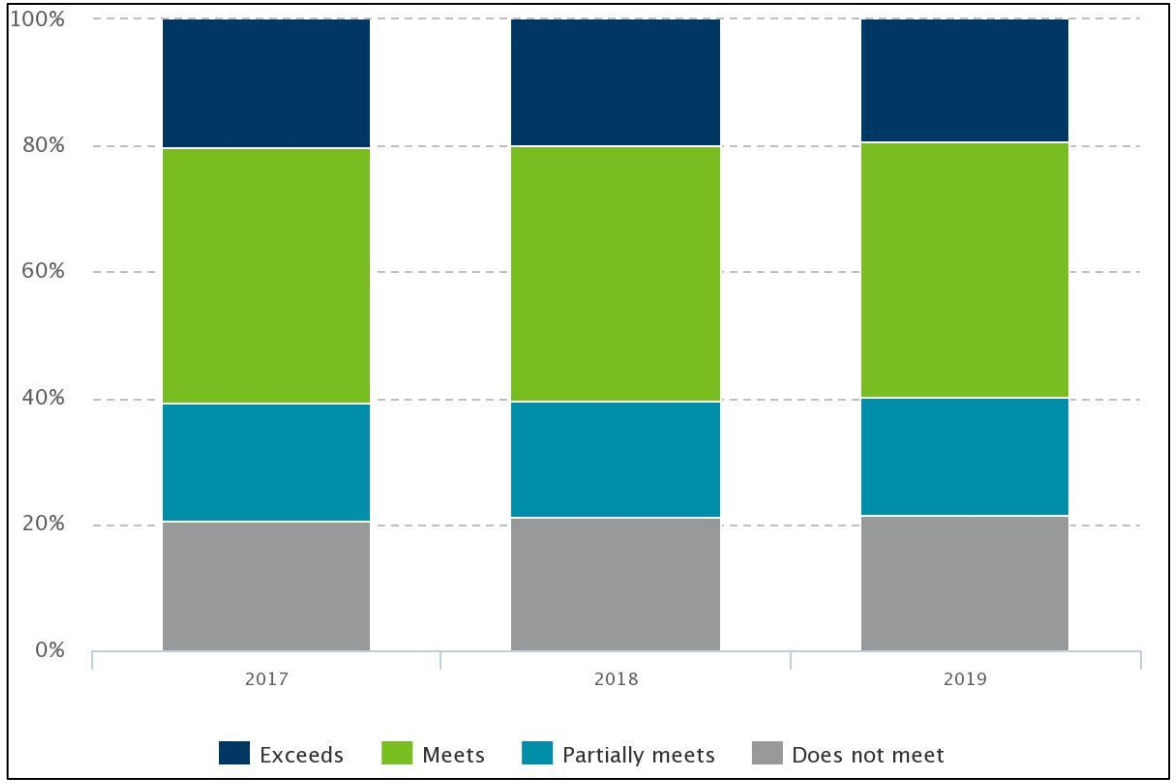
Standards-Based Assessment Data from MN Report Card





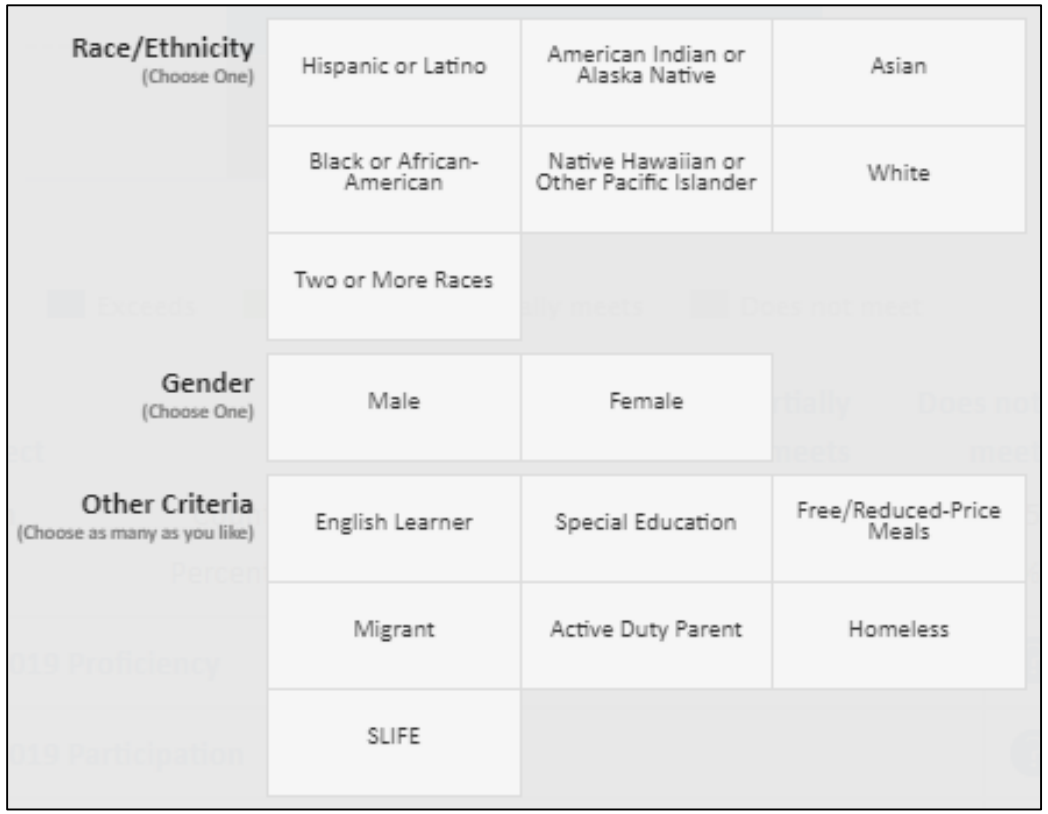
MDE website > Data Center > Minnesota Report Card > Are students mastering standards? > Test Achievement Levels, Test Results and Participation

Example: Student Achievement Level Statewide in Reading



Year		Exceeds	Meets	Partially meets	Does not meet
2017	Count	89,351	180,668	83,386	92,263
	Percent	20.0%	40.5%	18.7%	20.7%
2018	Count	89,013	181,202	82,066	95,203
	Percent	19.9%	40.5%	18.3%	21.3%
2019	Count	86,996	180,402	84,816	95,786
	Percent	19.4%	40.3%	18.9%	21.4%

Example: Filter Options for Student Groups



Questions to consider when analyzing state assessment data

What percentage of students are proficient in my content area? What percentage are not yet proficient? How does this compare across student groups?

What percentage of students are included in the summarized data?

Are the students that completed the assessment representative of the total student population of the school or district?

Were there specific local adjustments or approaches utilized that provide additional context (i.e., textbook change, purposeful emphasis on content strand)?

State Assessment Reporting Guidance


DEPARTMENT OF EDUCATION

2020 Statewide Assessment Reporting Guidance Due to COVID-19

June 11, 2020

District Resources

The following resources are designed to support districts in administering statewide assessments and interpreting the results.

+ District Assessment Coordinator Resources

− Test Score Interpretation Resources

2019-20 Interpretive Guide for Minnesota Assessment Reports - 8/17/20
The Interpretive Guide provides information to help educators understand the results from the Minnesota Assessments, including how to read the reports and interpret the data.

2019-20 MCA Individual Student Report (ISR) Quick Guide - 8/13/20
This two-page quick guide provides an overview of the content of the MCA ISR.

2019-20 MTAS Individual Student Report (ISR) Quick Guide - 8/13/20
This two-page quick guide provides an overview of the content of the MTAS ISR.

2020 Statewide Assessment Reporting Guidance Due to COVID-19 - 6/11/20
Answers district questions about using the 2020 results appropriately, with an emphasis on student data privacy

Growth Reporting Changes - 12/20/19
Provides information for reporting changes related to growth from 2019-20 to 2023.

MDE website > Districts, Schools and Educators > Statewide Testing> District Resources

Question, cont'd: To what extent are your students mastering state standards?

Where else might you get evidence to explore this question?

What can Teachers do with classroom assessment data?

Formative:

- Occurs throughout and after daily instruction
- Quick checks for understanding (warm-ups, fist to five, exit tickets, etc)
- Provides actionable data for teachers to monitor understanding and adjust instruction
- Provides specific, descriptive, actionable feedback to students and families

Summative:

- Grading and reporting

Example Uses: Formative or Summative Assessment Data?

A. Teachers analyze student math tests to evaluate the quality of their math curriculum.

B. A school tests students every 12 weeks to predict which students are “on track” to score proficient on the end-of-year state test.

C. Exit ticket question after a lesson: “What is the difference between mass and weight?”

D. Teacher instructs students to use white boards to “Sketch the graph of y=2x + 5.”

Example Scenarios Using Assessment Data

A. Teachers analyze student math tests to evaluate the quality of their math curriculum. **Summative evidence**

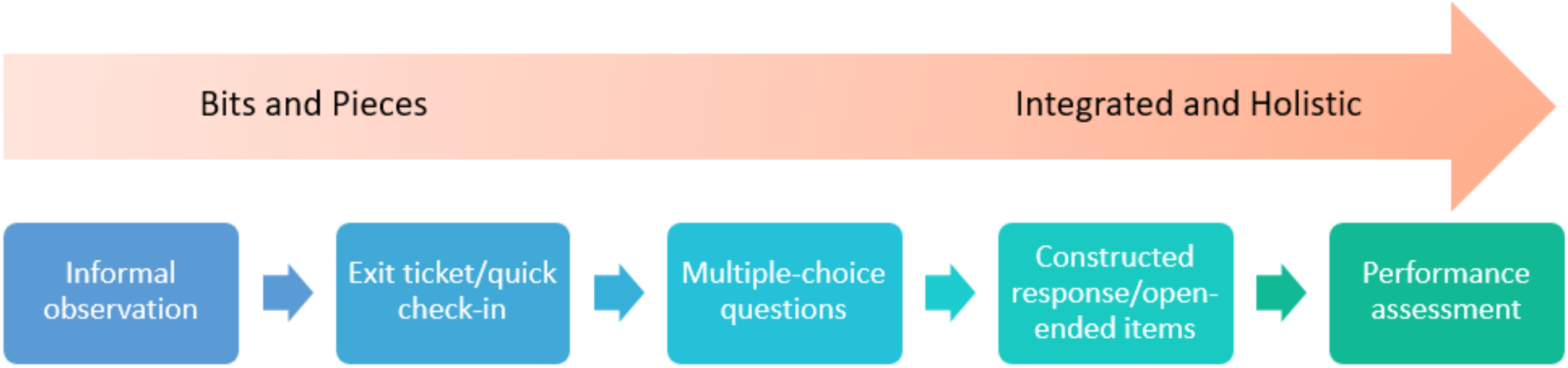
B. A school tests students every 12 weeks to predict which students are "on track" to score proficient on the end-of-year state test. **Summative evidence**

C. Exit ticket question after a lesson: "What is the difference between mass and weight?" **Formative evidence**

D. Teacher instructs students to use white boards to "Sketch the graph of y=2x + 5." **Formative evidence**

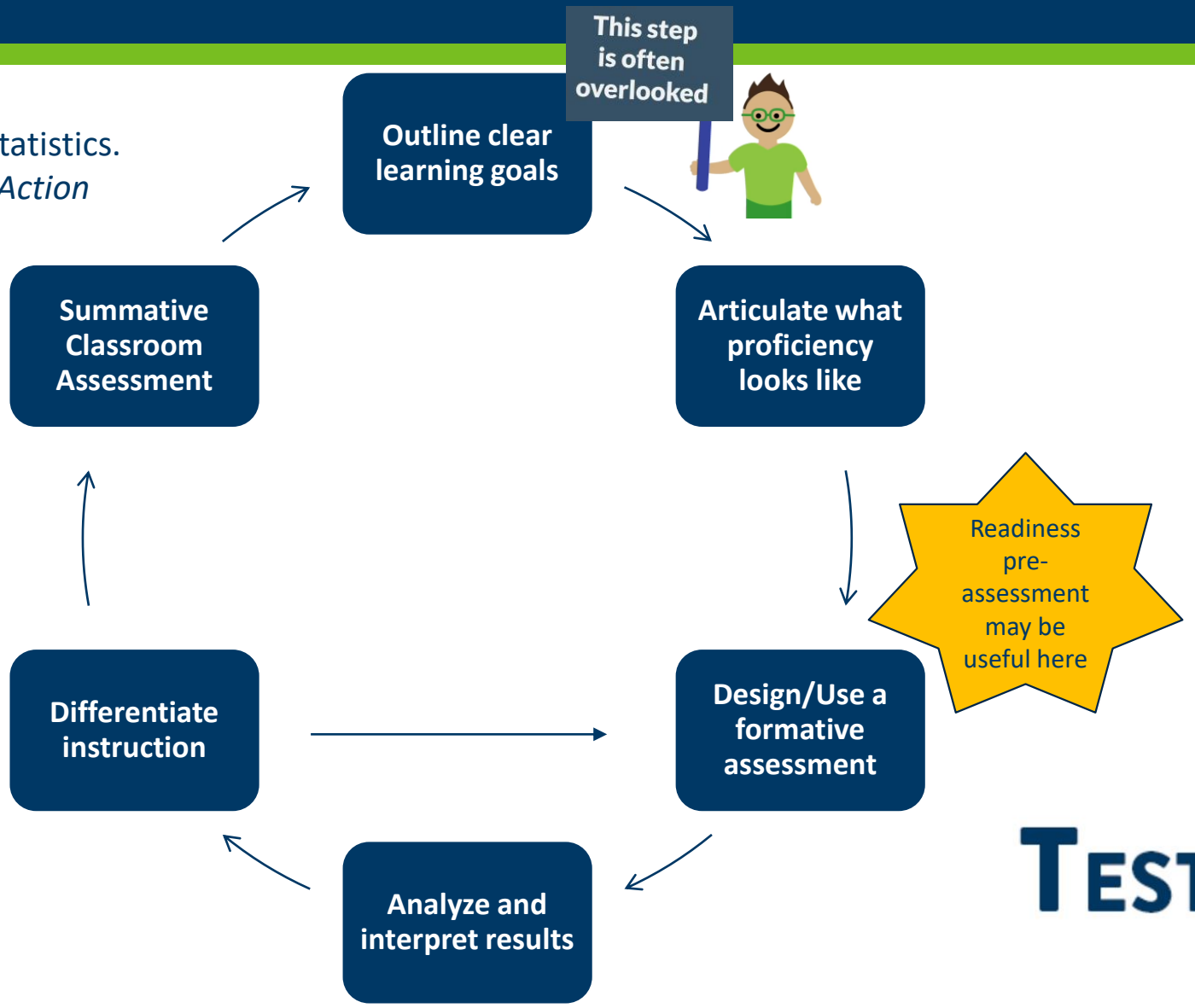
Assessment Continuum

- Assessments can fall along a continuum
- Some measure bits and pieces of student knowledge, and some seek to capture student understanding in more integrated and holistic ways.



Classroom Assessment Cycle

National Forum on Education Statistics. (2012). *Forum Guide to Taking Action with Education Data*



TESTING 123

Scenario 1: Using assessment data: in-person learning

A 6th grade ELA Teacher team typically spends one afternoon per week in PLC time evaluating how well their 125 students are mastering skills from class that week.

- **Goal:** Decide which students will join a small group for re teaching at the end of the week, or who will be assigned extension work (students already showing mastery).
- **How:** Create groupings for the following week's group work time based on formative assessment. Each group will continue learning with varying levels of scaffolding.
- **Why:** Using data to make these decisions about groupings and differentiation can ensure each student is receiving appropriate supports for success and can help the teacher scaffold instruction more efficiently.

Scenario 2: Using assessment data: remote learning

A teacher wants to evaluate how well their 125 students are mastering skills from class that week in virtual instruction.

- **Goal:** Identify which students aren't quite understanding the topic and which are able to provide strong answers to inform flexible grouping decisions.
- **How**: Assign checks for understanding during lessons on the virtual platform so results can be seen instantly. Create small groups of students based on who shared misunderstandings. Invite students who need extra challenge or more support to designated office hours time that same day.

"One of the benefits of virtual learning is letting us collect data in order to address each student's needs almost instantly and differentiate instruction efficiently."

Using Student Work to Adjust Instruction

Quick sort student work without scoring into high, average, and low proficiency groups.

Discuss with colleagues and write rationale for placing student work in each pile.

Diagnose strengths and weaknesses for each level as a group.

Identify next instructional steps for whole class and/or for creating flexible groups.

Download Handout: *Student Work Analysis Protocol for Instructional Purposes*

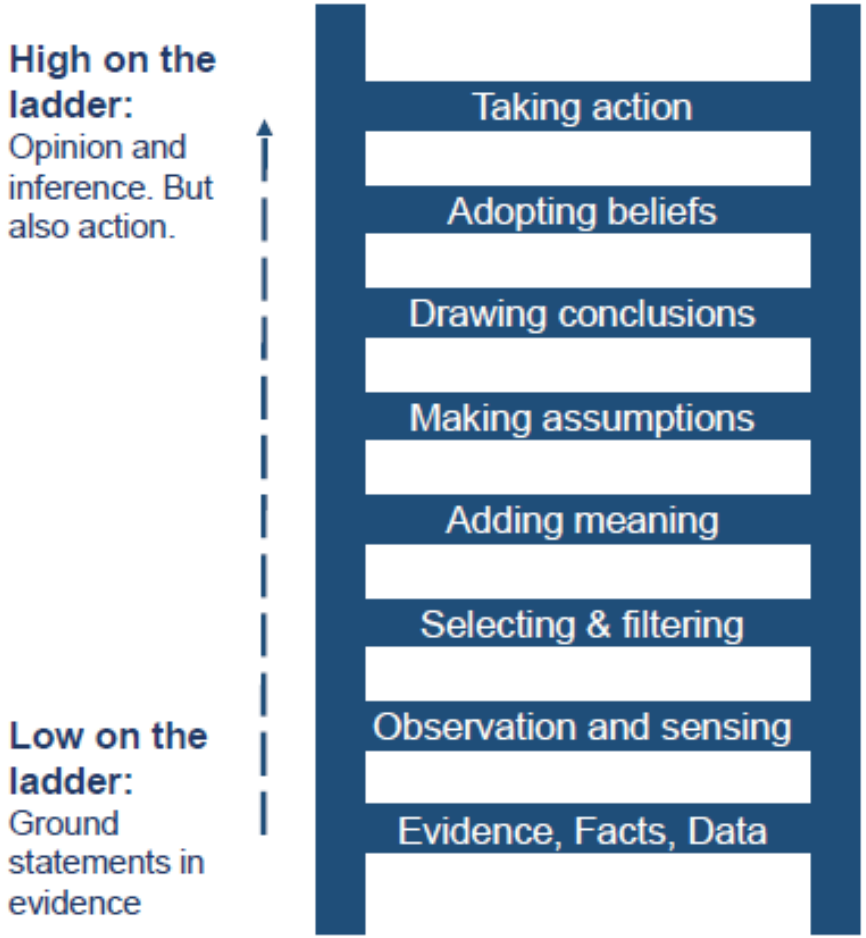
Center for Assessment

Question: How do you discuss student learning data with other staff?

What procedures or protocols do you use in staff meetings to discuss evidence of student learning?

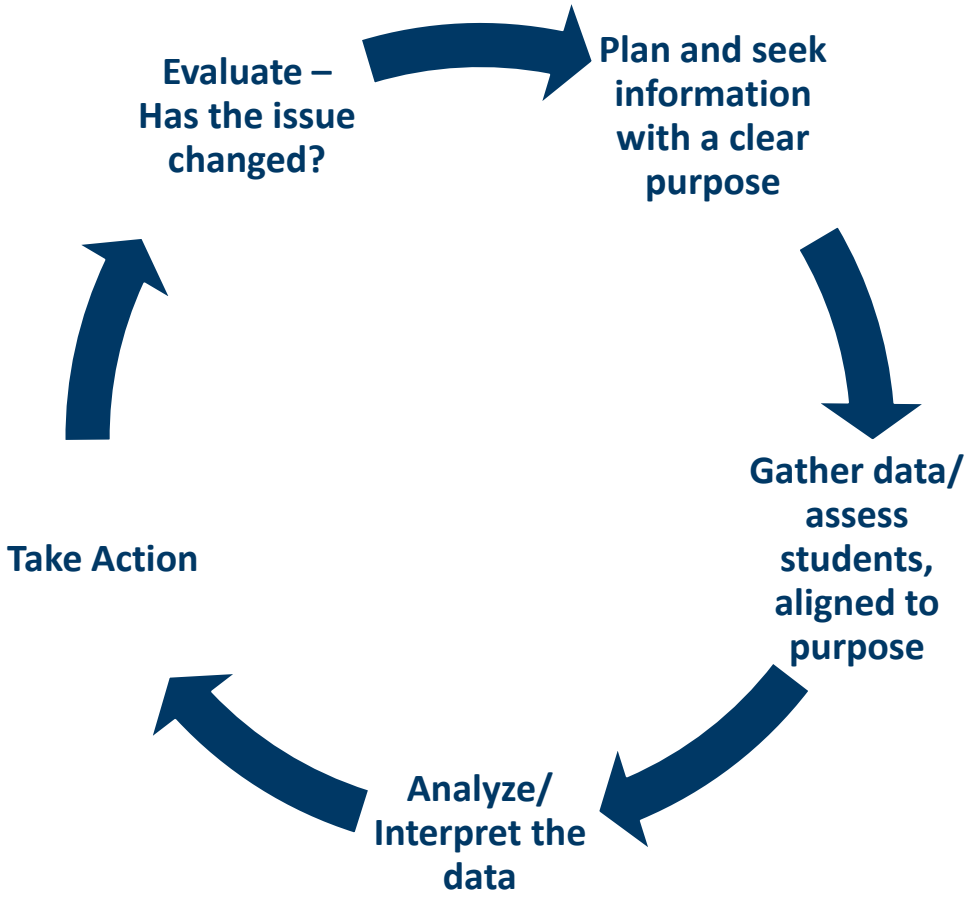
Ladder of Inference

- Conversations among staff in schools are often “high inference/low evidence”
- How do we improve conversations in meetings and PLC work to be “high evidence/low inference”?



Senge, P., Cambron-McCabe, N., Lucas, T. Smith, B. Dutton, J., and KleinerA. (2012). *Schools that Learn: A Fifth Discipline Handbook for Educators, parents, and Everyone Who Cares About Education*. Doubleday.

Data Use Cycle

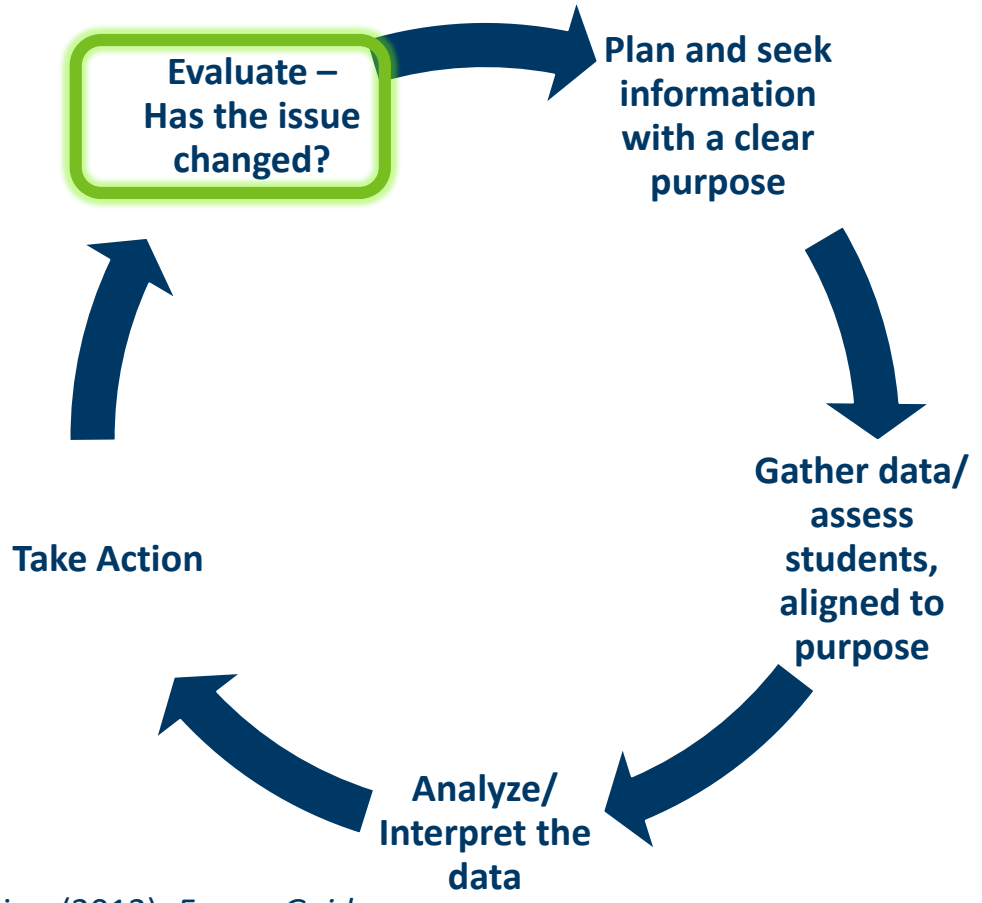


TESTING 123

National Forum on Education Statistics. (2012). *Forum Guide to Taking Action with Education Data*

A Question-Driven Approach to Assessment Data Use

- What do I want to know?
- What data might be relevant?
- How will I access the relevant data?
- What skills and tools do I need to analyze the data?
- What does the data tell me?
- What are my conclusions?
- What will I do next?
- What effects did my actions have?
- What are the next steps?



National Forum on Education Statistics. (2012). *Forum Guide to Taking Action with Education Data*

Example Template in Google Drive

Data Use	Framework	Scenario	Comments
	Scenario	A teacher observes that a student's math performance is declining.	An example of an academic situation that is likely to occasionally arise in a classroom setting.
Step 1: Seek Info	**What do I want to know?**	Based on this scenario, I need to know… Is the declining math performance part of a broader pattern of declining performance or related to a specific issue?	Additional/secondary questions may also be relevant.
Step 2: Access/Gather Data	**What data might be relevant?**	Based on the information I need, possibilities include… ☒ observational and anecdotal data ☐ health information ☐ family information ☐ behavioral/discipline data ☒ homework and classwork records ☒ interim benchmarks ☒ past math test results ☒ classroom assessments (projects, quizzes) ☒ historical end-of-year math tests ☐ other assessment data ☐ student attendance records ☐ teacher assignment/attendance data	Although there may be a wealth of data that could be evaluated, the scenario may warrant only a small subset of data for analysis.
	How will I access the relevant data?	Based on the relevant data, I will… ☒ consult colleagues about observational and anecdotal data ☒ reflect on my recent experiences with the student ☒ consult the student's portfolio to review past work	You may already have access to these data sources; other needs may require gathering data you do not already have. The process for accessing these data may vary by organization.

Example Template in Google Drive (2)

Step 3: Analyze/Interpret Data	**What skills and tools do I need to analyze the data?**	Based on gaining access to these data, I will need to be able to... ☒ understand the context and how the data are presented ☒ organize the data in a way that applies to this situation ☒ relate, combine, and balance information from different sources ☒ assess the data quality and limitations	Don't be too quick to form an opinion based on one or even a few pieces of data. Use techniques such as triangulation to assimilate and evaluate the body of data in order to develop conclusions.
	What do the data tell me?	Based on this analysis, the data suggest... ☐ inconsistent or conflicting results ☐ an outlier ☐ an isolated event ☒ a trend	Is there a correlational relationship in the data? Is there a cause-effect relationship in the data?
	What are my conclusions?	Based on this interpretation, I conclude... The student missed a fundamental concept that was taught at the beginning of the year and is showing only partial understanding.	If it is not a problem that requires action, then it is the end of the inquiry. If it is a problem that requires action, then more information becomes necessary.

Example Template in Google Drive (3)

Step 4: Act on the Data	**What will I do?**	Based on this conclusion, actions I will take include... ☐ find more information (check other data sources) ☐ teach the material again (doing again rather than differently) ☒ spend extra time with the student ☒ send extra practice exercises home ☐ recommending changes to the curriculum ☒ communicate with: ☒ the student ☐ the student's parents ☒ instructional support staff ☐ curriculum advisors	What support is currently available to the student? Are there interventions I can propose to help the student?
Step 5: Evaluate	**What effects did my actions have?**	Based on these actions, I observed that... ☐ the student did not demonstrate improvement ☐ the student demonstrated partial improvement ☒ the student demonstrated that he or she now understands the concept at an appropriate skill level	At a later point in time, I can assess whether my action (based on data use) changed the situation.
	What are the next steps?	Based on my evaluation, I will... ☒ continue to monitor the situation ☒ observe whether the student continues to demonstrate adequate mastery of fractions ☒ determine whether additional intervention is needed ☒ observe whether other students are having this problem ☒ if other students are not having this problem, then the response (action) will likely focus on the individual student ☒ if other students are having this problem, then the response (action) may be an instructional or curriculum issue ☒ evaluate whether subsequent questions have arisen and, if necessary, use this question-driven approach to data use to advance the inquiry	If the situation is not completely resolved, the educator may wish to identify what specific issues still need to be addressed and return to the beginning of the data use cycle to seek new information that will inform future action.

ORID Framework

Objective
Reflective
Interpretive
Decisional

Level	Purpose	Focus Questions	Answers
Objective	• Examine the data • Identify and clarify facts, evidence, or issues	1. What do you see in the data? 2. What factual statements can you make based on the evidence? **Example:** _____percent of families reported student(s) didn't feel empowered, or _____ % of families reported little or no access to technology as a challenge.	
Level	**Purpose**	**Focus Questions**	**Answers**
Reflective	• Explore context and assumptions • Understand your team members insights and feelings about the data	3. What surprised you or encouraged you about the data?	

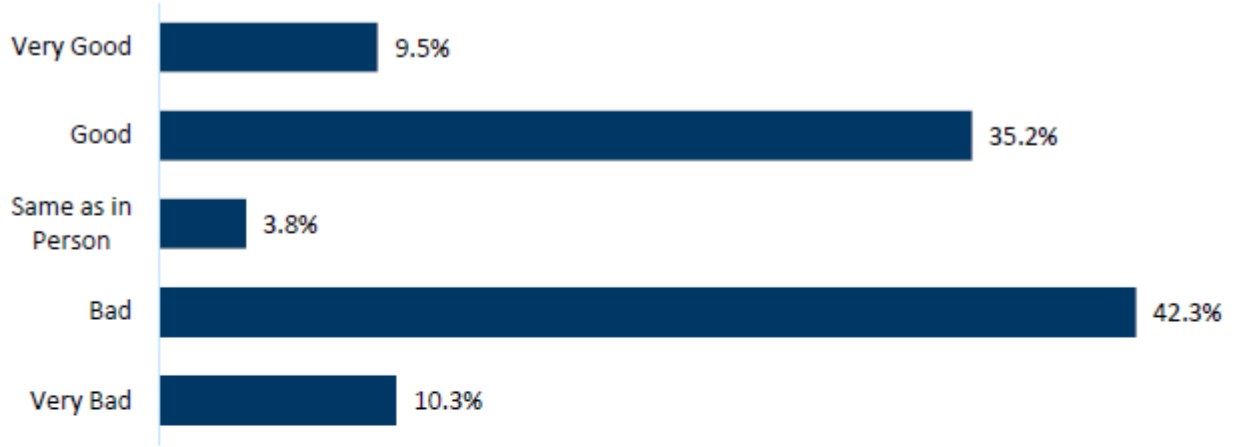
ORID Framework (2)

Objective
Reflective
Interpretive
Decisional

Level	Purpose	Focus Questions	Answers
Interpretive	• Make sense of the data and why • Identify patterns and determine their significance • Determine impact and future implications	**4.** Are there any emerging themes in the data? **5.** What is the data *not* telling you, and what else might you want to know?	
Level	**Purpose**	**Focus Questions**	**Answers**
Decisional	• Make decisions and plan actions	**6.** What additional information do you have access to use with this data? **7.** What does this conversation make you think about in terms of your own practice? How could you use this data as you think about next steps?	

Distance Learning Survey Responses – Statewide, 1

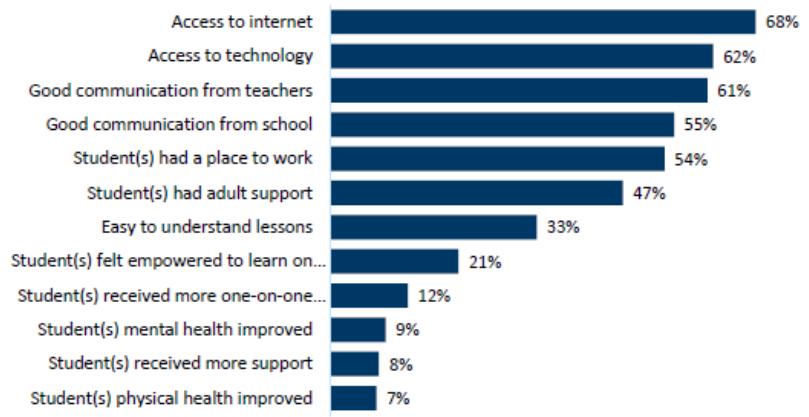
Question 1: How would you rate your distance learning experience?



Response	Percent
Very Good	9.5%
Good	35.2%
Same as in Person	3.8%
Bad	42.3%
Very Bad	10.3%

Distance Learning Survey Responses – Statewide, 2

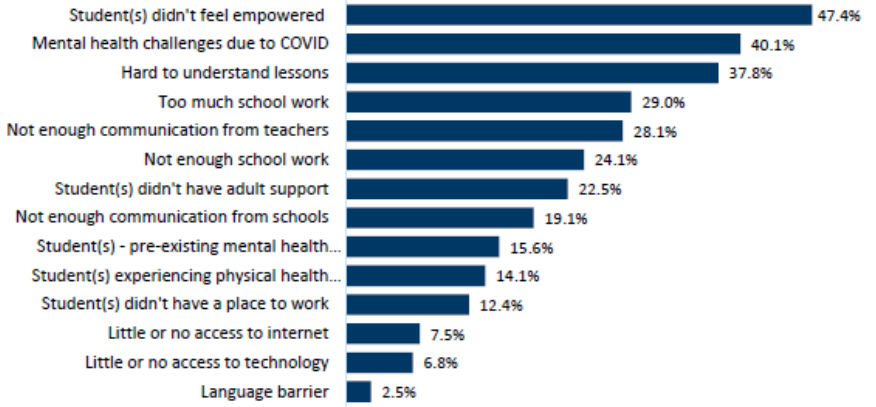
Question 2: What went well during the distance learning period? (Select all that apply.)



Response	Percent	Number of responses
Access to internet	68.4%	91,757
Access to technology	61.5%	82,522
Good communication from teachers	60.6%	81,304
Good communication from school	55.3%	74,118
Student(s) had a place to work	53.7%	72,061
Student(s) had adult support	47.0%	63,073
Easy to understand lessons	33.2%	44,499
Student(s) felt empowered to learn on their own	20.6%	27,611
Student(s) received more one-on-one attention	12.4%	16,651
Student(s) mental health improved	8.9%	11,877
Student(s) received more support	7.8%	10,433
Student(s) physical health improved	7.4%	9,862

Distance Learning Survey Responses – Statewide, 3

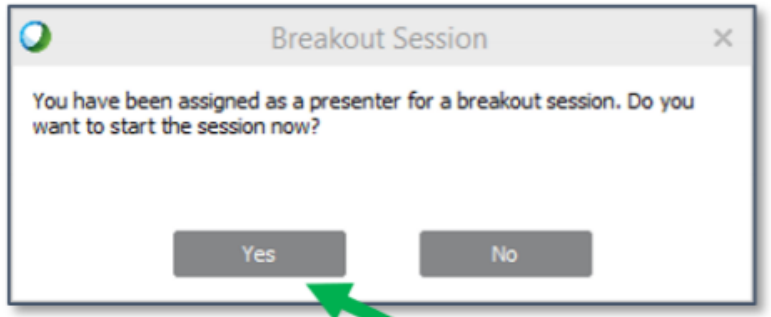
Question 3: What was challenging during the distance learning period? (Select all that apply.)



Response	Percent	Number of responses
Student(s) didn't feel empowered to work on their own	47.4%	63,499
Student(s) experiencing mental health challenges due to COVID	40.1%	53,702
Hard to understand lessons	37.8%	50,706
Too much school work	29.0%	38,824
Not enough communication from teachers	28.1%	37,690
Not enough school work	24.1%	32,373
Student(s) didn't have adult support	22.5%	30,168
Not enough communication from schools	19.1%	25,547
Student(s) experiencing pre-existing mental health challenges	15.6%	20,855
Student(s) experiencing physical health challenges	14.1%	18946
Student(s) didn't have a place to work	12.4%	16,692
Little or no access to internet	7.5%	10,016
Little or no access to technology	6.8%	9,105
Language barrier	2.5%	3,398

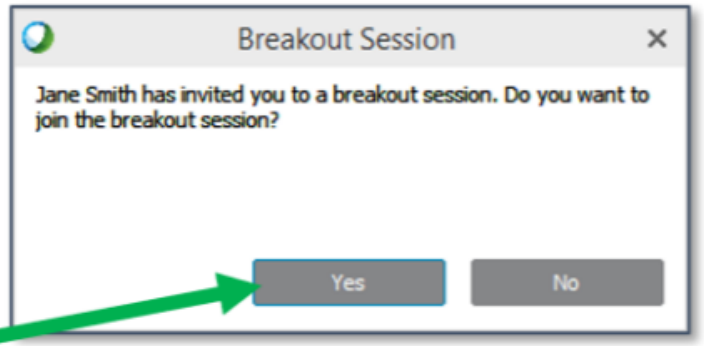
Joining Break out rooms

For Breakout Session presenters



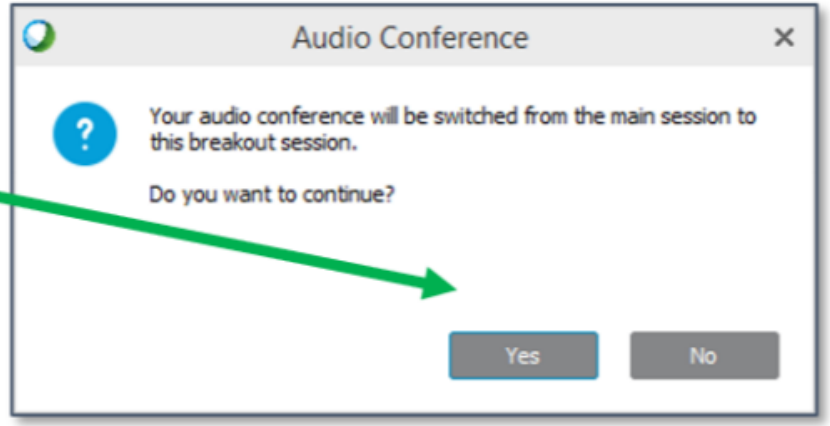
OR

For all other Breakout Session participants

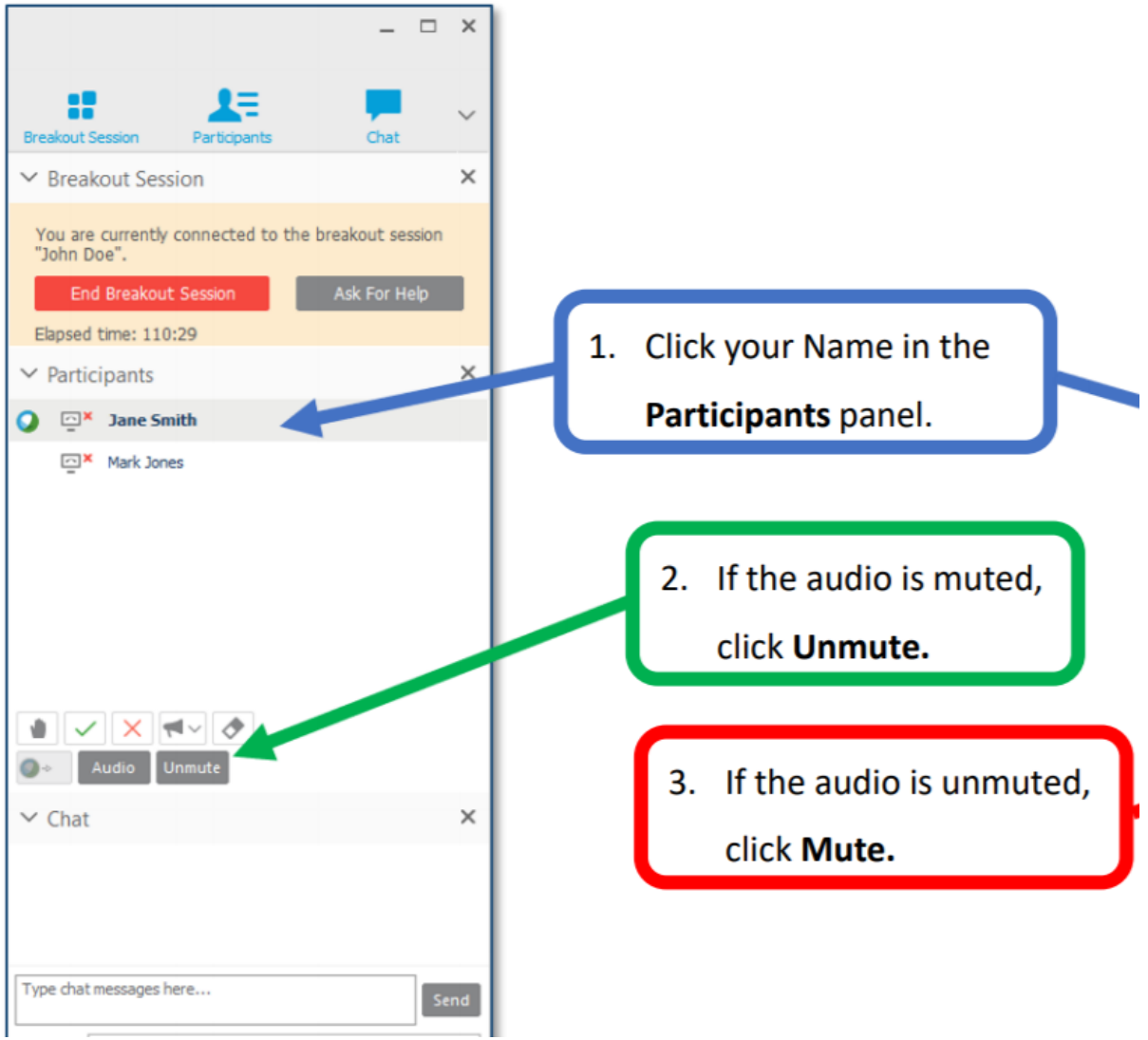


3. Click **Yes**.

4. The Audio Conference dialog box opens.
5. Click **Yes** to move audio into a breakout session.



Unmute yourself



1. Click your Name in the **Participants** panel.
2. If the audio is muted, click **Unmute.**
3. If the audio is unmuted, click **Mute.**

Break Out Groups (10 min.)

1. *Open Spring Distance Learning Survey Data ORID handout in Google Drive*
2. *Save a copy to your Google Drive if you want to type notes*
3. *Open and explore the Fall Planning Survey Results file in the same Google Folder.*
4. *Discuss the questions on the ORID handout with your group.*

Debrief the ORID Process

- What about the process helped you to see and learn interesting or surprising things?
- What could be improved about the ORID process?

Objective

Reflective

Interpretive

Decisional

Evidence Centered Design

Unit Learning Targets	Evidence	Assessment Design
What do we want to claim about what students know and can do?	What evidence would allow you to make that claim?	What projects, tasks, performances, or questions will elicit that evidence?

Upcoming Sessions

4. **Assessment *for* Learning – How do we know what our students really know?**
   - Integrate simple, frequent checks for understanding into existing instructional plans.
   - Improve the rigor of formative assessments to differentiate instruction.

     Thursday, October 22, 4:00 p.m.

5. **Assessment *of* Learning - Improving teacher-designed summative assessments**
   - Improve alignment of classroom summative assessment and questions to standards.
   - Increase the rigor of questions on assessments to eliminate student misconceptions.
   - Use ALDs to ensure assessments measure the extent students have mastered the standards in for instructional unit, and ensure depth of mastery.

     Thursday, November 12, 4:00 p.m.

Teacher Newsletter

- If you would like to receive updates about information relevant to educators, please use the following QR code to enter your information.
- You can also sign up on the Testing 1, 2, 3 site (testing123 > Get Involved > Testing 123 Newsletter).

Resources

- Testing 1, 2, 3 - MDE site for teachers about using assessment and data
- Assessment in Early Childhood – MDE Page
- Minnesota Report Card
- MDE Covid-19 Updates and Resources
- Classroom Assessment Learning Modules - Evans, C. M. & Thompson, J. (2020)
- How Temporary Virtual Classrooms can Help Teachers Learn How to Use Data Better – Data Quality Campaign (2020)
- Differentiated Instruction: Maximizing Learning for All Students – Training modules for teachers by Vanderbilt University
- Student Work Analysis Protocol for Instructional Purposes- National Center for Assessment (2020)
- Forum Guide to Taking Action with Education Data - National Forum on Education Statistics. (2012)

Closing

- Write one takeaway from this session that will help you to strengthen the culture of data use at your school.
- Which strategy would you like to use?
- Drop it in the chat!
- Please take our feedback survey – we want to hear from you!

Thank you!

Kendra Olsen
Kendra.Olsen@state.mn.us
651-582-8542