



BetterLesson Professional Learning Webinar

Developing Multiple and Varied
Checks for Conceptual
Understanding



Ohio Educational Service Center

Date: June 28th, 2024

Lisa Fik

Ways to Engage with Us Today



Chat Box

**Share your thoughts!
Make sure the chat box says Send to 'Everyone'.**



Q & A

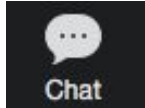
Use the Q&A button to add your questions.



Handout

**Click on the links shared in the chat.
Slides will be shared with the recording.**

Welcome!



Welcome!

Share in the chat:

- Where are you joining us from today?
- What is your current role?

Your Hosts



Annika Moore

Math Consultant
DEW



Lisa Fik

BetterLesson
Instructional Coach and
Designer

Aligned & Tailored for Ohio ESC Partnership



Aligned

Our partnership is specifically designed to amplify the impact of other state-wide infrastructure and initiatives.

Our coaches will be familiar with key efforts, including:

- Materials Matter
- HQIM-related work streams with EdReports & Instruction Partners
- Ohio Standards for Math Practice



Tailored

Our team has worked with leadership from the ESC of Central Ohio, OESCA, and the Department of Education to tailor our workshop, coaching, and learning walk content to the unique needs of ESC Math Specialists

Our Series: Elements of Student-Centered Math Instruction



Goal

Examine the importance of providing grade-level, high-quality instruction while being responsive to students' diverse backgrounds and experiences

DEFINE

The purpose of different types of assessments.

EXPLORE

Strategies and tools to check for understanding.

BUILD

A strategy into your practice.

TRY, MEASURE, LEARN

Our Webinar Series: Differentiation in a Student-Centered Math Classroom

- 1 Creating Positive Learning Experiences in Math
- 2 Developing Mathematical Fluency
- 3 Using Visual Representation to Support Math Reasoning
- 4 Developing Multiple and Varied Checks for Conceptual Understanding

Qualities of a Powerful Math Classroom



The Content

Students have opportunities to experience coherent and meaningful disciplinary ideas.



Cognitive Demand

Students engage in productive struggle, grappling with challenging problems.



Equitable Access to Content

Classroom structures invite and support active engagement of all students.



Agency, Authority, Identity

Students provided opportunities to contribute to discussions and build on others' ideas.



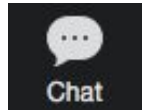
Formative Assessment

Instruction “meets students where they are” and gives them opportunities to deepen understanding.

Define

Types of Assessments

Check-in



**Think of an assessment
used at your district, school,
or classroom.**

**What is the purpose of this
assessment?**



Student-Centered Assessment and Feedback

A student-centered approach to assessment and feedback is ensuring that students have **multiple ways to show us what they know**, and that we **use those 'streams' to help us make decisions about student needs**.



Student Centered Assessment and Feedback

Summative
Assessment
Of Learning

Assessment
As Learning

Assessment
For Learning **Formative Assessment**

Teacher -
Centered

Student
Centered



Why are representations so important?



Student-Centered Assessment and Feedback is not one single strategy; instead, it is a set of principles and strategies focused on reflection, a variety of assessment tools and strategies, timely and actionable feedback, and student ownership over their growth and learning.

- Krystal Bankston - BetterLesson Instructional Coach

Define

Authentic Assessment

Multiple and Varied Ways to Assess

Where do our assessment strategies fall on this continuum?

Assessments mainly provide scores

Assessments give rich and varied evidence of learning

- ★ At the root of a student-centered approach is the idea that students can show us what they know in more than one way.
- ★ Checks for understanding are the narrowest form of formative assessment that provides a great lens to think about student-centered practices.

Let's Compare Characteristics of Authentic & Typical Assessments

Authentic Assessments

- Require justification
- Connected to real-world
- Include complex tasks
- Iterative
- Used as skills diagnostic

Typical Assessments

- Require correctness
- Disconnected from authentic application
- Exclusively easily scored items
- "One-shot"
- Provide a score

UDL Principles



Multiple means of
Representation

The **WHAT**
of learning



Multiple means of
Engagement

The **WHY** of
learning



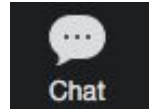
Multiple means of
**Action &
Expression**

The **HOW** of
learning

Reflect

Take a moment to reflect, then share your thoughts:

Identify examples of authentic assessment in your current practice.



Explore

Checks for Understanding

Checking for Understanding

Self-Assessment

When learners assess their own performance

Visible Thinking

When learners speak, write, or draw their ideas to deepen their cognition

Discourse

When learners engage in discussions and conversations with their peers and teachers

Mini-Assessments

When learners are quickly assessed after learning chunks within a lesson to ensure understanding and increase engagement

Creating a Sustainable and Replicable Way to Check for Understanding

Role of Technology

Tools

(tools for capturing CFU data)



Calendar

Routines

(expectations for learning)



Student Driven

Strategies

(ways to assess)



Connecting to Learning

Systems

(Structure for learning)



I Can Statements



Big Idea: A student centered approach to CFUs includes that students can use learning standards to better understand the target and track their progress as they move to bigger ideas that connect to their learning.

Standard: 3.NF.2

Understand a fraction as a number on the number line; represent fractions on a number line diagram.

Student-facing learning target:

I can place a fraction at the correct location on a number line.

I Can Statements... HS Geometry



Big Idea: A student-centered approach to CFUs includes that students can use learning standards to better understand the target and track their progress as they move to bigger ideas that connect to their learning.

Standard: G.SRT.2

Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.

Student-facing learning target:

I can, given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar.

I Can Statements & Formative Assessment

Strategies for checking student understanding and progress toward learning targets during the course of a lesson:

- Hand signals (e.g., fist to five, thumbs up, down, or sideways, high, middle, or low)
- Written checks (e.g., whiteboards, exit tickets, student practice, reflection journals)
- Verbal checks (e.g., cold-call questions, lotteries, whip-arounds)
- Progress charts (e.g., students posting sticky notes with initials)
- Peer check-ins (e.g., pair shares, peer critiques)
- Quick quizzes, written or verbal

How are you using I Can Statements in your classroom to check for understanding?

Pulse Check

Use this self-assessment tool for students to reflect on their understanding and consider class objectives



I know what varied checks for understanding are and I know some key ideas in student-centered approaches to letting kids show us what they know.

Experience a CFU



- 1 Click on the **Desmos link** in the chat to view the CFU's for Check-in, Reflection, and Self-Assessment
- 2 Click on the **Mentimeter** and check your understanding of this webinar!

Synthesis

CFUs can be more student-centered when they...

- Are aligned with clear **student-friendly learning targets**
- Are **accessible** to any student
- Can be used as **part of learning**
- Are **varied** in format and output
- Can give students **feedback** by making understanding **visible**

Build

How can we make this work actionable?

Time to Plan



5 minutes

- Use the Strategy Planning Guide to work out specific steps for using one of the strategies we explored or from the Choice Board.

Let's Explore: Strategy Choice Board

Choose any of the sections below and explore the related BL resources & strategies.

**Self-
Assessment**

[Show and Explain Math Rubric](#)

Visible Thinking

[See-Think-Wonder](#)

Discourse

[Assessing with the 5 Practices](#)

**Mini-
Assessments**

[Agree, Disagree, Prove It](#)

Multiple and Varied CFU's...

- How has your understanding of assessment shifted?
- What is one thing you want to keep in mind when planning multiple and varied checks for understanding?

Share out!
What are you
planning?



Chat

Q & A



What questions do you have about our conversation today?



“My students don’t believe in themselves and struggle with feeling people care about them.”

“I want to walk away from every training with something new I can use. I am disappointed if I don’t.”

“Math can be hard.”

 **“Ohio has a wonderful community of math educators.”** 

“I try to make math a class they look forward to.”

“My students are coming to me without knowing their multiplication facts and that has been a major challenge for me to move forward with other skills.”

“I am here and following along, but I don’t usually feel comfortable sharing my thoughts.”

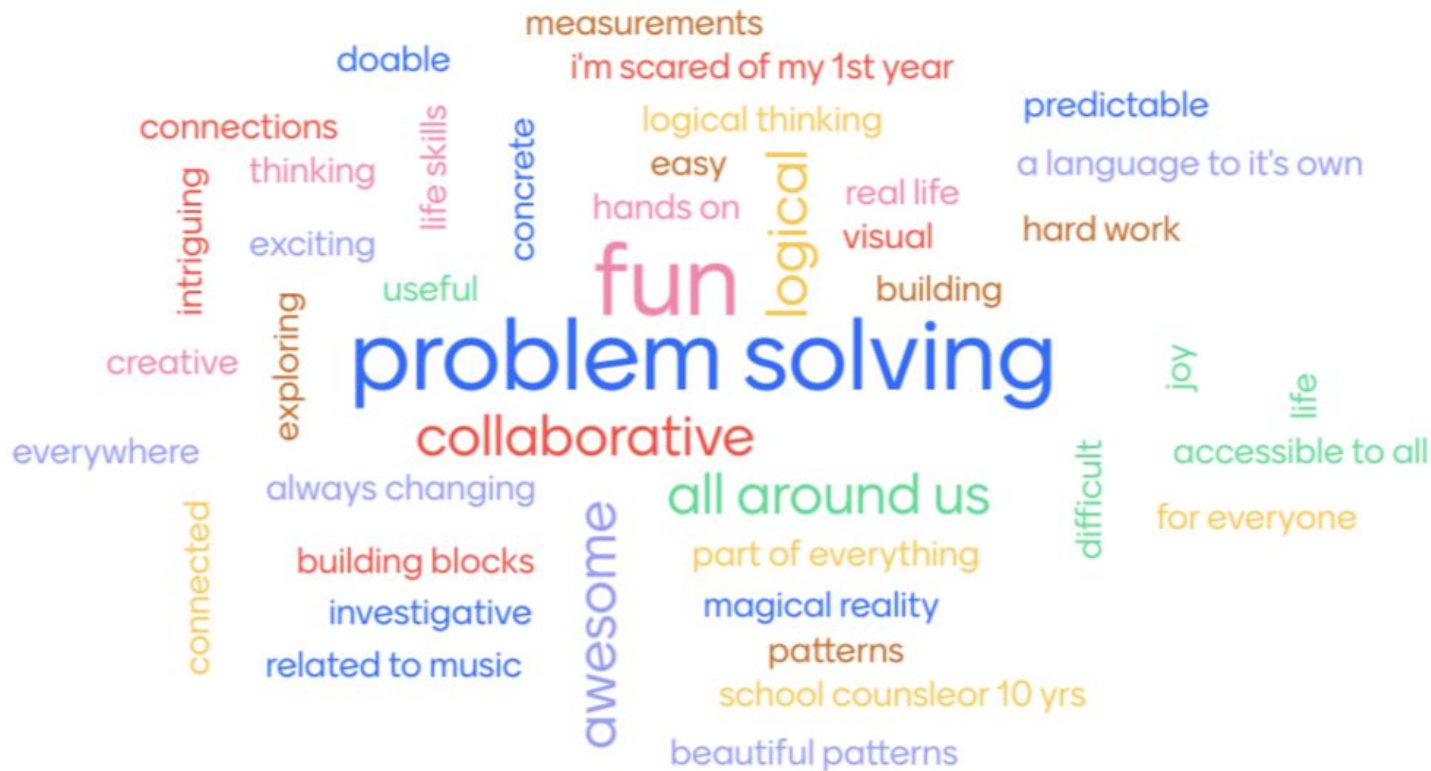


We value your feedback!

“

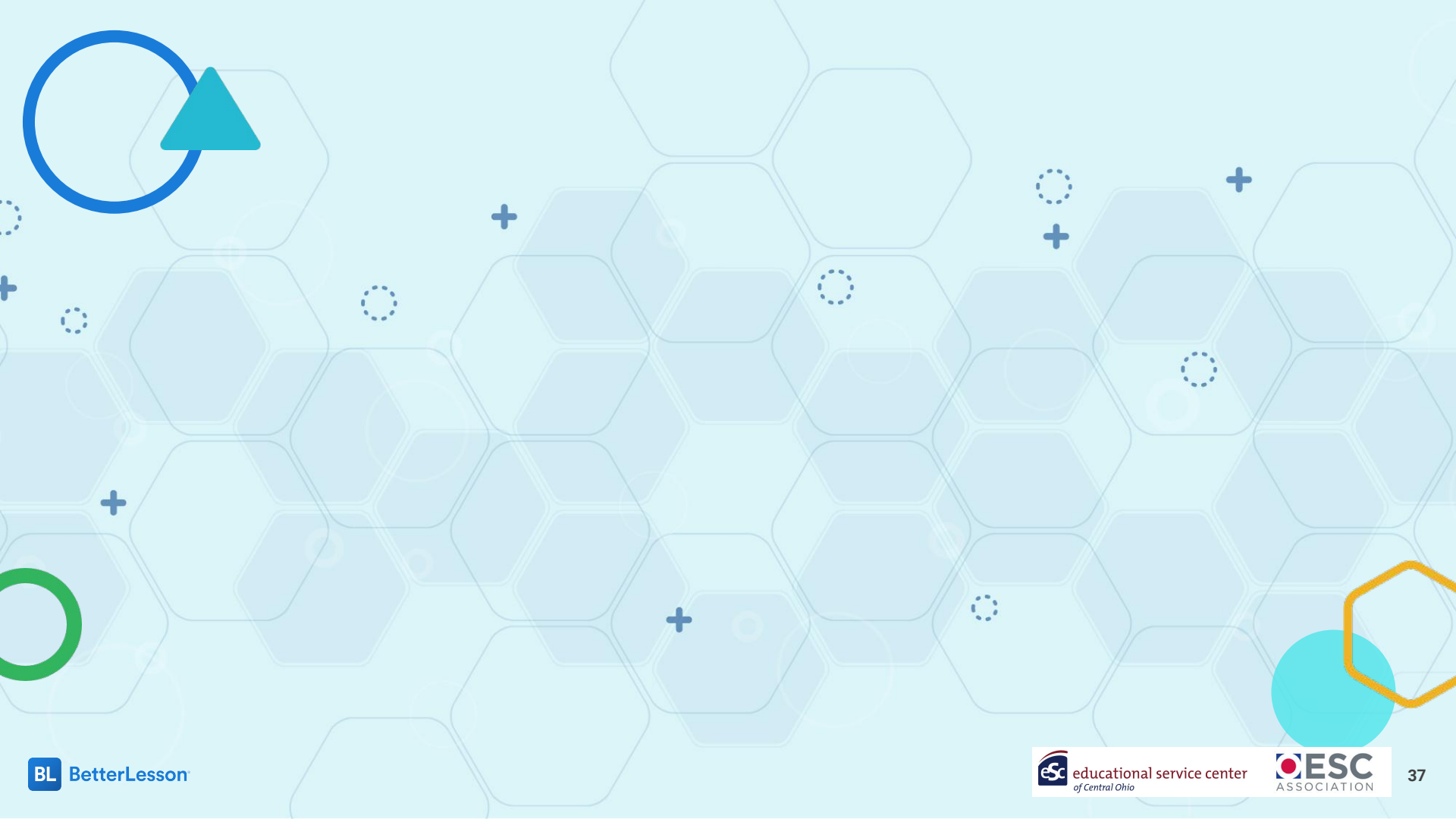
Your input is important to us, please take a moment to complete our survey using the link in the chat.

Math is...



Thank you!

















Graphics & Callouts

Style Guides - Zoom Icons

Please do not change the size or scale the image. Copy+paste any icons that you need and use them as they appear here.



Style Guides - Numbers

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Style Guides - Alpha

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A B C D E

Attention Callouts - Markers

To call attention to information, use outlined box, rounded box, or arrow in yellow.

EXAMPLE:

Call out copy here

Call out copy here

Call out

Call out

Call out copy here

The screenshot shows a BetterLesson session page for "Flexible Math: Introduction to Student-Centered Mathematics Practices". The page includes a header with the BetterLesson logo, the session title, and fields for "Partner name" and "Date, time". A yellow callout box highlights the "Key Links & Resources" section, which contains a bulleted list of instructions for joining the session. Below this is the "Agenda" section, which includes a paragraph of text and a table with columns for "Time", "Focus", and "Resources". The "Resources" column contains a bulleted list of links and prompts.

Key Links & Resources

- Join the session using the Zoom link
- Check in for the session in the BetterLesson Lab
- Find the slides for this session
- Your BetterLesson Coach for this session is name, email

Agenda

In this session we will define "student-centered math" and explore approaches to creating student-centered learning experiences in both in-person and virtual settings.

Time	Focus	Resources
20 minutes	Welcome, Introductions & Agreements	<ul style="list-style-type: none">• BetterLesson Check In • Find fun, math-y prompts at:<ul style="list-style-type: none">◦ Which One Doesn't Belong

Attention Callouts - Icons



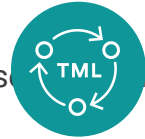
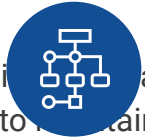
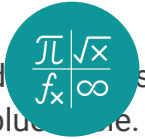
Icons

Used to add visual interest, highlight a concept/idea, or draw more attention to copy. Icons can also be used without the blue circle. Hold SHIFT when resizing icons to maintain the correct aspect ratio.

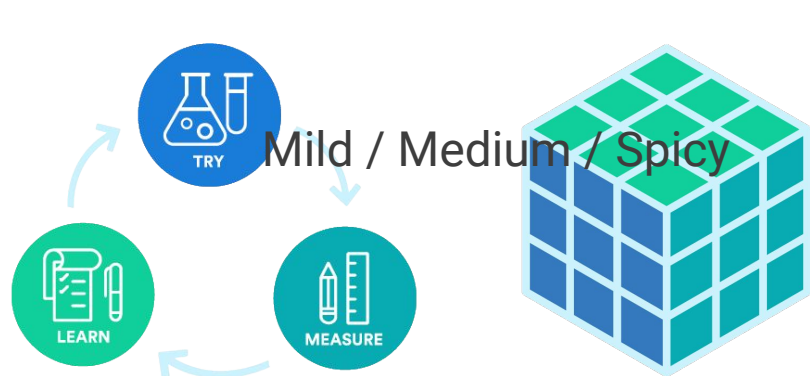


Icons

Used to highlight a concept/idea. Hold **S** when resizing icons to maintain the correct aspect ratio. Used to highlight a concept/idea. Hold **S** when resizing icons to maintain the correct aspect ratio.



Additional Graphics



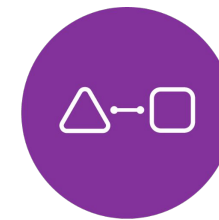
Additional Graphics



READ



REFLECT



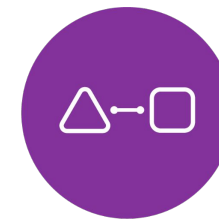
CONNECT



EXPLORE



REFLECT



CONNECT

Teacher / Students

Teacher

Student/students

