



# Methods of Using Data in the Classroom

Murray- Peer-to-Peer collaborative  
Special Education Teacher

January 31, 2022



01

## Collecting Data

Gathering student work, student voice and student observations is how to drive meaningful instruction.

02

## Applying Data

Creating moments of learning that infuse real time assessments of student learning.

03

## Interpreting Data

Synthesizing student learning outcomes and objectives is how to impact learning opportunities.

04

## Planning with Data

Applying researched based methodologies to create a learning environment that breeds learning.



# Amassing Data

Students, teachers, and parents are each stakeholders the learning experiences that occur in the classroom. Through the collection of strategies, methodologies and, algorithms there allowed for a window of sound learning opportunities.

# Assessment Capable Learners





# Interpreting Data

The practice of analyzing artifacts, assessments (formative and summative) and observations are each vital in gaining insight on the dynamics of a classroom and the abilities of student.

# Methodology of Learning

Using multiple sets of data to design and inform instruction

**Directive Role**



**FOCUS**

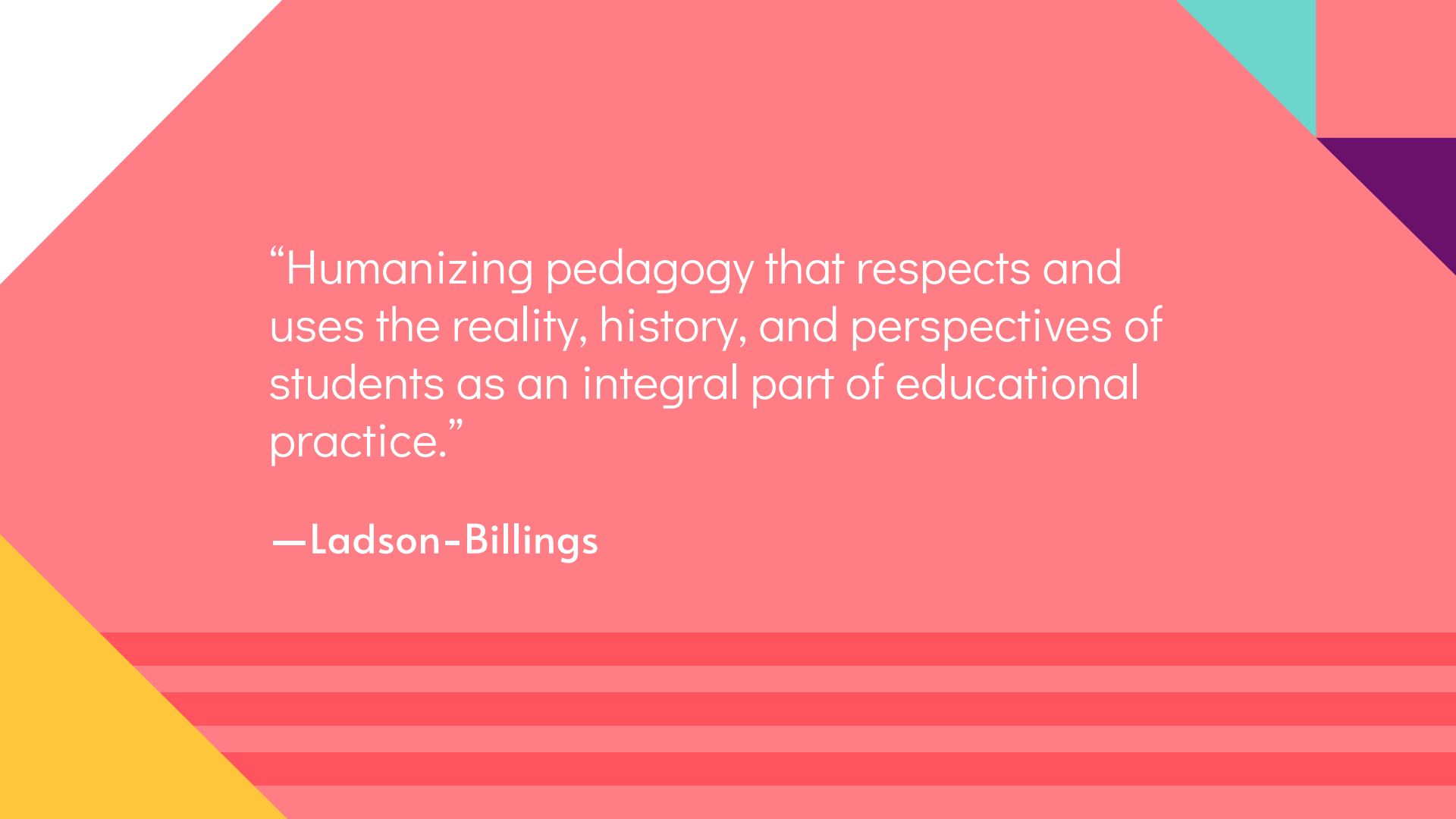
Designing meaningful supports that allow for sound data collection

**Facilitation Role**



**Student Data  
Driven**

Allowing while providing students with autonomy over their learning.



“Humanizing pedagogy that respects and uses the reality, history, and perspectives of students as an integral part of educational practice.”

—Ladson-Billings



# Applying Data

Developing, curating, and organizing instructional supports that are aligned to the academic and social readiness levels of students encourages learning opportunities that are designed to allow critical thinking and meaningful learning.



# Ice Cream Cone Research Model

## ■ Research Focus

Students monitoring their learning.

## ■ Participants

Students whom we service

## ■ Purpose

Develop students to become lifelong learners with a skill set.

## ■ Question

Which?... What? ...Why?...  
How?... (relationships and reasons)



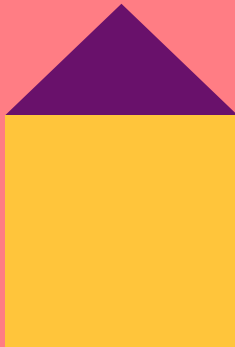
# Planning with Data

Implementing instructional strategies, tasks and projects grounded in observations, research and methodologies each allow for learning that is based on the academic needs of students while including their level of cognitive abilities.

# Target Objectives

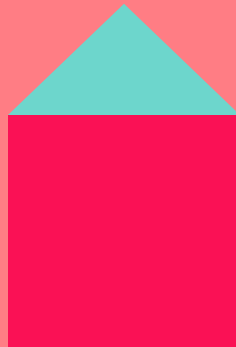
Students with  
Disabilities

A



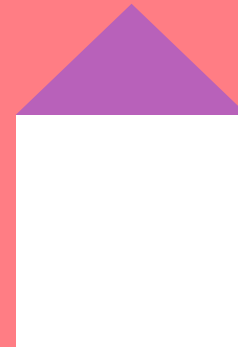
Disenfranchised  
Students

B



Disenfranchised  
Students with  
Disabilities

C



# Thanks!

Do you have any questions?  
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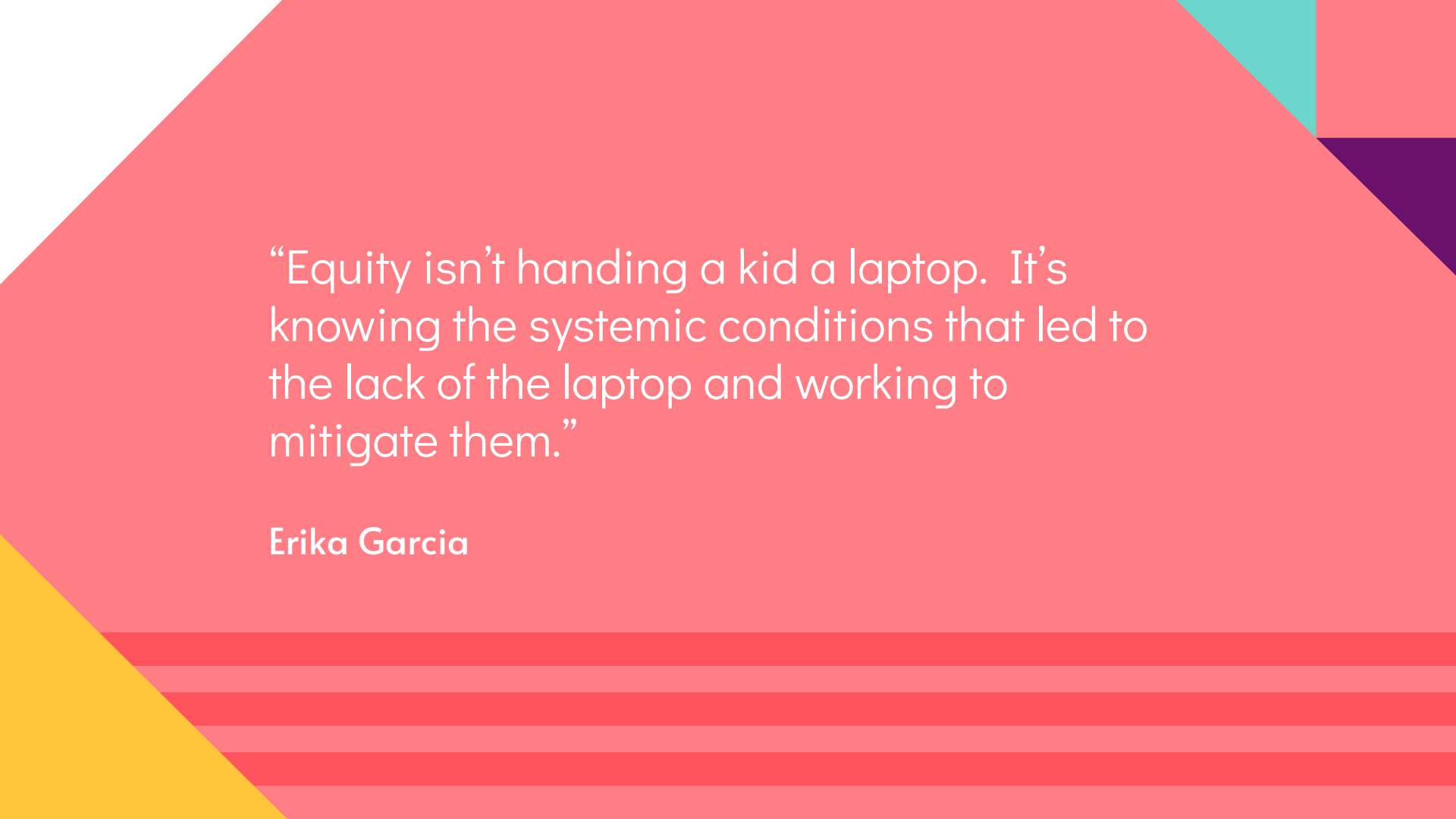
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# Analyzing Student Data

Murray- Model Special Education Teacher

March 28, 2022



“Equity isn’t handing a kid a laptop. It’s knowing the systemic conditions that led to the lack of the laptop and working to mitigate them.”

**Erika Garcia**

# Action Research Question

Which student-friendly progress monitoring strategies are the most effective in supporting students in managing their learning with content-specific standards of middle school-aged students (11-14 yrs. old) with individual education plans?

# Action Research Methodologies

## Observe

Student work protocol through collaboration

## Plan

Instructional moves to students thinking about their learning

## Reflect

Revising learning targets, strategies and instructional supports aligned to students' tracking their own learning.

## Act

Concrete next steps that can be collected and monitored.



# Student Work Protocol

## Looking at Student Work Collaboratively Template/Protocol

Guiding Question: How will we analyze student monitoring strategies that will help us make strategic instructional decisions resulting in improved student outcomes where students are the stakeholders?

<div>+</div> <div>Desired Student Thinking</div> <div>Based on the <a href="#">English Language Arts Learning Standards</a>, What do we expect students to know (nouns) and be able to do (verbs)?</div>	<div>Current Student Thinking</div> <div>What evidence do we see in the student work? What is the student work telling us?</div>	<div>What are Students Struggling With?</div> <div>What are the gaps?</div>	<div>Implications for Planning &amp; Preparation</div> <div>What instructional moves will we implement to address the gaps?</div>
<div>Instructional Strategy/Next Steps:</div> <div>Next Interim Check Date:</div>			

# Student Monitored Learning

Next Steps to Facilitate Accountability

## Clarifying Learning

Students grasp their learning targets is by having them summarize what they've learned.

## Eliciting Evidence

Students must be able to identify what they know about the critical content and recognize how their understanding has evolved

## Activating Learning

Students communicate what they know, what has helped them learn, and what they're still unclear about.

# Thanks!

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# Reflecting on Data

Mrs. Thomas-Murray



# Action Research Reflection

## Student Reflection

Using reflection tools as a part of everyday and long term project practice.

## Teacher Reflection

Monitoring student learning through the lens of mindsets. (Growth/Fixed)

## Next Steps

Tangible actions to support the practice of students becoming stakeholders in their learning.



Transforming education begins  
with equity in education.

-Nikole Hannah Jones

# Mindsets

In this mindset, people believe that intelligence and talents can be improved through effort and learning.

## Growth

In this mindset, people believe that their intelligence is static

## Fixed



# Student Reflection

**Significance:** It allows students to see the importance of their own learning process.

**Process Recognition:** Students can identify what they did well, what they failed at, what they need to change.

**Solutions/Strategies:** Provides students an opportunities to come up with solutions and strategies to improve on their learning.

**Motivation:** Reflection provides students with motivation to learn and enjoy the process of learning. This motivation comes from them reflecting on their thoughts, feelings and emotions.

**Analysis:** The most important benefit of reflection in the classroom is for students to be able to know  
\*what they needed to learn these concepts, theories, and ideas.



# Teacher Reflection Benefits

Reflective teaching brings into alignment one's underlying beliefs about learning and classroom practice.

Reflective teaching enables professional development.

Reflective teaching supports student-centered learning

# Reflective Teaching in Your Classroom

## Peer observation

Ask a trusted mentor and fellow teacher to observe your classroom instruction and provide feedback. Every teacher has a unique style and a plethora of best practices developed over years of teaching. An observing colleague can point out aspects of your approach that may be limiting student engagement—things you may not be able to observe yourself—and can provide suggestions for improvement. This is one of the best ways to improve teaching!

# Reflective Teaching in Your Classroom

## Self-reporting. Seeing a pattern in writing can be illuminating

At the end of every day for one week, create an outline of your class time, documenting all of the strategies you used to convey the day's lessons. Observe how much time your students spent listening to lecture, participating in team problem-solving, creatively ideating, collaborating in pairs, studying independently, and being assessed through testing. If you find that you are leveraging one style of teaching more than others, or that students were more engaged or seemed better able to comprehend theories when they participated in a specific activity, you have identified a tactic you can employ more frequently in your classroom for better results.

# Reflective Teaching in Your Classroom

## Record and evaluate your lessons

While you may often tell your students that you have eyes in the back of your head, the reality is that a teacher cannot possibly observe everything that occurs in his or her classroom during instruction. Video (keeping student privacy in mind) or audio recording your lessons, however, can provide you with the ability to identify aspects of class participation, as well as your teaching style, that you would not otherwise have been able to observe. For example, you may be able to note how students' engagement wanes after 10-minutes of lecture, or how many times you call on students in the front for answers compared to those in the back, or which topics resulted in the most questions and confusion. This type of reflection can provide valuable opportunities to target areas of opportunity in your pedagogy.<sup>4</sup>



# Next Steps

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