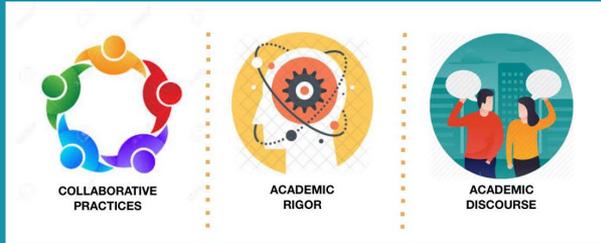


Pre-K to 3  
Coherence  
Collaboration

P3CC District  
Improvement Team

## AUSD Success Drivers

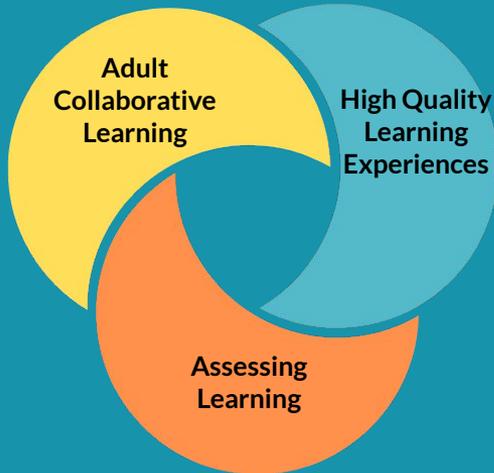


## Why work on P3 coherence?

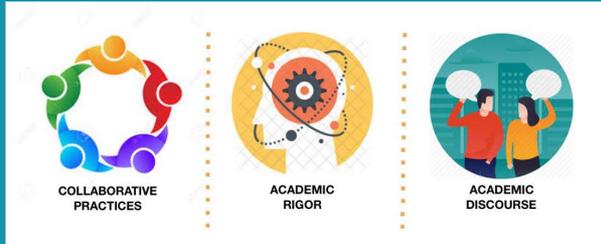
Great early childhood programs are not enough. Research shows that the positive effects of early education programs were often not sustained after children entered kindergarten and elementary school. There is often a lack of articulation and coherence between preschool and kindergarten-3rd grade programs. The Pace: PK-3 Alignment report clearly calls out the need for Pre-K to 3 alignment in the areas of :

- high quality learning experiences
- adult collaborative learning, and
- assessment of learning.

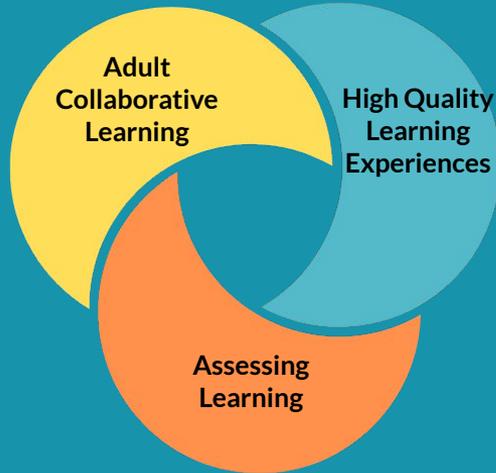
Coherent Systems



# AUSD Success Drivers



Coherent Systems

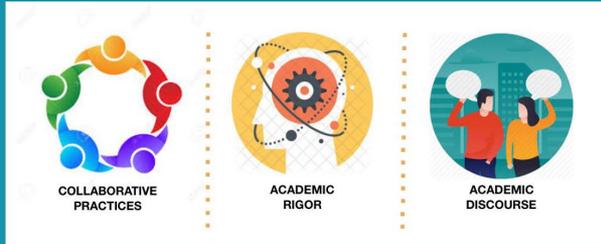


## What is P3CC?

California Ed Partners brought together school districts from across California and expert thought partners from the Stanford DREME Network to work on a three year process of aligning district systems and resources to provide coherence in Preschool to 3rd grade learning.

Together, we have developed a lens for high-quality early mathematics teaching and learning, robust and thoughtful assessment practices, and coherent learning across Preschool through 3rd grades.

## AUSD Success Drivers



Coherent Systems



## AUSD Team Aspiration

At the end of three years, AUSD will have a well-established, cohesive instructional math plan, PK-3, in which adults collaboratively and systematically understand the system, use data to drive instructional decisions, and implement continuous improvement plans to meet the needs of all students, specifically multilingual learners, students with disabilities, and socio-economically disadvantaged students.

# AUSD P3CC Process

## 2020-2021

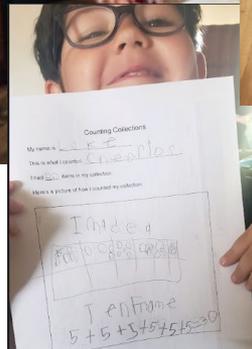
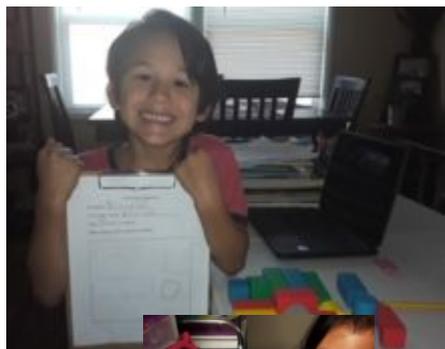
- Analysis of assessment data from our district system
- Shared learning opportunities for teachers
- Counting Collections online and with families



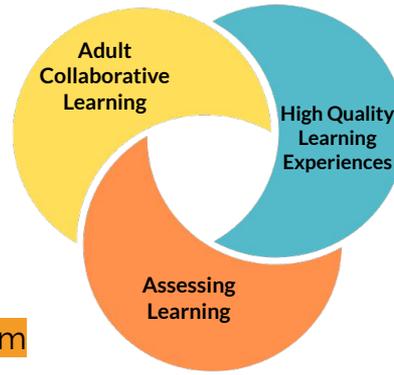
**Year 1**

**Year 2**

**Year 3**



# AUSD P3CC Process



## 2020-2021

- Analysis of assessment data from our district system
- Shared learning opportunities for teachers
- Counting Collections online and with families

## 2022-2023

- Weekly Counting Collections
- High leverage teaching practices
- Piloting new PK-2nd assessment

Year 1

Year 2

Year 3

## 2021-2022

*Piloted change ideas:*

- Weekly Counting Collections
- Piloted new problem solving assessment item PK-3rd

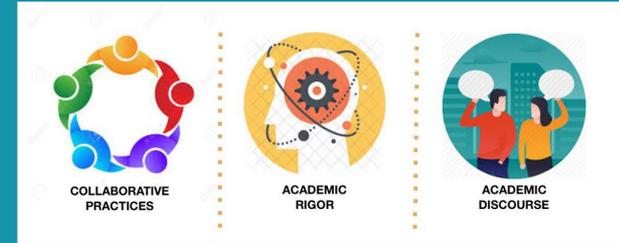


## **High Quality Learning Experiences: Counting Collections**

Counting Collections is an opportunity for children to work with a partner to count a collection of objects. Students use their own strategies to organize their collections.



## AUSD Success Drivers



Coherent Systems



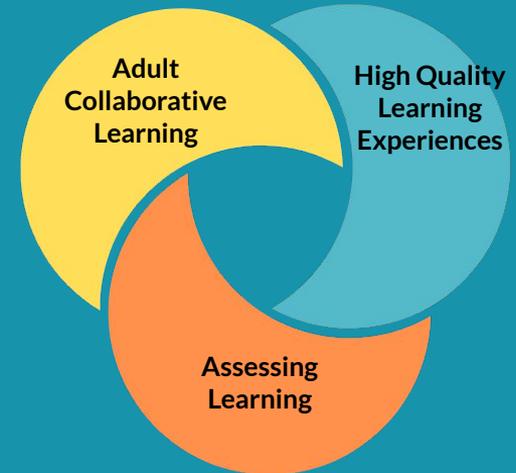
# High Quality Learning Experiences: Counting Collections

- Students count together with a partner
- Differentiated sizes of collections
- Teacher interacts with students, asking questions and recording strategies students use
- Students learn from the insights of peers

## AUSD Success Drivers



Coherent Systems



# Let's do a Counting Collection



# High-Leverage Math Pedagogical Practices

Elicit students' mathematical ideas

Use what is learned from students' strategy use to make decisions about what task to pose next

Allow students to use tools and representations of their own choosing

Have conversations in math class where students share their ideas with each other

Ask follow up questions that are specific to what the students said or did

Position each student to see themselves as capable in mathematics



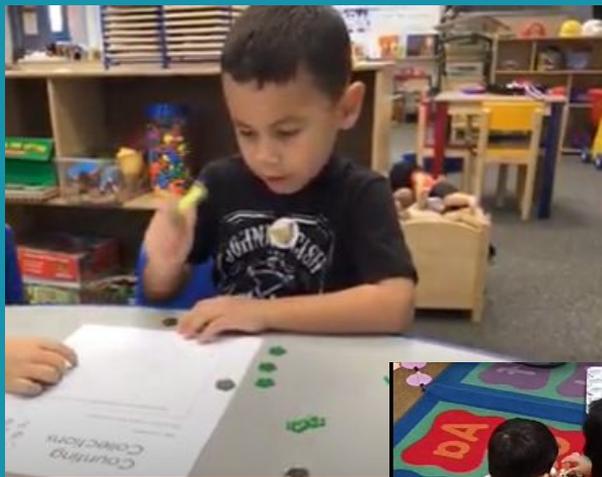
COLLABORATIVE  
PRACTICES



ACADEMIC  
RIGOR



ACADEMIC  
DISCOURSE





## Assessing Learning from a High Quality Learning Experience:

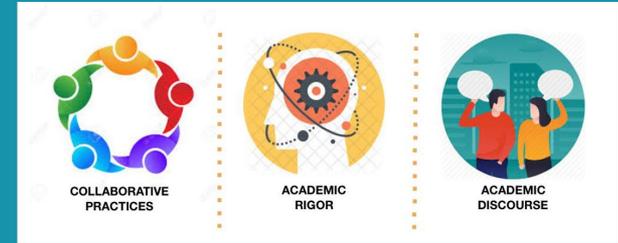
### A Plan-Do-Study-Act Cycle

*Would utilizing Counting Collections weekly help multilingual learners and students with disabilities develop cardinality?*

Pilot teachers committed to:

- Weekly Counting Collections
- Collect data on cardinality for 6 students who were struggling with math
- “Next Steps” meetings

## AUSD Success Drivers

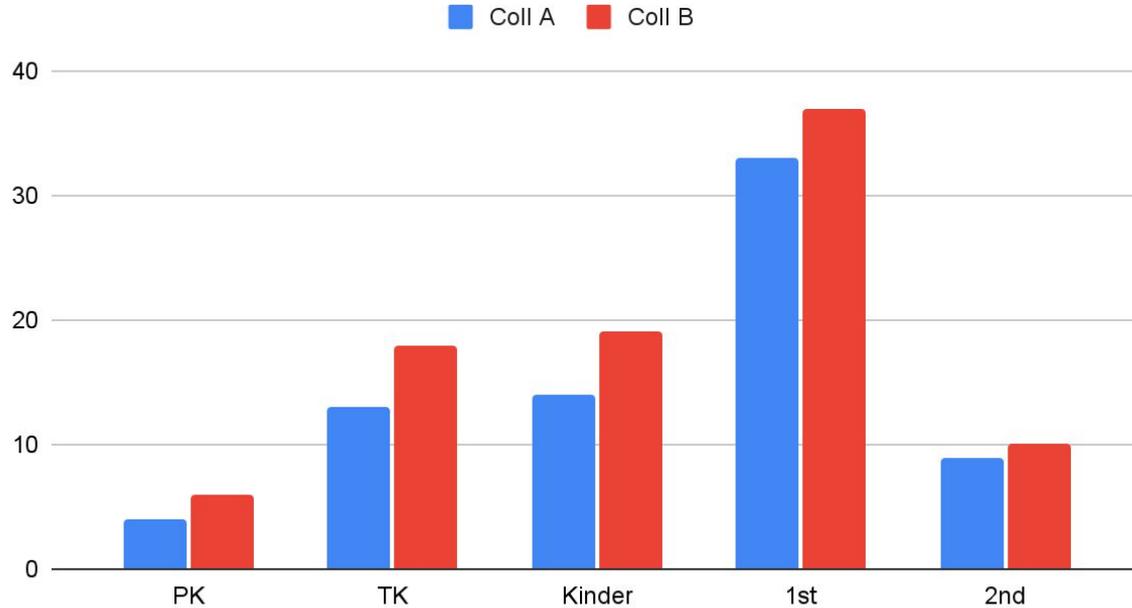


Coherent Systems

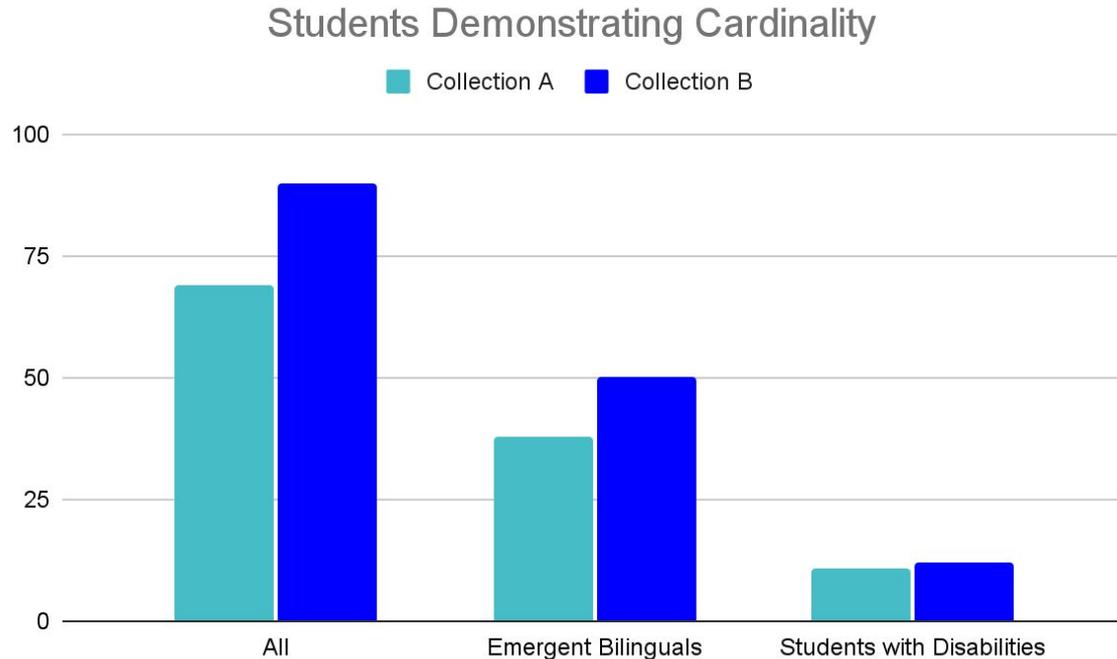


# Assessing Learning from a High Quality Learning Experience: Counting Collections Pilot Results

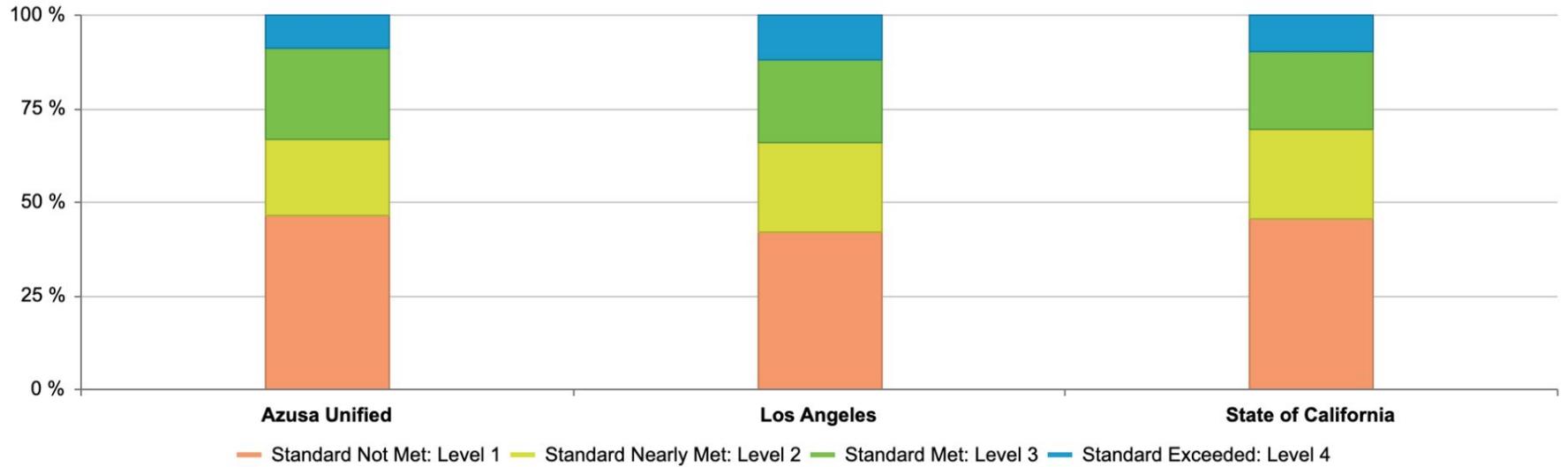
Students Demonstrating Cardinality



# Assessing Learning from a High Quality Learning Experience: Counting Collections Pilot Results



## 2021–22 Achievement Level Distribution - Grade 3



### 3rd Grade CAASPP Scores

	ELA		Math	
	All	SED	All	SED
Azusa	29%	29%	34%	33%
Buttonwillow	8%	9%	8%	9%
Modesto City	24%	19%	25%	20%
Monterey Peninsula	38%	25%	22%	25%
Oxnard	25%	23%	23%	21%
Robla	21%	18%	26%	22%
Sanger	45%	38%	48%	41%



22-23 PK-2 Pilot Scoring Guide and Student Recording Sheet  
Counting Collections Task Data Collection

Student Name \_\_\_\_\_ Date \_\_\_\_\_

1. Provide the child with their [pre counted bag of items](#) and tell them:

“Today you’re going to do a Counting Collection. Please count the items in your bag. You may use any of the tools here if you need them.”

*DI/Newcomers: “Hoy vas a hacer una colección de conteo. Por favor cuente las cosas en su bolso. Puede usar cualquiera de las herramientas aquí si las necesita.”*

Let them work on the collection before you ask questions. When the child says they are done counting, ask the child:

“Can you count out loud how many items you have?”

*For DI and Newcomers: ¿Puedes contar en voz alta cuántos contadores tienes?*

 Listen as the child counts.

 Write the counting sequence the child uses for your data. *(This will not go in Illuminate).*  
(P.NS.1.4, K.CC.B.4a, K.CC.B.5, 1.NBT.A.1, 2.NBT.A.2)

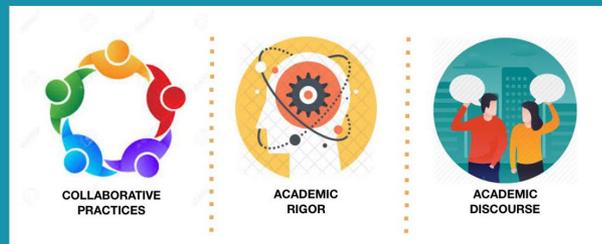
Counting sequence for teacher data:

*Example: student counted 1, 2, 3, 5, 7, 15*

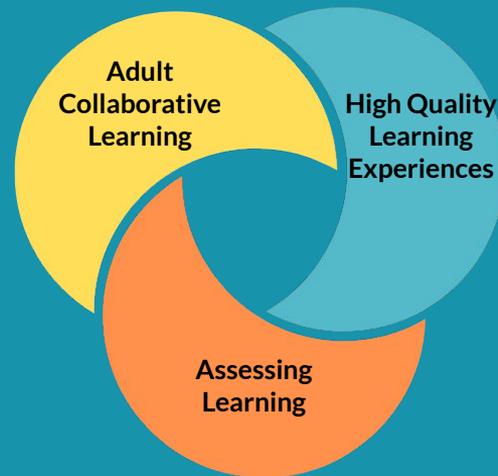
 Record: Does the child demonstrate 1:1 correspondence? Yes/No

 Pay close attention to **accuracy with teens and crossing each decade** (example: 38, 39, 40 or 58, 59, 60). For this reason, if children use skip counting (by 2s, 5s, 10s, etc), please ask them to also count by 1s until you have assessed that they have accuracy with the teens and with crossing the decades up to 30.

# AUSD Success Drivers



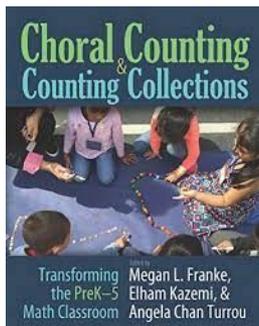
Coherent Systems



# High Quality Learning Experiences: Providing Support



**Build Parties**



**Teacher Book Clubs**



**Support to Launch Counting Collections at school sites**



**Next Step Conversations**

# AUSD Elementary Math Vision



**All** AUSD students are problem solvers who make sense of rigorous real-world mathematical tasks and communicate their strategies and reasoning in a variety of ways in inclusive learning communities because **all** students are able to learn mathematics.

# AUSD Elementary Math Vision



Math learning takes place in inclusive and collaborative learning communities that value each member's ideas and strategies and welcome productive mistakes as they foster the joy of learning.

Students engage in rigorous, authentic problem solving opportunities through rich math tasks.

Students demonstrate their diverse strategies and thinking in a variety of ways.

Students engage in rigorous, engaging instruction which connects to their fund of knowledge and develops conceptual understanding, procedural skills and fluency, and application.

Students have opportunities for rich mathematical discourse with peers as they share their ideas and explain their strategies and thinking.

Students develop a belief that math makes sense, is worthwhile, and is doable.

All students learn mathematics because students' academic success must not be predictable on the basis of race, ethnicity, gender, socioeconomic status, language, religion, sexual orientation, cultural affiliation, or special needs.

# High-Leverage Math Pedagogical Practices

Elicit students' mathematical ideas

Use what is learned from students' strategy use to make decisions about what task to pose next

Allow students to use tools and representations of their own choosing

Have conversations in math class where students share their ideas with each other

Ask follow up questions that are specific to what the students said or did

Position each student to see themselves as capable in mathematics



COLLABORATIVE PRACTICES



ACADEMIC RIGOR



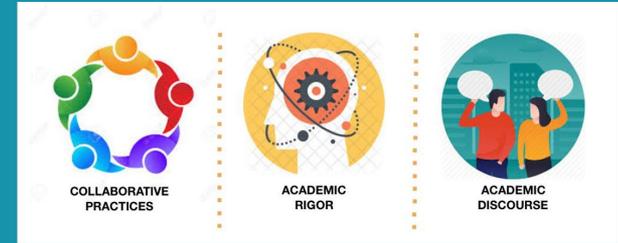
ACADEMIC DISCOURSE



## Adult Collaborative Learning using Assessment of Learning

By June of 2022, 50% PK-3 Multilingual Learners will be able to apply a valid strategy to solve a word problem in algebraic and operations as measured by district and early childhood assessments.

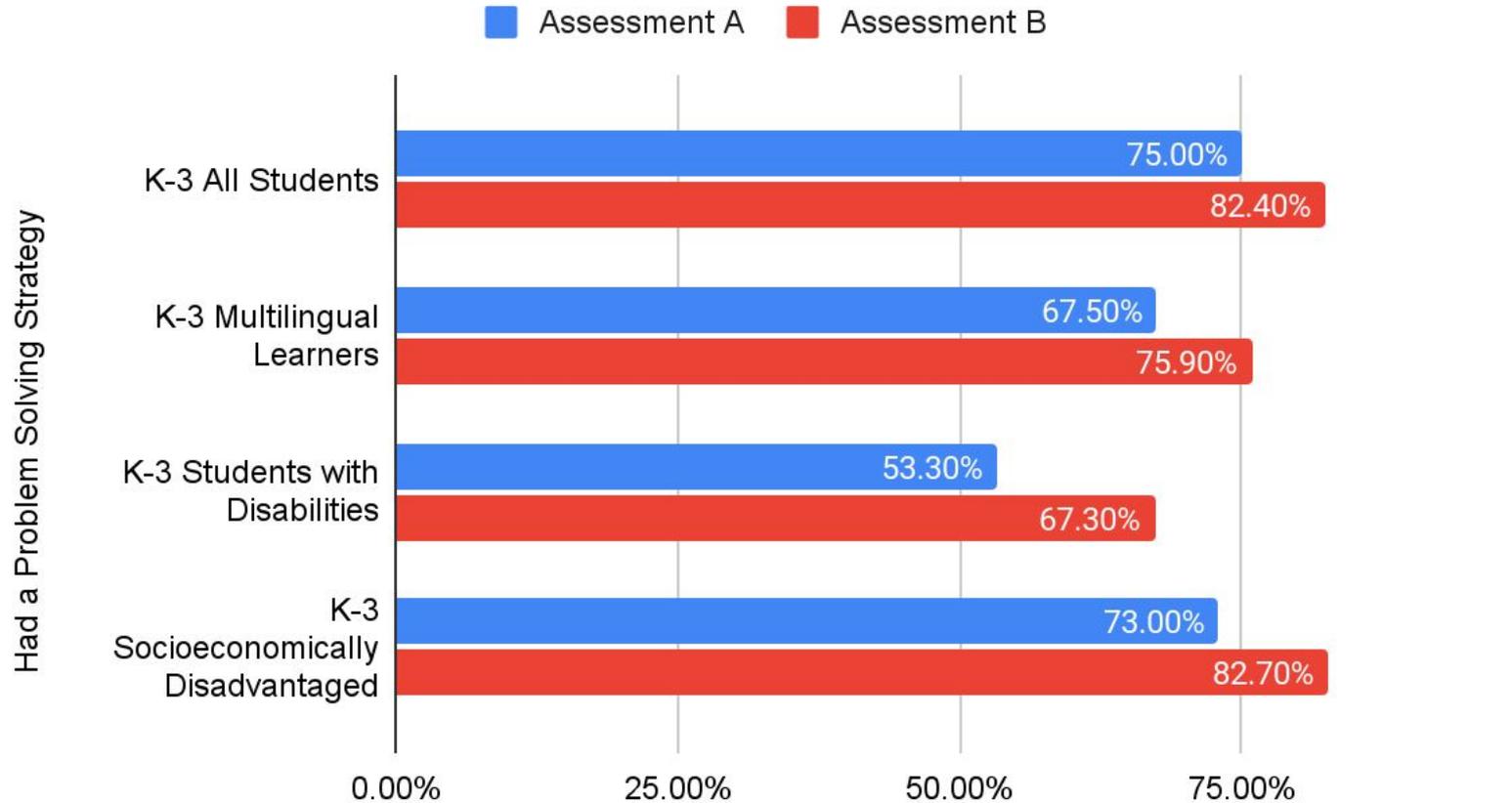
## AUSD Success Drivers



Coherent Systems



# 21-22 Kinder-3rd Grade Pilot Problem Solving Item





## Assessment of Learning

By June of 2023

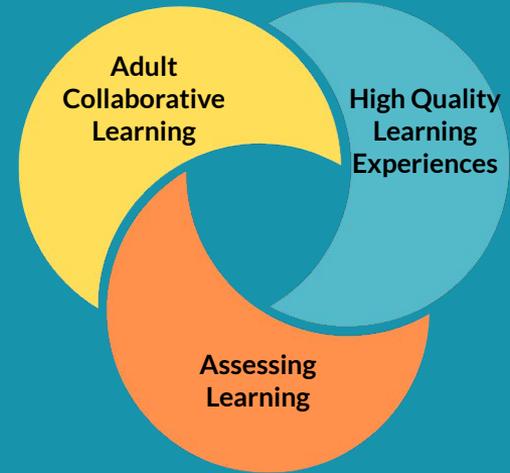
**100% PK-3 Multilingual Learners will be able to apply a valid strategy to solve a word problem as measured by district and early childhood assessments.**

**PK-3 Multilingual Learners will increase by 30% and all students will increase 25% in operations and algebraic thinking as measured by our district assessment.**

## AUSD Success Drivers



Coherent Systems



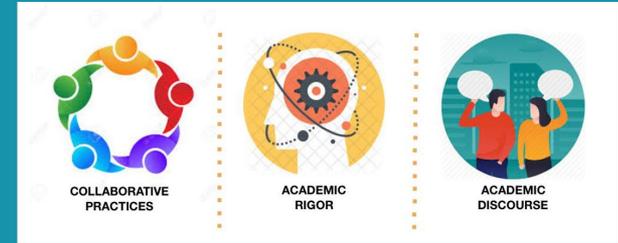


## Coherent Systems: Year 3 and Beyond

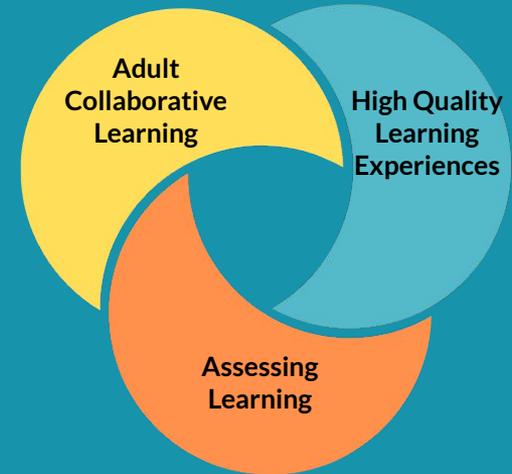
As we wrap up this collaboration with Ed Partners, our District Improvement Team will continue our work.

- **Adult Collaborative Learning**: Using student work samples from new assessments to anchor PLC conversations
- **High Quality Learning Experiences**: Deepening our lens for high quality instruction through the 6 high leverage practices. Supporting teachers with Counting Collections and problem solving
- **Assessing Learning**: Pk-2nd grade will all utilize our revised assessments next year. We are piloting a new item for 3rd-5th grade on this year's assessments .

## AUSD Success Drivers



Coherent Systems





**Questions?**