Preparing for Successful Math Instructional Materials Implementation: Lessons Learned

January 31, 2024 | 1 pm PT

TECH TIPS

Close all programs & browsers to maximize bandwidth

Exit & re-enter the webinar if you experience a lag

Use Q&A to ask a question; **Use Chat** for technical assistance

The **recording, slides & resources** will be sent by email

Today's Panelists

Morgan Sheppard
Program Manager, Strategic Initiatives (Innovation)
UnboundEd

Yolanda Perkins
Implementation Specialist
National Implementation Research Network

Allison Carter
Vice President, Curriculum Services
CORE Learning

Shannah Estep
Managing Director, Adoption & Innovation
EdReports

Francisco Villegas
Senior Vice President of School Transformation
The Partnership for Los Angeles Schools

Webinar Objectives

- Learn about the development of CalCurriculum's adapted Hexagon Tool

- Discuss takeaways and insights from a recent study report about math instructional materials implementation

- Explore necessary steps to guide the development of your district's implementation process.

Agenda

- Welcome & Introductions
- Hexagon Tool Overview
- Case Study Report Panel Discussion
- Q&A

What is CalCurriculum?

CalCurriculum is a joint project of EdReports and UnboundEd developed and tailored to support California educators. Our goal is to help districts adopt and implement high-quality instructional materials by providing independent reviews, actionable resources, and guidance tailored to the California context.
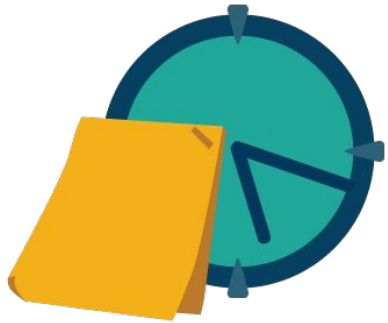
Setting the Stage for our Pilot

California's Math Journey: Looking Back

2014 Adoption List

2013 Framework

2010 Standards

What are the stakes?

Students have had inconsistent access to high-quality content*

In a single school year, the average student spent **581 of 720 available hours** on assignments that were **NOT high-quality**.

This was particularly significant for **students of color** and **students experiencing poverty,** who **have less access** to high-quality, standards-aligned materials than their peers.
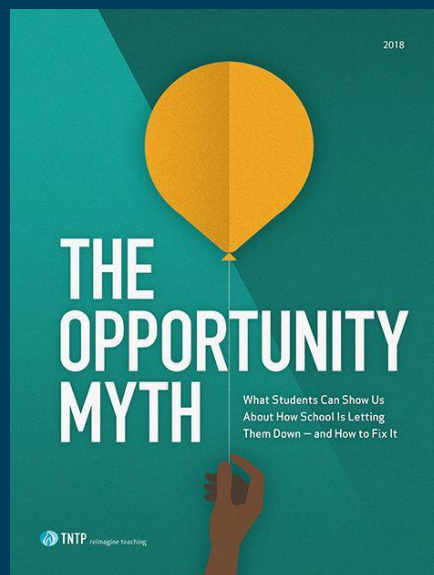
The Opportunity Myth, TNTP 2018

"When students who started the year behind had greater access to grade-appropriate assignments, they closed the outcomes gap with their peers by more than seven months. "

- *The Opportunity Myth*, TNTP 2018

This report illustrated that **teachers using aligned materials** engaged students in mathematical practices at a **significantly higher rate** than teachers who did not have access to aligned curriculum.

THE OPPORTUNITY MYTH

What Students Can Show Us About How School Is Letting Them Down — and How to Fix It

TNTP reimagine teaching

CalCurriculum.org | 10

What is the state of middle school math instructional materials in California?

California District Selection of 2014 State-Adopted Curricula for Middle School Math
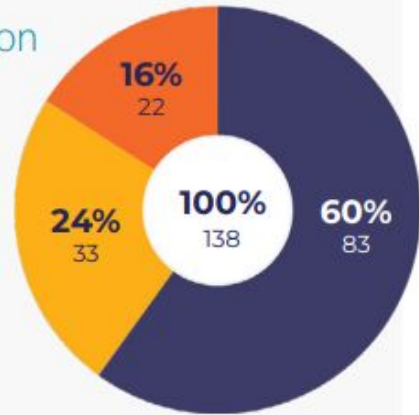
- **100%** — Total districts with data (138)
- **60%** — Districts with current selections *only* from the 2014 Mathematics Adoption list (83)
- **24%** — Districts with *no* current selections from the 2014 Mathematics Adoption list* (33)
- **16%** — Districts with current selections of *both* state-adopted and off-list products (22)

76% of districts still have **products from the 2014 list** in place

40% of districts have a **current selection of off-list curricula**

-K-8 Math Curriculum Landscape: Spotlight California,
The Center for Education Market Dynamics, Fall 2023

California's Math Journey: Continued

2025 Adoption List

Today

2023 Math Framework

As districts continue to make greater shifts toward adopting high-quality instructional materials, a significant question remains:

What does it take to implement these materials successfully, so that they have their intended impact?

Pilot Project Goals

CALIFORNIA CURRICULUM COLLABORATIVE

1 Develop a **tool** that can be used both during a team's adoption process, looking ahead toward implementation planning, or during implementation, to assess progress and areas for improvement.

2 Study the degree to which select programs have been feasible to implement and the conditions that enable successful instructional materials implementation through a **set of case studies**

Fall 2022: Implementation Interviews

We started our process by interviewing 10 internal staff with experience in math instructional materials adoption & implementation to learn more about:

- a **framework** that would allow us to assess the "ease of implementing" instructional materials
- the **key criteria** that affect instructional materials implementation experiences, and
- the **format/structure of a tool** that could be useful to district and charter leaders
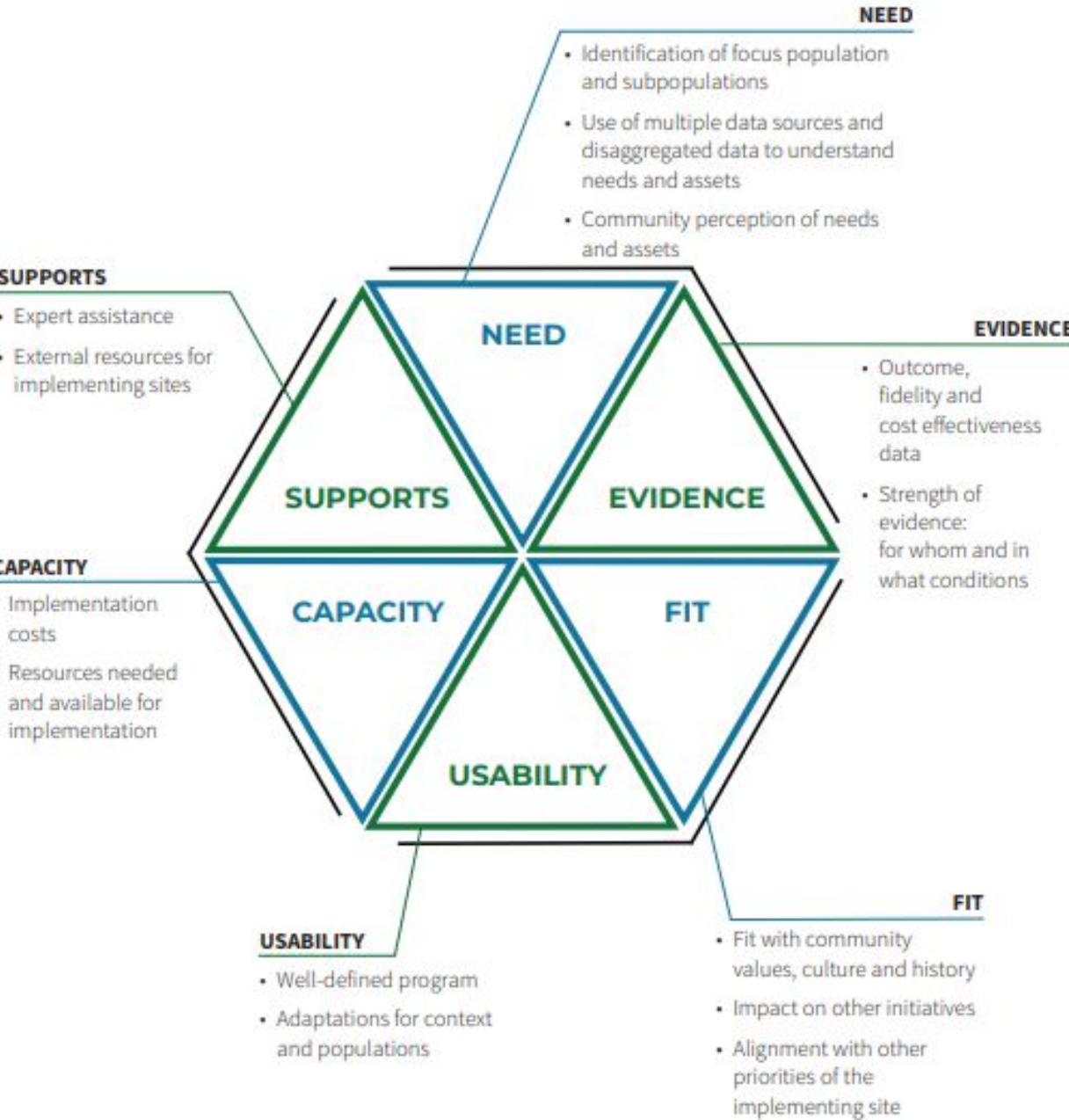
Fall 2022: Implementation Interviews

We asked these 10 leaders:

1. In your experience, what has been the easiest / most difficult curriculum to implement? Why?

2. What criteria have you observed affect a district/school's success with implementation? What kinds of questions do you think they need to be asking to assess this?

3. What format/structure of a tool do you think would be most helpful to district / school leaders?

The Hexagon: An Exploration Tool

The Hexagon can be used as a planning tool to guide selection and assess the fit and feasibility of potential programs and practices for use. It includes three **program indicators** and three **implementating site** indicators.
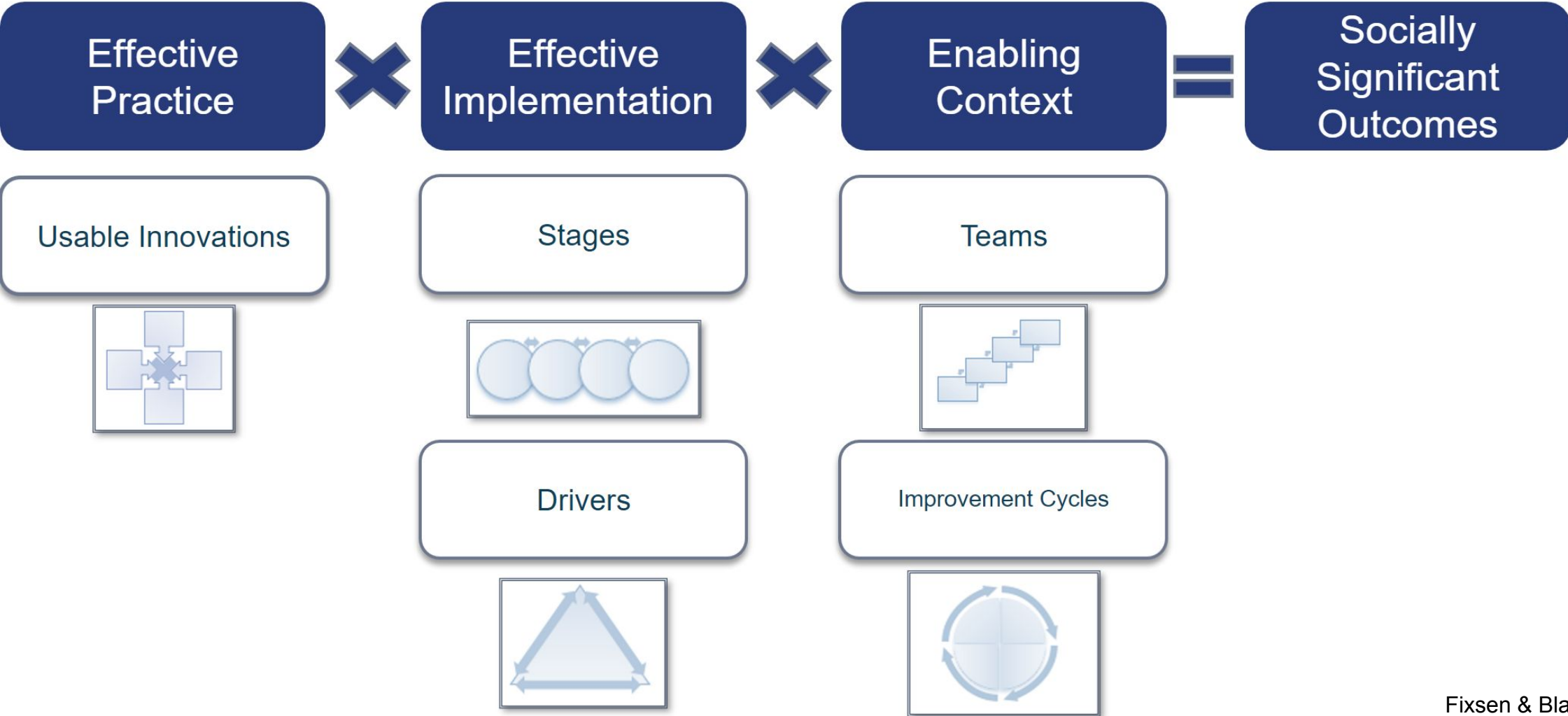
NEED
- Identification of focus population and subpopulations
- Use of multiple data sources and disaggregated data to understand needs and assets
- Community perception of needs and assets

SUPPORTS
- Expert assistance
- External resources for implementing sites

EVIDENCE
- Outcome, fidelity and cost effectiveness data
- Strength of evidence: for whom and in what conditions

CAPACITY
- Implementation costs
- Resources needed and available for implementation

USABILITY
- Well-defined program
- Adaptations for context and populations

FIT
- Fit with community values, culture and history
- Impact on other initiatives
- Alignment with other priorities of the implementing site

NEED / SUPPORTS / EVIDENCE / CAPACITY / FIT / USABILITY

The National Implementation Research Network's Hexagon Discussion & Analysis Tool

The Hexagon Tool

Active Implementation Formula & Frameworks

Effective Practice × Effective Implementation × Enabling Context = Socially Significant Outcomes

Usable Innovations

Stages

Drivers

Teams

Improvement Cycles

Fixsen & Blase, 2020

Implementation Stages

Exploration
- Assess need
- Examine fit and buy-in

Installation
- Assure resources
- Develop supports

Initial Implementation
- Initiate with children and families
- Use data to improve supports

Full Implementation
- Consistent delivery

Consistent & Reliable Valued Outcomes

Time (3-5 years)
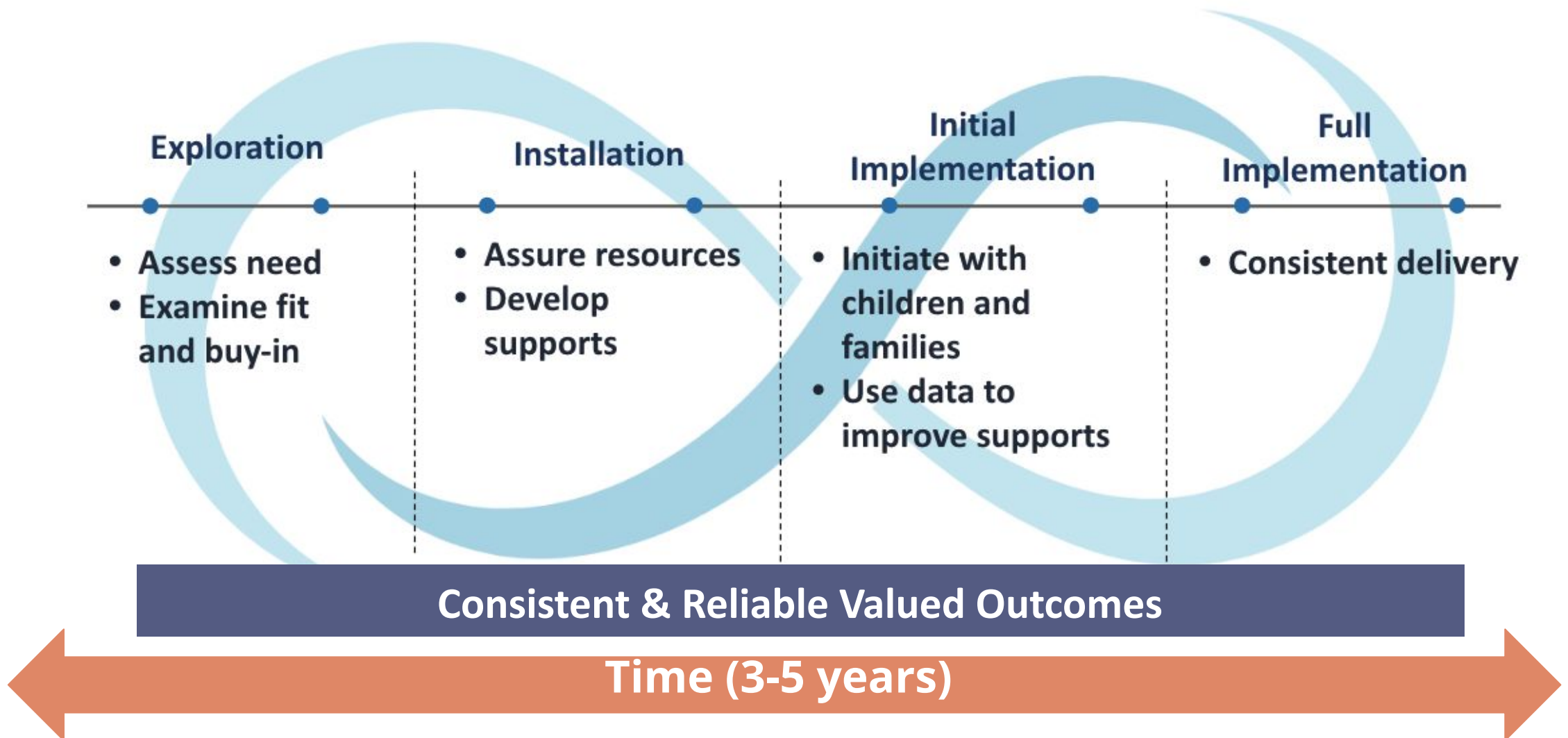
Metz et al., 2015; Proctor et al., 2011

The Hexagon Tool

- Developed for use in implementation informed assessments
- For use by organizations and communities
- Reviewed and edited by the Racial and Ethnic Equity and Inclusion Team (REEI)
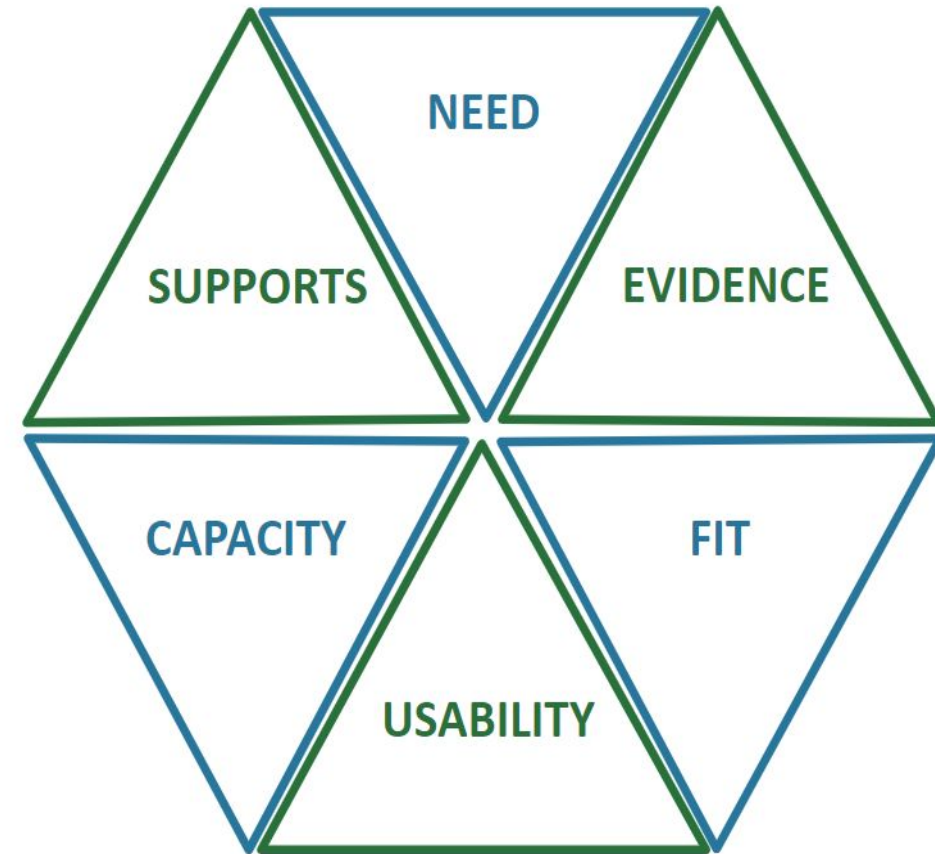
Adapted from Blase, K., Kiser, L., and Van Dyke, M., 2013

The Hexagon Tool

Implementing Site Indicators

- Need
- Fit
- Capacity

Program Indicators

- Evidence
- Usability
- Supports

SUPPORTS
- Expert assistance
- External resources for implementing sites

NEED
- Identification of focus population and subpopulations
- Use of multiple data sources and disaggregated data to understand needs and assets
- Community perception of needs and assets

EVIDENCE
- Outcome, fidelity and cost effectiveness data
- Strength of evidence: for whom and in what conditions

CAPACITY
- Implementation costs
- Resources needed and available for implementation

FIT
- Fit with community values, culture and history
- Impact on other initiatives
- Alignment with other priorities of the implementing site

USABILITY
- Well-defined program
- Adaptations for context and populations

Program Indicator
SUPPORTS

RATING ☐
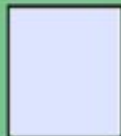
1. Is there a qualified "expert" (e.g., consultant, program developer, intermediary, technical assistance provider) who can help with implementation over time? If yes, list names and/or organization (e.g. Center, University) and contacts.

2. Are there start-up costs for implementation of the program or practice (e.g., fees to the program developer)? If yes, itemize in notes section. What does the implementing site receive for these costs?

3. Are there curricula and other resources related to the program or practice readily available? If so, list publisher or links. What is the cost of these materials? Enter in notes section.

4. Is training and professional development related to this program or practice readily available? Is training culturally sensitive? Does it address issues of race equity, cultural responsiveness or implicit bias? Include the source of training and professional development. What is the cost of these materials? Enter in notes section.

5. Is coaching available for this program or practice? Is coaching culturally sensitive? If so, list coaching resources and cost in notes section.

6. Are sample job descriptions and interview protocols available for hiring or selecting new staff for this practice? If so, identify here and any costs associated.

7. Is guidance on administrative policies and procedures available? If so, identify resources and any costs associated.

8. Are there resources to develop a data management plan for this program or practice (including data system and monitoring tools) available? If so, identify resources and any costs associated.

9. Is there a recommended orientation to facilitate "buy-in" for staff, key stakeholders and collaborative partners? If so, explain/describe briefly in notes section.

Ratings

5 Well Supported
Comprehensive resources are available from an expert (a program developer or intermediary) to support implementation, including resources for building the competency of staff (staff selection, training, coaching, fidelity) and organizational practice (data system and data use support, policies and procedures, stakeholder and partner engagement.)

4 Supported
Some resources are available to support implementation, including limited resources to support staff competency (e.g., training and coaching) and limited resources to support organizational changes (e.g., data systems)

3 Somewhat Supported
Some resources are available to support competency development or organizational development but not both

2 Minimally Supported
Limited resources are available beyond a curriculum or one time training

1 Not Supported
Few to no resources to support implementation

Additional Questions/ Notes

5

Adapting the Hexagon Tool

Fall 2022: Implementation Interviews

We started our process by interviewing 10 internal staff with experience in math instructional materials adoption & implementation to learn more about:

- a **framework** that would allow us to assess the "ease of implementing" instructional materials
- the **key criteria** that affect instructional materials implementation experiences, and
- the **format/structure of a tool** that could be useful to district and charter leaders

Initial Adapted Tool

Implementing Site Indicator: Fit

1. How does the curriculum fit with current priorities of the implementing site, including instructional vision and pedagogical approach and stances? Is there a recommended orientation or plan to facilitate buy-in for staff, key stakeholders and collaborative partners? If so, explain/describe briefly in notes section.

2. How does the curriculum fit with family and community values and assets in the impacted community, including the values of racially, ethnically, culturally and linguistically specific populations?

3. How do the instructional materials fit with the needs of the student population? Is it culturally and linguistically responsive to the focus population's needs?

Blue text = question language we added based on interview feedback

Orange text = Hexagon overlapped with interview feedback

Black text = Hexagon question in its original wording

Project Roles
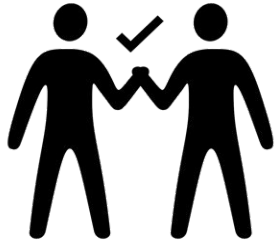
CalCurriculum - Lead project, including tool adaptation, Testing Group, Advisory Council, focus groups and report write-up
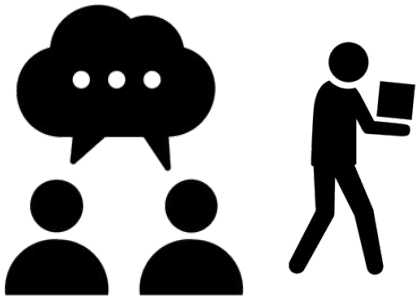
Testing Group - Tried out the tool and focus group interview protocol through sharing about adoption scenarios and implementation experiences of their own

Advisory Council - Provide project oversight and input

Advisory Council

Internal / External Org	Role	District/System	School Leader	Teacher
UnboundEd	Vice President, Mathematics	x	x	x
CORE Learning	Director of Mathematics	x		x
CORE Learning	Program Manager, Math Team	x		x
CORE Learning / UnboundEd	Vice President, Curriculum Services	x		x
CORE Learning / UnboundEd	Program Manager, Curriculum Services	x	x	x
CA District	K-12 Math Specialist / TOSA	x		x
CA District / Nonprofit	Senior Vice President of School Transformation	x	x	x
CA Charter Management Org	Executive Director	x	x	x
Across districts	Math Adoption & Implementation Consultant	x	x	x

Testing Group

LEA, Location	Role	District/System	School Leader	Teacher
CA District	Math Instructional Coach	x		x
CA District	STEM Coordinator	x	x	x
CA District	K-8 Math TOSA	x		x
CA District	Math Instructional Coach	x	x	x
CA District	Math Instructional Coach	x	x	x
CA Charter Management Org	Math Academic Program Manager	x	x	x
CA Charter Management Org	Director of Math Programs	x	x	x
CA Charter Management Org	Math Teacher		x	x
Across districts	CORE Math Consultant	x	x	x
Across districts	CORE Math Consultant	x		x
Across districts	CORE Math Consultant	x		x

Adaptation for CalCurriculum

Implementing Site Indicator: Fit

1. How does the curriculum fit with current priorities of the implementing site, including instructional vision and pedagogical approach and stances? Is there a recommended orientation or plan to facilitate buy-in for staff, key stakeholders and collaborative partners? If so, explain/describe briefly in notes section.

2. How does the curriculum fit with family and community values and assets in the impacted community, including the values of racially, ethnically, culturally and linguistically specific populations?

3. How do the instructional materials fit with the needs of the student population? Is it culturally and linguistically responsive to the focus population's needs?

Role	District/System	School Admin	Teacher
Math Instructional Coach	x		x
STEM Coordinator	x	x	x
K-8 Math TOSA	x		x
Math Academic Program Manager	x	x	x
Director of Math Programs	x	x	x
Math Teacher			x
CORE Math Consultant	x	x	x

System Indicator
NEED   Rating

Ratings
When scoring in the Need section, the focus of this rating is on to what extent the system team has deeply investigated their data and the needs of key stakeholders to understand the priorities for the district or charter context.

5 - Strong Understanding of Need
The Local Education Agency (LEA)[5] has demonstrated a comprehensive understanding of the needs of the focus population in relation to instructional materials. The LEA has included three or more data sources when conducting the needs assessment, including student achievement data and perspectives of staff, students, and families, and has disaggregated data to identify needs of specific and relevant subpopulations.

4 - Adequate Understanding of Need
The LEA has demonstrated an understanding of the needs of the focus population in relation to instructional materials. The LEA has included two or more data sources when conducting the needs assessment, including student achievement data and perspectives of staff, students, and families, and has disaggregated data to identify needs of specific and relevant subpopulations.

3 - Some Understanding of Need
The LEA has demonstrated some understanding of the needs of the focus population in relation to instructional materials. The LEA has included two or more data sources when conducting the needs assessment, including student achievement data, but has done limited stakeholder needs assessment and/or has not disaggregated these data.

2 - Minimal Understanding of Need
The LEA has demonstrated minimal understanding of the needs of the focus population in relation to instructional materials. The LEA has included only student achievement data when conducting the needs assessment and has not disaggregated these data.

1 - No Understanding of Need
The LEA has not demonstrated an understanding of the needs of the focus population in relation to instructional materials.

Adapt tool with focus on instructional materials adoption and implementation → Try out tool with 11 different adoption scenarios, Advisory Council + internal feedback → Finalize adapted tool based on feedback

Use Case: Adoption Scenario

A district is going through the adoption process and has narrowed down to their final options. This will prompt them to consider what implementation would look like for their context. Based on this, they can decide:

✔️ We can manage a successful implementation with our current context

❌ This is going to be too difficult for us to implement and it would not be successful

📈 This will take some changes that we now have in mind, and want to move forward planning for those changes

"I wish that I had this tool six months ago - if we'd gone through some of these questions, I think it would have altered what we chose to pilot this fall."

-Testing Group District Leader

"This tool is amazing - I already sent a copy of this to a teammate I'm working with to lead our adoption process because these questions are so important to think about."

-Testing Group District Leader

Use Case: Implementation Scenario

A district is in the midst of implementation and wants to evaluate how it's going. This will prompt them to consider each of the tool's indicator domains for their current materials. Based on this, they can decide:

✔️ Implementation is going quite successfully in the current set-up

❌ These were perhaps not the right materials for our context, and we need to consider some major changes for our system

📈 To improve implementation, there are some key areas we can consider adjusting to be more successful

"*Sometimes we get so focused on high-quality resources. But how are we implementing those high-quality resources? And are we providing the teachers the tools and the support that they need to make the necessary changes in their instruction to better meet the needs of students?*"

Kevin Dykema, President of the National Council of Teachers of Mathematics

The Case Studies Report

Case Studies Project Goal

To study and share learnings on the conditions for successful instructional materials implementation and the degree to which select programs have been feasible to implement across a variety of LEA profiles.

In order to do this, we interviewed teams from districts and charters across California to share their implementation experiences with middle school math instructional materials, and published a set of anonymous case studies about their best practices and lessons learned from these implementation experiences.

Adaptation for Case Studies

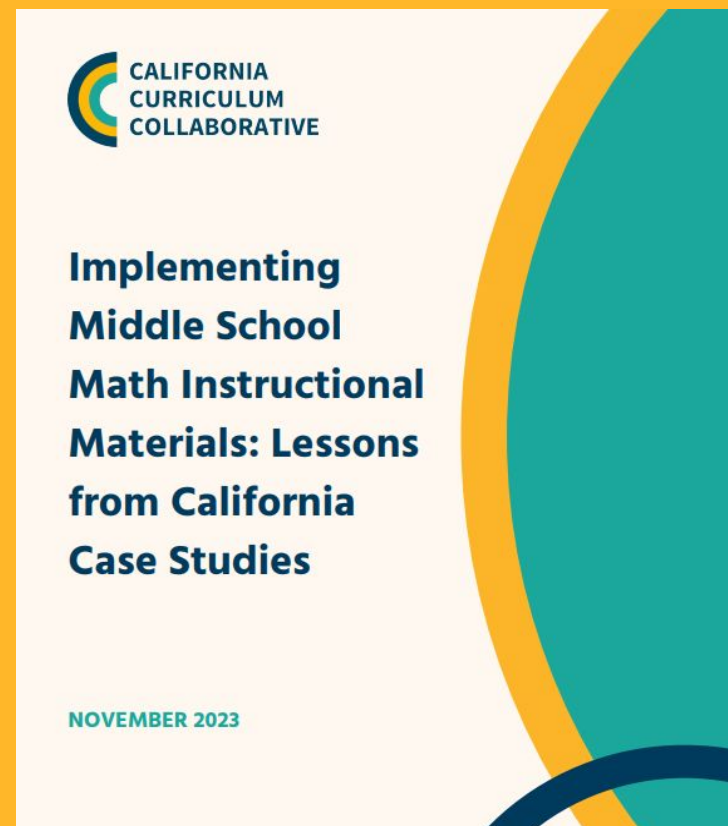Adapt tool to be a retrospective focus group protocol

Try out focus group protocol with 22 implementation experiences

Write up case studies based on focus group discussions

Implementing Middle School Math Instructional Materials: Lessons from California Case Studies

CalCurriculum
November 2023

Our Case Studies

	Case Study 1	Case Study 2	Case Study 3	Case Study 4
Instructional Materials	Houghton Mifflin Harcourt's Go Math! California Edition (2015) *2014 List*	Open Up Resources' 6-8 Math (2017) and Kendall Hunt's Illustrative Mathematics (2019) *Off-List*	Open Up Resources' 6-8 Math (2017) *Off-List*	Curriculum Associates' Ready Mathematics (2017) and iReady Classroom Mathematics (2021) *Off-List*
LEA Facts	Very Large District *40,001+ students*	Mid-Size CMO *1,000-10,000 students*	Small CMO *6-1,000 students*	Large District *10,001-40,000 students*
Years Implementing	8 years	7 years	5 years	5 years

Case Studies Panel Discussion

Allison Carter

Vice President,
Curriculum Services
CORE Learning

Shannah Estep

Managing Director,
Adoption & Innovation
EdReports

Francisco Villegas

Senior Vice President of
School Transformation
**The Partnership for
Los Angeles Schools**

> **The takeaways of the case studies are twofold: It is important to ensure that LEAs are adopting high-quality instructional materials and that there are plans and structures put in place to launch and support ongoing implementation of the materials.**

CALIFORNIA CURRICULUM COLLABORATIVE

Implementing Middle School Math Instructional Materials: Lessons from California Case Studies

NOVEMBER 2023

Questions & Answers

Additional Questions?

Contact:
morgan.sheppard@unbounded.org

ARCHIVE RESOURCES

Focus Group Setup: Addressing Power Dynamics

We approached setting the foundation for our focus groups with:

1. Focus Group Agreements
   - Be fully present and engaged
   - Speak from the "I" perspective
   - Monitor airtime
   - Allow for multiple narratives

2. Discussion of supportive moves for remote group discussions, with attention to power dynamics and how that affects narratives

Scoring Consensus & Disagreements

We approached scoring for each indicator through a (1) waterfall share, (2) discussion, and then (3) consensus process.

Disagreements could result in two possible scenarios:

1. After further discussion, the group aligned on a score that they felt best represented the LEA as a whole
2. The group could not align, and there were at least two distinct perspectives

Regardless of outcome, the case study presents the scores and takeaways of the LEA team.

Advisory Council Members

Rolanda Baldwin
Vice President,
Mathematics
UnboundEd

Dean Ballard
Director of Mathematics
CORE Learning

Joan Barrett
Educational Consultant
CORE Learning

Allison Carter
Vice President,
Curriculum Services
CORE Learning

Katie Laskasky
Program Manager,
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Advisory Council Members

John Moreno
K-12 Math Specialist / TOSA
Carlsbad Unified School District

Sarah Murphy Traylor
Program Manager, Curriculum Services
CORE Learning

Rebecca Rodriguez
Executive Director
Los Angeles College Prep Academy

Francisco Villegas
Senior Vice President of School Transformation
The Partnership for Los Angeles Schools

"You have to know your student population, your context, your teachers, and their experience. What if you're in a school district where turnover is massive every year? If that's the case, then do you have a curriculum that stands on its own, [and can you] then support your teachers, new or not, coming in to be able to implement it with fidelity?"

Dr. Trena Wilkerson, Bellwether *Rounding Up* Report