Leadership Support for Implementation

Opening

Leadership Support for Implementation

It became a great day when you joined us!

Presenter Name, FirstLast@cpm.org

Sign in and make a name tent.

Name Tent

City, State | Role in Education

Name

Hobby | I would rather be…

CPM

More Math For More People

Opening

Housekeeping

+ Bathrooms
+ 9:00 AM – 4:00 PM
+ Breaks scheduled and as needed
+ Lunch
+ Parking Lot Poster
+ Supply/Resource Table

CPM

More Math For More People

Opening

Professional Learning Portal

professionallearning.cpm.org

Leadership Support Implementation Action Plan

File Cabinet

CPM

More Math For More People

Opening

Who is in the room?

Presenter(s):

Presenter Name, FirstLast@cpm.org

CPM

More Math For More People

Opening

Agenda

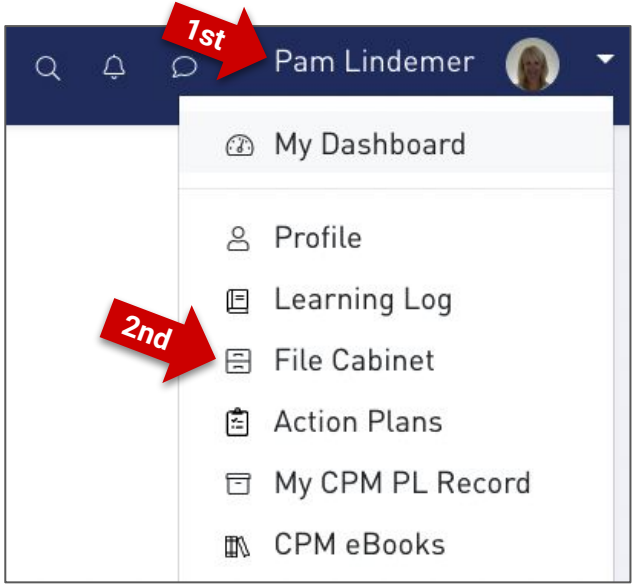
Leadership Implementation Support

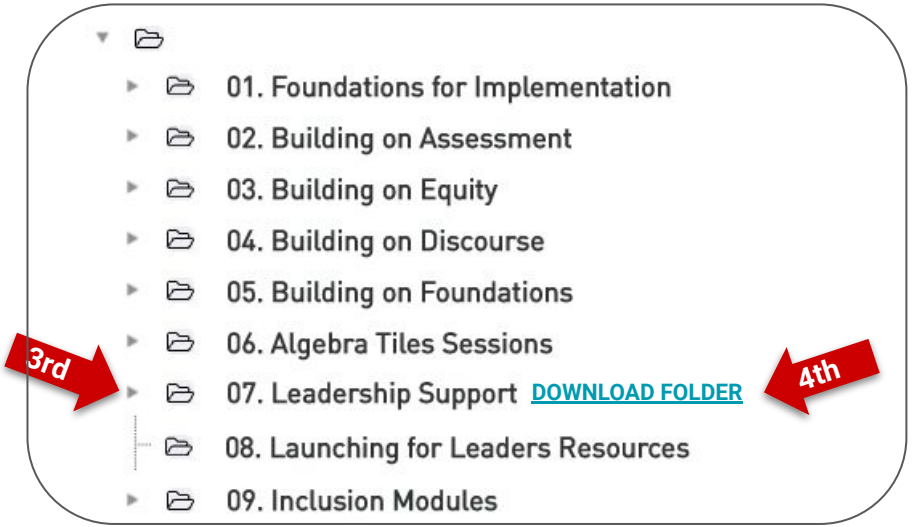
+ Opening
+ The Research Behind Best Practices
+ The CPM Classroom and Instructional Model
+ The Role of the Leader in Implementation
+ Supporting Implementation
+ Closure

Opening

Tech Tip: Getting Session Resources

File Cabinet





Opening

Learning Agreements

+ Actively engage in all activities and discussions.
+ Critically analyze ideas, not people.
+ Manage your technology professionally.
+ Focus on solutions and actions.
+ Be visionary.
+ Explore your beliefs about teaching and learning.

Change takes time, effort, and support FOR TEACHERS as well as students!

Opening

Your Hopes for the Day

Elevator Talk

+ Elbow partner
+ 30 Seconds

Opening

Outcomes

Participants will…

+ Make connections between best practices in mathematics instruction and the design of CPM's curriculum and professional learning.
+ Develop a clear vision of what a CPM classroom looks like and explore tools that can be used to support implementation.
+ Reflect upon the beliefs and instructional practices evident within their school/district to identify their next steps as a leader.
+ Understand CPM's Professional Learning Progression and reflect upon where teachers in their school/district are within that progression to identify their next steps as a leader.
+ Build professional relationships and learning communities to improve math learning.

Opening

Study Team and Teaching Strategies

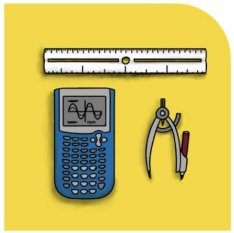
Ambassador	Give One-Get One	Pairs Check (Chat)	Teammates Consult
Carousel: Around the world	Hot Potato	Participation Quiz	Think-Ink-Pair-Share (T.I.P.S)
Carousel: Station Rotation	Hot Seat	Peer Edit	Think-Ink-Share
Carousel: Index Card	Huddle	Pick Three	Traveling Salesman
Dyad	I Spy	Proximity Partner	Tuning Protocol
Elevator Talk	Jigsaw (4 Corners)	Reciprocal Teach	Walk and Talk
Fishbowl	Listening Post	Red Light, Green Light	Whip Around
Fortune Cookie	Math Chat	Silent Debate	
Gallery Walk	Numbered Heads	Swap Meet	

Opening

Getting Ready for Rigor - Creating a Learning Community

Team Roles

Facilitator



Resource Manager

Task Manager

Recorder/Reporter

Opening

A Challenging Task

Huddle

Resource Manager

Opening

Bold Math Leadership

+ What process did your team use to decide how to tackle this problem?
+ Was anyone frustrated at all during the activity? If so, how was it handled?
+ Why is teamwork so important for this activity?
+ What does this activity teach us about accomplishing challenging tasks?

Opening

A Collective Work

Find 4 Partners *NOT* from your School/District or Table

A Partner	**B Partner**
C Partner	**D Partner**

Resource Manager

The Research Behind Best Practices

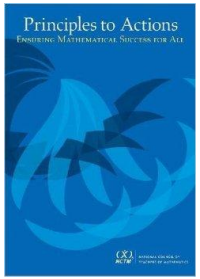
Agenda

Leadership Implementation Support

+ Opening
+ The Research
+ The CPM Classroom and Instructional Model
+ The Role of the Leader in Implementation
+ Supporting Implementation
+ Closure

The Research Behind Best Practices

Starting with Core Beliefs

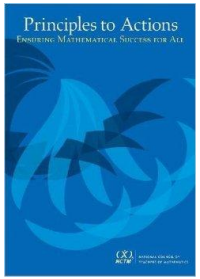


*"Teachers' **beliefs influence the decisions** that they make about the manner in which they teach mathematics… Students' beliefs influence their perception of **what it means to learn mathematics** and their dispositions toward the subject."*

- NCTM's Principles to Actions, 2014

The Research Behind Best Practices

Starting with Core Beliefs



Unproductive Beliefs

Limit Access and Hinder Implementation of Best Instructional Practice

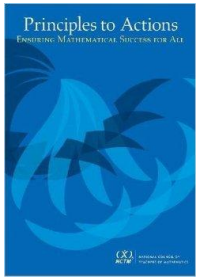
+ Have you encountered this belief? What does it look like?
+ How does this belief specifically impact a student's experience?
+ How might you lead a teacher who believed this?

Resource Manager

Facilitator

The Research Behind Best Practices

Starting with Core Beliefs

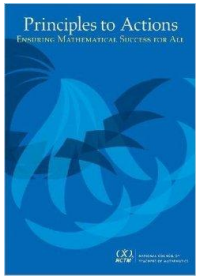


*"It is important to note that **these beliefs should not be viewed as good or bad**. Instead, beliefs should be understood as **unproductive** when they **hinder the implementation** of effective instructional practice or **limit student access** to important mathematics content and practices."*

NCTM's Principles to Actions, 2014

The Research Behind Best Practices

Starting with Core Beliefs



Leader

Productive Beliefs

Enable Access and Implementation of Best Instructional Practice

+ How do we support the shift as leaders?
+ Be prepared to share your ideas with other teams

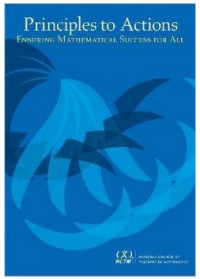
Resource Manager

Facilitator

The Research Behind Best Practices

Starting with Core Beliefs

Swapmeet



Share with the teams you visit

- Which unproductive belief did your team discuss?
- How would you lead a teacher who held the belief?
- How would you support the shift to the more productive counterpart?

Task Manager

Recorder/Reporter

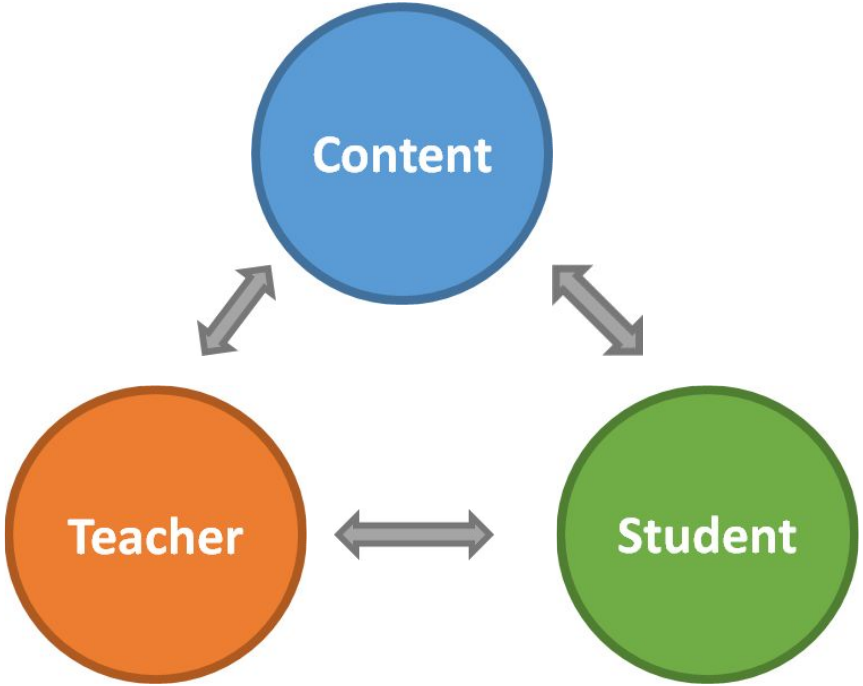
Take a break

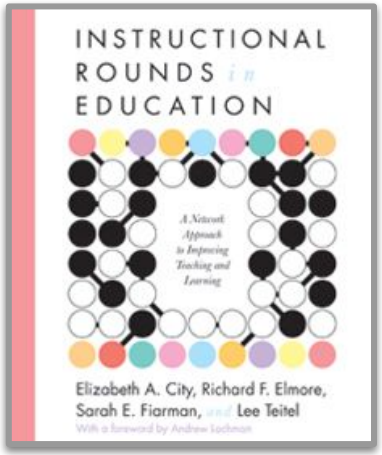
CPM

More Math For More People

The Research Behind Best Practices

The Components of the Instructional Core





The Research Behind Best Practices

CPM's Guiding Principles

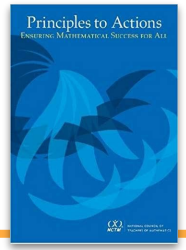
Leader

Content

- Involvement in effective study teams increases students' ability to learn.
- Better retention of mathematics occurs when concepts are grounded in context.
- Engagement with concepts over time deepens mathematical understanding.
- Study teams are guided and supported by a reflective knowledgeable teacher.
- Assessing what students understand requires more than one method.
- A growth mindset means understanding that mastery takes time, effort and support.

The Research Behind Best Practices

Effective Mathematics Teaching Practices



Leader

Teacher

- Establish mathematics goals
- Implement tasks that promote reasoning and problem solving
- Connect mathematical representations
- Facilitate mathematical discourse
- Pose purposeful questions
- Build procedural fluency from conceptual understanding
- Support productive struggle
- Use evidence of student thinking

The Research Behind Best Practices

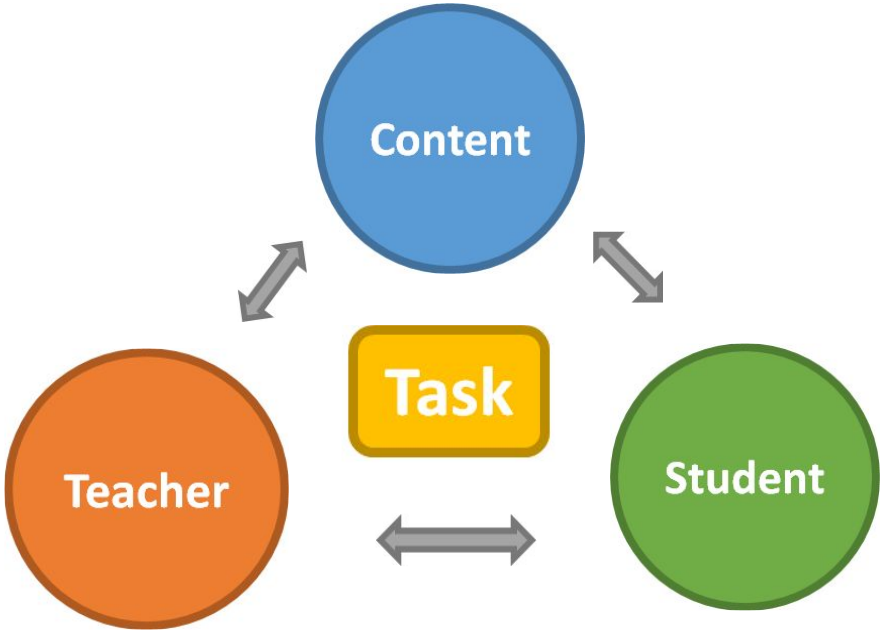
Standards of Mathematical Practice

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Construct viable arguments and critique the reasoning of others
- Model with mathematics

- Use appropriate tools strategically
- Attend to precision
- Look for and make use of structure
- Look for and express regularity in repeated reasoning

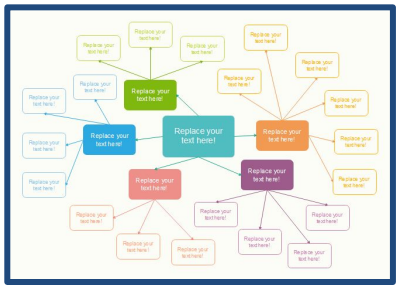
The Research Behind Best Practices

Application



The Research Behind Best Practices

The Instructional Core



What connections can you make?

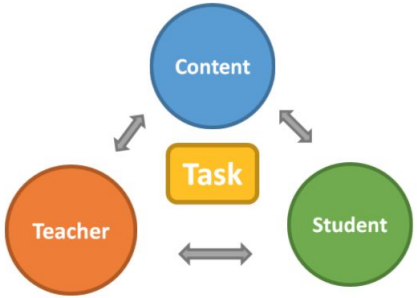
+ The CPM's Guiding Principles
+ Effective Mathematics Teaching Practices
+ The Standards of Mathematical Practice

Resource Manager

The Research Behind Best Practices

The Instructional Core

Hosted Gallery Walk



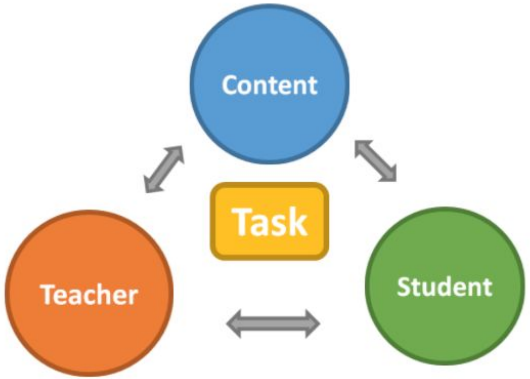
- What connections did others make?
- How did they organize their thinking?
- How do these components work together?

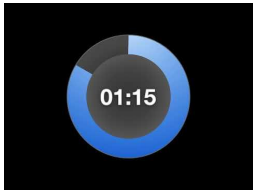
Task Manager

The Research Behind Best Practices

Think-Ink-Share

Beliefs about teaching and learning mathematics	
Unproductive beliefs	**Productive beliefs**
Mathematics learning should focus on practicing procedures and memorizing basic number combinations.	Mathematics learning should focus on developing understanding of concepts and procedures through problem solving, reasoning, and discourse.
Students need only to learn and use the same standard computational algorithms and the same prescribed methods to solve algebraic problems.	All students need to have a range of strategies and approaches from which to choose in solving problems, including, but not limited to, general methods, standard algorithms, and procedures.
Students can learn to apply mathematics only after they have mastered the basic skills.	Students can learn mathematics through exploring and solving contextual and mathematical problems.
The role of the teacher is to tell students exactly what definitions, formulas, and rules they should know and demonstrate how to use this information to solve mathematics problems.	The role of the teacher is to engage students in tasks that promote reasoning and problem solving and facilitate discourse that moves students toward shared understanding of mathematics.
The role of the student is to memorize information that is presented and then use it to solve routine problems on homework, quizzes, and tests.	The role of the student is to be actively involved in making sense of mathematics tasks by using varied strategies and representations, justifying solutions, making connections to prior knowledge or familiar contexts and experiences, and considering the reasoning of others.
An effective teacher makes the mathematics easy for students by guiding them step by step through problem solving to ensure that they are not frustrated or confused.	An effective teacher provides students with appropriate challenge, encourages perseverance in solving problems, and supports productive struggle in learning mathematics.





A Partner

Connect - Extend - Challenge

How do the beliefs and the Instructional Core **connect to/extend/challenge** your understanding of the teaching and learning of mathematics?

The CPM Classroom and Instructional Model

Agenda

Leadership Implementation Support

+ Opening
+ The Research
+ The CPM Classroom and Instructional Model
+ The Role of the Leader in Implementation
+ Supporting Implementation
+ Closure

The CPM Classroom and Instructional Model

Implementation Progress Tool

Leader

The three pillars represent researched best practice in math education around which the CPM program is designed.

Collaborative Learning

Research says students learn ideas more deeply when they discuss ideas with classmates.

Problem-Based Learning

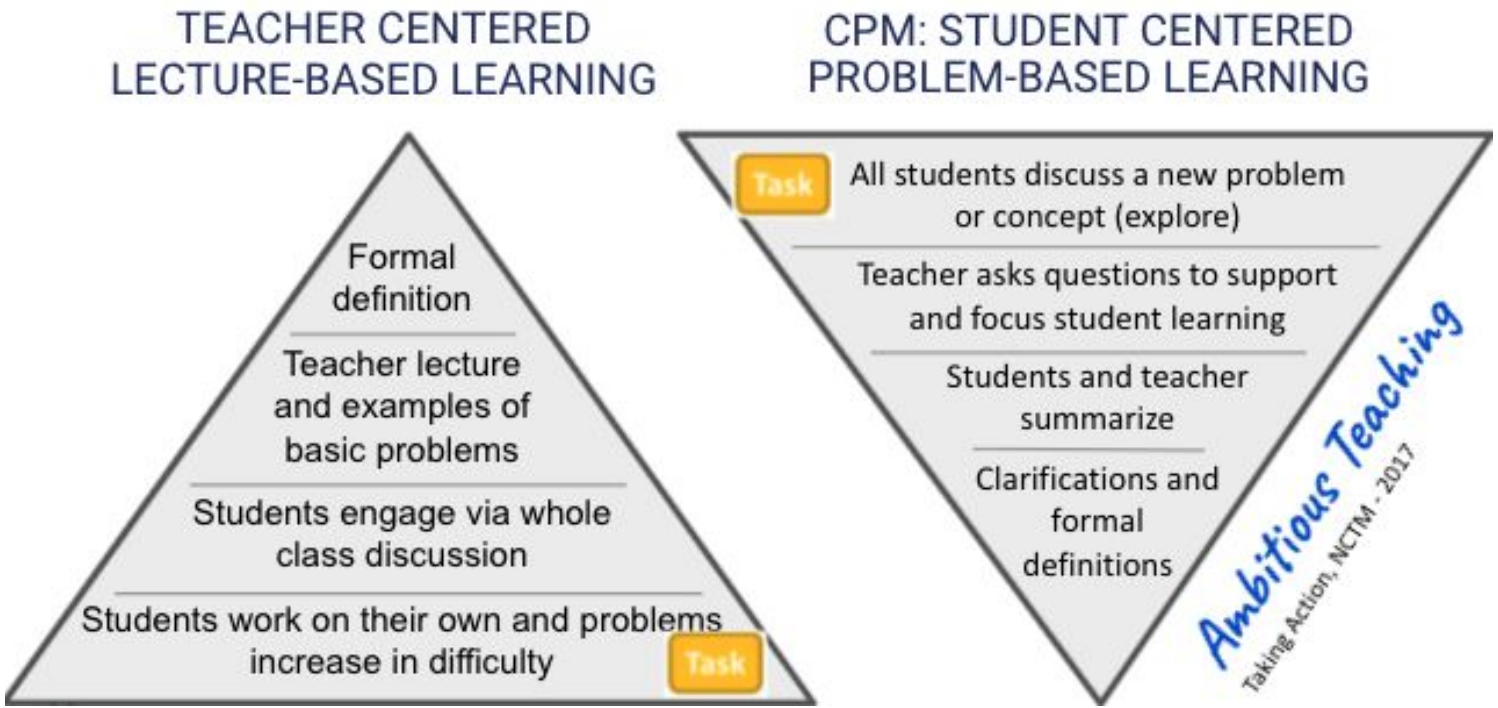
Research says students learn ideas more usefully for other arenas when they learn by attacking problems.

Mixed, Spaced Practice

Research says students learn ideas more permanently when they are required to engage and re-engage with those ideas for months or even years.

The CPM Classroom and Instructional Model

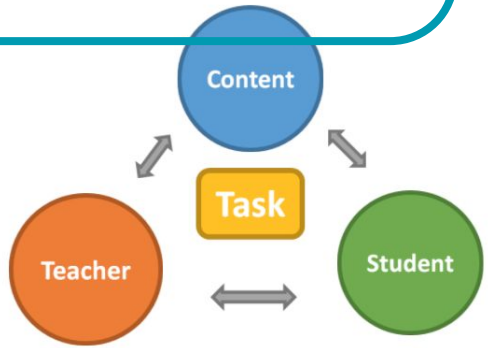
An Upside Down Approach



The CPM Classroom and Instructional Model

Lesson Planning

*In order to support **student engagement** with **rigorous content** in a student-centered collaborative classroom, teachers must be purposeful with **lesson planning**.*



The CPM Classroom and Instructional Model

Implementation Progress Tool: Section One

SECTION ONE: The pillars that represent necessary first steps in any implementation.

Collaborative Learning

Students and teachers are aware of the purpose for and value of working in teams, and are familiar with team norms and roles.

Problem-Based Learning

Students and teachers share math authority as they value and engage in productive struggle. Teachers guide without taking over the thinking.

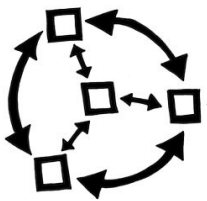
Mixed, Spaced Practice

Both individual lessons and chapters are followed, using suggested pacing. Review & Preview problems are assigned and valued as an essential part of learning.

The CPM Classroom and Instructional Model

Lesson Plan Structure

The **Launch-Explore-Closure (L-E-C)** lesson structure is an essential part of implementing effective CPM lessons and sharing math authority with students to support problem-based learning.



Launch - Lesson Opening

Explore - Structured Problem-Based Learning

Closure - Lesson Closure

The CPM Classroom and Instructional Model

CPM Lesson Observation Tool

The CPM Lesson

Student Centered, Problem-Based

Launch (≈20%)	• Establish the Why • Share the Math Goal • Activate Prior Knowledge • Establish Learning Expectations
Explore (≈60%)	• Students engage in Productive Struggle & Collaborative Learning • Teachers engage in Listening, Circulating & Questioning
Closure (≈20%)	• Presenting a Sequence of Student Thinking • Sharing Ideas with the Whole Class • Making Conceptual Connections • Formalizing Big Math Idea

The CPM Classroom and Instructional Model

CPM Lesson Observation Tool

The CPM Lesson

Student Centered, Problem-Based

Student-Centered · Problem Based Inquiry Driven Lessons	Look Fors	Notes
Launch **Lesson Introduction** Understanding the problem setting, mathematical context, and the challenge *10 minutes (20%) of a 50 minute Lesson*	Teacher communicates student expectations for the lesson (learning targets).	
	Teacher connects the lesson to prior experience and/or real-world context for students.	
	If necessary, the teacher provides background information necessary for students to engage in the lesson (including vocabulary).	
	Teacher spends adequate time on introducing the lesson without spending too much time.	
	Teacher quickly reminds students of prerequisite math skills that might keep them from accessing today's lesson.*	
Explore **Classwork/Teamwork** Students engage in the problem as the teacher moves about the classroom. *25 minutes (50%) of a 50 minute Lesson*	Students grouped appropriately for the type of lesson.	
	Teacher moves about the classroom as students are working, observing and selecting the mathematical ideas students are using that will advance the classes thinking during closure.	
	Teacher asks open-ended questions to probe student thinking, getting them to explain their thinking, generate discussion, and meet a wide range of learners.	
	Teacher questions help students explore mathematical meanings and/or relationships without giving away solutions.	
	Students are talking to each other about the math they are doing, and using math vocabulary while doing so.	
	Teacher/Students use a variety of representations/models to show mathematical thinking (pictures, tables, graphs, words, manipulatives, etc…).	
Summarize **Closure** Teacher guides students to reach the mathematical goals of the problem and to connect their new understanding to prior math goals. *15 minutes (30%) of a 50 minute Lesson*	Teacher sequences student thinking when facilitating a class discussion of the lesson, providing a coherent and compelling story line for the lesson.	
	Students make connections between today's various approaches and the mathematical ideas at the heart of the lesson.	
	Students formalize in their own words the big ideas discussed and make connections to prior learning.	
	Teacher paraphrases and summarizes student thinking to make connections to larger mathematical ideas.	
	Teacher assesses where students are in their understanding of the math in the lesson (either formally or informally).	

*Ideally, skill builders that reteach essential material covered in previous courses are done the week prior to this week's lessons.

The CPM Classroom and Instructional Model

A CPM Lesson

What do you notice?

What do you wonder?

What resonates with you?

The CPM Classroom and Instructional Model

Breaking Down the Approach

Table Discussion

+ What is the role of the teacher?
+ What is the role of the student?

Recorder/Reporter

Facilitator

Task Manager

The CPM Classroom and Instructional Model

Implementation Progress Tool: Section Two

SECTION TWO: Features of desired student learning when the pillars are in place.

Collaborative Learning	Problem-Based Learning	Mixed, Spaced Practice
Students read and make sense of problems together.	Student thinking at varied depths of conceptual understanding are openly shared and valued.	Students work through lessons at an appropriate pace.
Students are able to listen to the ideas of others and communicate their own ideas both in teams and during whole class discussions.	Students demonstrate and value both conceptual and procedural knowledge.	Students understand that mastery takes time, effort, and support.
Students listen carefully to the thinking of others and respond with clarifying questions or extensions of their own.	Students look for, compare, and connect multiple models and solution strategies.	Students are aware of learning targets and periodically self-assess their progress towards those targets.
Students engage in productive mathematical discourse, justifying answers, creating viable arguments, and critiquing the reasoning of others.	Students recognize that incorrect work can be a stepping stone to learning and are willing to share and investigate their thinking.	Students solidify learning as they work on Review & Preview problem sets daily as intended.

★ observed

✓ discuss

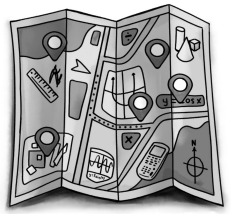
missing

The Role of the Leader in Implementation

Leadership Support - Implementation Action Plan

Supporting CPM Implementation

The CPM Instructional Model



Consider:

+ What might you expect to observe in a CPM classroom?
+ Which parts of the CPM Instructional Model will be easiest for your teachers to implement?
+ Which elements of the CPM Instructional Model will take time to master, be a heavier lift and require ongoing support?
+ Why is CPM the right move for your school or district?

The CPM Classroom and Instructional Model

Networking and Sharing Ideas: Part 1

B Partner

Walk and Talk

Take a 5 minute walk and discuss:

+ Which student actions may be challenging for your teachers to support?
+ Which student actions are quickly accessible?

The CPM Classroom and Instructional Model

Networking and Sharing Ideas: Part 2

Think-Ink-Pair-Share

Concise Talking Points

+ Why CPM?
+ Why is this the right move for my school or district?

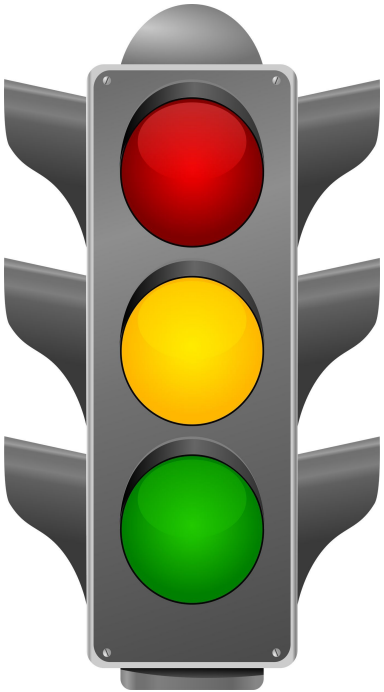
1) Think and Ink
2) Share with Elbow Partner
3) Take Notes on your Partner's Ideas
4) Can you incorporate any of their ideas in a revised draft?

Morning Closure

Green - I was learning today when…

Yellow - I have questions about… or I am wondering if…

Red - My learning stopped today when…



Lunch Time

CPM

More Math For More People

Afternoon Opening

New Teams

Icebreaker

+ Assign Team Roles
+ Introduce Yourself and share your biggest takeaway from the morning.

Facilitator

Afternoon Opening

Icebreaker

Icebreaker

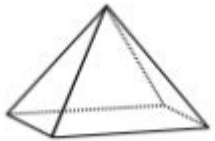
- Everyone touches the yarn
- Complete one challenge at a time

Resource Manager

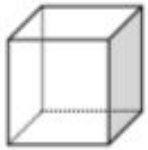
Building with Yarn

a.

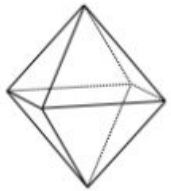
b.



c.



d.



The Role of the Leader in Implementation

Agenda

Leadership Implementation Support

+ Opening
+ The Research
+ The CPM Classroom and Instructional Model
+ The Role of the Leader in Implementation
+ Supporting Implementation
+ Closure

The Role of the Leader in Implementation

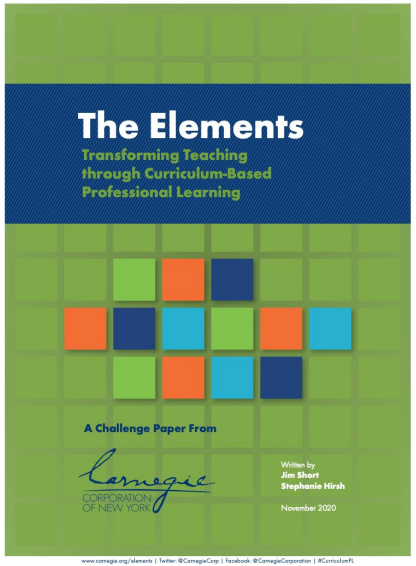
Leadership Vision

The implications are clear. Curriculum matters, but how teachers use curriculum matters even more.

The Elements: Transforming Teaching through Curriculum-Based Professional Learning
-Carnegie Corporation of New York, 2020

The Role of the Leader in Implementation

The Elements



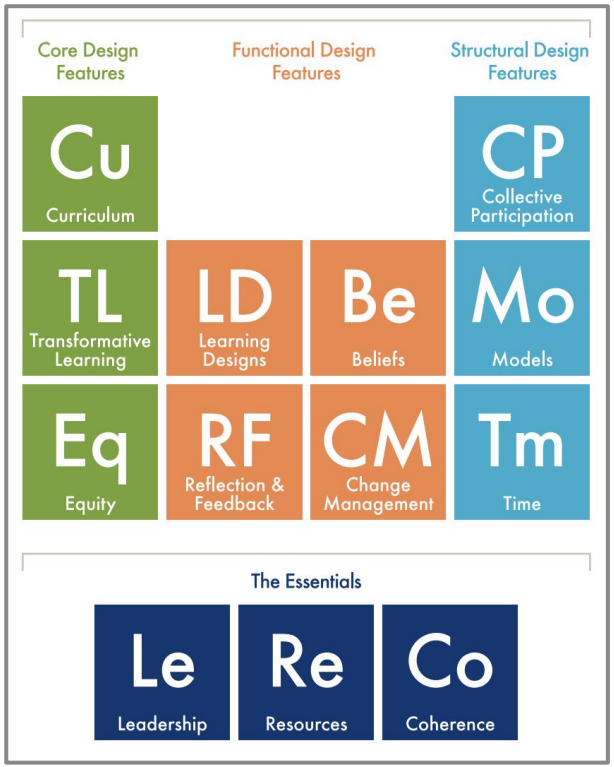
The Elements:
Transforming Teaching through Curriculum-Based Professional Learning

A Challenge Paper from Carnegie Corporation of New York, November 2020

https://bit.ly/3aNjgyQ

The Role of the Leader in Implementation

The Elements



The Elements:
Transforming Teaching through Curriculum-Based Professional Learning

A Challenge Paper from Carnegie Corporation of New York, November 2020

The Role of the Leader in Implementation

The Truth

Good teaching **is** rocket science. Teachers achieve this remarkable feat when they apply sophisticated instructional approaches that require a deep understanding of the subject matter and how students learn.

The Elements: Transforming Teaching through Curriculum-Based Professional Learning, Carnegie Corp, 2020

The Role of the Leader in Implementation

The Elements: The Core (What CPM Provides)

Guidance on what to teach and how to use the rigorous and standards-aligned instructional materials

Experiences that shift teachers' beliefs, perceptions, and practices

Understanding that provides high expectations and culturally relevant instruction for each and every student

The Elements: Transforming Teaching through Curriculum-Based Professional Learning, Carnegie Corp, 2020

The Role of the Leader in Implementation

A Comparison of Two Approaches

Traditional teacher professional development often takes the form of a lecture-heavy workshop that is disconnected from the day-to-day lessons teachers lead. By contrast, curriculum-based professional learning is active, ongoing, and focused on improving the rigor and impact of teachers' lessons. It calls for six major shifts.

FROM TRADITIONAL TEACHER PROFESSIONAL DEVELOPMENT	TO CURRICULUM-BASED PROFESSIONAL LEARNING
Focused on topics or themes	Focused on instructional materials with specific teaching strategies
One-time workshops, usually when school is closed	Repeated sessions, coaching, and feedback opportunities during teachers' regular workdays
Teachers grouped by school	Teachers grouped by the curriculum they are using
Information shared in lectures, presentations, or Q&A discussions	Active learning experiences, such as practicing instruction or participating in lessons as students
Coaching and feedback reserved mostly for new or struggling teachers	Curriculum-focused coaching and feedback for all teachers
Selected teachers receive support for using new curriculum materials	All teachers using new materials participate in curriculum-based professional learning

The Elements: Transforming Teaching through Curriculum-Based Professional Learning, page 10

Table Talk

+ What do you notice?
+ What do you wonder?

The Role of the Leader in Implementation

CPM's Professional Learning Progression

In-Person Learning Events	Virtual Learning Events
Introduction to Foundations Asynchronous Module	**Introduction to Foundations** Asynchronous Module
Days 1 - 3 In-person Learning (Includes parts of IM 1-3 and CM 1-2)	**Sessions 1-6** Synchronous Virtual Learning
Instructional Modules (IM) Asynchronous IM 1 -3 (remaining activities)	**Instructional Modules (IM)** Asynchronous IM 1 - 3
Content Modules (CM) Asynchronous CM 1- 2 (remaining activities)	**Content Modules (CM)** Asynchronous CM 1- 2
Days 4 and 5 In-person Learning (Includes parts of IM 4 - 5)	**Sessions 7 - 10** Synchronous Virtual Learning
Instructional Modules (IM) Asynchronous IM 4 - 5 (remaining activities)	**Instructional Modules (IM)** Asynchronous IM 4 - 5
Content Modules (CM) Any 4 additional Asynchronous CMs	**Content Modules (CM)** Any 4 additional Asynchronous CMs

https://cpm.org/for-teachers

The Role of the Leader in Implementation

CPM's Professional Learning Progression: Continuous Growth

The Role of the Leader in Implementation

CPM's Professional Learning Progression: Continuous Growth

Building on Instructional Practice Series

Complimentary

These professional learning opportunities foster the development of effective strategies for teaching and analyzing student work to provide effective feedback.

Building on Assessment
Participants examine learning progressions and develop formative assessment plans.

Building on Equity
Participants further develop equitable practices to support typically underserved students.

Building on Discourse
Participants study facilitating meaningful mathematical discourse.

Prerequisite: Foundations for Implementation Series

Building on Foundations

This professional learning builds upon the Foundations for Implementation Series by engaging participants with research tools and resources that support student-centered, problem-based learning.

Additional Supports

Implementation Support Visits, Content Sessions, Coaching, Leadership Support, Academies, and more!

The Role of the Leader in Implementation

Structural Design Features (The Role of Building Leaders)

Working together to achieve common goals, grouped by grade and subject

Evolve as teachers' needs change; may include workshops, coaching, professional learning communities, and expert support

Essential to successful curriculum implementation

The Elements: Transforming Teaching through Curriculum-Based Professional Learning, Carnegie Corp, 2020

The Role of the Leader in Implementation

The Essentials (The Role of District Leadership)

Model and promote active learning for both students and adults

Allocate adequate time, funding, assessments, and support for curriculum implementation and professional learning

Weave together curriculum-based professional learning that both supports and is supported by other initiatives

The Elements: Transforming Teaching through Curriculum-Based Professional Learning, Carnegie Corp, 2020

The Role of the Leader in Implementation

Functional Design Features

Experience inquiry-based lessons incorporating strategies for teachers to use with students

Challenge beliefs, promoting transformational learning

Opportunities to deepen understanding and self-assess regularly

Ensure new curriculum and instructional approaches endure

The Elements: Transforming Teaching through Curriculum-Based Professional Learning, Carnegie Corp, 2020

The Role of the Leader in Implementation

The Functions: Change Management

Ensure new curriculum and instructional approaches endure

Change is a **process** not an event.

The Elements: Transforming Teaching through Curriculum-Based Professional Learning, Carnegie Corp, 2020

The Role of the Leader in Implementation

The Elements, “The Essentials” Reading

Jigsaw

- ***Everyone reads pg 45, and…***
  Facilitator: pgs 55-58 Call to Action (for your role)
  Resource Manager: pgs 46-48 Leadership Essential
  Recorder/Reporter: pgs 49-51 Resources Essential
  Task Manager: pgs 52-54 Coherence Essential

- ***Prepare*** to share with your teammates by taking notes on your graphic organizer.

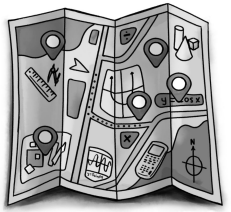
The Role of the Leader in Implementation

Leadership Support - Implementation Action Plan

Supporting CPM Implementation

What is **my** role?

Consider:



+ What is your role in implementation?
+ Who else might be part of the leadership team that guides implementation?
+ What are your next steps to support implementation?
+ Specifically, how will you support teacher engagement in CPM's curriculum-based professional learning?

The Role of the Leader in Implementation

Networking and Sharing Ideas

Walk and Talk

C Partner

With your C Partner, take a 5 minute walk and discuss

+ What are your next steps as a leader in supporting implementation?
+ How will you support teacher engagement in CPM professional learning?

Take a break

CPM

More Math For More People

Supporting Implementation

Agenda

Leadership Implementation Support

+ Opening
+ The Research
+ The CPM Classroom and Instructional Model
+ The Role of the Leader in Implementation
+ Supporting Implementation
+ Closure

Supporting Implementation

Foundations for Implementation Series

Foundations for Implementation Series

Complimentary

The Foundations for Implementation series emphasizes the three pillars of CPM—Collaborative Learning, Problem-Based Learning, and Mixed, Spaced Practice. This series focuses on the mathematics found in the chapters, the course structure, and the classroom environment.

In-Person Learning
Participants attend either a regional location or residential institute and complete content modules/sessions for each chapter.

Virtual Learning
Participants join synchronous sessions held in the CPM Professional Learning Portal and complete instructional modules along with content modules/sessions for each chapter.

For more details or to register visit **professionallearning.cpm.org/events**.

How do we support this work?

Leader

Transitioning to a New Model

+ What are the right questions we need to be asking?
+ How do we support each phase of the lesson?
  + Launch
  + Explore
  + Closure

Question you have asked

Question you would like to ask

Supporting Implementation

The Instructional Model

Teacher Actions That Support Implementation

Use the Teacher Notes as intended.

Work all the problems in the lesson ahead of time, including the Review & Preview problems.

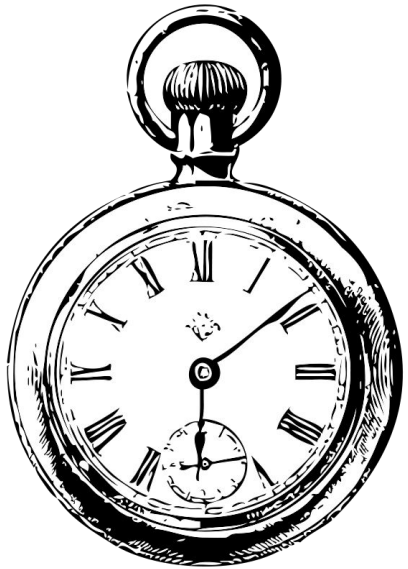
Create purposeful lesson plans.

Supporting Implementation

The Instructional Model

Teacher Actions That Support Implementation

- Use the Teacher Notes as intended.
- Work all the problems in the lesson ahead of time, including the Review & Preview problems.
- Create purposeful lesson plans.



This work takes **TIME...**

Supporting Implementation

Authentic Assessment

Supporting Implementation

Shifts in Practice - Principles of Assessment

In the past, paper/pencil problem solutions and the number of right answers served as sufficient evidence of either a student's mathematical competence or failure to learn.…Today, expectations of mathematical competence go beyond these limited measures of achievement.

CPM's Position Paper on Assessment

Supporting Implementation

Shifts in Practice - Principles of Assessment

Reading & Table Discussion

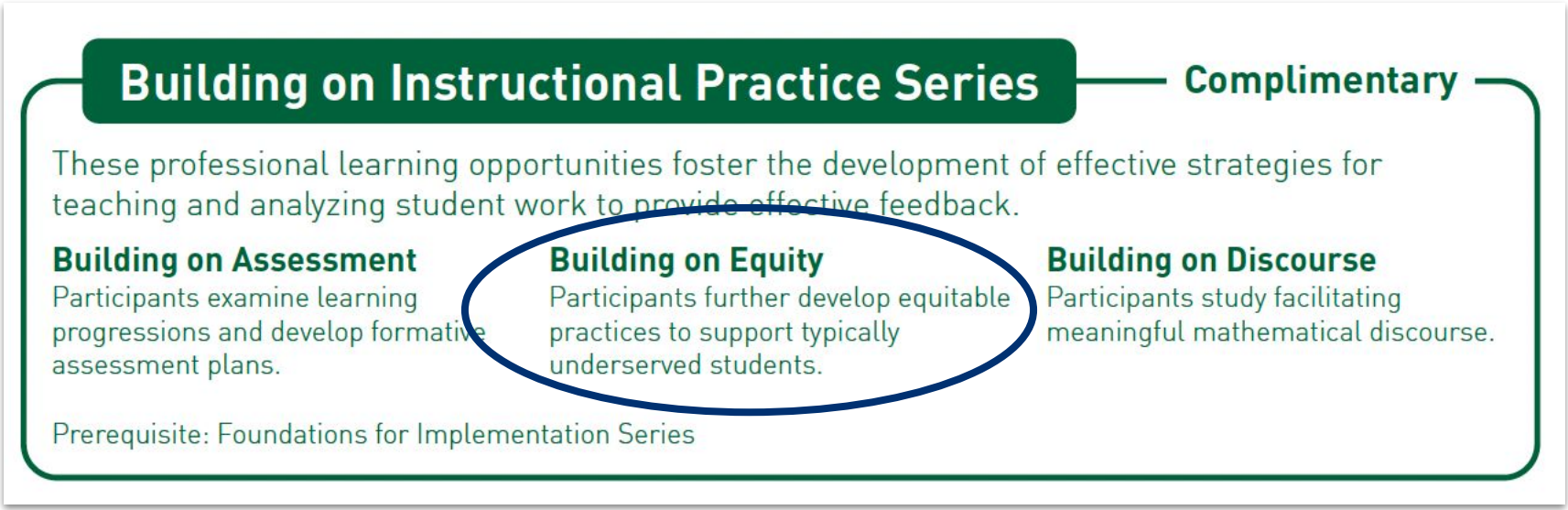
+ What strikes you as you read this document?
+ What are the critical pieces your teachers need to wrestle with?

https://bit.ly/3QjhHJ4

Not about Friday's Test

Supporting Implementation

Equitable Practices



Supporting Implementation

Moving Deeper - Culturally Responsive Teaching

Supporting Implementation

CPM'S Equity Principles

CPM's Equity Principles

The goal of teaching is to help all students transition from dependent to independent learners.

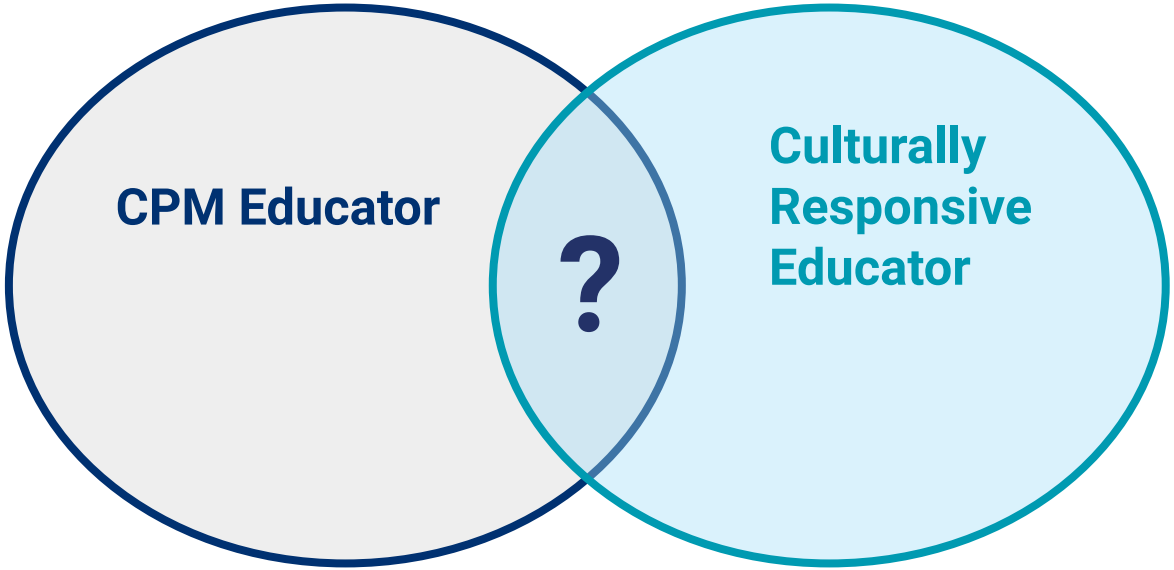
Relationships are of vital importance.

Student uniqueness is an asset, not a deficit.

Reflection is a crucial part of growth.

Supporting Implementation

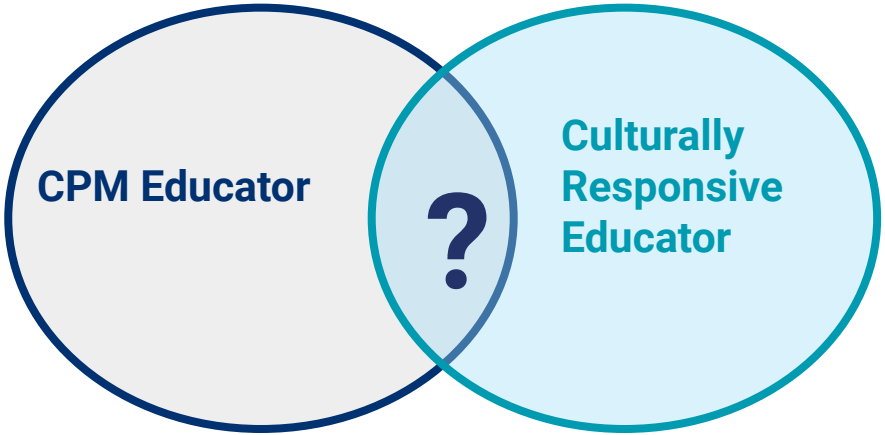
Culturally Responsive Teaching



What additional responsibilities does ***Culturally Responsive Teaching*** bring to the CPM approach?

Supporting Implementation

Culturally Responsive Teaching



Leader

CULTURALLY RESPONSIVE EDUCATION

Focuses on improving the learning capacity of diverse students who have been marginalized educationally.

Centers around the affective & cognitive aspects of teaching and learning.

Efforts to accelerate learning live here.

Concerns itself with building cognitive capacity and academic mindset by pushing back on dominant narratives about people of color.

Independent Learning for Agency

Supporting Implementation

Why Equity?

"Equity articulates and advances high expectations for all students and applies culturally relevant pedagogies and content consistent with a shared vision for learning and teaching."

(The Elements: Transforming Teaching through Curriculum-Based Professional Learning, Carnegie Corp, 2020)

Supporting Implementation

Discourse and Collaboration

Building on Instructional Practice Series

Complimentary

These professional learning opportunities foster the development of effective strategies for teaching and analyzing student work to provide effective feedback.

Building on Assessment
Participants examine learning progressions and develop formative assessment plans.

Building on Equity
Participants further develop equitable practices to support typically underserved students.

Building on Discourse
Participants study facilitating meaningful mathematical discourse.

Prerequisite: Foundations for Implementation Series

Building on Foundations

This professional learning builds upon the Foundations for Implementation Series by engaging participants with research tools and resources that support student-centered, problem-based learning.

Additional Supports

Implementation Support Visits, Content Sessions, Coaching, Leadership Support, Academies, and more!

Supporting Implementation

Networking and Sharing Ideas

D Partner

Concise Talking Points

+ Why CPM?
+ Why is this the right move for my school/district?

1) Share Revised Draft
2) Take Notes on Partner's Ideas
3) Can you incorporate any of their ideas in a Final Draft?

Closure

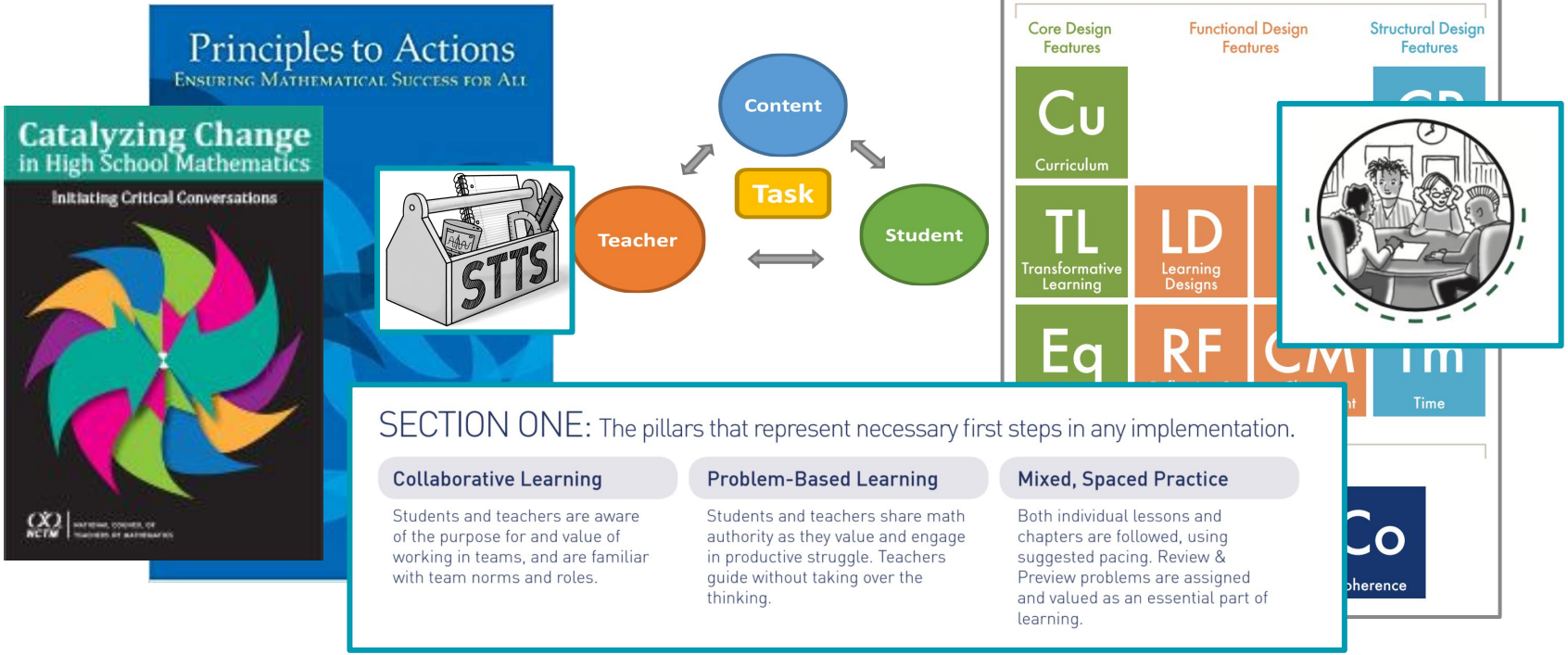
Agenda

Leadership Implementation Support

- Opening
- The Research
- The CPM Classroom and Instructional Model
- The Role of the Leader in Implementation
- Supporting Implementation
- Closure

Closure

Leadership Support for Implementation



Closure

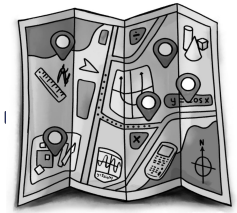
Outcomes

Participants will…

- Make connections between best practices in mathematics instruction and the design of CPM's curriculum and professional learning.
- Develop a clear vision of what a CPM classroom looks like and explore tools that can be used to support implementation.
- Reflect upon the beliefs and instructional practices evident within their school/district to identify their next steps as a leader.
- Understand CPM's Professional Learning Progression and reflect upon where teachers in their school/district are within that progression to identify their next steps as a leader.
- Build professional relationships and learning communities to improve math learning.

Closure

Change Management



CM
Change Management

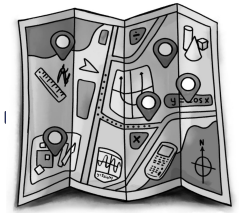
Ensure new curriculum and instructional approaches endure

Change is a **process** not an event.

(The Elements: Transforming Teaching through Curriculum-Based Professional Learning, Carnegie Corp, 2020)

Closure

My Commitment to Leading Change



Think/Ink/Share (Table Talk)

Change is a **process** not an event.

+ What do I commit to do in response to today's learning?
+ What do I need to do next with my knowledge?
+ What information do I need?
+ What questions do I have? What am I wondering about?

Closure

- Parking Lot
- Attendance & Feedback
  - In the PL Portal
- Complete the Implementation for Leadership - On Demand Work module in the PL Portal
- Continuing Education Credit

QR CODE HERE

CPM

More Math For More People