

## Professional Development

# Transforming Mathematics Classrooms



### Start

#### Connect to Prior Knowledge

**Why** Support students' knowledge of solving addition problems with an unknown change by foreshadowing solving for an unknown change in an addition problem with three-digit numbers.

**How** Have students solve two-digit addition equations for missing addends.

Find each sum.  
 $32 + ? = 89$   
 $55 + ? = 92$

**Solutions**  
57; 37

# Helping Every Educator Unlock the Power of a Truly Discourse-Driven Mathematics Classroom

To help you get the most from *Ready Classroom Mathematics*, we partner with you to help you shape a culture of deep mathematics learning. Educators learn carefully developed practices built around the most important actions to drive meaningful mathematics conversations for conceptual understanding. Each educator learns to make the leap to discourse-driven instruction with a powerful network of support behind them.

## Ready Classroom Mathematics Professional Development

PRODUCT KNOWLEDGE ● ..... ► PRACTICE CHANGE

### New Users



**Launching** mathematics curriculum

### Practicing Users



**Strengthening** daily mathematics instruction

### Advanced Users



**Expanding** effective mathematics practices



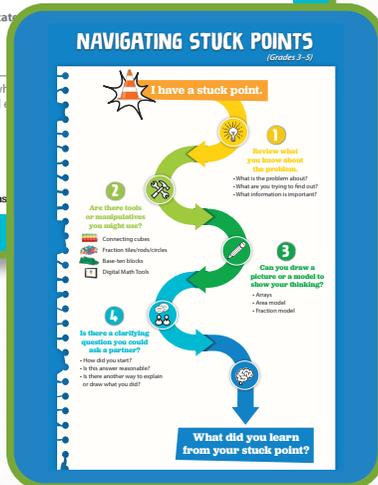
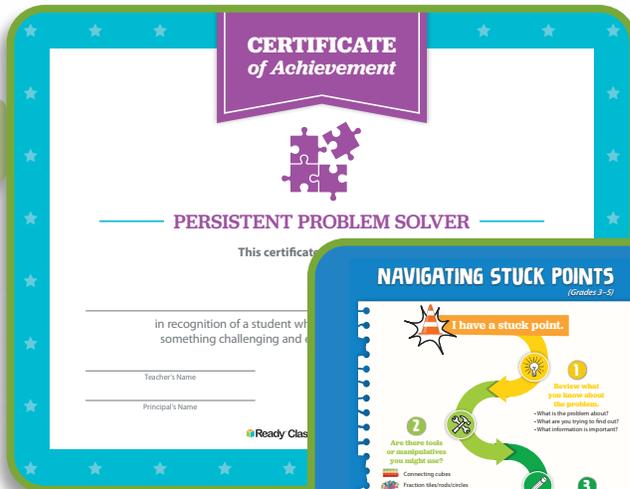


## Putting Discourse at the Center of the Classroom

Our professional development supports educators in using *Ready Classroom Mathematics* with fidelity from day one. Educators learn to deeply infuse student engagement through conversation into everyday instruction and to make balancing rigor and practical action possible in every classroom.

## Building Leader Capacity to Support Strong Mathematical Practices

By providing rich supports for instructional leaders, including coaches, we help all educators deepen their understanding of mathematics instructional practice as they improve their understanding of *Ready Classroom Mathematics*.

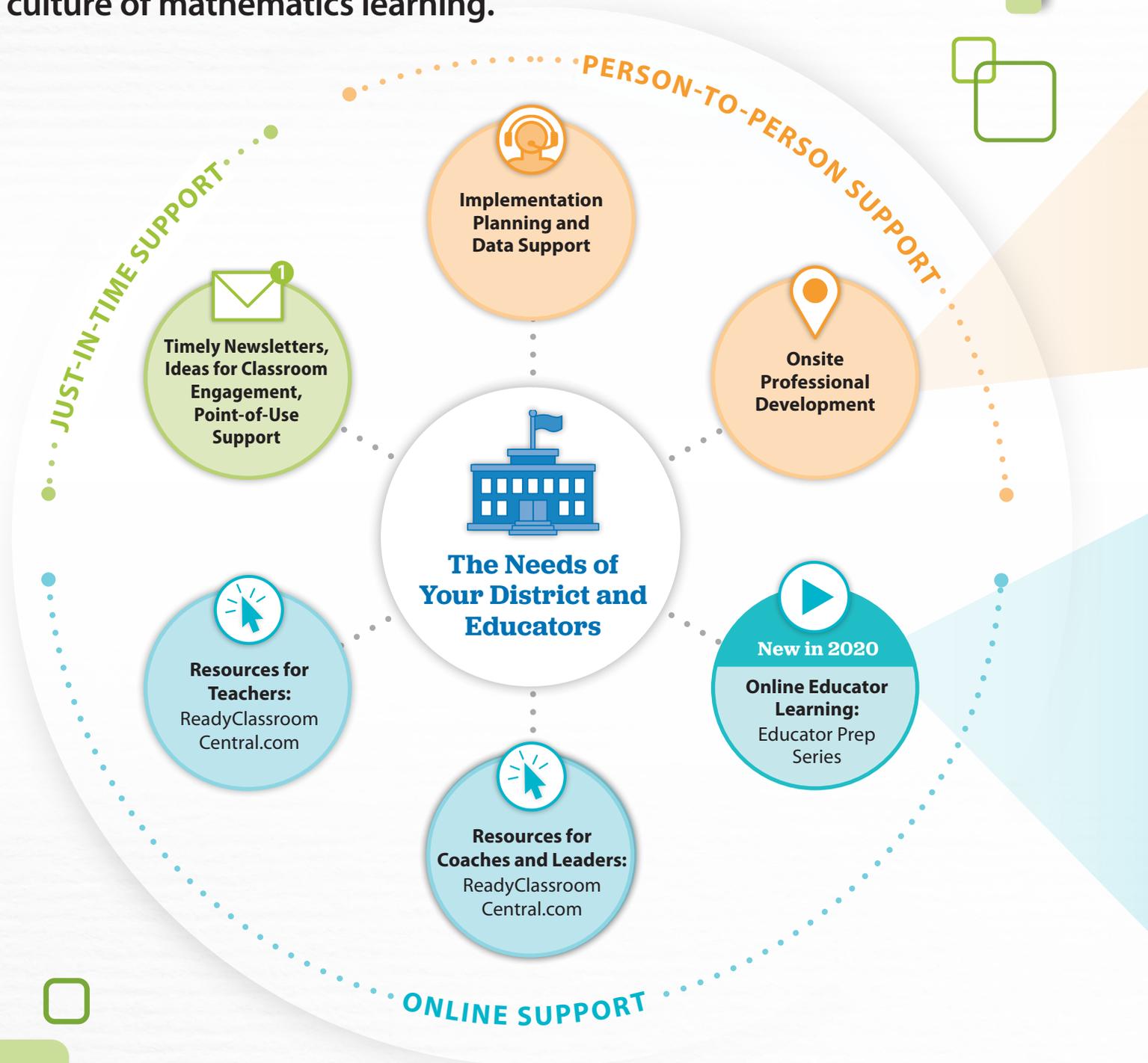


## Helping Implementations Succeed

Our commitment to each educator's success is our foremost priority. From the rich supports in our Teacher's Guides, to our always-available resources, to our deep commitment to partnership and service, we are here for you for long-term success.

# A Comprehensive Network of Support—There When You Need It

We partner with you to help you build a discourse-driven culture of mathematics learning.



## Onsite Professional Development: Sustained, Classroom-Focused Development

Our onsite courses offer sustained, classroom-focused development for all educators that builds both their practical knowledge of fully utilizing the components of *Ready Classroom Mathematics* and their deep understanding of mathematics instructional practices. The result is rich, discourse-driven classrooms sustained by practical routines.



## Educator Prep Series: Extending Educator Learning to Maximize Impact



Available to all educators through their *i-Ready* account, the Educator Prep Series is a flexible complement to, and extension of, your onsite *Ready Classroom Mathematics* professional development program.

The Educator Prep Series consists of short courses and videos that highlight and align to NCTM's Effective Mathematics Teaching Practices. Focus areas include preparing for instruction, supporting productive struggle, promoting fluency, and facilitating meaningful discourse. These courses are intended to be used on demand to help educators extend or refresh their learning as they put *Ready Classroom Mathematics* strategies into practice.

# Ready Classroom Mathematics Professional Development Scope and Sequence

Our professional development is designed to grow along with your implementation, meeting the learning needs and interests of educators at each phase of their development: New, Practicing, and Advanced. Our courses address a set of common learning outcomes, while our Tailored Support sessions deliver targeted outcomes specific to your needs.

	 <b>New</b> <b>Launching</b> mathematics curriculum		 <b>Practicing</b> <b>Strengthening</b> daily mathematics instruction	
<b>End of Prior Year</b>	Introducing the <i>Ready Classroom Mathematics</i> Program	\$1,500**		
		<b>3 Sessions<sup>†</sup></b> Total: \$4,500/site		
<b>Back to School</b>	<b>For Leaders:</b> Leading a <i>Ready Classroom Mathematics</i> Implementation I <a href="#">p. 10</a>	<b>Included*</b>	<b>For Leaders:</b> Leading a <i>Ready Classroom Mathematics</i> Implementation II <a href="#">p. 11</a>	
	<b>For Teachers:</b> Preparing to Teach <i>Ready Classroom Mathematics</i> <a href="#">p. 12</a> <i>The recommended time for this course is 6 hours.</i>	✓	<b>For Teachers:</b> Sequencing Student Ideas to Deepen Mathematical Reasoning <a href="#">p. 13</a>	
<b>4–6 Weeks into the School Year</b>	<b>For Teachers:</b> Developing Mathematical Thinkers through Instructional Routines <a href="#">p. 12</a>	✓	<b>For Teachers:</b> Making Mathematics Accessible for All Learners <a href="#">p. 13</a>	
<b>12–16 Weeks into the School Year</b>	 <b>Tailored Support p. 15</b> Opportunities to enhance and refine learning are available during Tailored Support visits. These visits are designed in cooperation with leaders and coaches based on implementation goals and educator needs. Topics include: <ul style="list-style-type: none"> <li>• Developing Fluency with <i>Ready Classroom Mathematics</i> (geared toward <i>Math Leads and Coaches</i>)</li> <li>• Using <i>Ready Classroom Mathematics</i> Assessment Data to Drive Instruction</li> <li>• Planning and Pacing</li> <li>• Interactive Video Studies</li> </ul>	✓	 <b>Tailored Support p. 15</b> Opportunities to enhance and refine learning are available during Tailored Support visits. These visits are designed in cooperation with leaders and coaches based on implementation goals and educator needs. Topics include: <ul style="list-style-type: none"> <li>• Leadership Classroom Visits—Look-Fors (geared toward <i>Math Leads and Coaches</i>)</li> <li>• Support for New Users</li> <li>• Implementation Reflection with Look-Fors</li> <li>• Try–Discuss–Connect Routine</li> <li>• And more, including Tailored Support courses from the prior year</li> </ul>	

\*Districts with three or more implementing sites purchasing professional development packages will receive a centralized leadership session (one per every 10 sites) of up to three hours in length.

† Up to six hours unless otherwise indicated. See pages 8–9 for details about our flexible scheduling and grouping.

\*\* Strongly recommended add-on to New User package. \$1,500 price includes up to three 90-minute sessions in a centralized location.



**The Educator Prep Series** of online modules is a complement to your onsite professional development. For more about the Educator Prep Series, see page 5.



Visit **ReadyClassroomCentral.com** to find helpful resources to support mathematics instruction, including videos, planning templates, pacing guidance, and family communications.

	3 Sessions <sup>†</sup> Total: \$4,500/site	2 Sessions <sup>†</sup> Total: \$3,000/site	 <b>Advanced</b> Expanding effective mathematics practices	2 Sessions <sup>†</sup> Total: \$3,000/site	1 Session <sup>†</sup> Total: \$1,500/site
	Included*	Included*	<b>For Leaders:</b> Leading a <i>Ready Classroom Mathematics Implementation III</i> p. 11	Included*	Included*
	✓	✓	<b>For Teachers:</b> Empowering Students within Differentiated Small Groups p. 14	✓	✓
	✓	✓	 <b>Tailored Support</b> p. 15 Opportunities to enhance and refine learning are available during Tailored Support visits. These visits are designed in cooperation with leaders and coaches based on implementation goals and educator needs. Topics include:		
	✓		<ul style="list-style-type: none"> <li>Facilitated Collaborative Team Planning (<i>geared toward Math Leads and Coaches</i>)</li> <li>Support for New Users</li> <li>Advanced Differentiated Instruction Practices</li> <li>And more, including Tailored Support courses from other years</li> </ul>	✓	

For detailed course descriptions, see pages 10–15.

# Flexible Scheduling, Differentiated Learning

While our professional development scope and sequence is designed to move teachers and leaders along the continuum from product to practice, we continually calibrate our approach because not everyone has the same needs at the same time. Our flexible days and groupings allow us to work with you to meet multiple sets of needs in one session, lasting up to six hours.



## Scheduling Courses

The recommended time for Preparing to Teach is six hours. For the remaining New and Practicing courses, we advise at least four hours and no less than three.

### Scenario 1

**The Need:** Educators need a solid foundation of the program components and philosophy as well as time to prepare for instruction.

**The Solution:** Deliver a six-hour course to all teachers together.

6 hrs Preparing to Teach course

### Scenario 2

**The Need:** All educators need the same learning for the remaining scope and sequence of Developing Mathematical Thinkers through Instructional Routines and the Practicing courses.

**The Solution:** Deliver a four-hour course to all teachers together and follow up with site leaders.

4 hrs Course delivered to up to 30 teachers

Break

2 hrs Site-level leadership planning with principals, coaches, and other building leaders

### Scenario 3

**The Need:** Educators at the same site have varying levels of experience or other differentiated learning needs.

**The Solution:** Rotate teacher groups through different courses.

3 hrs Condensed course delivered to group with similar learning needs

Break

3 hrs Different condensed course delivered to group with separate learning needs



## Scheduling Tailored Support

Tailored Support sessions last up to six hours and are designed in cooperation with leaders and coaches based on implementation goals and educator needs.

### Scenario 1

**The Need:** All teachers at a site need support with pacing *Ready Classroom Mathematics*.

**The Solution:** Rotate grade-level teams through Professional Learning Communities (PLCs).

**60 mins** PLC to review midyear data with Grade K

**60 mins** PLC to review midyear data with Grade 1

**60 mins** PLC to review midyear data with Grade 2

Break

**60 mins** PLC to review midyear data with Grade 3

**60 mins** PLC to review midyear data with Grade 4

**60 mins** PLC to review midyear data with Grade 5

### Scenario 2

**The Need:** Specific groups need targeted support in implementing the Try–Discuss–Connect routine to foster mathematical discourse in their classrooms.

**The Solution:** Rotate role-alike teams through Tailored Support sessions.

**2 hrs** Try–Discuss–Connect routine support provided through Interactive Video Study to enhance Grade 3 teachers' capacity for orchestrating mathematical discourse to increase student engagement

**2 hrs** Try–Discuss–Connect routine support provided through Interactive Video Study to enhance primary teachers' capacity for orchestrating mathematical discourse to increase student engagement

Break

**2 hrs** Try–Discuss–Connect routine support provided through Interactive Video Study to enhance math coaches' capacity for orchestrating mathematical discourse to increase student engagement

# Detailed Course Descriptions

The following pages include detailed course descriptions for Leaders, New Users, and Practicing Users as well as Tailored Support topics. Each description is accompanied by outcomes indicating what leaders and educators should know or be able to do as a result of the session.

If you have any questions regarding the content, contact your sales representative or professional development specialist for more information. The service team at Curriculum Associates is dedicated to supporting a successful implementation of *Ready Classroom Mathematics* at your school or district. We look forward to working with you.

Symbols indicate an action is addressed in our professional development for:



**Leaders**



**New Users**



**Practicing Users**



**Advanced Users**



## Courses for Leaders

The leader courses are geared toward principals and other site-level implementation leaders—such as instructional coaches—and district leaders responsible for the implementation.



### Leading a *Ready Classroom Mathematics* Implementation I

#### Leaders prepare to support teacher success implementing *Ready Classroom Mathematics*

In *Leading a Ready Classroom Mathematics* Implementation I, leaders who are new to implementing this program are introduced to strategies for identifying observable markers of effective mathematics instruction and practices that support educators in selecting appropriate program components, preparing for instruction, and establishing routines to facilitate meaningful discourse. If time permits, leaders construct a clear vision to ensure strong program rollout and work collaboratively to develop plans for communicating and engaging teachers in a unified vision and shared goals for *Ready Classroom Mathematics* use in their schools.

#### Outcomes:

- **Focus Outcome\*** Support educators in meeting students' needs by selecting the appropriate components of the *Ready Classroom Mathematics* program, preparing for instruction, and establishing routines to facilitate meaningful discourse.
- Set and communicate a clear vision, including identifying person(s) responsible for ensuring implementation of program components with fidelity.
- Identify common challenge areas in early phases of implementation, such as adjusting pacing, and determine actionable steps to provide support and guidance.

\*Focus Outcomes are the primary objective of the course. Scheduling the course for less time than the recommended length will result in a reduction in the coverage of other outcomes or only coverage of the Focus Outcome.



## Leading a *Ready Classroom Mathematics* Implementation II

### Leaders focus on building a culture that fosters a growth mindset for teachers and students

Leading a *Ready Classroom Mathematics* Implementation II engages leaders who have been using *Ready Classroom Mathematics* for at least one year to support a school culture that fosters a growth mindset among students and educators. Leaders refine their implementation plans to build on the prior year's successes and enhance use of observation tools to support teacher practice. If time permits, leaders examine case studies so they can make connections to and generate next steps for their implementations. Leaders discuss ways to build trusted partnerships with teachers and provide actionable feedback to promote learning.

#### Outcomes:

- **Focus Outcome\*** Refine and execute a school-level implementation plan that builds on past successes and integrates the observable markers of quality *Ready Classroom Mathematics* instruction.
- Support schoolwide use of the full range of *Ready Classroom Mathematics* resources for whole class and small group instruction, assessment, practice, review, and enrichment.
- Provide specific and actionable feedback on teachers' practice in direct relation to student learning.



## Leading a *Ready Classroom Mathematics* Implementation III

### Leaders advance the implementation of *Ready Classroom Mathematics* to develop students as mathematical thinkers and foster ownership of their own learning

Leaders continue to define effective mathematics instruction, analyze current levels of implementation, refine previous action plans to support and enhance educators' instructional practice, and advance the implementation of *Ready Classroom Mathematics* to develop students as mathematical thinkers. Leaders have the option to choose from topics such as:

- The Role of Leaders in a Strong Implementation
- Examining Mathematical Discourse in Action
- Supporting Differentiation in the Classroom
- Using *Ready Classroom Mathematics* Assessment Data to Drive Instruction for Leaders to meet their implementation goals

#### Outcomes:

- **Focus Outcome\*** Enhance educators' instructional practice and advance the implementation of *Ready Classroom Mathematics* to develop students as mathematical thinkers.
- Further refine and execute a school-level implementation plan that builds on past successes and integrates the observable markers of quality *Ready Classroom Mathematics* instruction.

\*Additional outcomes may vary.



# Courses for New Users

## Launching mathematics curriculum

The recommended length for these centrally delivered courses is four hours unless otherwise noted—with each course needing a minimum scheduled time of at least three hours—but we work within the flexibility of up to six hours to meet your needs. Computer and web access are strongly recommended. The teacher courses are geared toward teachers and instructional coaches, but leaders are also encouraged to attend.



### Preparing to Teach *Ready Classroom Mathematics*

#### Educators connect the program to important daily habits and mathematics instructional practices

Preparing to Teach *Ready Classroom Mathematics* equips educators to launch successful *Ready Classroom Mathematics* implementations and begin to make connections between the program, the Standards for Mathematical Practice, and NCTM's Effective Teaching Practices. Using print and digital resources, educators prepare for the first few weeks of instruction and learn how to administer the Diagnostic to gather reliable student data to drive instructional decisions. Throughout this preparation, educators focus on creating a discourse-rich classroom that supports students' mathematical reasoning and conceptual understanding through each day of instruction.

#### Outcomes:

- **Focus Outcome\*** Locate and utilize essential components for planning goal-driven *Ready Classroom Mathematics* lessons.
- Motivate and prepare students to do their best on the Diagnostic in order to get reliable data to drive instruction.
- Prepare to deliver purposefully planned instruction for *Ready Classroom Mathematics*.
- Begin to establish a mathematics classroom where students make meaning of mathematics through purposeful conversation, perseverance, productive struggle, and collaborative thinking.

#### NCTM Effective Teaching Practice Connection\*\*

- Establish mathematics goals to focus learning.
- Implement tasks that promote reasoning and problem solving.
- Support productive struggle in learning mathematics.

**Recommended Time:** six hours with a minimum scheduled time of four hours.



### Developing Mathematical Thinkers through Instructional Routines

#### Educators expand their practice of supporting productive student discourse for all learners

In Developing Mathematical Thinkers through Instructional Routines, educators examine how to use the *Ready Classroom Mathematics*' Try–Discuss–Connect routine to support productive student discourse. Within each step of the routine, educators reflect on students' opportunities to engage with the Standards for Mathematical Practice—including making sense of and solving a task, discussing various strategies, and connecting between representations. As educators prepare for a day of instruction focused on facilitating student-led discourse that leads to shared understanding of mathematical concepts, they analyze student data gathered from the Prerequisites report to inform instruction.

#### Outcomes:

- **Focus Outcome\*** Draw connections between the Try–Discuss–Connect routine and the Standards for Mathematical Practice.
- Use the routine as a vehicle for developing conceptual understanding through shared student thinking, productive struggle, and authentic discourse.
- Use data from the Prerequisites report to inform instruction.

#### NCTM Effective Teaching Practice Connection\*\*

- Implement tasks that promote reasoning and problem solving.
- Use and connect mathematical representations.
- Facilitate meaningful mathematical discourse.
- Pose purposeful questions.



# Courses for Practicing Users

## Strengthening daily mathematics instruction

The recommended length for these centrally delivered courses is four hours with a minimum recommended time of three hours, but we work within the flexibility of up to six hours to meet your needs. Computer and web access are strongly recommended. The teacher courses are geared toward teachers and instructional coaches, but leaders are also encouraged to attend.



### Sequencing Student Ideas to Deepen Mathematical Reasoning

#### Educators develop students' confidence in mathematics through the use of the Standards for Mathematical Practice

In Sequencing Student Ideas to Deepen Mathematical Reasoning, educators analyze student work samples and build their teaching practice for selecting, sequencing, sharing, and connecting student-generated strategies to advance established mathematical goals. Educators also hone their ability to pose purposeful questions during the Try–Discuss–Connect routine to continue to develop students' mathematical confidence and ability to independently activate the Standards for Mathematical Practice.

#### Outcomes:

- **Focus Outcome\*** Investigate how session and lesson goals are situated within the learning progression and related standards.
- Connect *Ready Classroom Mathematics* supports for sequencing student solutions to established goals.
- Pose questions that lead students to use, discuss, and connect multiple representations.

#### NCTM Effective Teaching Practice Connection\*\*

- Use and connect mathematical representations.
- Facilitate meaningful mathematical discourse.
- Pose purposeful questions.
- Build procedural fluency from conceptual understanding.
- Elicit and use evidence of student thinking.



### Making Mathematics Accessible for All Learners

#### Educators differentiate instruction to support student access to grade-level content

Making Mathematics Accessible for All Learners helps educators refine their ability to offer all students access to grade-level content through whole class differentiation opportunities built into *Ready Classroom Mathematics*. Educators strategically explore program features to activate or build students' prior knowledge, connect to real-world contexts, develop language, and represent mathematics with hands-on models. In order to advance the learning of all students, educators apply these supports to their practice and plan for ways to monitor and observe understanding.

#### Outcomes:

- **Focus Outcome\*** Use *Ready Classroom Mathematics* components to plan opportunities for differentiation within a day of instruction.
- Leverage problems to maximize student learning, providing access and challenge for all students.
- Utilize formative assessments to plan for instruction that meets the needs of all learners.

#### NCTM Effective Teaching Practice Connection\*\*

- Implement tasks that promote reasoning and problem solving.
- Support productive struggle in learning mathematics.
- Elicit and use evidence of student thinking.

\*Focus Outcomes are the primary objective of the course. Scheduling the course for less time than the recommended length will result in a reduction in the coverage of other outcomes or only coverage of the Focus Outcome.

\*\*Our courses support the understanding and implementation of all NCTM's Effective Teaching Practices. We have listed the Teaching Practices most connected to each course.



# Courses for Advanced Users

## Expanding effective mathematics practices

The recommended length for these centrally delivered courses is four hours with a minimum scheduled time of three hours, but we work within the flexibility of up to six hours to meet your needs. Computer and web access are strongly recommended. The teacher courses are geared toward teachers and instructional coaches, but leaders are also encouraged to attend.



## Empowering Students within Differentiated Small Groups

### Educators empower students and support their instructional needs

Educators evaluate student needs to create differentiated rotations that leverage *Ready Classroom Mathematics* resources in small groups, empowering students to develop autonomy, self-efficacy, and a growth mindset. Educators refine strategies to prepare for scaffolds that support students' instructional needs, while honoring their thinking and maintaining the rigor of *Ready Classroom Mathematics* to foster student ownership of their learning.

### Outcomes:

- **Focus Outcome\*** Plan for differentiated instruction within the Refine day of a lesson to reteach, reinforce, extend, or individualize student learning.
- Use opportunities to formatively assess learning in *Ready Classroom Mathematics* to elicit evidence of student thinking and plan for differentiated instruction, providing equity and access for all students.

### NCTM Effective Teaching Practice Connection\*\*

- Establish mathematics goals to focus learning.
- Implement tasks that promote problem solving and reasoning.
- Elicit and use evidence of student thinking.





# Tailored Support

Tailored Support is planned collaboratively with you to provide what you need to meet your goals by addressing key areas of professional development. Our professional development specialists work directly with you to create Tailored Support agendas designed to address specific district or school implementation goals. Tailored Support can be designed to meet the needs of teachers, leaders, or coaches. Sessions can take the form of a structured learning session or a facilitated planning session.



## Developing Fluency with *Ready Classroom Mathematics*

*This course is geared toward Math Leads and Coaches.*

Educators work in teams to develop their understanding of how students build from conceptual understanding to procedural fluency in *Ready Classroom Mathematics*. They analyze learning progressions and identify fluency expectations, explore effective teaching practices that help students connect procedures with the underlying concepts, and leverage program resources designed to encourage students to demonstrate flexible and efficient application of problem-solving strategies.

### Outcomes:

As a result of our time together, leaders will be able to:

- Use progressions from *Ready Classroom Mathematics* and student work samples to investigate how procedural fluency develops from conceptual understanding.
- Analyze, organize student work, and share student-generated strategies that demonstrate increasing sophistication and efficiency.



## Interactive Video Studies

Educators see the Try–Discuss–Connect routine used within a day of *Ready Classroom Mathematics* instruction and engage in purposeful planning to set the stage for viewing the routine. While viewing, educators observe *Ready Classroom Mathematics* Look-Fors and make connections between the video and the Standards for Mathematical Practice. Educators reflect on the day’s learning and create an action plan to incorporate goals identified during the session.

### Outcomes:

As a result of our time together, leaders will be able to:

- Use the Try–Discuss–Connect routine to structure mathematical discourse during instruction.
- Connect the Try–Discuss–Connect routine to the Standards for Mathematical Practice.

### Additional Tailored Support Topics

Practicing and Advanced Users can also select from Tailored Support topics from prior years.

#### New Users

- Using *Ready Classroom Mathematics* Assessment Data to Drive Instruction
- Planning and Pacing

#### Practicing Users

- Leadership Classroom Visits—Look-Fors (*geared toward Math Leads and Coaches*)
- Support for New Users
- Implementation Reflection with Look-Fors
- Try–Discuss–Connect Routine

#### Advanced Users

- Facilitated Collaborative Team Planning (*geared toward Math Leads and Coaches*)
- Support for New Users
- Advanced Differentiated Instruction Practices

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\*\*Our courses support the understanding and implementation of all NCTM’s Effective Teaching Practices. We have listed the Teaching Practices most connected to each course.

## ***For more information:***



**Go to  
[CurriculumAssociates.com/PD](https://CurriculumAssociates.com/PD)**



**[ReadyClassroomCentral.com](https://ReadyClassroomCentral.com)**

24/7 access to self-service support, including tutorial videos, how-tos, planning tools, and tips



**Contact Your Sales  
Representative**

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To see how other educators are maximizing their ***Ready Classroom Mathematics*** experience, follow us on social media!



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