

WEBINAR 💸

Inspiring Collective Agency Through Responsive Coaching

FREQUENTLY ASKED QUESTIONS

- Assessment
- Centers
- Differentiation
- Getting Started
- IM Certified[®] Professional Learning

- Implementation
- Pacing and Scheduling
- Spanish Translation
- Teacher Beliefs and "Buy in"
- Videos

Assessment

Q: How do teachers use the Check Your Readiness assessment to support students?

A: In IM 6–12 Math[™], the authors chose to include pre-unit diagnostic assessments rather than a beginning of the year assessment. The data from the Check Your Readiness assessments provide teachers with actionable data to support student access to upcoming lessons in the unit. Teachers might use this data to identify scaffolds or supports to put in place to increase access for students as they begin the unit.

The blog post <u>Planning to Use Pre-Unit Assessments</u> might also be helpful as you think about the many ways to support students with grade-level work.

Q: Is there a pdf version of assessments and how do I get access to those assessments?

A: Assessments can be accessed through your selected IM Certified Partner.

Kendall-Hunt provides the free digital access for IM K–12 Math. The curriculum can be accessed at <u>https://</u> <u>im.kendallhunt.com</u>. While access to student and family materials does not require registration, there is a no-cost registration for educators to access assessments and answer keys, which are password protected. Kendall Hunt also sells print materials and blackline masters.

Imagine Learning offers an enhanced digital platform that offers options for students to complete assessments digitally or in print. Imagine Learning also offers print materials to accompany the digital platform.

Q: What is IM's guidance for K-1 Checkpoint Checklists?

A: Each section in kindergarten and grade 1 has a checklist to indicate that students are meeting the section goals. The checklists are typically completed as teachers monitor student progress during instructional activities and centers.

The blog post <u>Centers in Kindergarten: Purposeful Play and Authentic Assessment</u> offers some guidance and suggestions for using these checklists in K–1.

Centers

Q: How should centers be organized? What is the best way to introduce new centers in your classroom?

A: Center organization is unique to individual teachers. This IM Certified blog post, <u>Making IM Centers Work</u>, provides guidance on setting up centers for the first time, examples of how different teachers organize centers in their classrooms, and tips for getting started.

Centers are embedded in the pacing for grades K–2, but grades 3–5 will need to make decisions about how to utilize centers. Some districts have found success:

- Combining assessment days with center practice time
- Adding center days into the pacing for the year
- Utilizing existing parts of the school day such as morning work routines or additional RTI time with
 opportunities for students to play centers
- Using centers as an alternative to homework so that families can engage in math activities that foster joy.
 This can also serve as an opportunity for family members to learn about the types of activities in IM K-5 Math[™]

Differentiation

Q: How do we differentiate for our students in Grades K–5 who are performing far below the grade-level benchmark and get them engaged in the center activities?

A: IM's problem-based approach supports a positive, inclusive classroom culture and provides both access and challenge for a diverse group of learners. IM K–12 Math[™] provides multiple entry points and is designed to balance access and challenge. Individual students can have their unique needs addressed within the structure of the IM lessons and centers. When a teacher responds to student work during the lesson, each student's learning is addressed just in time by the teacher's usage of advancing and assessing questions. Each curriculum lesson has a suggested access strategy for diverse learners.

IM K–5 Math[™] has centers that are intended to give students time to practice skills and concepts that are developed across the year. There are two types of centers. Addressing Centers address the work of a lesson or section of a unit. Supporting Centers review prior unit or prior grade-level understandings and fluencies. Each center builds across multiple stages that may span several grades. Students in the same class can play different stages of the same center or different centers during "learning station" time.

Getting Started

- Q: How do I best help/coach teachers in our first year implementing IM? How do you recommend prepping for each unit in the first year of implementation? What resource should we navigate?
- A: The blog post <u>Supporting Teachers During Implementation of Illustrative Mathematics: Big Ideas For Coaches</u> <u>and Teacher Leaders</u> provides guidance on preparing for the first year of IM K-12 Math implementation. Many educators find it helpful to collaboratively plan with grade-level partners as they prepare for a unit by reading the narratives for the unit, completing the cool-downs, anticipating student responses, and completing the unit assessment. This allows teachers to understand the progression of the lessons and what is expected of students at the completion of the unit.

IM Certified[®] Professional Learning is available for teachers, coaches, and leaders as they plan for implementation of IM K–12 Math through many different product offerings designed to prepare educators to unpack the units and plan for instruction. IM Certified[®] Professional Learning can be purchased and scheduled through the IM Certified[®] Distribution Partner you are using to access the curriculum.

See IM Certified[®] Professional Learning section.

IM Certified[®] Professional Learning

Q: How can I get support with implementation from Illustrative Mathematics?

A: IM Certified Professional Learning can be scheduled through your IM Certified Partner for your district or school or via academy-style learning. Academy-style learning is a good option for individual teachers or schools that only have a few teachers who need training. You can view all <u>upcoming academy offerings</u> on the IM website.

Q: What does coaching look like for teachers who employ teacher-centered instruction and are shifting to the IM curriculum?

- A: Implementation success increases when teachers and school leaders share a vision for mathematics teaching and learning, understand what this may mean in terms of their practice, and understand why and how adopting IM is a part of that vision. Many schools find it helpful to begin by having a discussion regarding what their district vision is for math instruction. NCTM has tools that help facilitate this shift in instruction by providing guidance on the 8 Effective Teaching Practices and productive vs. unproductive beliefs.
 - NCTM Principles to Actions Book and Toolkit
 - <u>NCTM Taking Action Series</u> is an application-based approach to the publication *Principles to Actions* mentioned above. It includes classroom videos, transcripts, and discussion questions that can be used with teachers to help them anchor their discussions in observation.

Other great resources for districts in planning for systemic, sustained change include:

- Curriculum Support Guide from Curriculum Partners
- Systems for Instructional Improvement: Creating Coherence from the Classroom to the District Office Creating Coherence from the Classroom to the District Office by Cobb et al.

This related IM Certified Blog post might also be helpful:

• Supporting Teachers During Implementation of Illustrative Mathematics: Big Ideas For Coaches and Teacher Leaders

We also offer an entire IM Certified Professional Learning catalog that has options for Leading IM Implementation and a menu of offerings for teachers and coaches to engage in professional learning with opportunities prior to implementation that focus on instructional routines. If you are interested in learning more about <u>IM Certified</u>. <u>Professional Learning</u> opportunities, you can reach out to one of our IM Certified Partners.

Q: Where can we find information on the 8-part series for 6-12 coaching?

A: We offer an entire IM Certified Professional Learning catalog that has options for facilitating teacher collaboration for coaches and instructional leaders. Coaching options include an 8-part coaching series for grades 6–12 coaches and instructional leaders as well as a Unit Planning Guide launch for both K–5 and 6–12. The Unit Planning Guides are asynchronous documents that coaches and instructional leaders can use to guide teachers through the initial exposure and planning for a new unit. Unit 1 sample materials are available.

If you are interested in learning more about <u>IM Certified</u> <u>Professional Learning</u> opportunities, you can reach out to one of our <u>IM Certified Partners</u>.

Implementation

Q: What structures in the IM curriculum support teaching for equity and engagement?

A: Each unit, lesson, and activity has the same overarching design structure: the learning begins with an invitation to the mathematics, which is followed by a deep study of concepts

and procedures, and concludes with an opportunity to consolidate understanding of mathematical ideas. The invitation to the mathematics is particularly important because it offers students access to the mathematics. It builds on prior knowledge and encourages students to use their own language to make sense of ideas before formal language is introduced, both of which are consistent with the principles of Universal Design for Learning.



Q: How does the lesson structure in IM lessons promote equity and engagement?

A: Each lesson starts with a warm-up to activate prior knowledge and set up the work of the day. This is followed by instructional activities in which students are introduced to new concepts, procedures, contexts, or representations, or make connections between them. Each activity synthesis and the lesson synthesis include flexible options for teachers to support students in solidifying topics from the activities of the lesson. The lesson ends with a synthesis to consolidate understanding and make the learning goals of the lesson explicit, followed by a cool-down in which students have an opportunity to apply what was learned. Ongoing opportunities to consolidate and apply learning are embedded in the overarching design structure. The IM Certified Blog post Exploring the Lesson Synthesis: When do I actually teach? offers insight into opportunities for making content concepts and connections explicit in a problem-based classroom.

Q: Have you thought about how this process works with teachers who are developing? I have noticed that you worked with open-minded and great teachers. How do you change minds and develop teachers who think that the traditional model is still best?

A: A strong implementation plan begins with a growth mindset for teachers and leaders as learners, similar to the asset-based approach we hold for student learning. Consider how you might create a shared vision for mathematics teaching and learning prior to curriculum adoption. Implementation success increases when teachers and school leaders share a vision for mathematics teaching and learning, understand what this may mean in terms of their practice, and understand why and how adopting IM is a part of that vision. Consider how your implementation plan will include IM Certified Professional Learning to support the school/ district leadership team in launching curriculum implementation and the ongoing work of nurturing professional

See Teacher Beliefs and "Buy in" section.

learning communities that honor teacher voice and agency.

Q: How can I best encourage current teachers to implement with fidelity and not think they need supplemental materials?

- A: The best way to position teachers so that they trust the curriculum is to begin with a shared vision for teaching and learning mathematics that creates understanding of shifts in pedagogy, and then makes connections to how the curriculum supports system-wide changes in classroom practice. A common area of concern for teachers is access to the high-rigor activities of the problem-based approach and how to address unfinished learning and may be a reason for seeking supplemental materials. Professional learning affirms the belief that all students—each with unique knowledge and needs—enter the mathematics learning community as capable learners of meaningful mathematics. In professional learning sessions, educators increase their understanding of how to leverage the problem-based approach for equitable access to grade-level mathematics for all learners. The problem-based approach in the curriculum creates opportunities for access to grade-level mathematics, but it is the teacher's facilitation moves and students' interactions that make authentic mathematical ideas accessible to all students and cultivate a sense of pride that empowers students' developing math identities. Instead of using supplemental materials, we recommend that teachers consider asking these questions during planning:
 - Where is there opportunity to enhance access and challenge already written into the lesson?
 - What can I highlight or amplify?
 - What questions can I ask to build on students' understanding?
 - What tools can I offer to help students make connections to the new work?

See Unfinished Learning section.

Q: What are some ways district and school leaders can support teachers during the launch of IM as a new curriculum?

A: Panelists on the Inspiring Collective Agency through Responsive Coaching webinar shared many strategies that contributed to their students' and teachers' success. In Homer Plessy Community Schools, district and school leaders honored the voices and experiences of teachers and shared their experience regarding curriculum implementation. They stated that they were very intentional in the rollout as they did not want a new curriculum to be overwhelming for teachers because frustrated teachers often buy out. After sharing that no one resists a change if there's a good reason, they shared their "why" for the change and pointed out that it was grounded in equitable learning for all students, including students with disabilities, English language learners, Black and Brown students, and students experiencing poverty.

They shared IM's belief in the right of every learner to engage in rigorous, meaningful, grade-level mathematics, and position all learners as competent, valued contributors. They went on to discuss their support of district instructional leaders in shifting their mindset. This early work with instructional leaders helped create a culture in which leaders shouldered the work of implementation alongside teachers. After establishing their "why," the curriculum implementation plan included summer professional learning followed by monthly planning and collaboration sessions. The team noted that a responsive approach to coaching honored teachers' expertise. This model included co-teaching, modeling, and data-support that was customized to each teacher.

If you would like to learn more about Homer Plessy Community School's IM implementation journey, you might wish to read their IM Case Study.

Q: What are some ways district and school leaders can support teachers during the first year of this new curriculum?

A: A system of continuous support that is grounded in the curriculum includes:

- leaders participating in professional learning with teachers to understand deeply how the curriculum supports a problem-based approach
- professional learning for leaders that is focused on leading change so that school and district leaders understand and support the systemic changes that are necessary to change teachers' practice
- collaborative leadership that is responsive to teachers' thinking and learning in the same way the curriculum supports teachers in responding to students' thinking and learning
- regular classroom observations and walk-throughs to understand, honor, and respond to strengths and stretches for teachers and students
- family and community awareness and engagement to understand how and why math class may be different from what they experienced as students and how they can support their students' learning
- Teachers also benefit from ongoing job-embedded support, such as regular interaction with a math coach who works alongside teachers with a planning, modeling/co-teaching/observing, and reflecting coaching cycle.

A recommendation from the Homer Plessy Community Schools for classroom walk-throughs the first year is to monitor for the "bookends" of a lesson: Launch the lesson really well and have a strong synthesis.

At <u>Homer Plessy Community Schools</u>, their goal in year 1 was for teachers to use the IM curriculum with integrity. They wanted teachers to use IM exclusively as their instructional resource. They recognized and affirmed the challenge for teachers to put aside the procedural toolkit they had used in the past. They acknowledged that what was done in the past and was "comfortable" wasn't wrong. For example, a classroom anchor chart showing a strategy from a previous curriculum that isn't a focus in IM K–8 Math (such as a place value chart) isn't wrong, but it isn't inline with design principles of IM K–12 Math. They anchored every conversation in their "why" for change toward equitable practices. A school math coach shared: "We trusted the IM curriculum and didn't supplement by teaching strategies used in our old curriculum. It is quite stunning the way students described and used strategies that worked for them!"

Q: What do you do when a student is absent? It has been hard to recreate that lesson on an individual basis.

A: Each lesson in IM 6–12 Math includes a lesson summary for students. The lesson summary is helpful information for resource teachers for absent students. One reason the authoring team included the lesson summary in the student materials was so that teachers and students wouldn't feel like they needed to spend class time transcribing notes. The lesson summary is a reference so that students don't have to take notes (that are often incorrect). It's a concise summary after a chunk of learning with space for the learner to add their own thoughts or highlights. Some teachers use the lesson summary as a way for students to reflect (annotating and adding their own examples), as a study guide, or as a guide for addressing unfinished learning in small groups. In Grades K–5, some schools use centers as an alternative to homework so that families can engage in math activities that foster joy. Thus, take-home centers might be a resource for students who were absent.

Pacing and Scheduling

- Q: Some lessons seem to take longer than the estimated time. Teachers sometimes split a lesson into two days. What recommendations do you have for moving through the lessons? How do you decide what to cut when things don't fit into a class period? How do you keep a lesson to one class period? If teachers are having trouble getting one lesson a day finished, what are your suggestions?
- A: In IM K-5 Math[™] lessons are designed for 60 minutes of instruction. IM 6–12 Math[™] lessons are designed for 45 minutes of instruction with practice problems falling outside of that time. If you have shorter blocks of time for math instruction, you will need to make decisions about what to cut and what to keep based on the unit learning goals. Some districts have decided to increase their math instructional minutes in order to accommodate more time for math instruction.

Following the pacing doesn't mean that students have to complete every problem in every activity. Think about which problems will be most beneficial for your students to dig into based on the lesson's learning goals. The daily cool-downs can help guide these decisions. There are a variety of IM Certified Professional Learning opportunities available to support you in planning, including our Focus on Planning and Pacing session.

Q: We've found it impossible to get through everything. What resources do you have for making decisions about trimming back the curriculum when time is shorter than preferred?

A: Many teachers find it helpful to create a district-specific pacing guide based on their school schedule. Section and lesson learning goals are helpful in making decisions about instructional activities that might be combined or cut. Lessons labeled *optional* might also be removed from the pacing. Pre-unit practice problems in K–5 and Check Your Readiness assessments in 6–12 can provide guidance on how to approach pacing when instructional time is limited. These components offer teachers information about student strategies and prior knowledge that may be helpful in making decisions about which lesson activities will best support students in meeting the section and unit learning goals.

The section planning guides, found on the <u>IM Resource Hub</u>, might be used as a resource to make decisions about pacing when instructional days are limited. The section planning guides include suggestions for mitigating issues that may arise with distance learning and pacing constraints. The guides identify essential lessons and activities that address major work of the grade or prerequisites, and provide guidance on distance-learning activities to support each lesson or activity.

- K-5 Section Planning Guides
- <u>6–12 Section Planning Guides</u>

Spanish Translation

Q: Is there any homework in Spanish I can use for my students?

A: All of the student materials are translated for grades K–Algebra I. Extra practice problems are available at the section level in IM K–5 Math[™] and at the lesson level in IM 6–12 Math[™]. When we created the curriculum, we chose not to prescribe homework assignments or decide which student work should count as a graded event. This was deliberate because homework policies and grading practices are highly variable, localized, and values-driven shared understandings that evolve over time. For example, the curriculum needed to work for schools where nightly, graded assignments are expected; schools where no work done outside of class is graded; and schools that take a feedback-only approach for any formative work. The IM Certified Blog post IM 6–12 Math: Grading and Homework Policies and Practices shares some information gathered from a survey of teachers using IM in their classrooms.

Teacher Beliefs and "Buy-in"

Q: What beliefs need to be in place as a site or district to support teachers in transitioning to problem-based instruction from more traditional instruction?

- A: Implementation success increases when teachers and school leaders all share a vision for mathematics teaching and learning, understand what this may mean in terms of their practice, and understand why and how adopting IM is a part of that vision. Many schools find it helpful to begin by having a discussion regarding what your district vision is for math teaching and learning. The National Council of Teachers of Mathematics (NCTM) has tools that help facilitate this shift in instruction by providing guidance on the 8 Effective Teaching Practices and productive vs. unproductive beliefs.
 - NCTM Principles to Actions Book and Toolkit
 - <u>NCTM Taking Action Series</u> is an application-based approach to the publication *Principles to Actions* mentioned above. It includes classroom videos, transcripts, and discussion questions that can be used with teachers to help them anchor their discussions in observation.

Professional learning and district support for school leaders will support their understanding of their role in the implementation process—alignment to vision, what to expect, how to support teacher learning, school conditions, etc. The IM Certified Professional Learning catalog has options for leading IM implementation. Other great resources for districts in planning for systemic, sustained change include:

- <u>Curriculum Support Guide</u> from Curriculum Partners
- <u>Systems for Instructional Improvement: Creating Coherence from the Classroom to the District Office</u> Creating Coherence from the Classroom to the District Office by Cobb et al.

In addition to professional learning for leaders, the IM Certified Professional Learning Catalog includes options for teachers and coaches to engage in professional learning around our problem-based design. The instructional routines are a great place to start with teachers. If possible, some professional learning and practice with instructional routines the spring before they implement IM will give teachers a chance to try out some of the routines before implementing IM lessons. The routines are bite-sized activities that mirror the problem-based lesson structure, and include the instructional practices embedded in the curriculum. If you are interested in learning more about IM Certified Professional Learning opportunities, you can reach out to one of our IM Certified Partners.

These related IM Certified Blog posts might also be helpful:

- Beyond Curriculum Adoption: A Vision of the IM Classroom
- Promoting Change: Reflections from the UnboundEd Five-Day Standards Institute[™] 2022
- Supporting Teachers During Implementation of Illustrative Mathematics: Big Ideas For Coaches and Teacher Leaders

See IM Certified Professional Learning and Implementation sections.

Videos

Q: Are there any IM videos correlated with Grades 5 or lower?

A: As a nonprofit organization, IM relies on grant funding from foundations and other organizations for projects, such as the lesson summary videos, which was funded to support teachers and students with distance learning during the 2020–2021 school year. This is not currently on our roadmap to develop.