

WEBINAR



# Building Thinking in an IM Classroom

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## Access for Diverse Learners

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**Q: Has anyone had success using IM with populations who don't have English language backgrounds and/or have disabilities?**

**A:** [Case studies](#) and [IMpact stories](#) can provide more information about schools and districts who have implemented IM with increased student success.

The IM mission is to create a world where all learners know, use, and enjoy math, and the curriculum is for all learners. The problem-based approach, instructional routines, and lesson structure draw forth student thinking, reasoning, and communication in ways that challenge all learners from their multiple entry points. “Exploration” practice problems in Grades K–5, “Are You Ready for More?” Problems in Grades 6–12, and “Modeling Prompts” in Grades 9–12 are a few of the built-in curriculum resources to challenge students.

**Q: How do you recommend engaging multilingual learners in your curriculum?**

**A:** You can learn more about embedded support for learning language and content simultaneously in IM K–12 Math™ in the “How To Use These Materials” section [Access For English Language Learners](#) on the IM demo site. (Visit our current Certified Partner’s sites—[Kendall Hunt](#), [Imagine Learning](#), or [McGraw-Hill](#)—for the full curriculum.)

These related IM Certified Blog posts might be helpful:

- [Math Language Routines: Discourse with a Purpose](#)
- [Unlocking Learners’ Thinking Using Mathematical Language Routines](#)

**Q: How do you scaffold for the needs of learners with disabilities? What do you do when the struggle moves from productive to unproductive?**

**A:** We use guidelines from the [Universal Design for Learning](#) as a framework to provide suggestions for teacher moves that will open up access to the on-grade-level mathematics for a wide range of learners.

We also offer IM Certified Professional Learning for *Enhancing Access with Universal Design for Learning*. If you are interested in learning more about IM Certified Professional Learning opportunities, you can reach out to one of our IM Certified Partners.

## Assessment

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**Q: Any plans for multiple versions of tests for Algebra 1, Geometry, and Algebra 2 Courses?**

**A:** As a nonprofit organization, Illustrative Mathematics depends on grant funding for new initiatives, products, and services. This is not currently one of our grant-funded projects.

## Curriculum

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**Q: My district is planning to adopt this curriculum. How can it stand alone compared to other curricula?**

**A:** IM K–12 Math™ is a complete curriculum with consistency in lesson structure and design for a problem-based approach that is driven by student discourse. Students learn by interacting with one another. The problem-based tasks are engaging and coherently sequenced. There's guidance in the lesson plan for teacher moves to support a classroom culture where students do math, share their thinking, and reflect on their learning.

**Q: Are there any plans for developing Integrated Math 1–3 courses for high school?**

**A:** IM K–12 Math CA version with high school integrated is on our roadmap. We do not have a release date yet, but it won't be for the 23/24 school year. Once complete, the IM HS Integrated will be made available by our IM Certified Partners. In the meantime, we have [guidance](#) in the IM Resource Hub on using the existing IM 9–12 curriculum in an integrated manner. The guidance shows one way to rearrange units from IM Algebra 1, Geometry, and Algebra 2 Courses into an integrated sequence.

**Q: Our teachers are noticing that there are many features and formatting shifts in K–5 that they would really love to see in the 6–8 teacher guides. Are there plans for reformatting the grades 6–8 teacher guides to mirror what was learned when writing the 9–12 and K–5 programs?**

**A:** Thanks for sharing your ideas about the features and format of the teacher guides. The IM authoring team is constantly seeking feedback and revising our curriculum for future versions. Please share your specific feedback directly with the IM curriculum team using this [form](#).

**Q: Why aren't there any estimation explorations in the MS or HS curriculum? Will there be any incorporated in future revisions/editions?**

**A:** The Estimation Exploration routine was introduced with IM K–5 Math when it was released in 2021, whereas the latest version of IM 6–12 Math was released previously in 2019. Thanks for sharing your interest in this instructional routine in future versions of the curriculum. The IM authoring team is constantly seeking feedback and revising our curriculum for future versions. Please share your specific feedback with the IM curriculum team using this [form](#).

**Q: When will IM release a new edition?**

**A:** When we release a version, feedback collection and some work toward a new version begins, but it is reliant on funding. We are a non-profit that depends on help from our benefactors, and we have no new version timelines to share at this time. When we release a new version, it will be announced through our Certified Partners. They are always the first to carry the latest versions of IM Certified curricula.

**Q: Some concepts are covered one time on one day and never seen again—yet they are on the exams. Can this please be looked into?**

**A:** The IM authoring team is constantly seeking feedback and revising our curriculum for future versions. Please share your specific feedback with the IM curriculum team using this [form](#).

## Curriculum Access

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**Q: Do you have a teacher’s edition that can be printed out with solutions?**

**A:** Curriculum access is through our [IM Certified Partners: Kendall Hunt, Imagine Learning, or McGraw-Hill](#). The teacher guide is available on the open education resource hosted by [Kendall Hunt](#) and it is possible to print PDFs of the teacher guide after you register for access. Access to all assessments and solutions requires registration and login.

## Engagement

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**Q: What are some strategies to engage students in partner activities when they refuse to work with the partner they are paired with, especially in those critical discussion tasks?**

**A:** A suggested strategy is to use the Notice and Wonder routine to launch what you’ve named as a critical discussion task. The design of IM warm-up routines—for example, Notice and Wonder—invites students with multiple entry points. The purpose is to make a mathematical task accessible to all students with these two approachable questions. Students are shown some media or a mathematical representation. The prompt to students is “What do you notice? What do you wonder?” By noticing and wondering, students gain entry into the context and might get their curiosity piqued. Taking steps to become familiar with a context and the mathematics that might be involved is making sense of problems (MP1). Other instructional routines can work similarly in launch activities to open greater access to the mathematics content and invite student curiosity. (Note: Notice and Wonder and I Notice/I Wonder are trademarks of NCTM and the Math Forum and used in these materials with permission.)

These related IM Certified Blog posts might also be helpful:

- [The Power of Noticing and Wondering](#)
- [How Do Students Perceive Problem-based Learning?](#)
- [Inviting Students to the Mathematics](#)
- [Concrete Representations that Give Student a Way to Get Started](#)
- [Explicit Classroom Norms to Teach Kids How to Learn from Solving Problems](#)

## Extra Practice

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**Q: The amount of practice for each lesson is much less than compared to other math programs I’ve used in middle and high school. What plans does IM have for providing more practice?**

**A:** Our approach in IM 6–12 Math™ emphasizes distributed practice rather than massed practice (lots of the same types and content problems at once). We usually use “distributing” to mean sprinkling around the content, but it also means, “Don’t try to do too much at once.” Each lesson has an associated practice problem set that contains a few questions practicing the new learning from that day, and also several questions of cumulative review. Practice problems, when assigned in a distributed manner, give students ongoing practice, which also supports developing procedural proficiency.

Providing access to grade-level mathematics does require that teachers make strategic adjustments in order for students to engage, make sense of the questions being asked, persist, collaborate with peers, share their thinking, listen to and understand each others' thinking, internalize and try on new ideas, and practice and apply what they are learning. Here are some strategies to consider before, during, and after a lesson as teachers plan to:

- adjust common instruction: adjust the launch, directions, sequence of activities
- use specific resources: offer a support such as sentence frames to students who need access for participating in conversation with their classmates
- individualize practice: offer various practice assignments for students to choose from

When we apply these suggestions to a problem-based classroom, we consider what supports are already included in the curriculum and how teachers can plan to support access and challenge for all students through:

- Daily Practice Problems
- Are you Ready for More?
- Math Modeling Prompts in Algebra 1, 2, and Geometry

Often, a teacher can adjust or amplify something that's already in the curriculum. For example, the Responding to Student Thinking suggestions in cool-down guidance are helpful. This guidance suggests when students will have more chances to practice, points to emphasize in future lessons, or when teachers should press pause and revisit the work in lessons or practice problems. Teachers may see a need and plan to individualize practice either before or after a lesson. This IM Certified Blog post may spark some ideas about [Planning for Meaningful Practice](#).

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## IM Certified Partners

### Q: What are IM's partners?

**A:** The three IM Certified curriculum partners—Imagine Learning (K–12), Kendall Hunt (K–12), and McGraw-Hill Education (6–12)—exclusively offer the IM Certified curricula for free or via enhanced teacher and student experiences in digital and print formats. [IM Certified partners](#) make an agreement that they will not change or modify the curriculum from the original design, and they receive updates to the curriculum prior to public release. Having three partners for IM 6–12 Math™ and two partners for IM K–5 Math™ gives districts and schools more choices and flexibility to meet the needs of their students.

In addition, IM has eight [IM Certified Professional Learning](#) (PL) partners: Kendall Hunt, Imagine Learning, McGraw-Hill Education, Capital Region Education Council (CREC), CenterPoint Education Solutions, Cooperative Education Service Agency 2 (CESA2), Mathematics Institute of Wisconsin (MIW), and Michigan Math and Science Leadership Network (MMSLN). IM has one partner that provides interim assessments aligned with IM 6–8 Math v.III: CenterPoint Education. IM Certified Professional Learning is authored and facilitated by the IM Team, and the IM Partners support clients with PL purchases.

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## IM Certified® Professional Learning

### Q: Where can we get IM Certified® Professional Development?

**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 who only have a few teachers who need training. You can view all [upcoming academy offerings](#) on the IM website.

## Implementation

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**Q: We have a lot of teachers in grade 6 who are new to teaching math and new to using technology. What supports does the IM middle school curriculum have for these teachers?**

**A:** The curriculum is often described as educative and is a great resource for early career teachers to deepen their understanding of math content and pedagogy. In IM K–12 Math™, the teacher guide to the curriculum summarizes how research translates into practice with the [IM Problem-Based Curriculum](#). In addition, the narratives at the unit, lesson, and activity level support teachers in thinking about the mathematical progressions within and across grade levels. IM 6–8 Math™ also includes the progression of disciplinary language in each unit as a teacher resource. In IM K–5 Math™, each lesson includes a reflection question to support teachers' growth.

Strategically support math teaching and learning with the IM curriculum in Year 1 and beyond by including the following in your implementation plan:

- create a shared vision for mathematics teaching and learning
- provide IM Certified Professional Learning to support teachers, instructional coaches, and other school/district leaders with systemic, sustained change in practice
- use the IM Implementation Reflection Tool for leaders and coaches Grades [K–5](#) and [6–12](#) to support collaborative conversations among teachers, coaches, and other school leaders for deep reflection about strengths and opportunities for improvement of math instruction

**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 learning communities that honor teacher voice and agency.

## Intervention

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**Q: What are IM's recommendations for an intervention class?**

**A:** IM is designed to be used with the entire, inclusive classroom and includes built-in resources for teachers to address the needs of individual students. Many schools find that, when using IM K–12 Math, students are able to stay within the classroom and make significant progress on grade-level content without being pulled out for intervention groups. It's preferable to keep students in the least restrictive environment, learning grade-level content alongside their peers as much as possible.

Realizing that there may be times when unfinished learning is going to impact students' ability to access grade-level content, the IM Team created [K–5 Unit Adaptation Packs](#) and [6–12 Unit Adaptation Packs](#). This teacher resource identifies ways to address gaps in prior learning and thus increase students' access to grade-level mathematics. This blog post, [Looking to the Fall Part 2: Creating a Supportive Resource for K–5 Teachers](#), shares more information about these manageable and useful resources for teachers.

## Pacing and Scheduling

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**Q: Do you have advice for pacing in a single class? I understand the teacher guide has this, but as someone new to the curriculum, it feels rushed for our 48 minute middle school periods.**

**A:** IM 6–12 Math™ lessons are designed for 45 minutes of instruction with additional practice problems falling outside of that time. IM K–5 Math™ lessons are designed for 60 minutes of instruction with extra section-level practice problems (and centers in Grades 3–5) 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. We have IM Certified professional learning offerings that can help teachers in making these decisions.

## Pre-Kindergarten

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**Q: Is there an IM prekindergarten or transitional kindergarten curriculum?**

**A:** Our writing team is in the process of creating an IM prekindergarten curriculum. We don't have an official release date yet.

## Research

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**Q: What do you think about the Science of Math?**

**A:** We have not evaluated the Science of Math. IM K–12 Math™ supports a problem-based approach. We invite you to learn more about the beliefs, principles, practices, and supporting research for [IM's Problem-Based Curriculum](#).

## Spanish Translation

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**Q: Does IM have an authentic Spanish translation of the curriculum available for dual language immersion programs? I have currently been using the curriculum and have led efforts in making it work for our dual language program. Are there plans for more specific supports or resources in the future?**

**A:** All of the translated materials went through a very careful, manual translation process. It is time consuming and resource intensive, but this is because we are committed to accessibility and materials of the highest quality. Specifically, the line-by-line translation work, copy editing, and proofreading was performed by a Colombia-based team of native Spanish speakers with Mathematics teaching experience in both English and Spanish. In this on-demand K–5 Math webinar [Access to Mathematics through Language](#), the head of the translation team, Dr. Enrique Acosta, was a panelist. All the members of the translation team are Spanish native speakers and fluent in English, have degrees in Mathematics or Mathematics Education, and have Mathematics teaching experience in formal settings at some educational level. The team's strategy was to collaboratively determine wording that would be best understood by the most people from the most countries, instead of using any one regional dialect. The student-facing materials are translated into Spanish for grades K–Algebra 1. The statements or questions in quotation marks in the teacher guide are also translated. These materials are available through our IM Certified Partners.

**Q: Are there Spanish translations for IM 9–12 Math™? Is the Geometry course being translated into Spanish, and if so what is the timeline?**

A: As a nonprofit organization, Illustrative Mathematics depends on our partners or grant-funding for new initiatives, products, and services. We're very aware of the need and it's on our roadmap to translate all of K–12 Math into Spanish when funding becomes available.

The Algebra 1 Course and Algebra 1 Support Materials student materials have been translated into Spanish (available from Certified Partners [Kendall Hunt](#), and [Imagine Learning](#)).

## Videos

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**Q: Will Geometry and Algebra 2 have videos at the unit level and chunks of lessons similar to what we have for Algebra 1?**

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.

## The Webinar

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**Q: Where can we access the recording of this webinar? Are we allowed to share it with our teams?**

A: A recording of the webinar is available [here](#) for you to view and share with others.