Illustrative Mathematics®

www.illustrativemathematics.org

Fall 2019 / Winter 2020

IM Professional Learning Catalog for IM Certified™ curricula

IM Certified™ IM 6–8 Math™ v. III

IM Certified™ IM 9–12 Math™ v. I

Algebra 1, Geometry, Algebra 2

For more information on arranging offerings from this catalog contact an IM Certified™ Professional Learning Partner

PROFESSIONAL LEARNING CATALOG STAGE DESCRIPTIONS

Our catalog is informed by the Concerns-Based Adoption Model. We have grouped our offerings roughly around stages of concern that teachers may experience in implementing a new curriculum. Every offering focuses on the knowledge and skills teachers need to teach IM effectively but they are further grouped into:

FOUNDATION

Teach & Learn

Designed for schools in their first implementation year, offerings that support teachers to understand the mathematical progressions in the curriculum, the instructional routines, and other embedded supports for understanding and managing teaching with IM.

EXTENSION

Teach & Respond

Designed for schools with experience teaching IM, offerings that support teachers to anticipate, make sense of, and respond to student thinking using tools in the IM curriculum, such as understanding trajectories across grade levels to support students with unfinished learning, how to adapt instruction based on formative assessment, etc.

High-Level Implementation Paths and School Year Timeline (PL Index to follow) IM 6–8 Math™ v.III

FOUNDATION

TEACH & LEARN

TEACHERS & COACHES & SPECIALISTS

Beginning of the school year:

- Teaching & Learning with IM 6–8 Math v.III

Throughout the school year:

- Unit Overviews per Grade Level

Additional professional learning options:

- Planning for Success in a Problem-Based Classroom
- 5 Practices: Looking at a Case Study
- Facilitated Unit and Lesson Planning
- Instructional Routines
- Math Language Routines Part I
- Math Language Routines Part II

COACHES & SPECIALISTS

- Extended Unit 1 Overviews for Coaches
- Unit Overviews for Coaches per Unit Level

ADMINISTRATORS

- Curriculum Overview
- Observing a Problem-Based Classroom

EXTENSION

TEACH & RESPOND

TEACHERS & COACHES & SPECIALISTS

Beginning of the school year:

- Teaching & Responding with IM 6–8 Math v.III
- 5 Practices: Looking at Student Work
- Using Cool-downs to Plan Instruction
- Curriculum Diagrams and Representations
- Working in a Productive PLC
- Using Pre-Unit Diagnostic Assessments to Plan Instruction

Throughout the school year, Professional Learning Community (PLC) sessions:

- Landing the Lesson: Using Learning Goals for Effective Lesson Syntheses
- Launching Activities So Students Start Strong
- Supporting Students While They Work
- Activity Syntheses that Meet Your Goals
- Planning in Response to the Pre-Unit Diagnostic Assessment
- Using Routines for Extra Support and Extra Challenge
- Planning in Response to the End-of-Unit Assessment
- Focus on Planning to Support English Learners
- Focus on Planning to Support Students with Disabilities
- Planning with the 5 Practices Framework

ONSITE | VIRTUAL OPTION AVAILABLE | MOST APPLICABLE TO YOUR SCHOOL & IMPLEMENTATION | CUSTOMIZED BY UNIT | ELL OPTION

NAME
Teaching and Learning with IM 6–8 Math Curriculum

FOUNDATION
Teach & Learn

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
12 hours, onsite

PREREQUISITES
None

AGENDA
Day 1:
- Problem-based lesson structure
- Assessment
- Math content routines

Day 2:
- 5 Practices
- Math language routines
- Teaching Unit 1
- Classroom norms

Description: During this two-day implementation onsite event, teachers and coaches will be guided by an IM Certified facilitator to gain first-hand experience and fluency with the IM curricula.

Participants will be able to:
- describe the structure of a lesson and the purpose of each component
- locate teacher and student resources in the curriculum
- describe multiple opportunities for assessment and their purposes
- summarize the value and potential purpose of three math content routines
- paraphrase the key ideas of each of the 5 Practices named in the framework for productive discussion and ways to incorporate the 5 Practices in their planning
- describe the purposes of math language routines and how the routines support mathematical language development
- describe the steps in a sample process for planning to teach a lesson in Unit 1, and how the activities for one lesson are connected to the learning goals
- explain the importance of norms in a problem-based classroom

NAME
Teaching and Learning with IM 6–8 Math Curriculum with a Focus for ELL

FOUNDATION
Teach & Learn

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
12 hours, onsite

PREREQUISITES
None

AGENDA
Day 1:
- Problem-based lesson structure
- Assessment
- Math content routines

Day 2:
- 5 Practices
- Math language routines
- Teaching Unit 1
- Classroom norms

Description: This event engages participants in much of the same work and content as IM's standard two-day introductory offering, with an additional focus on supporting language development for ELLs within the IM curriculum.

In addition to the goals of Teaching and Learning with IM 6–8 Math Curriculum, participants will be able to:
- describe how the curriculum supports mathematical language development for all students
- explain how to use activity-specific supports to provide students with access to the mathematics by supporting them with the language demands of a specific activity
- describe how mathematical language routines are used throughout the curriculum to support students' mathematical sense-making and communication

NAME
Unit Overviews per Grade Level

FOUNDATION
Teach & Learn

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

2 hours each (24 total, 8 per grade level), onsite or virtual

PREREQUISITES
Teaching and Learning with IM 6–8 Math Curriculum

AGENDA
- Overview of the unit
- Focal lesson
- Facilitated planning
- Before and after the unit
- The End-of-Unit Assessment

Description: Unit overviews support teachers to make effective instructional decisions such as engaging students, effective questioning, pacing, formative assessment, and differentiation, through making visible the big ideas and coherence within a unit, and how understanding the trajectory of learning goals across lesson supports effective planning.

Participants will be able to:
- recognize how the big mathematical idea of the unit progresses and is assessed throughout the unit
- identify how the big mathematical idea of the unit connects to mathematical content before and after the unit
- meet unit-specific goals around planning and implementation

NAME
Extended Unit 1 Overviews for Coaches (for all Grade Levels)

FOUNDATION
Teach & Learn

ATTENDEES
School and District Math Coaches and Specialists; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
Teaching and Learning with IM 6–8 Math Curriculum

AGENDA
- The unit overview curriculum and supporting teachers in their first year
- Grade 6 Unit 1 overview
- Grade 7 Unit 1 overview
- Grade 8 Unit 1 overview

Description: After the review of IM's unit overviews, and suggestions for supporting teachers in their first year of implementation with common themes like pacing, planning, and implementing routines, participants will experience the full unit overviews for all three Unit 1s. This PL could prepare coaches to support teachers in IM-facilitated unit overviews, or to lead their own unit overviews, if accompanied by virtual unit overviews for coaches.

Participants will be able to:
- name common challenges in first year implementations and strategies for supporting them
- describe the learning trajectory across the first year of unit overviews
- describe the structure and purpose of an IM Certified unit overview
- lead a Unit 1 overview for teachers at their school

NAME
Units Overviews for Coaches (for all Grade Levels, starting with Unit 2)

FOUNDATION
Teach & Learn

ATTENDEES
School and District Math Coaches and Specialists; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

2 hours per session
(covering all 3 grade levels), onsite or virtual

PREREQUISITES
Teaching and Learning with IM 6–8 Math Curriculum

AGENDA
- Experience focal lessons from several of Unit Overviews
- Plan for facilitating the Unit Overviews with teachers

Description: Work with the IM facilitator to review the highlights of the three grade-level overviews for the unit, and the key ideas to bring out when facilitating overviews with teachers.

This is especially valuable for districts who will not be sending their teachers through the IM Certified Unit Overviews and will be leading their teachers on their own.

Participants will be able to:
- describe the big mathematical ideas in each grade level for the unit
- make connections within and across grade levels
- name important points to share with teachers when facilitating the Unit Overviews in each grade level

NAME
Learning Modules

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

Description: Learning module topics designed to meet individual district needs in their extended learning throughout the school year.

Typical Agenda Items (descriptions in pages following)**:**

- Experience lessons or routines from the curriculum
- Focus on important practices for planning and/or instruction
- Collaborate with colleagues to plan routines, activities, lessons, or units

Structure:

6 hours onsite

- 3 hours for the first selected learning module
- 3 hours for the second selected learning module

Select two of the following 3-hour modules for a full 6-hour day of Professional Learning

NAME
Planning for Success in a Problem-based Classroom

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
3 hours, onsite

PREREQUISITES
None

AGENDA
- Problem-based lesson structure
- Teacher and student roles in a problem-based lesson

Description: The IM 6–8 Mathematics curriculum was designed with this quote from mathematics educator James Hiebert in mind. “Students learn mathematics as a result of solving problems. Mathematical ideas are the outcomes of the problem-solving experience rather than the elements that must be taught before problem solving.” Explore how this principle is experienced by teachers and students, and the support built into the curriculum to help teachers engage students in learning through problem solving.

Participants will be able to:
- describe the structure of a lesson and the purpose of each component
- recognize opportunities for students to understand the context and what is being asked without being told what to do
- identify questions to advance student thinking in productive ways
- examine opportunities for students to share their work and synthesize their learning through discussion
- recognize opportunities for students to learn mathematical ideas through the experience of solving problems

NAME
5 Practices: Looking at a Case Study

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
3 hours, onsite

PREREQUISITES
None

AGENDA
- Understanding the 5 Practices
- A case study
- 5 Practices in a lesson plan

Description: Gain an understanding of the 5 Practices for Orchestrating Mathematical Discussions, and how the curriculum embeds this planning structure in the materials to support both teacher planning and student learning.

Participants will be able to:
- paraphrase the key ideas of each of the 5 Practices named in the framework for productive discussion
- explain the teacher's role in orchestrating discussion, both in planning and during the lesson
- give examples of how the materials support teachers to incorporate the 5 Practices in their planning
- articulate how the framework supports student understanding through discourse

NAME
Instructional Routines

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
3 hours, onsite

PREREQUISITES
None

AGENDA
- Notice and Wonder
- Number Talk
- Which One Doesn't Belong
- Planning a Math Routine

Description: Explore the three important mathematical routines used in the IM curriculum: Notice and Wonder, Number Talk, and Which One Doesn't Belong. Plus, gain effective guidance on how these routines are used in IM.

Participants will be able to:
- explain the structure and purpose of:
  - Notice and Wonder
  - Math Talk
  - Which One Doesn't Belong?
- use the structure of an instructional routine to plan for implementation
- connect the design of an instructional routine to the learning goals of a lesson

NAME

Math Language Routines to Plan for Purposeful Math Instruction I

FOUNDATION

Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES

Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES

None

AGENDA

- Understand mathematical language demands
- Experience 5 mathematical language routines
- Plan and reflect

Description: Explore 5 mathematical language routines (MLRs) that support the learning of mathematics and language development. MLRs in this session: Stronger and Clearer Each Time, Discussion Supports, Collect and Display, Co-craft Questions, Three Reads.

Participants will be able to:

- explain how learning mathematics is a language-demanding activity for all students.
- describe how mathematical language routines (MLRs):
  - foster mathematical understanding
  - promote language development
  - provide access to the problem
  - support collaborative work
- apply their learning to plan for successful classroom use of MLRs

NAME

Math Language Routines to Plan for Purposeful Math Instruction II

FOUNDATION

Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES

Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES

Math Language Routines to Plan for Purposeful Math Instruction I

AGENDA

- Understand mathematical language demands
- Experience 3 new mathematical language routines
- Rehearse and practice routines
- Plan and reflect

Description: Take a deeper dive into the mathematical language routines (MLRs) by practicing 3 new routines to gain hands-on experience and receive feedback. MLRs in this session: Clarify, Critique, Correct; Information Gap; Compare and Connect.

Participants will be able to:

- build on the learning goals as MLR Module 1
- strengthen their MLR implementation through collaborative rehearsals
- apply their learning to plan for successful classroom use of MLRs

NAME
Facilitated Unit and Lesson Planning

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
3 hours, onsite

PREREQUISITES
None

AGENDA
- Planning a unit
- Planning a week
- Planning a lesson

Description: Collaborate with the IM Certified facilitator on an effective unit and lesson planning structure that focuses the learning across the unit.

Participants will be able to:
- explain the value of planning at the unit, the section, and the lesson level
- name the components of the curriculum that are helpful for planning
- describe a process for planning a unit, a section, and a lesson that helps make visible the key mathematical ideas
- identify how the activities for a lesson

NAME
Curriculum Overview

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
School and District Administrators; Math Coaches and Specialists encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES
None

AGENDA
- Problem-based lesson structure
- Assessment
- Math content and language routines

Description: Survey the IM curriculum with a focus on the philosophy and instructional shifts and the resources available in the curriculum for supporting teachers around student understanding and discourse, planning, assessment, and instructional routines.

Participants will be able to:
- describe the structure of a lesson and the purpose of each component in order to support teacher planning and implementation
- locate teacher, student, and family resources in the curriculum to support effective use of the resources
- explain the purposes of different curriculum assessments
- identify multiple opportunities for assessment
- describe how instructional supports and extensions are used throughout the curriculum
- explain the purpose of math content routines in a lesson to support effective implementation, observation, and collaborative planning
- explain the purpose of Math Language Routines in the curriculum to support effective implementation, observation, and collaborative planning

NAME
Observing a Problem-based Classroom

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
School and District Administrators; Math Coaches and Specialists encouraged to join

DURATION/FORMAT
3 hours, onsite

PREREQUISITES
Curriculum Overview for Administrators (ideal but not required)

AGENDA
- What does a classroom look like where students are doing math?
- How does the curriculum support students doing math?
- How does looking for students doing math inform observations?

Description: Examine the philosophy of a problem-based classroom and learn how to effectively observe teachers' instruction of the IM curriculum.

Participants will be able to:
- use a process for observing a problem-based classroom
- describe student actions observed in a problem-based classroom
- explain how these actions are supported by curriculum lesson plans
- describe teacher actions that impact student work in problem-based classroom

NAME
Teaching and Responding with IM 6–8 Math Curriculum

EXTENSION
Teach & Respond

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

12 hours, onsite

PREREQUISITES
Teaching and Learning with IM 6–8 Math Curriculum

*AGENDA
Day 1:
- 5 Practices: Looking at student work
- Using cool-downs to plan instruction

Day 2:
- Curriculum diagrams and representations
- Working in a productive PLC

Description: This advanced two-day onsite event brings teachers and coaches together with an IM Certified facilitator for a series of sessions in which they'll gain resources and strategies for responding to student thinking using tools from the IM curriculum.

Participants will be able to:

- analyze the connections between a 5 Practices activity as enacted and the supports in the teacher materials
- articulate the purposes of Anticipate, Monitor, Select, Sequence, and Connect in planning and enacting an activity
- apply the 5 Practices to a given set of student work
- analyze different ways of applying the 5 Practices to a set of student work for an activity
- plan how to address common classroom scenarios involving the 5 Practices framework
- describe how cool-downs formatively assess lesson learning goals
- anticipate student responses for cool-downs
- make connections between cool-downs and current and upcoming lessons
- recognize the value of using a protocol for making sense of student work
- adapt warm-ups and activity launches or syntheses based on class responses to a cool-down
- describe the purpose of one progression of representations in the curriculum
- differentiate the purposes of various representations
- explain how representations are used to help students understand concepts, algorithms, and mathematical structure
- establish and maintain norms for working in a productive PLC
- use PLC protocols to plan a lesson and rehearse an activity
- explain the characteristics of a great activity launch, and plan to launch a lesson
- describe connections between working in a productive PLC and one's own growth as a teacher and learner

*Connect with your IM Certified Partner if different modules than the 4 recommended here are desired

NAME
5 Practices: Looking at Student Work

EXTENSION
Teach & Respond: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES
Teaching and Learning with IM 6–8 Math Curriculum

AGENDA
- Revisit the 5 Practices framework
- Plan a 5 Practices activity
- Think through classroom scenarios

Description: Gain a deeper understanding of the 5 Practices by selecting and sequencing student work from curriculum lessons, and discussing classroom scenarios that could arise and impact instruction.

Participants will be able to:
- analyze the connections between a 5 Practices activity as enacted and the supports in the teacher materials
- articulate the purposes of Anticipate, Monitor, Select, Sequence, and Connect in planning and enacting an activity
- apply the 5 Practices to a given set of student work
- analyze different ways of applying the 5 Practices to a set of student work for an activity
- plan how to address common classroom scenarios involving the 5 Practices framework

NAME
Using Cool-downs to Plan Instruction

EXTENSION
Teach & Respond: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES
Teaching and Learning with IM 6–8 Math Curriculum

AGENDA
- Connect cool-downs to learning goals
- Look at student work from a cool-down
- Adapt instruction based on student work

Description: Use student cool-downs as a formative assessment for identifying how to address student misconceptions or misunderstandings in future lessons, and purposefully differentiate instruction.

Participants will be able to:
- describe how cool-downs formatively assess lesson learning goals
- anticipate student responses for cool-downs
- make connections between cool-downs and current and upcoming lessons
- recognize the value of using a protocol for making sense of student work
- adapt warm-ups and activity launches or syntheses based on class responses to a cool-down

NAME

Using Pre-Unit Diagnostic Assessments to Plan Instruction

EXTENSION

Teach & Respond: 3-hour module (select two 3-hour modules for a full 6-hour day)

ATTENDEES

Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES

Teaching and Learning with IM 6–8 Math Curriculum

AGENDA

- Purpose of pre-unit diagnostic assessments
- Using pre-unit diagnostic assessments to analyze student thinking
- Using pre-unit diagnostic assessments to adapt instruction

Description: Discover how the pre-unit diagnostic assessment can help uncover student misconceptions or misunderstandings, and illuminate opportunities to address them in future lessons through purposefully differentiated instruction.

Participants will be able to:

- recognize the purpose of pre-unit diagnostic assessments
- anticipate student responses for pre-unit diagnostic assessment items
- make connections between pre-unit diagnostic assessment items and upcoming lessons
- recognize the value of using a protocol for making sense of student work
- adapt warm-ups and activity launches or syntheses based on class responses to pre-unit diagnostic assessment items

NAME
Curriculum Diagrams and Representations

EXTENSION
Teach & Respond: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES
Teaching and Learning with IM 6–8 Math Curriculum

AGENDA
- Using representations to understand concepts
- Using representations to understand structure in equations
- Using representations to understand algorithms

Description: Understand the progression of important mathematical diagrams and representations in the curriculum, and how they help students understand concepts and algorithms.

Participants will understand:
- describe the purpose of one progression of representations in the curriculum
- differentiate the purposes of various representations
- explain how representations are used to help students understand concepts, algorithms, and mathematical structure

NAME
Working in a Productive PLC

EXTENSION
Teach & Respond: 3-hour module (select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES
Teaching and Learning with IM 6–8 Math Curriculum

AGENDA
- Establish collaborative professional learning community (PLC) norms
- Use PLC planning protocols
- Reflect on our teaching

Description: Teachers will learn to collaboratively use professional learning community (PLC) protocols to plan, observe, and reflect on lessons while monitoring self-progress throughout the year. They'll learn to establish processes for working together to more productively use their PLC time for lesson planning based on their students' unique needs.

Participants will understand:
- establish and maintain norms for working in a productive PLC
- use PLC protocols to plan a lesson and rehearse an activity
- explain the characteristics of a great activity launch, and plan to launch a lesson
- describe connections between working in a productive PLC and one's own growth as a teacher and learner

Professional Learning Community Sessions

EXTENSION

Teach & Respond: PLC Sessions

Description: In this advanced learning series detailed in the pages following, teachers choose the topics they'd like to master. These professional learning community topics can be repeated as many times as desired.

High-Level Agenda (descriptions in pages following)**:**

- Invitation to the problem of practice
- Deep dive
- Consolidate and apply

Structure:

6 hours onsite:

- 1.5 hours per grade group (1 session per grade level, for a total of 3 per day, 4.5 hours)
- 1.5 hours for structured meetings with designated onsite contact who will do follow-up work with teachers

Select one of the following PLC topics for a full 6-hour day of Professional Learning

Topics in bold are recommended first topics for all sites.

1. **Landing the Lesson: Using Learning Goals for Effective Lesson Syntheses**
2. **Launching Activities So Students Start Strong**
3. **Supporting Students While They Work**
4. Activity Syntheses that Meet Your Goals
5. Planning in Response to the Pre-Unit Diagnostic Assessment
6. Using Routines for Extra Support and Extra Challenge
7. Planning in Response to the End-of-Unit Assessment
8. Focus on Planning to Support English Learners
9. Focus on Planning to Support Students with Disabilities
10. Planning with the 5 Practices Framework (Coming Winter 2020)

NAME

Landing the Lesson: Using Learning Goals for Effective Lesson Syntheses

EXTENSION

Teach & Respond: PLC Session

ATTENDEES

Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES

None

AGENDA

- Design a dream lesson ending
- Stronger and clearer each time
- Look at cool-downs
- Examine the activities
- What could possibly go wrong?

Goals:

- Use the lesson learning goals to help focus the lesson synthesis.
- Use the lesson synthesis to make decisions throughout the lesson.

Description: Participants will use a modified version of MLR1 “Stronger and Clearer Each Time” to plan a synthesis discussion.

NAME
Launching Activities So Students Start Strong

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
None

AGENDA
- Options for setting students off to work
- Do the math
- Three Reads of the launch
- Plan and practice activity launches

Goals:
- Use an activity launch to support students in getting started on the activity.
- Adapt the activity launch based on anticipated student thinking.
- Plan and practice how to manage the timing and structure of an activity launch.

Description: Participants will use a modified version of MLR6 Three Reads to annotate and plan the launch of an activity.

NAME
Supporting Students While They Work

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
6 hours, onsite

PREREQUISITES
None

AGENDA
- Do math
- Tell me more (based on MLR8)
- Let's consolidate our questions
- Let's revisit and revise the launch

Goals:
- Describe the demands of an activity and create an implementation plan.
- Anticipate when and how students might struggle during work on activities.
- Plan questions to ask and tools to use to support small group activities.

Description: Participants will use a modified version of MLR8 Discussion Supports to respond to and plan for different scenarios that occur while students work on activities. Leave with a question bank of ideas to offer students to help the struggle remain productive.

NAME
Activity Syntheses that Meet Your Goals

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
None

AGENDA
- Elements of a successful synthesis
- Anticipating student responses
- Connecting student responses to the learning goal
- Connecting student responses to the activity synthesis
- Rehearsing the activity synthesis

Goals:
- Plan an effective activity synthesis by connecting an activity to the lesson's learning goals.
- Anticipate student responses to the activity's task, and understand the value of anticipating in order to plan.
- Explore effective questioning through rehearsing an activity synthesis.

Description: Participants will use a modified version of MLR7 Compare and Connect to make connections between anticipated student responses, the learning goals of the lesson, and the suggestions for the activity syntheses in the teacher materials.

NAME
Planning in Response to the Pre-Unit Diagnostic Assessment

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
None

AGENDA
- Benefits and barriers to using the pre-unit diagnostic assessment
- Zoom out to zoom in
- Prioritize our focus and look at student work
- Plan an adjustment
- Share and get feedback

Goals:
- Describe the purpose and potential uses of pre-unit diagnostic assessments.
- Use routines for using student work on the pre-unit diagnostic assessment to gather information about what knowledge and understanding students are bringing to the unit.
- Identify strategies for addressing student needs and strengths in a way that takes the least amount of time and effort.

Description: Participants will use the Notice and Wonder routine to look at student work and plan adjustments to upcoming lessons and activities based on the results.

NAME
Using Routines for Extra Support and Extra Challenge

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
None

AGENDA
- Which (routine) doesn't belong?
- A routine dissection
- A routine draft
- Practice our routines
- Revise your plan

Goals:
- Describe how content routines might be used to provide support or challenge for students.
- Explain why a certain routine might be used to support or challenge students with a particular concept, referring to the differences in structure and purpose of the routines.
- Improve our skills at designing and implementing routines.

Description: Participants will rehearse and plan for a routine, including how to create other examples of a selected routine to provide students with additional practice.

NAME
Planning in Response to the End-of-Unit Assessment

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
None

AGENDA
- Let's take stock
- Thinking about our last End-of-Unit Assessment
- Prioritizing items
- Looking at student work
- Near-term planning
- Far-term planning

Goals:
- Use student responses on End-of-Unit Assessments to describe what students know and can do, and what they still need support with.
- Learn a protocol for looking at student work that helps to distill needs so the needs can be effectively targeted.
- Identify opportunities in upcoming lessons or units to address needs.

Description: Participants will use the Notice and Wonder routine to look at student work and plan to address unfinished learning in upcoming units, as well as look back and annotate prior lessons based on student assessment work.

NAME
Focus on Planning to Support English Learners

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
6 hours, onsite

PREREQUISITES
None

AGENDA
- Strengths of emerging multilingual students
- Revisit design principles and MLRs
- Plan and rehearse an MLR
- MLRs all the time

Goals:
- Explain the design principles of the curriculum that support English learners.
- Use a math language routine to help all students reach the goals of the lesson.
- Plan supports for our own students that give students access to the math and the community, and keep the math thinking work with the student.

Description: Participants will use a modified version of MLR6 Three Reads to read and annotate a lesson with a focus on EL supports. Look across lessons to identify opportunities to add additional EL supports.

NAME
Focus on Planning to Support Students with Disabilities

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
6 hours, onsite

PREREQUISITES
None

AGENDA
- Sharing student success
- Revisit design principles and categories of support
- What will students bring to the activity?
- Plan to support students with disabilities

Goals:
- Explain the design principles of the curriculum that support students with disabilities.
- Describe what "presuming competence" means in the context of planning a lesson to support students with disabilities.
- Design supports for our own students that keep the math thinking work with the student.

Description: Participants will read and annotate a lesson with a focus on the Universal Design for Learning principles.

NAME
Planning with the 5 Practices Framework *Winter 2020*

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
6 hours, onsite

PREREQUISITES
None

ATTENDEES & GOALS
Coming Soon! This session will be available in Winter 2020

Description: Participants will plan to support student discussions by Anticipating approaches, making a Monitoring sheet, and planning a Sequence of Selected student work with prepared Connection questions.

PROFESSIONAL LEARNING CATALOG STAGE DESCRIPTIONS

Our catalog is informed by the Concerns-Based Adoption Model, and so we have grouped our offerings roughly around stages of concern that teachers may experience in implementing a new curriculum. Every offering focuses on the knowledge and skills teachers need to teach IM effectively but they are further grouped into:

FOUNDATION

Teach & Learn

Designed for schools in their first implementation year, offerings that support teachers to understand the mathematical progressions in the curriculum, the instructional routines, and other embedded supports for understanding and managing teaching with IM.

EXTENSION

Teach & Respond

Designed for schools with experience teaching IM, offerings that support teachers to anticipate, make sense of, and respond to student thinking using tools in the IM curriculum, such as understanding trajectories across grade levels to support students with unfinished learning, how to adapt instruction based on formative assessment, etc.

High-Level Implementation Paths and School Year Timeline (PL Index to follow) IM 9–12 Math™ v.I

FOUNDATION

TEACH & LEARN

TEACHERS & COACHES & SPECIALISTS

Beginning of the school year:

- Teaching & Learning with IM 9–12 Math v.I

Throughout the school year:

- Unit Overviews per Course Level + Math Modeling Overviews

Additional professional learning options:

- Instructional Routines
- Planning for Success in a Problem-Based Classroom
- 5 Practices: Looking at a Case Study
- Facilitated Unit and Lesson Planning

COACHES & SPECIALISTS

- Extended Unit 1 Overviews for Coaches
- Unit Overviews for Coaches per Unit Level

ADMINISTRATORS

- Curriculum Overview
- Observing a Problem-Based Classroom

EXTENSION

TEACH & RESPOND

TEACHERS & COACHES & SPECIALISTS

Beginning of the school year:

- Teaching & Responding with IM 9–12 Math v.I AGA
- 5 Practices: Looking at Student Work
- Using Cool-downs to Plan Instruction
- Using Pre-Unit Diagnostic Assessments to Plan Instruction

Throughout the school year, Professional Learning Community (PLC) sessions:

- Landing the Lesson: Using Learning Goals for Effective Lesson Syntheses
- Launching Activities So Students Start Strong
- Supporting Students While They Work
- Activity Syntheses that Meet Your Goals
- Planning in Response to the Pre-Unit Diagnostic Assessment
- Using Routines for Extra Support and Extra Challenge
- Planning in Response to the End-of-Unit Assessment
- Focus on Planning to Support English Learners
- Focus on Planning to Support Students with Disabilities
- Planning with the 5 Practices Framework

ONSITE VIRTUAL OPTION AVAILABLE MOST APPLICABLE TO YOUR SCHOOL & IMPLEMENTATION CUSTOMIZED BY UNIT

NAME
Teaching and Learning with IM 9–12 Math Curriculum (Unit 1 Overview Included)

FOUNDATION
Teach & Learn

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
12 hours, onsite

PREREQUISITES
None

AGENDA
Day 1:
- Problem-based lesson structure
- Assessment
- Math content routines

Day 2:
- 5 Practices
- Math language routines
- Teaching Unit 1
- Classroom norms

Description: During this two-day implementation onsite event, teachers and coaches will join an IM Certified facilitator for an overview of the IM curricula.

Participants will be able to:
- describe the structure of a lesson and the purpose of each component
- locate teacher and student resources in the curriculum
- describe multiple opportunities for assessment and their purposes
- summarize the value and potential purpose of three math content routines
- paraphrase the key ideas of each of the 5 Practices named in the framework for productive discussion and ways to incorporate the 5 Practices in their planning
- describe the purposes of math language routines and how the routines support mathematical language development
- describe the steps in a sample process for planning to teach a lesson in Unit 1, and how the activities for one lesson are connected to the learning goals
- explain the importance of norms in a problem-based classroom

NAME
Unit Overviews per Course Level (beginning with Unit 2)

FOUNDATION
Teach & Learn

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

2 hours each (22 total), onsite or virtual
1 per unit per course + mathematical modeling overview per course

PREREQUISITES
Teaching and Learning with IM 9–12 Math Curriculum

AGENDA
- Overview of the unit
- Focal lesson
- Facilitated planning
- Before and after the unit
- The End-of-Unit Assessment

Description: Unit overviews support teachers to make effective instructional decisions such as engaging students, effective questioning, pacing, formative assessment, and differentiation, through making visible the big ideas and coherence within a unit, and how understanding the trajectory of learning goals across lesson supports effective planning.

Participants will be able to:
- recognize how the big mathematical idea of the unit progresses and is assessed throughout the unit
- identify how the big mathematical idea of the unit connects to mathematical content before and after the unit
- meet unit-specific goals around planning and implementation

NAME
Math Modeling Overview: Algebra 1

FOUNDATION
Teach & Learn

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
2 hours, onsite or virtual

PREREQUISITES
Teaching and Learning with IM 9–12 Curriculum

Description: Understand what it means to model with mathematics and the role of modeling in high school. Experience one of the course level modeling prompts, and discuss the attributes of different versions of the prompt along with the next steps for using a modeling prompt with students.

NAME
Math Modeling Overview: Geometry

FOUNDATION
Teach & Learn

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
2 hours, onsite or virtual

PREREQUISITES
Teaching and Learning with IM 9–12 Curriculum

Description: Understand what it means to model with mathematics and the role of modeling in high school. Experience one of the course level modeling prompts, and discuss the attributes of different versions of the prompt along with the next steps for using a modeling prompt with students.

NAME
Math Modeling Overview: Algebra 2

FOUNDATION
Teach & Learn

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
2 hours, onsite or virtual

PREREQUISITES
Teaching and Learning with IM 9–12 Curriculum

Description: Understand what it means to model with mathematics and the role of modeling in high school. Experience one of the course level modeling prompts, and discuss the attributes of different versions of the prompt along with the next steps for using a modeling prompt with students.

NAME
Extended Unit 1 Overviews for Coaches (for all Course Levels)

FOUNDATION
Teach & Learn

ATTENDEES
School and District Math Coaches and Specialists; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
6 hours, onsite

PREREQUISITES
Teaching and Learning with IM 9–12 Math Curriculum

AGENDA
The unit overview curriculum and supporting teachers in their first year

- Algebra 1 Unit 1 overview
- Geometry Unit 1 overview
- Algebra 2 Unit 1 overview

Description: After an overview of IM's unit overviews, and suggestions for supporting teachers in their first year of implementation with common themes like pacing, planning, and implementing routines, participants will experience the full unit overviews for all three Unit 1s. This PL could prepare coaches to support teachers in IM-facilitated unit overviews, or to lead their own unit overviews, if accompanied by virtual unit overviews for coaches.

Participants will be able to:

- name common challenges in first year implementations and strategies for supporting them
- describe the learning trajectory across the first year of unit overviews
- describe the structure and purpose of an IM Certified unit overview
- lead a Unit 1 overview for teachers at their school

NAME
Units Overviews for Coaches (for all Course Levels, starting with Unit 2)

FOUNDATION
Teach & Learn

ATTENDEES
School and District Math Coaches and Specialists;
School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

2 hours per session
(covering all 3 course levels), onsite or virtual

PREREQUISITES
Teaching and Learning with IM 9–12 Math Curriculum

AGENDA
- Experience focal lessons from several of Unit Overviews
- Plan for facilitating the Unit Overviews with teachers

Description: Work with the IM facilitator to review the highlights of the three grade-level overviews for the unit, and the key ideas to bring out when facilitating overviews with teachers.

This is especially valuable for districts who will not be sending their teachers through the IM Certified Unit Overviews and will be leading their teachers on their own.

Participants will be able to:
- understand big mathematical ideas in each grade level for the unit
- have opportunities to make connections within and across grade levels
- Have important points to share with teachers when facilitating the Unit Overviews in each grade level

NAME
Learning Modules

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

Description: Learning module topics designed to meet individual district needs in their extended learning throughout the school year.

Typical Agenda Items (descriptions in pages following)**:**

- Experience lessons or routines from the curriculum
- Focus on important practices for planning and instruction
- Collaborate with colleagues to plan routines, activities, lessons, or units

Structure:

6 hours onsite

- 3 hours for the first selected learning module
- 3 hours for the second selected learning module

Select two of the following 3-hour modules for a full 6-hour day of Professional Learning

NAME
Planning for Success in a Problem-based Classroom *Winter 2020*

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES
None

ATTENDEES
Problem-based lesson structure

- Teacher and student roles in a problem-based lesson

Coming Soon!
This session will be available in Winter 2020

Description: The IM 6–8 Mathematics curriculum was designed with this quote from mathematics educator James Hiebert in mind. “Students learn mathematics as a result of solving problems. Mathematical ideas are the outcomes of the problem-solving experience rather than the elements that must be taught before problem solving.” Explore how this principle is experienced by teachers and students, and the support built into the curriculum to help teachers engage students in learning through problem solving.

Participants will be able to:

- describe the structure of a lesson and the purpose of each component
- recognize opportunities for students to understand the context and what is being asked without being told what to do
- identify questions to advance student thinking in productive ways
- examine opportunities for students to share their work and synthesize their learning through discussion
- recognize opportunities for students to learn mathematical ideas through the experience of solving problems

NAME
5 Practices: Looking at a Case Study

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
3 hours, onsite

PREREQUISITES
None

AGENDA
- Understanding the 5 Practices
- A case study
- 5 Practices in a lesson plan

Description: Gain an understanding of the 5 Practices for Orchestrating Mathematical Discussions, and how the curriculum embeds this planning structure in the materials to support both teacher planning and student learning.

Participants will be able to:
- paraphrase the key ideas of each of the 5 Practices named in the framework for productive discussion
- explain the teacher's role in orchestrating discussion, both in planning and during the lesson
- give examples of how the materials support teachers to incorporate the 5 Practices in their planning
- articulate how the framework supports student understanding through discourse

NAME
Instructional Routines

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES
None

AGENDA
- Notice and Wonder
- Math Talk
- Which One Doesn't Belong?
- Info Gap
- Planning a Math Routine

Description: Understand the purpose and important structures of the Info Gap math language routine and three mathematical content routines used in the IM curriculum: Notice and Wonder, Math Talk, and Which One Doesn't Belong?

Participants will be able to:
- summarize the value and potential purpose of the Notice and Wonder, Math Talk, Which One Doesn't Belong, and Info Gap routines
- use the structure of an instructional routine to plan for implementation
- connect the design of an instructional routine to the learning goals of a lesson

NAME
Facilitated Unit and Lesson Planning

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES
None

AGENDA
- Story of a unit
- Story of a section
- Story of a lesson

Description: Collaborate with the IM Certified facilitator on an effective unit and lesson planning structure that focuses the learning across the unit.

Participants will understand:
- explain the value of planning at the unit, the section, and the lesson level
- name the components of the curriculum that are helpful for planning
- describe a process for planning a unit, a section, and a lesson that helps make visible the key mathematical ideas
- identify how the activities for a lesson are connected to the learning goals

NAME
Curriculum Overview

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
School and District Administrators; Math Coaches and Specialists encouraged to join

DURATION/DELIVERY FORMAT
3 hours, onsite

PREREQUISITES
None

AGENDA
- Problem-based lesson structure
- Assessment
- Math content and language routines

Description: Survey the IM curriculum with a focus on the philosophy and instructional shifts and the resources available in the curriculum for supporting teachers around student understanding and discourse, planning, assessment, and instructional routines.

Participants will be able to:
- describe the structure of a lesson and the purpose of each component in order to support teacher planning and implementation
- locate teacher, student, and family resources in the curriculum to support effective use of the resources.
- explain the purposes of different curriculum assessments
- identify multiple opportunities for assessment
- describe how instructional supports and extensions are used throughout the curriculum
- explain the purpose of math content routines in a lesson to support effective implementation, observation, and collaborative planning
- explain the purpose of Math Language Routines in the curriculum to support effective implementation, observation, and collaborative planning

NAME
Observing a Problem-based Classroom

FOUNDATION
Teach & Learn: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
School and District Administrators; Math Coaches and Specialists encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES
Ideally, admin curriculum overview, but not required

AGENDA
- What does a classroom look like where students are doing math?
- How does the curriculum support students doing math?
- How does looking for students doing math inform observations?

Description: Examine the philosophy of a problem-based classroom and learn how to effectively observe teachers' instruction of the IM curriculum

Participants will be able to:
- use a process for observing a problem-based classroom
- describe student actions observed in a problem-based classroom
- explain how these actions are supported by curriculum lesson plans
- describe teacher actions that impact student work in problem-based classroom

NAME
Teaching and Responding with IM 9–12 Math Curriculum

EXTENSION
Teach & Respond

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
Teaching and Learning with IM 9–12 Math Curriculum

AGENDA
- 5 Practices: Looking at student work
- Using cool-downs to plan instruction

Description: This advanced one-day onsite event brings teachers and coaches together with an IM Certified facilitator for a series of sessions in which they'll gain resources and strategies for responding to student thinking using tools from the IM curriculum.

Participants will be able to:
- analyze the connections between a 5 Practices activity as enacted and the supports in the teacher materials
- articulate the purposes of Anticipate, Monitor, Select, Sequence, and Connect in planning and enacting an activity
- apply the 5 Practices to a given set of student work
- analyze different ways of applying the 5 Practices to a set of student work for an activity
- plan how to address common classroom scenarios involving the 5 Practices framework
- describe how cool-downs formatively assess lesson learning goals
- anticipate student responses for cool-downs
- make connections between cool-downs and current and upcoming lessons
- recognize the value of using a protocol for making sense of student work
- adapt warm-ups and activity launches or syntheses based on class responses to a cool-down

NAME
5 Practices: Looking at Student Work

EXTENSION
Teach & Respond: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES
Teaching and Learning with IM 9–12 Math Curriculum

AGENDA
- Revisit the 5 Practices framework
- Plan a 5 Practices activity
- Think through classroom scenarios

Description: Gain a deeper understanding of the 5 Practices by selecting and sequencing student work from curriculum lessons, and discussing classroom scenarios that could arise and impact instruction.

Participants will be able to:
- analyze the connections between a 5 Practices activity as enacted and the supports in the teacher materials
- articulate the purposes of Anticipate, Monitor, Select, Sequence, and Connect in planning and enacting an activity
- apply the 5 Practices to a given set of student work
- analyze different ways of applying the 5 Practices to a set of student work for an activity
- plan how to address common classroom scenarios involving the 5 Practices framework

NAME
Using Cool-downs to Plan Instruction

EXTENSION
Teach & Respond: 3-hour module
(select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES
Teaching and Learning with IM 9–12 Math Curriculum

AGENDA
- Connect cool-downs to learning goals
- Look at student work from a cool-down
- Adapt instruction based on student work

Description: Use student cool-downs as a formative assessment for identifying how to address student misconceptions or misunderstandings in future lessons, and purposefully differentiate instruction.

Participants will be able to:
- describe how cool-downs formatively assess lesson learning goals
- anticipate student responses for cool-downs
- make connections between cool-downs and current and upcoming lessons
- recognize the value of using a protocol for making sense of student work
- adapt warm-ups and activity launches or syntheses based on class responses to a cool-down

NAME
Using Pre-Unit Diagnostic Assessment to Plan Instruction

EXTENSION
Teach & Respond: 3-hour module (select two 3-hour modules for a full 6-hour day)

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

3 hours, onsite

PREREQUISITES
Teaching and Learning with IM 9–12™ Math Curriculum

AGENDA
- Purpose of pre-unit diagnostic assessments
- Using pre-unit diagnostic assessments to analyze student thinking
- Using pre-unit diagnostic assessments to adapt instruction

Description: Discover how the pre-unit diagnostic assessment can help uncover student misconceptions or misunderstandings, and illuminate opportunities to address them in future lessons through purposefully differentiated instruction.

Participants will be able to:
- recognize the purpose of pre-unit diagnostic assessments
- anticipate student responses for pre-unit diagnostic assessment items
- make connections between pre-unit diagnostic assessment items and upcoming lessons
- recognize the value of using a protocol for making sense of student work
- adapt warm-ups and activity launches or syntheses based on class responses to pre-unit diagnostic assessment items

NAME
Professional Learning Community Sessions

EXTENSION
Teach & Respond: PLC Session

Description: In this advanced learning series detailed in the pages following, teachers choose the topics they'd like to master. These professional learning community topics can be repeated as many times as desired.

High-Level Agenda (descriptions in pages following)**:**

- Invitation to the problem of practice
- Deep dive
- Consolidate and apply

Structure:

6 hours onsite:

- 1.5 hours per grade group (1 session per grade level, for a total of 3 per day, 4.5 hours)
- 1.5 hours for structured meetings with designated onsite contact who will do follow-up work with teachers

Select one of the following PLC topics for a full 6-hour day of Professional Learning

Topics in bold are recommended first topics for all sites.

1. **Landing the Lesson: Using Learning Goals for Efficient Activity and Lesson Syntheses**
2. **Launching the Lesson So Students Start Strong**
3. **Supporting Students while They Work**
4. Activity Syntheses that Meet Your Goals
5. Planning in Response to the Pre-Unit Diagnostic Assessment
6. Using Routines for Extra Support and Extra Challenge
7. Planning in Response to the End-of-Unit Assessment
8. Focus on Planning to Support English Learners
9. Focus on Planning to Support Students with Disabilities

10. Planning with the 5 Practices Framework (Coming Winter 2020)

NAME

Landing the Lesson: Using Learning Goals for Efficient Activity and Lesson Syntheses

EXTENSION

Teach & Respond: PLC Session

ATTENDEES

Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES

None

AGENDA

- Design a dream lesson ending
- Stronger and clearer each time
- Look at cool-downs
- Examine the activities
- What could possibly go wrong?

Goals:

- Use the lesson learning goals to help focus the lesson synthesis.
- Use the lesson synthesis to make decisions throughout the lesson.

Description: Participants will use a modified version of MLR1 Stronger and Clearer Each Time to plan a synthesis discussion.

NAME
Launching the Lesson So Students Start Strong

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
None

AGENDA
- Options for setting students off to work
- Do the math
- Three Reads of the launch
- Plan and practice activity launches

Goals:
- Use an activity launch to support students in getting started on the activity.
- Adapt the activity launch based on anticipated student thinking.
- Plan and practice how to manage the timing and structure of an activity launch.

Description: Participants will use a modified version of MLR6 Three Reads to annotate and plan the launch of an activity.

NAME
Supporting Students while They Work

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
6 hours, onsite

PREREQUISITES
None

AGENDA
- Do math
- Tell me more (based on MLR8)
- Let's consolidate our questions
- Let's revisit and revise the launch

Goals:
- Describe the demands of an activity and create an implementation plan.
- Anticipate when and how students might struggle during work on activities.
- Plan questions to ask and tools to use to support small group activities.

Description: Participants will use a modified version of MLR8 Discussion Supports to respond to and plan for different scenarios that occur while students work on activities. Leave with a question bank of ideas to offer students to help the struggle remain productive.

NAME
Activity Syntheses that Meet Your Goals

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
None

AGENDA
- Elements of a successful synthesis
- Anticipating student responses
- Connecting student responses to the learning goal
- Connecting student responses to the activity synthesis
- Rehearsing the activity synthesis

Goals:
- Plan an effective activity synthesis by connecting an activity to the lesson's learning goals.
- Anticipate student responses to the activity's task, and understand the value of anticipating in order to plan.
- Explore effective questioning through rehearsing an activity synthesis.

Description: Participants will use a modified version of MLR7 Compare and Connect to make connections between anticipated student responses, the learning goals of the lesson, and the suggestions for the activity syntheses in the teacher materials.

NAME
Planning in Response to the Pre-Unit Diagnostic Assessment

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
None

AGENDA
- Benefits and barriers to using the pre-unit diagnostic assessment
- Zoom out to zoom in
- Prioritize our focus and look at student work
- Plan an adjustment
- Share and get feedback

Goals:
- Describe the purpose and potential uses of pre-unit diagnostic assessments.
- Use routines for using student work on the pre-unit diagnostic assessment to gather information about what knowledge and understanding students are bringing to the unit.
- Identify strategies for addressing student needs and strengths in a way that takes the least amount of time and effort.

Description: Participants will use the Notice and Wonder routine to look at student work and plan adjustments to upcoming lessons and activities based on the results.

NAME
Using Routines for Extra Support and Extra Challenge

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT
6 hours, onsite

PREREQUISITES
None

AGENDA
- Which (routine) doesn't belong?
- A routine dissection
- A routine draft
- Practice our routines
- Revise your plan

Goals:
- Describe how content routines might be used to provide support or challenge for students.
- Explain why a certain routine might be used to support or challenge students with a particular concept, referring to the differences in structure and purpose of the routines.
- Improve our skills at designing and implementing routines.

Description: Participants will rehearse and plan for a routine, including how to create other examples of a selected routine to provide students with additional practice.

NAME
Planning in Response to the End-of-Unit Assessment

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
None

AGENDA
- Let's take stock
- Thinking about our last End-of-Unit Assessment
- Prioritizing items
- Looking at student work
- Near-term planning
- Far-term planning

Goals:
- Use student responses on End-of-Unit Assessments to describe what students know and can do, and what they still need support with.
- Learn a protocol for looking at student work that helps to distill needs so the needs can be effectively targeted.
- Identify opportunities in upcoming lessons or units to address needs.

Description: Participants will use the Notice and Wonder routine to look at student work and plan to address unfinished learning in upcoming units, as well as look back and annotate prior lessons based on student assessment work.

NAME
Focus on Planning to Support English Learners

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
None

AGENDA
- Strengths of emerging multilingual students
- Revisit design principles and MLRs
- Plan and rehearse an MLR
- MLRs all the time

Goals:
- Explain the design principles of the curriculum that support English learners.
- Use a math language routine to help all students reach the goals of the lesson.
- Plan supports for our own students that give students access to the math and the community, and keep the math thinking work with the student.

Description: Participants will use a modified version of MLR6 Three Reads to read and annotate a lesson with a focus on EL supports. Look across lessons to identify opportunities to add additional EL supports.

NAME
Focus on Planning to Support Students with Disabilities

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
None

AGENDA
- Sharing student success
- Revisit design principles and categories of support
- What will students bring to the activity?
- Plan to support students with disabilities

Goals:
- Explain the design principles of the curriculum that support students with disabilities.
- Describe what "presuming competence" means in the context of planning a lesson to support students with disabilities.
- Design supports for our own students that keep the math thinking work with the student.

Description: Participants will read and annotate a lesson with a focus on the Universal Design for Learning principles.

NAME
Planning with the 5 Practices Framework *Winter 2020*

EXTENSION
Teach & Respond: PLC Session

ATTENDEES
Teachers and Coaches; School and District Administrators encouraged to join

DURATION/DELIVERY FORMAT

6 hours, onsite

PREREQUISITES
None

AGENDA & GOALS

Coming Soon!
This session will be available in Winter 2020

Description: Participants will plan to support student discussions by Anticipating approaches, making a Monitoring sheet, and planning a Sequence of Selected student work with prepared Connection questions.

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