

AGENDA

Getting Started With MATH 180® Course II Professional Learning: Days 1 and 2

OVERVIEW

This course helps teachers gain a deeper understanding of instructional strategies and underlying mathematics content embedded in *MATH 180* Course II. Teachers learn alternative teaching approaches that engage and motivate struggling students, pace students for success, and bolster their confidence and competence. Teachers learn how to use the dynamic software of *MATH 180* and progress monitoring to make informed choices about the instruction as they plan for the first six weeks.

OUTCOMES

MATH 180 professional learning is designed to help teachers:

- Consider how *MATH 180* prepares students to meet rigorous college- and career- readiness standards
- Understand the *MATH 180* Instructional Model from the teacher's and student's perspectives
- Explain and use the role of classroom discourse to support learning of mathematics
- Use SAM to support teaching, planning, and progress monitoring
- Interpret *MATH 180* progress, performance, and assessment data to inform instruction
- Prepare for the first six weeks with *MATH 180*

Instructor Agenda

***MATH 180* Implementation Professional Learning Day 1**

Opening

The opening includes introductions, outcomes, setting norms/learning agreements, an overview of the habits of mathematical thinkers, an overview of *MATH 180*, and pertinent logistical information.

Intervention Instruction to Support Student Learning

Through the use of a mathematical problem, participants consider the challenges of math teaching and learning and begin to identify characteristics of struggling learners. An overview of the *MATH 180* "spine" provides participants with an understanding of how the program is designed to support students to meet the rigors of college- and career- readiness standards.

BREAK

The Student Experience

Participants experience the *MATH 180* Instructional Model by engaging in a group lesson and exploring the instructional software. Participants learn how the Instructional Model motivates and supports struggling learners. They reflect on the role of the student and the teacher in the *MATH 180* classroom.

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LUNCH

Teaching and Planning Using HMH Central

Using SAM, participants engage in interactive professional learning and lesson planning. They learn that SAM Central is a comprehensive online teacher resource.

BREAK

Closing

Participants take time to reflect on the experiences of the day and ways that these experiences will positively impact their classroom instruction.

Day 2

Opening

The opening includes course goals, a review of highlights from the previous day, and an overview of the day's agenda.

Assessing Student Learning

To gain a complete picture of what students understand and can do, it is important to consider results from multiple forms of assessments. Participants preview the *MATH 180* assessment timeline and learn how to use the assessments to inform instruction.

BREAK

Monitoring Progress With Data Analytics

MATH 180 includes extensive data-analysis tools to help monitor student progress and target instruction. Participants learn how to track students' progress toward algebra readiness, group students for differentiated instruction, and monitor ongoing progress and performance.

LUNCH

Differentiating Instruction CheckPoint days

MATH 180 CheckPoint days are purposefully designed to provide all of the necessary resources to differentiate instruction for all learners. Participants learn how the Groupinator® on HMH Central uses data to systematically group students and generate targeted lessons for differentiated instruction and problem solving.

BREAK (15 minutes)

Preparing for the First Two Weeks

The first two weeks in the classroom is an opportunity to set high expectations for students and the role of the teacher in meeting those expectations. Participants learn how to use the *Getting Started Guide* to establish a positive classroom environment, introduce students to growth mindset, and give students opportunities to explore *MATH 180* software.

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Closing

Participants take time to reflect on the experiences of the day and ways that these experiences will positively impact their classroom instruction.

Math Solutions Guiding Principles

Drawing upon academic work and our own classroom-grounded research and experience, Math Solutions has identified the following four instructional needs as absolutely essential to improving instruction and student outcomes:

- Robust Content Knowledge
- Understanding of How Students Learn
- Insight into Individual Learners through Formative Assessment
- Effective Instructional Strategies

These four instructional needs drive the design of all Math Solutions courses, consulting and coaching. We consider them our guiding principles and strive to ensure that all educators:

- Know the math they need to teach—know it deeply and flexibly enough to understand various solution paths and students’ reasoning.
- Understand the conditions necessary for learning, what they need to provide, and what students must make sense of for themselves.
- Recognize each student’s strengths and weaknesses, content knowledge, reasoning strategies, and misconceptions.
- Have the expertise to make math accessible for all students, to ask questions that reveal and build understanding, and help students make sense of and solve problems.