

Math Solutions Professional Learning

AGENDA Developing Math Coaching Expertise

OVERVIEW

This course focuses on the disposition, skills, and knowledge math coaches need to support teachers' understanding and application of new content knowledge and effective instructional practices. Based on current research and Math Solutions' extensive experience with coaching, participants learn strategies to effectively partner with teachers in analyzing and reflecting on student data for the purpose of enhancing student learning.

OUTCOMES

- Recognize and apply the characteristics of an effective mathematics coach.
- Focus coaching work on students through the use of questioning, tools, and student data.
- Develop effective communication strategies to grow productive coaching partnerships.

Day One

Opening

This introduction includes the course goals, an overview of the course, and pertinent logistical information. In addition, time is provided to form a working rapport amongst the group.

Developing a Coaching Philosophy Part One

Coaching is a partnership in which colleagues work together to grow more effective and confident in their work. During Part One of this two part session, participants characterize their previous coaching experiences in order to draft their own personal coaching philosophy.

Exploring Our Beliefs

Effective coaches convey the belief that others are capable of and committed to learning, growing, and developing as professional educators. This session introduces the characteristics of effective coaches with an emphasis on the beliefs of an effective coach. Participants produce scenarios and statements they can use with coaches to express these beliefs.

BREAK

Taking a Learning Stance

Effective coaches do not assume to have 'the answer'. Rather, they continually seek deeper understanding in collaboration with those they serve. During this session, participants reflect on their stance as a coach and collectively generate ways to convey a *learning* stance while coaching.

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LUNCH

Focusing Conversations

When thinking about the skills of an effective coach, questioning rises to the top of the list. There are ways to format questions to invite the coach and the coachee to think more deeply about student learning. In this session, participants share common barriers coaches face and learn about different categories for purposeful questioning.

Closing

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

Day Two

Opening

This introduction includes a review of the course goals, an overview of the agenda, and pertinent logistical information. In addition, participants revisit key ideas from Day 1 of this professional learning course.

Building Trusting Relationships

People who understand their values and what is important to them are able to nurture relationships based on trust. During this session, participants relate ideas about adult learning theory to the characteristics of an effective coach.

BREAK

Using Tools for Effective Coaching

When coaches and teachers work together they form a learning partnership. During this session, participants collaborate around a math experience to construct understanding of how the use of coaching tools creates focus for the work and a safe relationship between partners.

LUNCH

Setting Goals Using Student Data

Coaches and teachers work effectively together when they focus on addressing student learning needs by setting goals using student data. During this session participants interact with tools for coaching to examine how to make the learning of a coaching partnership visible and build evidence of enhanced student learning.

BREAK



Developing a Coaching Philosophy Part Two

Coaches are committed to continuous learning and improvement. During this session participants reflect on both days of professional learning and revisit their coaching philosophy. In addition, they set learning goals for themselves including an action plan.

Closing

Participants take time to reflect on the experiences of the day and provide feedback.

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.

