



Math Solutions®

FOUNDED BY MARILYN BURNS

NEW PROFESSIONAL LEARNING OPPORTUNITY

Alaska Council of Teachers of Mathematics and Math Solutions are teaming up to support teachers with eProfessional Development and Virtual Coaching for UAA Credit during the second semester of the 2017-2018 school year. These opportunities will be available to both members and non-members. We need your input to customize the experience and make it successful!

TAKE A QUICK SURVEY TO TELL US YOUR COURSE PREFERENCES!

Review the course descriptions
listed on the reverse side.

Go to <https://goo.gl/hZ92PE>

Survey deadline is **December 8**.
Courses will **start mid-January 2018**.

Can't wait? Reserve now
during the survey process!

Need UAA credit?
Interested in receiving more
Mathematical practice
support for K-12?
Planning a PLC?

**Let us help you
achieve your goal!**

WHAT TO EXPECT FROM THE ePD EXPERIENCE

Our Master Math Consultants will offer hands on practical support in a two-hour virtual course session focused on a specific instructional topic.

After the course, virtual coaching can provide the continuing support needed to successfully implement new strategies. Coaches partner with individual teachers or grade-level teams of up to five teachers. Student-centered and goal-driven, each session is personalized to the unique needs of the individual or team. Time is structured based on student indicators from our Instructional Practices Inventory and designed to support implementation of the eight Mathematical Practices in the classroom.

COURSE DESCRIPTIONS

Thinking and Reasoning—How to Foster Problem Solving in a Math Classroom

Session 1: **Fostering Classroom Discourse Using Talk Moves with Grade Appropriate Math Task:**

This session is designed to provide simple strategies that can be used in a math classroom to encourage students to talk with each other, listen to each other, and engage in making sense of the math. We'll experience the strategies together and have a chance to practice using them during the session. You'll leave the session with strategies and tasks you can use tomorrow. Join this session to learn ways to encourage students to actively engage.

Session 2: **The Standards for Mathematical Practice—Asking Questions to Promote Reasoning:**

This session is designed to provide an in depth look at each of the 8 Standards for Mathematical Practice in the context of rich math tasks appropriate for your grade level. You'll participate in small groups and consider what each practice looks like and sounds like in your classroom. You'll write questions that you can use to help develop the practices in your students. This is a perfect session for you if you need practical ways to foster the practices in your students.

Session 3: **Comparing Math Tasks:**

This session is designed to provide time to consider math tasks, the thinking they promote and the strategies students might use to make sense of them. You'll participate in small groups and consider the instructional benefits of different kinds of tasks. This session will support teachers to select tasks that align with their learning goals.

Session 4: **Good Math Tasks for Your Classroom:**

This session is designed to provide opportunities to analyze math tasks for their level of thinking. We'll look at tasks that provide access to a variety of ability levels while also providing a challenge for students. You'll leave this session with resources to use with students and strategies for selecting tasks that are both accessible and promoting thinking.

Session 5: **Problem Solving Math Tasks that Support Thinking and Reasoning:**

Problem solving, thinking and reasoning are important to develop, not only for success in math, but throughout life. This session will include tasks you can use tomorrow that will help students learn to be life-long problem solvers. Learning to solve complex problems in a variety of situations and contexts prepares students to solve problems they may face, whether they are in or out of a classroom. Join this session and experience the value these problems can bring to your classroom and to your community.

Practical Strategies that Increase Student Success in Mathematics

Session 1: **Using Mathematical Tools to Build Understanding:**

In this session, participants consider how to support student understanding using a variety of tools. This session will help teachers select tasks and identify tasks that can be used to introduce topics.

Session 2: **Connecting Multiple Representations:**

Participants extend the use of tools from Session 1. They consider how to help students connect their understanding of an idea represented with a model to other types or mathematical representations including words, math symbols, graphs, and tables. You'll leave this session with strategies to help connect multiple representations to any task.

Session 3: **Computing Flexibly and Accurately—Effective Use of Games:**

Flexible and accurate computation allows student to access higher levels of mathematics. In this session, participants engage in games that can be implemented immediately to improve flexible and accurate computation.

Session 4: **Problem Solving Math Tasks that Support Thinking and Reasoning:**

Problem solving, thinking and reasoning are important to develop, not only for success in math, but throughout life. This session will include tasks you can use tomorrow that will help students learn to be life-long problem solvers.

Session 5: **Examining the Nature of Tasks:**

This session highlights the nature of tasks that promote confidence, competence and perseverance in students. Participants experience firsthand an example of a task that is rigorous yet accessible to all students.

Math Workshop

This course highlights Math Workshop, a model for organizing standards-based instruction to support all learners in the mathematics classroom.

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