MTCs Make a Difference

Research has begun to show how teachers benefit from participating in MTC.

■ After participating in a weeklong immersion workshop, teachers’ scores increased significantly on a standard test measuring mathematical knowledge for teaching. Higher mathematical knowledge for teaching is correlated with higher student achievement.

■ MTC participants nationwide report increased enthusiasm for mathematics and use of interactive problem-solving in their classrooms. They see themselves – and their students – as mathematicians.

Why Teachers Get Involved

■ To meet other local math teachers
■ To renew their excitement about math
■ To gain confidence with familiar and new concepts
■ To get new ideas to use in their teaching
■ To earn professional development or graduate course credits

Problem Corner

Can you paint a circle (not a disk) with two colors so that no isosceles triangle has three vertices of the same color?

What if you can use three colors?

A thousand colors?

Teacher Testimonials

“I have made new friends and have stretched my brain. I have explored in depth some of the concepts that I teach. The networking with other professionals in the field of math is something that I value that would not have happened in any other venue. I truly enjoy our once-a-month gatherings and am constantly sharing the good news with colleagues.”

“I truly believe in the joy of math, of problem solving, and comfort in risk-taking. The Math Teachers’ Circle provided me with content and professional and peer support to further promote this teaching philosophy.”

“The collaborative effort of solving a complex problem has been a new experience for me. In the past, I saw math as a skill to be mastered individually, and that still does dominate my teaching. However, I have found that math ‘comes alive’ when it is shared and used to reach a common goal.”

“There are so many critical mathematical principles that are glossed over or ignored by elementary and middle school teachers. When I was taught basic arithmetic, geometry, and algebra, I was never taught the underlying math inherent to these ideas. My understanding has been enhanced, and therefore my teaching has improved.”
Why should I be interested?

Many math teachers, like their students, enjoy discovering great mathematics. Since 2006 the American Institute of Mathematics (AIM) has decided to open its doors to such teachers to help them in their quest.

The primary goals of the AIM Math Teachers’ Circle are 1) to engage middle school math teachers in mathematical problem solving and involve them in an ongoing dialogue about math with students, colleagues and professional mathematicians; and 2) to provide them with guidance, materials and resources that will promote open-ended problem solving as a way of learning, thinking about, and practicing mathematics in their classrooms.

An Opportunity: The AIM Math Teachers’ Circle Immersion Workshop

The AIM Math Teachers’ Circle Immersion Workshop is a residential summer program for Bay Area middle school math teachers, and all expenses are paid. During the workshop, teachers will be busy doing math throughout the morning, the afternoon, and even into the evening! Experienced session leaders engage participants with a problem-solving approach to math education. Teachers gain hands-on experience with problem-solving techniques and work on open-ended problems in several content areas. In addition to math sessions, there will be discussions of ways to apply the problem solving approach to teaching in the middle school classroom.

Teacher participants are eligible for continuing education credit, professional development units, or college course credit.

The workshop takes place at the American Institute of Mathematics in downtown Palo Alto. Participants are housed in the nearby Creekside Inn free of charge. We ask all participants, even those living within commuting distance, to remain on site, since collegial interaction and evening activities form an important part of the workshop.

About on-going support and follow-up meetings

Another important component of the Math Teachers’ Circle program consists of seven follow-up events that occur throughout the school year. On designated evenings approximately once a month, teachers gather at the American Institute of Mathematics to enjoy complimentary dinner, participate in a math session, share pedagogical insights, and talk with colleagues.

How to Apply

If you are a middle school math teacher with a desire to learn more about problem solving and how it can be applied in the classroom, then this workshop is for you!

In order to apply, go to www.mathteacherscircle.org, click on “Upcoming Workshops” and scroll down to the AIM Math Teachers’ Circle Immersion Workshop. Then follow the directions.

For each Immersion workshop, up to twenty-five participants will be chosen. Participants will be selected based on their degree of interest in becoming engaged in a community of problem solvers and bringing the culture of problem solving to their classrooms. We urge all interested teachers to apply, regardless of their mathematical background.

Participants are asked to commit to attending the monthly evening follow-up sessions as often as possible. Specifically, teachers receiving professional development units or college course credits are required to attend the follow up meetings.

Questions?

Check our website or contact Brianna Donaldson, Director of Special Projects at AIM (circles@aimath.org).

More about the AIM MTC and the national MTC Network

Founded in 2006, the AIM MTC has been meeting ever since, and its model gave rise to the national Math Teachers’ Circle Network. The mission of the national Math Teachers’ Circle (MTC) program, developed at the American Institute of Mathematics (AIM), is to establish the foundation for a culture of problem solving among middle school math teachers in the U.S.

To find out more about this growing movement for middle school math teachers around the country, please visit www.mathteacherscircle.org.