



KENTUCKY CENTER FOR
MATHEMATICS

**Mathematics Intervention Teacher
Growth Opportunities
Summer 2009**





Adaptive Schools Leadership

Members of the KCM Learning Community (mathematics intervention teachers or coaches) will learn how to help their schools develop the technical and social resources to realize continuing student improvement. Steady improvement in student learning is happening in a new kind of professional culture within schools. Sustaining these collaborative, results-focused working relationships requires leaders at all levels of the organization to develop new ways of seeing their work and new templates and tools for engaging collective energies toward common goals. For more information, visit www.adaptiveschools.com.

Center for Adaptive Schools

*Building Capacities for
School Improvement*

Participants will learn to apply the research of Karen Seashore Louis¹ and her colleagues who identified five attributes of collaborative cultures that improve learning for all students at three levels of schooling—elementary, middle and high school:

1. Shared norms and values
2. Collective focus on student learning
3. Collaboration
4. Deprivatized practice
5. Reflective dialogue

¹Louis, K. S., et. al. (1996). "Teachers' professional community in restructuring schools." *American Educational Research Journal*, 33 (4), 757-798.

Contact: Jim Justice, justiceji@nku.edu or Alice Gabbard, gabbardal@nku.edu

Location: University of Louisville Shelby Campus, Founders Union Room 14, 9001 Shelbyville Road (near the intersection of Hurstbourne and Shelbyville Roads)

Schedule: Days 1 & 2 — September 15 & 16, 2009; Days 3 & 4— December 10 & 11, 2010

Housing: Homewood Suites by Hilton Louisville—East; 9410 Hurstbourne Trace, Louisville, KY 40222; 502.429.9070 (ask for U of L special rate—\$109 for a 2-room suite with king bed)

Cost: \$750, payable to the Kentucky Center for Mathematics

Co-requisite: Ongoing participation in either the KCM MIT Community or the KCM Coaching Community. (MIT Community annual membership fee for non-grant schools is \$368.75. One person from each MAF grant schools—MIT Community annual membership fee is \$200.)

Register online: <http://kymath.org/registrations>

Add+Vantage MR for K – 5th Grade Teachers

The Add+Vantage MR Course focuses on the use of **diagnostic assessment to inform instruction**. Through live, videotaped student interviews during the course, teachers will administer and analyze 3 distinct diagnostic assessment tools. These assessments can be used with small groups or whole groups to compile a detailed profile of their students' current understandings of number words and numerals, structuring numbers, and early addition and subtraction. The Learning Framework in Number provides stages and levels that **pinpoint the child's understanding**. This in-depth analysis provides the basis for designing instruction to accelerate children's learning. Participants will examine the Classroom Instructional Framework in Early Number and use this framework to reflect upon curriculum demands. Teachers will explore how to organize the resulting data and to design lessons that reflect the range of understandings of their students. Exemplary instructional settings will be discussed and incorporated into differentiated lessons. This 5 -day course has no pre-requisites, but requires participation in the sustained support of membership in the MIT Community.

A Distinctive Program for Ongoing Teacher Growth

- Add+VantageMR is not a curriculum; Add+VantageMR supports K-5 mathematics assessment and teaching through professional development and innovative approaches to understanding children's mathematical thinking.
- Instead of providing teachers with a large bank of activities, teachers utilize the resources they currently have.



Choose from one of four course offerings (exact building locations TBA):

June 8—12, 2009; 8:30 a.m. to 4:30 p.m. ct; Clinton County, Albany, KY
June 15—19, 2009; 8:30 a.m. to 4:30 p.m. et; Taylor County, Campbellsville, KY
July 13—17, 2009; 8:30 a.m. to 4:30 p.m. et; Madison County, Richmond, KY
July 20—24, 2009; 8:30 a.m. to 4:30 p.m. ct; Daviess County, Owensboro, KY

Cost: \$772.50 for training and materials plus \$368.75 for annual MIT Community membership, payable upon registration to the KCM, 504 Johns Hill Road, Highland Heights, KY 41099

Contact: [Alice Gabbard](mailto:Alice.Gabbard@kymath.org)

Housing: Will be announced as needed upon registration

Register online: <http://kymath.org/registrations>

Add+Vantage MR Course 2

The Add+Vantage MR Teacher Course 2 extends teachers' study & application of the Learning Framework in Number to include place value and multiplication and division. Teacher assessment materials include detailed diagnostic assessments schedules and models to inform instruction based on an understanding of each child's level of proficiency with computation and number. The Learning Framework in Number provides stages and levels that allow teachers to **pinpoint** the child's understanding and to **accelerate** children's internalization of advanced number concepts and skills. Participants will examine the Classroom Instructional Framework in Early Number and use this framework to reflect upon curriculum demands. Participants will administer and analyze live student interviews and they will learn exemplary settings and strategies for differentiating lessons. Add+Vantage Course 1 is a prerequisite for this 3 day course and is open to preschool through 5th grade teachers.

A Distinctive Program for Teacher Growth



Choose 1 of 4 course offerings (exact building locations TBA):

June 10—June 12; 8:30 a.m. to 4:30 p.m. et; London, KY

June 29—July 1; 8:30 a.m. to 4:30 p.m. et, Campbellsville, KY

July 6—July 8; 8:30 a.m. to 4:30 p.m. et, Newport, KY

September 28—September 30; 8:30 a.m. to 4:30 p.m. et, Louisville, KY

Prerequisite: Completion of Add+Vantage MR Course 1

Cost: \$417.00 for training and materials and \$368.75 for annual membership in the KCM mathematics intervention teacher (MIT) Community, payable upon registration to the KCM, 504 Johns Hill Road, Highland Heights, KY 41099 (Round 3 MAF grant schools will pay \$231 for the course; One teacher from each continuing MAF grant school will pay \$200 for MIT Community membership)

Housing: To be announced, according to need, upon registration

Register online: <http://kymath.org/registrations>; **Contact:** [Alice Gabbard](#)

Landscape of Intervention

During this one-day seminar we will delve into the numeracy development series, *Contexts for Learning Mathematics: Investigating Number Sense, Addition, and Subtraction*, Grades K — 3, by Catherine Twomey Fosnot. We will explore the eight units that use classroom-tested, carefully crafted math situations to foster a deep conceptual understanding of the number system, place value, addition and subtraction, and early algebra. We will also discuss and experience a variety of minilessons and games that can be used throughout the year with intervention groups, at family math events, or as a supplement for tier-one classroom mathematics instruction. Handouts and limited program samples will be provided for use during the seminar, but participants are welcome to bring their own collections of the program materials ([see http://books.heinemann.com/.products/E01052.aspx](http://books.heinemann.com/.products/E01052.aspx)).



- Learn how to use realistic contexts to support mathematics development.
- Learn how to support efficient computation, sense-making, and problem-solving.
- Explore mini-lessons crafted with strings of related problems designed to support a repertoire of mental arithmetic strategies.
- Help students feel like “real mathematicians” at work.

Schedule: Monday, July 6, 2009, 8:30 a.m. to 4:30 p.m.

Location: Newport on the Levee, Suite B

Cost: \$25, payable to the Kentucky Center for Mathematics

Co-requisite: Membership in MIT Community

Housing: Comfort Suites, 420 Riverboat Row, Newport, 859.291.6700 (NKU/KCM rate \$79) or Holiday Inn Express, 110 Landmark Drive, Bellevue, 859.957.2320 (NKU/KCM rate \$89); **Register online:** <http://kymath.org/registrations>

MIT Community Membership

"...there is increasing consensus that the most effective forms of professional development are those that are directly related to teachers' instructional practice, intensive and sustained, integrated with school-reform efforts, and that actively engage teachers in collaborative professional communities. Teachers in many high-achieving nations have these kinds of opportunities on a regular basis, as considerable time is built into their work week for collegial planning and learning, lesson study, and peer observations.¹"

¹Darling-Hammond, Linda, et. al. (February 2009) Professional Learning in a Learning Profession; A Status Report on Teacher Development in the US and Abroad, National Staff Development Council.

Full participation in the MIT (mathematics intervention teacher) Community is a co-requisite for all MIT events, because research shows that sustained, job-embedded support is *the* most effective means of professional development. During the first three years of the statewide intervention initiative, mathematics intervention teachers have embraced the opportunity to extend their learning through engagement in long-term professional relationships with colleagues who have high professional standards and share common experiences and goals.



School-day time commitment: weekly online meetings (less often for experienced MITs) and quarterly in-person meetings

Cost: \$368.75 (discounted rate of \$200 for one person per continuing MAF grant school)

Register online: <http://kymath.org/registrations>



MR Numeracy Specialist Certification

Math Recovery is a distinctive program for teacher growth that deepens teacher understanding of student numeracy development and builds technical skills for designing differentiated, cutting-edge instruction informed by dynamic diagnostic and formative assessments. Teachers learn to use frameworks for learning and instruction and they benefit from participation in a teacher-centered professional learning community with very high collegial standards for ongoing reflection and rigorous study built around intensive instructional problem solving.

Minimum Requirements

- Full participation at 5 days of summer training, 3 days of training in September and 2 days of training in November
- Full participation in weekly online Centra meetings
- Full participation in quarterly in-person collegial team meetings
- 100 hours of videotaped one-on-one first grade instruction
- 100 hours of video analysis
- Professional journaling
- 3 coaching visits made by the leader to the participant's classroom
- Completion of an assessment project
- Completion of a case study



Choose from one of three part a) course offerings (exact building locations TBA):

June 1—5, 2009; 8:30 a.m. to 4:30 p.m. et; Laurel County, London, KY

Facilitators: Alice Gabbard and Gwen Morgan

July 6—10, 2009; 8:30 a.m. to 4:30 p.m. et; Campbell County, Newport, KY

Facilitators: Petey MacCarty and Kurt Kinsey

July 27—31, 2009; 8:30 a.m. to 4:30 p.m. et; Jefferson County, Louisville, KY

Facilitators: Linda Jewell and Cindy Aossey

Part b) sessions: same locations, 5 days in the fall TBD by participants and leaders

Cost: \$2343.00 for training and materials plus \$368.75 for annual MIT Community membership, payable upon registration to the KCM, 504 Johns Hill Road, Highland Heights, KY 41099

Contact: [Alice Gabbard](#)

Housing: Will be announced as needed upon registration

Register online: <http://kymath.org/registrations>



One-to-One for MITs

Thanks to PIMSER (the University of Kentucky Partnership in Mathematics and Science Education Reform) the KCM is proud to offer one of Kentucky's popular and effective professional development opportunities for mathematics intervention teachers. This two-day event is targeted for mathematics intervention teachers who work with struggling primary grades students to deepen their understanding of number and develop proficiency with addition, subtractions, multiplication, and division. This workshop will be presented by PIMSER teacher partner Vonda Stamm and involves using many of the One-to-One free printable math tools shared on the KCM website: <http://kymath.org/resources/pimser.asp>. For more information on PIMSER courses, see: http://www.uky.edu/P12MathScience/summer09_programs.html.



Schedule: Thursday, July 9 & Friday, July 10, 2009,
8:30 a.m. to 4:30 p.m.

Location: Newport on the Levee, Suite B

Cost: \$250, payable to the Kentucky Center for Mathematics

Co-requisite: Membership in MIT Community

Housing: Comfort Suites, 420 Riverboat Row, Newport, 859.291.6700 (NKU/KCM rate \$79) or Holiday Inn Express, 110 Landmark Drive, Bellevue, 859.957.2320 (NKU/KCM rate \$89)

Contact: Alice Gabbard, gabbardal@nku.edu

Register online: <http://kymath.org/registrations>



Individual Assessment, Improved Instruction

The SNAP™ (Student Numeracy Assessment Progressions) Teacher course is a two-day, research-based, professional development opportunity that allows teachers to grow in pedagogical content knowledge of number while using an individualized assessment tool for determining student need in the various aspects of number. Teachers compile individual student data to establish a class profile which typically reveals a range of readiness and can be used to inform instruction within the core math program. Participants will conduct and analyze live, videotaped student interviews. This course has no pre-requisites, but participants must be members of the ongoing MIT Learning Community.

Each participant receives:



- An assessment kit that includes the materials to conduct the assessment
- The SNAP™ Teacher Handbook with black line masters
- 25 SNAP™ Assessment Folders (additional folders are \$1/student)
- A canvas carrying case screened with the SNAP™ logo

Target audience: Preschool and primary grades teachers

Choose from 1 of 6 sessions (exact building location TBA):

June 4 & 5, 8:30 a.m. to 4:30 p.m. ct, Clinton County, Albany KY
June 9 & 10, 8:30 a.m. to 4:30 p.m. et, Taylor County, Campbellsville, KY
June 11 & 12, 8:30 a.m. to 4:30 p.m. et, Madison County, Richmond, KY
July 7 & 8, 8:30 a.m. to 4:30 p.m. et, Campbell County, Newport, KY
July 13 & 14, 8:30 a.m. to 4:30 p.m. ct, Daviess County, Owensboro, KY
July 23 & 24, 8:30 a.m. to 4:30 p.m. et, Madison County, Richmond, KY

Cost: \$199.50 for materials and training fee plus \$368.75 annual MIT Community membership payable to the *Kentucky Center for Mathematics*

Housing: To be announced upon registration, based on need

Contact: Alice Gabbard, Kentucky Center for Mathematics (gabbardal@nku.edu)

Register: <http://kymath.org/registrations>

