MSP Sustainability Conference 2007 set for June in Indianapolis

Reserve June 27–28 for attending the MSP Sustainability Conference 2007. Over 200 pre-registered attendees can count on a challenging and stimulating two days in Indianapolis. Dr. Suellen K. Reed, Superintendent of Public Instruction for the state of Indiana, will deliver the welcoming address dealing with the direction of Indiana public education. Other keynote speakers, all nationally known, will be Dr. Eugene White, Superintendent of Indianapolis Public Schools; Dr. Rick Billstein, Professor of Mathematics at the University of Montana and co-author of twenty-four books, and Dr. Paul Kehle, Assistant Professor of Education at Hobart and William Smith Colleges.

The two major components for sustaining a program—consistency and continuity—will be primary topics for keynote speakers and in many break out sessions. Teachers and administrators for K–12 will encounter new strategies and techniques for sustaining the IMI standards-based program as well as resources for their own professional development.

Dr. Eugene White will speak directly on the issue of sustaining exemplary educational programs. Rick Billstein will speak about a standards-based curriculum and how it affects the teaching of mathematics. Also, Dr. Billstein will lead breakout sessions on using literature to motivate students in the learning of mathematics as well as a session on the role of assessment in mathematics teaching.

Dr. Paul Kehle will talk about sustaining and enriching the mathematical conversations that arise in K–12 classrooms and will share some ideas for stimulating rich mathematical conversations. He will also reflect on continuing the types of professional dialogues the IU/IMI MSP has supported.

IMI staff members Donna McLeish and John LaMaster will lead breakout sessions on topics that have proved popular in the past: John will offer a guided tour of the best sites for teachers on the Internet, including naturally, the Indiana Department of Education Web Site; Donna’s breakout session deals with Indiana Academic Standards or rather what is now called “Power Standards.” What are they? And what about “The Big Ideas of Math”?

Pike Township Select Cadre teachers Amy Schomacker and Katie Reel will lead a session on the use of the SmartBoard and how it can be used for a variety of mathematics activities. Another breakout session will deal with the use of the Task Board, to include learning how to take the on-going daily calendar routines and turn them into an independent task board that reinforces the Indiana state standards, while allowing one-on-one time with struggling students.

For all the latest on our June conference, go to http://www.indiana.edu/~iucme/events/summer2007conference.htm.

Far left, Dr. Rick Billstein, Professor of Mathematics, University of Montana, and left, Dr. Paul Kehle, Asst. Professor of Education, Hobart and William Smith Colleges.
Anderson CSC: The importance of articulation between elementary and secondary

by Angie Kelich

The Anderson Community School Corporation entered into the pilot of *Everyday Mathematics* along with eight other Indiana districts. There were eight teachers who piloted two 5th grades, five 2nd grades, and one 1st grade. The following year nearly 80 teachers got on board, the enthusiasm kept developing, and the program was adopted.

Now in the third year of the adoption, the district has seen some great math growth. ISTEP+ results from September 2005’s administration of the test showed significant gains in the free/reduced population in a city that has a poverty rate of 62%.

Teachers involved at the elementary level have worked very hard as mentor teachers and helped with the process of getting others acclimated to the program. There have been numerous “Family Math Nights” offered to parents and children at their schools, and many exchanges between the mentors and their mentees have allowed for classroom visitations to take place as well these last few years.

During the 2004–2005 school year, two teachers, Angie Kelich and Nicole Dean, were allowed a weekly release-day to go into the elementary schools in the district to work as math coaches. They were able to model lessons, team-teach lessons, and observe when they visited other teachers’ classrooms. They were also employed during the summer school session of 2005 to go into the classrooms as math coaches and play the math games from the program for 30-minute time slots daily.

During the 2005–2006 school year, content training sessions were offered to all the elementary teachers in the district. The staff development committee of ACS agreed to allow two of their early-release days from the state to be devoted to giving additional training to all teachers. In February, Miss Kelich presented the algebra content strand trace to secondary teachers who were very receptive to hearing about *Everyday Mathematics* and how it’s geared to prepare students for algebra. They were also shown the correlations of ISTEP+ questions in the area of algebra to different grade levels on the test. The secondary teachers were surprised to see that 5th grade has some activities in their program that were nearly identical to some questions on the GQE test given to our 10th graders in the state. There were many questions that helped to debunk some of the rumors going around about the alternative algorithms being used in the program.

The district has been working to add in secondary liaisons who would continue to receive training through workshops provided by the Indiana Mathematics Initiative (IMI). The expectation is that they would take that knowledge back and share it among staff members at the secondary level. There are currently two teachers serving in that capacity — Angela Sellers at Highland High School and Darla Werner at Anderson High School.

Last summer, plans were made in the district to offer after-school math game sessions to secondary teachers since the IMI group has worked on tailoring some of the games used by the elementary teachers to meet the needs of secondary students. Six sessions were implemented during the ’06–07 semester, and the same six are being repeated during the current semester. Teachers attend, play games, take back the ideas to use in their classrooms, and are paid a stipend for their participation.

Several administrators from the district attended the administrators’ workshop that was offered last June in Indianapolis. As a guest presenter, Miss Kelich appreciated their support. She has also served as Anderson District Coordinator for IMI for the past two years. Kelich says, “administrator support has been crucial to successful implementation in our district. We now need to have more articulation between elementary and secondary teachers so we don’t continue seeing the gaps we’re trying to close in our math education.”
Pike Township successes abound!
by Julie Sigmund

**Family Math Nights.** Throughout the school year, educators have made a commitment to providing communication to parents. One successful way to share about mathematics is to hold a family math night. Elementary schools across the district have made learning math fun for both students and parents with their creative family math nights. The creative ideas are working. Over 1200 students and parents have attended a math night in Pike Township this school year.

*What are you doing this weekend?* This question was posed to Pike educators along with an invitation to attend a content training workshop. Twenty-seven educators accepted the invitation and spent a Saturday morning together learning about math. They were engaged in a multitude of activities including solving problems from the story *Counting on Frank*, creating a human number line, and participating in a math scavenger hunt with digital cameras. The success of the workshop has prompted innovative ideas for content training including popcorn parties and more Saturdays together that weave together teaching ideas and math content.

**Engaging Middle School Students.** Middle school liaisons have found an easy way to engage middle school students in math – games! After learning the effectiveness of games in our elementary schools, middle school liaisons worked together to create adaptations of the games to better match their content. One of our middle school liaisons, Sandra Baker, was so excited to share these games with teachers in her building that she spent hours copying and laminating. The results of her efforts included training four teachers on games specifically aligned with their math curriculum. The trainings were scheduled once every two weeks, so teachers could learn the game and immediately use it with their students. The teachers reported students were engaged and excited about math and that they were enjoying the math lesson more themselves. Because of the success of these trainings at Lincoln Middle School, plans are in the works to have the same kind of sessions at our other two middle schools.

**Everyday Mathematics makes secondary connections.** Just as *Everyday Mathematics* concepts have filtered into our middle schools, they are finding their way into our high school math classrooms as well. Trainings offered by our secondary liaisons have given high school teachers a better understanding of an *EM* program and the resources to implement within their own classroom. At a recent after-school training, Sandra Baker and Patti Boda shared the adapted middle school games with both math and special education teachers at Pike High School. In addition, Rachel Boatman shared how the lattice and partial quotients algorithms can be used with polynomials. Therefore, teachers are not only learning what skills the students are learning in elementary school but are also looking for ways that it will help students learn the new content of high school math courses.

In addition to using *Everyday Mathematics* ideas, teachers at the high school are seeking new ways to engage students in the content. Mary Neilson and Kathleen Smith, two math teachers at Pike High School, took advantage of the popularity of the NUMB3RS television series. With the support of an IMI grant, the two worked during their winter break to match the mathematical content of episodes of the series to specific math courses at the high school. They have prepared materials for the entire math department to use in their courses.

**Students at Snacks Crossing Elementary explored Everyday Mathematics games on computers while attending a Family Math Night.**

*Photo: Sally Hamlin*

Teachers are always interested in integrated technology. In April, our district hosts a Best Practice Institute. Educators are invited to present to their colleagues about topics of interest. By request, John LaMaster, project staff, is visiting Pike Township to share his expertise with graphing calculators with our math teachers. The high school teachers are excited to learn strategies from John that will enhance their teaching. This partnership between IMI and our high school teachers has sparked even greater collaboration within all levels of educators.

**All Hands on Deck.** In Pike Township, you do not have to be a classroom teacher to be a mathematics teacher. The professional development in Pike has expanded to include after-school caregivers from the Loving Care program and from the 21st Century Learning Sites. The adults at these sites have participated in training conducted by Select Cadre members in the district. They have learned the alternative algorithms, routines, and games. Each program has also dedicated a large portion of its budget to purchase math supplies, which include student reference books and game kits for student use. The IMI Select Cadre members have also been involved in trainings offered to preschool educators within our district. Using many of the effective strategies included within the *Everyday Mathematics* program, caregivers are learning ways to support mathematics instruction for youngsters at a very young age.
Hammond Education Summit focuses on creating an academic culture

*by Debi Maddox*

During the past four years the School City of Hammond, Hammond PTA Council, Civil City of Hammond, Purdue University Calumet, Hammond Teachers Federation Local 394, 21st Century Community Learning Centers, and Lake Shore Chamber of Commerce have been collaborating by organizing and hosting the Hammond Education Summit. This one-day event, open to everyone, draws hundreds of people from a variety of cultures and backgrounds.

Held each year in October, the Summit is institutionalizing a network committed to providing the best possible education for all students in Hammond. Last fall’s Summit was held on October 21, 2006, and focused on “Creating an Academic Culture in Our Community,” continuing the theme of engaging the Hammond community in the business of education.

The Summit begins with a keynote speaker and follows with individual breakout workshop sessions that participants attend throughout the latter part of the morning and afternoon. Each year elementary and middle school math teachers in Hammond facilitate sessions throughout the day focusing on *Everyday Mathematics* and *MathThematics*.

This year Sally Will and Lois Huntington, second and third grade teachers at Morton Elementary School, facilitated *Everyday Mathematics* sessions for Summit participants. Sally and Lois focused their sessions on many of the program features, such as “Situation Diagrams,” “Name Collection Boxes,” etc., that are embedded into *Everyday Mathematics*. They have found that parents may become confused, not necessarily because of the mathematics, but because of the format in which it is presented in the program. Reviewing these program features with parents helps them to understand and thus to be supportive of their children and the *EM* curriculum.

At the secondary level this year, Pat Smith, sixth grade mathematics teacher at Scott Middle School, and her classroom aide, George Goodmun, facilitated *MathThematics* sessions for Summit participants. Pat and George focused their sessions on Alternative Algorithms and Strategies for Problem Solving.

Each of the teachers facilitating at the Summit was excited about the number of participants and their enthusiasm for the learning. This Summit is a great opportunity for all members of the “Community of Hammond” to work together for the good of our students — our future!

For more information about the IU/IMI/NSF Math Science Partnership, please contact:

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Please visit the IMI Web site: [www.indiana.edu/~iucme](http://www.indiana.edu/~iucme)

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Pat Smith and George Goodmun demonstrate the use of Lattice Multiplication at the Summit. *Photo: Debi Maddox*