



# MSC UPDATE

Math & Science Collaborative

January 2008

## Math Coaches & Lenses on Learning

Once the data on student achievement has been collected and reviewed, what does the school do with it? Enters the MATH COACH!!! The math coach, after aiding the staff in interpreting the data, employs a variety of strategies to advance student achievement in mathematics. The number of math coaches in the MSC region has increased over the past four years. The coaches meet four times a year. The remaining two dates for the 2007-08 school year are:

February 25, 8:30-3:30

May 12, 8:30-3:30

All sessions meet at the Allegheny intermediate Unit. All math coaches in the region are invited to participate. If interested, notify Samuel Shaneyfelt at [samuel.shaneyfelt@aiu3.net](mailto:samuel.shaneyfelt@aiu3.net).

Are individual students making sense of the math content? Are they working together and talking about the math that is being investigated? The *Lenses on Learning* administrator learns a different approach to questioning, one that delves deeply into the student learning and thereby enhances the learning of both the teacher and the administrator. Three cohorts of administrators in Allegheny, Beaver, and Westmoreland Intermediate Units have been meeting this school year. In the spring, the schedule for the 2008-09 school year will be advertised. Watch for it and then register.

## Find What You Need in MSC Publications and Web Resources!

Be on the lookout for the spring 2008 **Coordi-net**! It should be published and arriving at your school in March. Every year, the *Coordi-net* features Professional Development opportunities available to local educators through the Math & Science Collaborative and other providers. The summer Teacher Leadership Academies will be especially featured. For the first time, course completion data will also be reported in this publication.

All MSC events, calendars, notices, and publications are also available on

the **MSC web page**, at [www.aiu3.net/msc](http://www.aiu3.net/msc). This site has a new look—we welcome your feedback on how to make this resource even better!

The **Resources for Educators** database/web site has been recently revamped to provide improved functionality to its users. Please visit this new page at [www.pa-edresources.net](http://www.pa-edresources.net), to search for local opportunities and to post your resources!! Feel free to contact the MSC office for assistance using either site.

## Inside This Issue

<i>LOL and Math Coaches</i>	1
<i>Publications</i>	1
<i>Noteworthy</i>	1
<i>Network Connections</i>	2,3
<i>MSC Calendar</i>	4
<i>About MSC/MSP</i>	4

## Noteworthy

- The School Year Secondary Science TLA begins on January 25 at the AIU and runs through May 20.
- Please send in the sign-in sheets for the On-Site Academies that you are holding at your district. This data is extremely important!
- The MSC Math Coordinators are working with the PDE for the development of a standards-aligned system in math. More information to follow.
- The Leadership Action Academies, Day 4, will take place in May, 2008.

Time to register for Network Connections!

## Network Connections

Preparations are underway for the next Network Connections conference! The Winter Meeting of the Math & Science Collaborative Network Connections conference will be held on **February 6** at the David L. Lawrence Convention Center. Network Connections is open to educators from all districts within the 11-county region of Southwest Pennsylvania. There is no registration fee, but those wishing to attend must be appointed by their districts. Check-in and breakfast begin at 7:30 a.m., and the sessions run from 8:30 a.m. to 3:30 p.m. The RSVP (registration) form is following.

Conference attendees may also choose between several morning sessions, including:

- Finance Education– The PA recommendations for integrating finance education into the district K-12 curriculum.
- Explore What Research & Standards Say About a Science Topic– discussion of Curriculum Topic Study **Note– this session is open to participants in grades K-12, instead of just K-8 as we had previously published it.**
- Girls, Math & Science Toolkit– Jennifer Stancil of the GMSP presents “The Girl Solution: A Gender Equity Toolkit.”
- Public Lesson and Debrief– Two local school districts will conduct a live public lesson (one elementary and one secondary) followed by a lesson debrief.

For full listing of all sessions, see article in the MSC *Journal* or the MSC web site at [www.iau3.net/msc](http://www.iau3.net/msc).

The Keynote address for the February 6 conference will be delivered by **Angela Kirby-Wehr and Edward Vollbrecht** of the PA Dept. of Education. They will provide an update of PDE initiatives including Standards Aligned Systems, Classrooms for the Future, Project 720 and others.

Following the Keynote address is INTERACT, which gives participants an opportunity to discuss

math and science education in their districts and develop an action plan to disseminate Network Connections information and experiences.

**Deadline for registration for the February 6 Network Connections is January 25 (changed from January 18), 2008.**

### Highlights from previous Network Connections:

The Fall Network Connections conference was held on November 29, 2007. The Keynote address was delivered by Heidi Schweingruber of the National Research Council of the National Academies. A copy of Dr. Schweingruber’s presentation can be found on the Math & Science Collaborative web site.

The MSC recognizes educators from the Indiana Area and Riverview School Districts, who delivered public lessons. The Indiana Area Lesson Study team comments on the experience of engaging in Lesson Study:

*“The benefits of the experience continue to crop up on a daily basis. As I sit down to plan each math lesson the reflections of lessons learned from the lesson study process are conjured up before me and challenge me to reanalyze the focus of the student’s perspective. That may be the most valuable outcome for all-for both the educator and learner.”*



## NETWORK CONNECTIONS RSVP FORM

WINTER: February 6, 2008 from 8:30 AM to 3:30 PM

**LOCATION: David L. Lawrence Convention Center – Downtown Pittsburgh**

Please check website for directions - [www.pittsburghhcc.com](http://www.pittsburghhcc.com)

**Parking will be validated in Convention Center Parking Garage Only (Limited support available)**

(Check-in and Continental Breakfast begins at 7:30 AM)

To attend Network Connections, you need to be appointed by your district (see form on page 10). Please complete and return this form by fax to (412-394-4599) or mail to Math & Science Collaborative, Allegheny Intermediate Unit, 475 East Waterfront Drive, Homestead, PA 15120 **no later than January 25, 2008.**

**From:**

Name: \_\_\_\_\_ School: \_\_\_\_\_

Organization/District: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Primary Affiliation (Check One of the boxes below that best describes what you do.)**

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Elem. Teacher of Math    | <input type="checkbox"/> Middle Math Teacher       | <input type="checkbox"/> High School Math Teacher    |
| <input type="checkbox"/> Elem. Teacher of Science | <input type="checkbox"/> Middle Science Teacher    | <input type="checkbox"/> High School Science Teacher |
| <input type="checkbox"/> Supt./Asst. Supt.        | <input type="checkbox"/> Curriculum Director       | <input type="checkbox"/> University/College          |
| <input type="checkbox"/> Technology Coordinator   | <input type="checkbox"/> Principal/Asst. Principal | <input type="checkbox"/> Guidance Counselor          |
| <input type="checkbox"/> Provider                 | <input type="checkbox"/> Business/Industry         | <input type="checkbox"/> Other                       |

### Network Connections Sessions

(Refer to the February 6, 2008 Agenda (in *Journal*) for full description or online at [www.aiu3.net/msc](http://www.aiu3.net/msc))

#### Morning Session

Check One in-depth session that you are most interested in attending.

- \_\_\_\_\_ A. Explore What Research and Standards Say About Data Analysis, Pt. II
- \_\_\_\_\_ B. Making Classroom Assessment Meaningful
- \_\_\_\_\_ C. Finance Education
- \_\_\_\_\_ D. Explore What Research and Standards Say About a Science Topic (CTS)
- \_\_\_\_\_ E. Reading in the Science Content
- \_\_\_\_\_ F. Research Opportunities for Teachers
- \_\_\_\_\_ G. Girls, Math & Science Toolkit
- \_\_\_\_\_ H. Lenses on Learning and Professional Learning Communities
- \_\_\_\_\_ I. Public Lesson and De-Brief: elementary lesson
- \_\_\_\_\_ J. Public Lesson and De-Brief: secondary lesson

#### Afternoon Session

Includes Lunch, Keynote Speaker and Interact Time

All participants must attend their district meeting during INTERACT time in order to receive Act 48 credit. Those attending as individuals, not part of a district team, will meet together with a facilitator.



## Math & Science Collaborative

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Homestead, PA 15120

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Fax: (412) 394-4599  
E-mail:

ON THE WEB:

[www.aiu3.net/msc](http://www.aiu3.net/msc)

## MSC Events and Deadlines

- Jan. 23 *Lenses on Learning* at IU 27 (Day 6)
- Jan. 25 Deadline for registering for **Network Connections** conference
- Jan. 25 *Lenses on Learning* at IU 7 (Day 6)
- Jan. 25 SY Secondary Science TLA begins
- Feb. 1 *Everyday Mathematics* Network at AIU (Day 3)
- Feb. 5 *Lenses on Learning* at AIU (Day 7)
- Feb. 6** **Network Connections** at D. L. Lawrence Convention Center
- Feb. 7 *Investigations* Network at AIU (Day 3)
- Feb. 22 *Lenses on Learning* at IU 7 (Day 7)
- Feb. 25 Math Coaches Network at AIU
- Feb. 26 *Connected Math* Network at AIU (Day 3)
- Feb. 28 *Lenses on Learning* at IU 27 (Day 7)
- Mar. 3 *Investigations* Network at AIU (Day 4)
- Mar. 5 MSC Steering Council at AIU (3:30-6:00 pm)
- Mar. 7 *Everyday Mathematics* Network at AIU (Day 4)
- Mar. 12 Eyes on Science at AIU (Day 2)
- Mar. 12 *Lenses on Learning* at AIU (Day 8)
- Mar. 14 Secondary Science Network at AIU
- Mar. 26 *Everyday Mathematics* Network at AIU (Day 5)
- Mar. 27 *Lenses on Learning* at IU 27 (Day 8)
- Mar. 28 *Lenses on Learning* at IU 7 (Day 8)
- April 15 *Lenses on Learning* at AIU (Day 9)
- April 17 *Investigations* Network at AIU (Day 5)

## Math & Science Collaborative (MSC)

The Math & Science Collaborative of Southwestern PA convenes representatives of teachers, administrators, non-profit organizations, institutions of higher education, and other committed stakeholders to strengthen the teaching and learning of mathematics and science. Originally established with foundation support within the Carnegie Museums, the Collaborative moved to the Allegheny Intermediate Unit in August 2002.

The Math & Science Collaborative was formed in 1994 at a regional "congress" of *stakeholders*, people with a stake in the quality of math & science education - teachers, school administrators, students, parents, school board members, corporations, foundations, universities, museums, and others.

## Math Science Partnership (MSP)

The Southwest Pennsylvania Math Science Partnership is a collaboration which unites the collective experience and expertise of 53 school districts, 4 intermediate units, 4 colleges and universities, and experts in K-16 education to improve student learning in mathematics and science. The Partnership is based on the belief that the level of student achievement in mathematics and science can be strengthened by administrators and classroom teachers who are themselves willing to become learners and deepen their own conceptual understanding of the big ideas in mathematics and science.

The goal of the Partnership is for all students to attain the skills necessary for success in the 21<sup>st</sup> century, develop an understanding of how the "big ideas" are connected coherently in the disciplines of mathematics and science, make the connections of those "big ideas" to their everyday world, and develop problem-solvers who are prepared to be discerning citizens and productive employees.



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