

# NEWS

Connecticut Department of Education

Dr. Mark K. McQuillan  
Commissioner



For Immediate Release:

Monday, August 16, 2010

Contact: Tom Murphy 860.713.6525

## State Grant Helps Three Districts Form Consortium with CT Science Center/WCSU to Improve Science and Math Programs at Elementary Level

(EAST HARTFORD, CONN.) Twenty-nine elementary teachers from three school districts will meet this week at Two Rivers Magnet School to take part in a unique program designed to improve science and mathematics instruction in the elementary grades and beyond.

Elementary teachers from **Danbury, New Milford and Newtown Public Schools** will be engaged in hands-on learning activities this week and throughout the year in order to become "**Science Instructional Coaches**" for their districts and will be instrumental in overhauling their curriculum and instructional strategies in science and math. The weeklong institute will introduce the elementary teachers to the inquiry process of teaching and learning, guide participants in strategic planning for incorporating inquiry into the classroom, and assist participants in building capacity to incorporate inquiry in the entire school or district. Teachers conduct scientific investigations in much the same way as their students will. Then they reflect on their own learning and consider specific teaching strategies.

The initiative is funded by a \$780,000 Mathematics and Science Partnership grant that will finance a three-year collaboration among the districts, the **Connecticut Department of Education**, the **Connecticut Science Center** and **Western Connecticut State University**, to set a solid foundation for Science, Technology, Engineering and Math (STEM) instruction beginning early in elementary school and carrying forward to a rigorous secondary school curriculum.

"This initiative supports our efforts to increase the emphasis on higher achievement levels in mathematics and science in our high schools as part of secondary school reform," said state Education Commissioner Mark K. McQuillan. The Commissioner pointed out that the reform package, which requires more math and science courses for graduation was adopted by the state legislature in May and will take effect for the graduating class of 2018. "Setting a strong foundation for science and math learning at the elementary level is vital to our success in high school reform."

Danbury, New Milford, and Newtown Public Schools will use the funding with Western CT State University and the Professional Development arm of the Connecticut Science Center to form an Elementary Science Instructional Coaching Academy to prepare selected teachers to become Elementary Science Instructional Coaches.

As science coaches, the 29 teachers will collaborate with other school teachers to model effective science teaching and assessment practices, integrate literacy and numeracy instruction in science lessons and provide job-embedded professional development in science concepts and inquiry

instructional strategies. The project is designed to improve science instruction, upgrade the districts' science curriculum and instructional materials and, through integration with the districts' instructional programs in math and reading, to increase students' achievement in targeted strands of the state assessments in science, mathematics and reading.

In addition, this project aims to create a new Science, Technology, Engineering and Mathematics (STEM) education program at the University. This program will provide graduate credits for elementary school teachers who seek to become STEM instructional specialists, eventually leading to a new master's degree program in STEM education that could be offered at other state university campuses. Through cooperation between WCSU and the school districts, the university will customize new courses to address both the state's content and assessment standards and the specific needs of the districts it serves.

The Mathematics and Science Partnership (MSP) Grant is a federal program funded under Title II, Part B of the No Child Left Behind Act of 2001 and administered by the U.S. Department of education <http://www.ed.gov/programs/mathsci/index.html>.

### **Project Activities:**

The preparation of the science coaches is based on the following activities:

1. Monthly professional seminars (3 after school hours) focused on general and science-specific topics such as design of effective science instruction, science safety, assessment for and of learning, integration of thinking skills into the content learning, and literacy (reading and writing) connections across the curriculum (anticipated 22 sessions total).
2. Week-long summer institutes provided by the CT Science Center addressing inquiry teaching and assessment strategies that can be applied across the disciplines (summer 2010, 2011, 2012)
3. Graduate level course in mathematics for doing science (Spring 2010)
4. Graduate level life science for teachers course (with integrated pedagogy) (Winter 2011)
5. Graduate level physical science for teachers course (with integrated pedagogy) (Spring 2011)
6. Graduate level Earth and space science for teachers course (with integrated pedagogy) (Winter 2012)
7. McREL Designing Effective Science Instruction® seminars (4 days in 2010 and 4 days in 2011)
8. Cognitive Coaching® seminars (8 days in 2011)
9. Scientific Research experience for teachers (Spring/Summer 2012)
10. Classroom Action Research experience (Spring/Summer 2012)
11. Supervised coaching practicum and start-up (2011-2012 school year)

THE MEDIA IS WELCOME TO ATTEND

#### **INQUIRY INSTITUTE AT THE TWO RIVERS MAGNET SCHOOL**

Date: August 16 – 20, 2010

Time: 8:30 to 3:30 daily

Attendees:

- 29 K-6 teachers from Danbury, Newtown and New Milford (as well as Danbury parochial schools)
- Biology professor from Western CT State University
- State Department of Education Science Specialist (Liz Buttner is contact if you are visiting)

## **FOR TELEVISION AND RADIO COVERAGE**

### **Elementary Science Instructional Coaching Academy (Inquiry Institute)**

#### **TWO RIVERS MAGNET SCHOOL**

Date: August 16 – 20, 2010

Time: 8:30 to 3:30 daily

#### **Best Times for Interviews of Participants and SDE Staff:**

##### **Tuesday, August 17, 2010**

9:45 – 10:00 a.m.

12:00 - 12:45 p.m.

2:05 – 2:20 p.m.

#### **Best Times to Take Footage of Activities:**

##### **Tuesday, August 17, 2010**

8:45 – 9:05 a.m.

9:15 - - 9:45 a.m.

1:05 – 2:05 p.m.

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