

## A Call for STEM Fellows

### The Dayton Regional STEM Center (DRSC) is proud to announce our 2013-2014 STEM Fellows Program!

*We believe that quality STEM education experiences are for all students. The DRSC can provide your school or district with time and research tested tools, resources and professional development experiences that will:*

- *Prepare your teachers to offer high quality STEM education in their PK-12 classrooms.*
- *Position you to inform parents how their children are being engaged in high quality STEM learning experiences designed to challenge their minds and expand their career horizons.*
- *Support your efforts to retain and challenge students interested STEM education and STEM career pathways.*



STEM Fellows: engineers, scientists and educators exploring curriculum concepts around a green energy chemistry lab.

### Did You Know That?

- Educational leaders from Arizona, Florida, Maryland, Tennessee, Texas, and Washington have consulted with the DRSC to learn how to replicate this award winning professional development program.
- Our *STEM Education Quality Framework* has been nationally recognized by a fourteen-state consortium dedicated to improving STEM Education at the state and national levels.
- STEM Fellows work with STEM industry professionals, research scientists and engineers to explore real-world applications to enhance STEM learning.
- STEM Fellows are engaged in long-term communities of practice where they acquire hands-on instructional design experience using the Common Core Standards, problem-based and project-based learning, Backward Design, differentiated instruction, technology integration, and performance-based assessments.
- The involvement in the STEM Fellows program can improve a teacher's performance rating on the OTES Rubric and other measures of quality teaching.
- RttT funds can be used to fund STEM Fellowships.

## Who Should You Encourage to Apply?

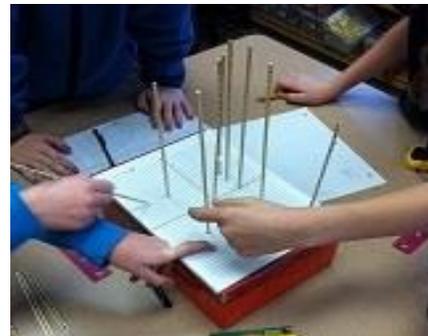
- Any teacher of grades PK-12 who is an innovative thinker committed to offering students powerful research-based learning experiences.
- Any teacher who has the leadership potential to collaborate with peers and engage them in adopting research-based best practices.
- Early to mid-career teachers who have the opportunity to impact you district and students over the decades ahead.
- Curriculum directors or instructional leaders including department chairs or grade level teacher leaders who want to deepen their knowledge of STEM Education.



Cornerstone engineers and Wright State Research Institute engineer collaborate with regional educators on an interdisciplinary middle school engineering unit of instruction.

## What Will Fellows Learn and Be Able to Do?

- Employ a web-based instructional design tool based on the DRSC's nationally recognized and validated *STEM Education Quality Framework*.
- Design powerful authentic and performance based assessments that engage students in demonstrating new knowledge and skill.
- Integrate the STEM disciplines so that students see the powerful relationships between science, technology, engineering and mathematics.
- Enhance STEM learning experiences by including knowledge and skills from the arts, humanities, language arts and social studies.
- Help students understand the connections between their learning experience, related careers and their respective educational pathways.



Student teams participate in a STEM unit of instruction focusing on coordinate plane academic content standards.

# The 2013-2014 STEM Fellows Program

## Fellowship Cost

Over the past five years the DRSC has been able to offer the STEM Fellows Program at little or no cost to districts due to the generous support of the National Governor's Association and the National Defense Education Program. Unfortunately, those funds are no longer available.

**Consequently this year's fellowships will be available for district purchase and private sponsorships.** Due to some generous scholarship support we are able to offer some fellowships at the cost of \$2,500. Up to twelve fellowships will be available at this reduced rate. Three elementary fellowships (Grades 2 to 5), six middle school fellowships (Grades 6-8), and three high school fellowships will be *available on a first-come first serve basis* pending the teacher's acceptance into the program following the application and interview process.

If you are interested in approaching community service organizations or local businesses and industries in your community to sponsor one or more STEM Fellows by donating the \$2,500 fellowship fee to have the fellowship named in their honor, we are prepared to support your efforts in making such a request.

## Details

This year's STEM Fellow's Program will take place from January to May 2014 through a series of twelve Wednesday evening meetings. Participating Fellows will receive a stipend of \$1,500 for fulfilling the following responsibilities:

- Attend all regular STEM Fellow meetings (12 meeting @ 2 hours each – 24 hours)
- Work collaboratively with team members throughout the sessions
- Complete assigned work outside of the workshops sessions (estimated 2 hours per session)
- Pilot at least one unit of instruction created by other STEM Fellow teams.

## How to Apply

Applications for the 2013-2014 STEM Fellows Program are available online at [daytonregionalstemcenter.org](http://daytonregionalstemcenter.org).

Applications must be transmitted via fax (937-496-7426). Applications will be time stamped to determine eligibility for scholarship support.