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## Rose-Hulman's Institute of Technology's PRISM Program Provides Elementary- and Middle-School Classrooms with New STEM Tools



Lego motorized mechanism kits, bio-domes, and VEX robotics are some of several new tools that Indiana elementary- and middle-school teachers will bring into their classrooms this fall in hopes of interesting students in science, technology, engineering, and mathematics (STEM) careers.

An educational partnership between Rose-Hulman and the Vigo County School Corporation, through an Indiana Department of Education Math Science Partnership grant, provided nearly 50 teachers with three weeks of intensive hands-on training on programs that can integrate STEM concepts into school curricula.

Sessions were led by Rose-Hulman professors and staff associated with the PRISM program, supported by Lilly Endowment Inc. PRISM provides resources to assist teachers in learning more about STEM educational standards and effective teaching practices. Earlier this year the Indiana Department of Education praised the decade-long partnership between PRISM and Vigo County schools for providing promising practices in math and science education.

"The ever-increasing emphasis on STEM competencies within the modern workplace mandates that today's teachers merge challenging content, engaging activities, and their own dynamic teaching style," says PRISM Director Pat Carlson. "Our workshops contribute to strengthening Indiana's workforce by helping students develop the content knowledge, problem-solving habits of mind, and socio-cognitive behaviors valuable to a technology-enabled workforce. Our goal is to help fourth- through eighth-grade teachers prepare their students with the 21st-Century skills necessary for success in post-secondary education or to merge easily into the modern workplace."

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## **Rose-Hulman's Institute of Technology's PRISM Program Provides Elementary- and Middle-School Classrooms with New STEM Tools - continued**

Workshop sessions have covered a range of intriguing topics, ranging from building robots to visualize geometric and algebraic functions, learning about basic electricity elements by developing wet cell batteries, and examining the physiology of biomedical engineering and life sciences.

Rose-Hulman professors presenting workshop sessions included Renee Rogge and Jennifer O'Connor, professors of biology and biomedical engineering; Chris Miller and Tina Hudson, professors of electrical and computer engineering; Maarij Syed and Rob Bunch, professors of physics and optical engineering; Wayne Tarrant, assistant professor of mathematics; and Jennifer Mueller Price, assistant professor of civil and environmental engineering.

This marked PRISM's eighth summer workshop for Vigo County STEM teachers. Different programs are planned each year, through cooperation with local school officials. Teachers receive specialized designed kits to support the implementation of workshop concepts into easy to understand educational classroom activities.

The lessons and hands-on activities, says eighth grade science teacher Diana Cooper of Otter Creek Middle School, "add another component to teaching because students can conceptualize it, they can build it, they can test it, and then they can write about what they've done"—all important concepts of reinforcing Indiana's math and science curriculum standards.

Joining Carlson in organizing the workshops were Karen Goeller, VCSC's deputy superintendent; John Newport, VCSC's math, science, and assessment coordinator; Ryan Smith, PRISM's system administrator and project lead; Bob Jackson, PRISM's educational liaison; and Ashlee Scherwinski, PRISM's outreach coordinator.

## Summer 2016 Moodle Training Courses

We are offering three FREE online training courses beginning in July. We offer Professional Growth Plan (PGP) points for each course.

### **Basic Moodle for Teachers (10 PGP Points)**

July 12 - August 9

A basic introduction to Moodle 3.1. You will learn how to build a classroom course and populate it with files, assignments and quizzes.

### **Intermediate Moodle for Teachers (10 PGP Points)**

July 13 - August 10

A continuation from the Basic Moodle for Teachers course. Choose this course if you already have Moodle experience and would like to learn how to use some of the more advanced features like wikis, databases, lessons, and RSS feeds.

### **Advanced Moodle for Teachers (10 PGP Points)**

July 14 - August 11

A continuation from the Intermediate Moodle for Teachers course. This course will take the Intermediate level course a step further as participants learn advanced gradebook features, groups and groupings, conditional activities, and the workshop activity module.

All of the courses are completed online at your-own-pace during your own free time.

If you would like to register for a course, please visit the PRISM website, login, and click the 'Event Registration' link. Use the drop-down menu to select the appropriate course and click the 'Registration Form' button. You will see a complete description of the course. To sign up, scroll down and enter your information. You should receive a confirmation email. If you do not receive a confirmation email, please contact us.

## Girls Who Code launches record number of Summer Immersion Programs in Chicago this year

*\*Programs Supported and Hosted by Accenture, Microsoft, Synchrony Financial, University of Illinois at Chicago and Verizon*

Programs Will Run from June 27, 2016 – August 19, 2016



CHICAGO, IL (June 27, 2016) — Girls Who Code, a national non-profit organization that aims to inspire, educate and equip young women for futures in the computing-related fields, kicked off its 2016 Summer Immersion Program in Chicago today. Chicago Summer Immersion Programs – a record number for the region to-date – are supported and hosted by Accenture, Microsoft, Synchrony Financial, University of Illinois at Chicago (Computer Science and Center for Research on Women and Gender departments) and Verizon. The Summer Immersion Program will reach 1560 rising 11th and 12th grade girls this summer across 78 programs in 11 cities including New York, Boston, Chicago, DC, Los Angeles, Miami, Seattle, Newark, and across the San Francisco Bay Area, with programs being held in Austin and Atlanta for the first time. Chicago Summer Immersion Programs will run from June 27, 2016 to August 19, 2016. To visit a Summer Immersion Program in the Chicago area, please contact [Christina Honeysett](mailto:Christina.Honeysett@girlswhocode.com): 917-717-1816.

“Too often girls don’t pursue computer science because they’ve never been exposed to it, or they don’t see the impact it can make on the world,” said Girls Who Code Founder and CEO, Reshma Saujani. “By actually embedding classrooms in today’s leading companies that create products girls use every day, we show them, ‘Look, you can do this. You can code this. This is a world that is open to you, and once you learn this skill set, the possibilities are endless.’”

The Girls Who Code Summer Immersion Program is a seven-week computer science course that embeds classrooms in major media and tech companies and universities. Students learn the fundamentals of computer science – from robotics to how to build a webpage – while gaining exposure to the tech industry and mentorship from women working in technology. No prior coding experience is required. 90% of Summer Immersion Program participants plan to major or minor in computer science or closely related field. Alumni of Girls Who Code have already gone on to pursue computer science degrees at top universities like University of Michigan and Princeton University, secure paid technical internships working alongside professionals in the field, and even launch programs to teach girls around the world how to code.

Piloted in New York City in 2012 as a single summer program reaching 20 young women, Girls Who Code has grown to a national movement to create gender parity in the computing fields. The organization is committing to teach 40,000 students – up from 13,000 today – by the end of 2016. The commitment was announced as part of President Obama’s broader ‘Computer Science for All’ program and new “Educate to Innovate” campaign during the White House Science Fair this year. Girls Who Code’s commitment to expand access to computer science will support the Administration’s efforts to give all students across the country the chance to learn computer science (CS) in school.

### **About Girls Who Code**

Girls Who Code is a national non-profit organization working to close the gender gap in technology. Through its Summer Immersion Program and Girls Who Code Clubs, the organization is leading the movement to inspire, educate, and equip young women with the computing skills to pursue 21st century opportunities. Additional information is available at [www.girlswhocode.com](http://www.girlswhocode.com).

## Professional Development Opportunities



The Focus Forum workshop is for administrators, leaders, and change makers from schools across Indiana. The series will focus on building awareness and skills, finding resources, and understanding current trends in instructional technology to be an innovative leader for today's learner in our schools and districts.

We will review Eric Sheninger's seven pillars of digital leadership and are planning to watch a private screening of the movie *Most Likely to Succeed*. The film's website states, "The film inspires its audiences with a sense of purpose and possibility, and is bringing School communities together in re-imagining what our students and teachers are capable of doing." There will be time to network and share what best practices or innovation you are implementing in your schools.

Our first Focus Forum will be held on June 22-23, 2016 at the new Fishers High School College and Career Academy from 8:00 am - 3:00 pm. This new learning space is a MUST SEE! It is innovative and provides a customizable experience for students. The learning spaces it offers are incredible. A tour of the facility will be given.

Through our partnership with the Indiana Department of Education Office of eLearning, there will be two free seats per district for each two-day session with a cap of 50 participants. PGP's are available to participants if requested.

Download the flyer: [FocusForumFlyer.pdf](#)

### NSTA Conferences on Science Education

NSTA conferences offer the latest in science content, teaching strategy, and research to enhance and expand your professional growth. Take advantage of this unique opportunity to collaborate with science education leaders and your peers. Each year, NSTA hosts a national conference on science education (in the spring), three area conferences (in the fall), and a STEM Forum & Expo.

### NGSS Workshops

Please check out the following NGSS workshops:

- [Discover the NGSS](#), San Diego, June 29–30
- [Discover the NGSS](#), Fall 2016 & Spring 2017

### NGSS Summer Institutes

Join NSTA for a one-day summer institute designed to help science educators and leaders implement the NGSS. The event engages attendees with a series of sessions given by NGSS experts and differentiated for different grade band– and content-specific educator roles.

- [Reno, Nevada](#): July 15
- [Detroit, Michigan](#): August 8

## Upcoming NSTA Conferences

|  |                              |                                |                          |                         |
|--|------------------------------|--------------------------------|--------------------------|-------------------------|
| STEM Forum & Expo, Denver, CO:<br>July 27–29, 2016 | <a href="#">Registration</a> | <a href="#">Housing/Travel</a> | <a href="#">Sessions</a> | <a href="#">More...</a> |
| Minneapolis:<br>Oct. 27–29, 2016                   | <a href="#">Registration</a> | <a href="#">Housing/Travel</a> | <a href="#">Sessions</a> | <a href="#">More...</a> |
| Portland: Nov. 10–12, 2016                         | <a href="#">Registration</a> | <a href="#">Housing/Travel</a> |                          | <a href="#">More...</a> |
| Columbus: Dec. 1–3, 2016                           | <a href="#">Registration</a> | <a href="#">Housing/Travel</a> |                          | <a href="#">More...</a> |

## What PRISM Can Do For You!

- Easily find the perfect teaching and learning resources from our library of over 4,000.
- Save a list of your favorite resources for quick retrieval.
- Create and share lesson plans that teach your subjects utilizing your favorite resources.
- Develop online classrooms with interactive assignments, lessons, quizzes and more!
- Store your classroom materials online so that they are available to you from any computer.
- Reach your students more effectively by using web media for the digital age.
- Earn PGP points by completing PRISM led online Moodle course – either Beginning Moodle or Intermediate Moodle courses are available to you at no cost several times throughout the year.
- Select from free learning resources that emphasize visualization, rich context, staged-problem solving, and electronically enabled collaboration / communication.
- Augment your own dynamic presence in the classroom with teaching tools that mirror the skills needed for success in higher education and the 21st Century workplace.

*Through our strong support from the [Lilly Endowment](#) and others, we are constantly growing and improving. Check our site regularly to see what new resources you can use in your classroom.*

[www.rose-prism.org](http://www.rose-prism.org)