Newsletter

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Lilly Endowment Supports PRISM's Educational Initiatives with $946,000 Grant

Lilly Endowment Inc. has awarded Rose-Hulman a $946,000 grant to help Indiana primary and secondary educators provide students with the skills to thrive in the technology-rich workplace of the 21st century.

The grant supports initiatives for the next three years by Rose-Hulman's Portal Resource for Indiana Science and Mathematics (PRISM) program to provide interactive digital learning tools and professional development workshops for Indiana teachers in science, technology, engineering and mathematics (STEM) areas.

"Lilly Endowment has been a valuable partner with us in helping provide Indiana students with the communication, collaboration, creativity and computational skills to be our state's future technology leaders. We appreciate this deep-rooted relationship with Lilly Endowment in helping transform K-12 education to address 21st century needs," says Rose-Hulman President Jim Conwell.

The PRISM website will add new media resources and educational tools to keep teachers up to date with changing Indiana educational requirements. These enhancements include digital resources for five math and seven science high school courses and age-appropriate internet STEM reference sources for elementary school media specialists. PRISM also will add resources for the newly established computer science standards being taught in kindergarten through eighth-grade classrooms. All PRISM digital resources integrate critical thinking topics such as system perspectives and quantitative reasoning into classroom learning units.

Workshops will be conducted for curriculum coordinators within each Indiana school district to promote PRISM educational resources, and social media will be used to link the PRISM team with teachers, school leaders and district administrators.
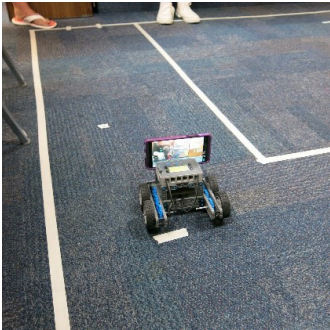
PRISM Director Patricia Carlson notes that 75 percent of Indiana's school corporations now provide computer-mediated education at various levels, and digital materials have replaced textbooks in some Indiana districts.

"The educational landscape is changing across Indiana. There's tremendous opportunity for teachers to adapt their teaching styles and to revamp their classroom methods and practice," Carlson says. "At the same time, the PRISM program must strengthen our direct outreach to teachers in underserved communities and foster innovation in the learning process by directly blending our resources with more traditional classroom activities."

Opened with Lilly Endowment support in late 2002, the PRISM program began in 2006 to offer free accounts on Moodle, a learning management system that helps Indiana teachers use digital media as an extension of their own dynamic presence in the classroom. In 2016, PRISM's website averaged 137,195 page views per day, and was recognized by the Indiana Department of Education for its math and science partnership with the Vigo County School Corporation.

Other PRISM staff members assisting with the program are Bob Jackson, educational liaison, and Ryan Smith, system administrator.

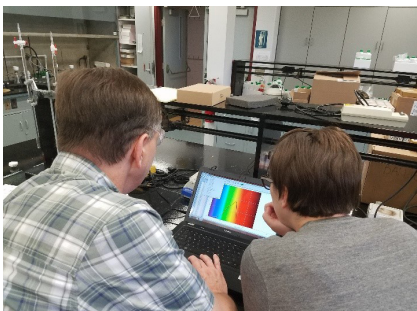## PRISM Workshops Gives Teachers New STEM Tools

Thanks to summer workshops offered through Rose-Hulman, Vigo County middle school and high school teachers have new educational tools to incorporate robotics, sustainable engineering and genetic science in their classes to pique students' interest in science, technology, engineering and mathematics (STEM).
A $300,000 grant from the Indiana Department of Education has enhanced a partnership between Rose-Hulman's Portal Resource for Indiana Science and Mathematics (PRISM) program and the Vigo County School Corporation (VCSC).

Features of this summer's teacher workshops were:

- Computer science and software engineering professor Matthew Boutell used VEX robotics to showcase real-world mathematics.
- Mechanical engineering professor Rebecca Bercich showed how LEGO education kits can be used to teach physical science and engineering concepts.
- Biology and biomedical engineering professor Renee Rogge discussed new ways to incorporate genetics, cell division and invasive species topics into science courses.

- Civil and environmental engineering professor Jennifer Mueller-Price provided classroom topics on sustainable engineering.
- Mechanical engineering professor Zac Chambers provided insight on the science behind aquaponics.
- Physics and optical engineering professor Elaine Kirkpatrick and mathematics professor Felicia Tabing provided instruction on Seven Big Ideas in Calculus.
- Biology and biomedical engineering professor Jennifer O'Connor taught current and future topics in biology.
- Chemistry and biochemistry professor Rebecca DeVasher introduced new chemistry curriculum concepts.

Also in June, 36 high school students visited Rose-Hulman Ventures and the campus' Branam Innovation Center during a three-week College 101 STEM career awareness course, offered by VCSC. Lunch With An Engineer sessions gave the students a chance to meet with Rose-Hulman and VCSC high school alumni. The visiting engineers were Julie Hopkins, a process engineer at Hitachi High Technologies America; Jordan Thralls, design engineer at Precision Rings Inc.; and Thomas White, engineer with ArcelorMittal USA.

Technology in Education

#GoOpen Campaign

The U.S. Department of Education's #GoOpen campaign encourages states, school districts and educators to use openly licensed educational materials to transform teaching and learning.

#GoOpen Districts

Through the #GoOpen campaign, the U.S. Department of Education supports school districts and educators using openly licensed educational materials to transform teaching and learning.

District and state leaders are working alongside innovators from education technology companies and nonprofit organizations to share effective strategies and ideas, create new tools and provide professional learning opportunities that help educators find, adapt, create, and share resources. Read our #GoOpen Exchange press release and our Open Education Symposium fact sheet for more on these commitments.

Why #GoOpen?

Openly licensed educational resources have enormous potential to increase access to high-quality education opportunities in the United States. Switching to openly licensed educational materials has enabled school districts to repurpose funding typically spent on static textbooks for other pressing needs, such as investing in the transition to digital learning. Visit our Open Education page to learn how resources that are openly licensed can benefit schools.

What it means to #GoOpen

School districts that #GoOpen are committing to transition to using high-quality, openly licensed educational resources in their schools. These districts will be supported by #GoOpen Ambassador districts who have already taken steps toward implementing the use of openly licensed materials at the district-level.

#GoOpen Launch Districts:

- Identify a district #GoOpen team who will work to develop a strategy for the implementation of openly-licensed educational materials.
- Commit to replace at least one textbook with openly-licensed educational materials in the next year.
- Document and share their implementation process.

#GoOpen Ambassador Districts:

- Mentor #GoOpen Launch Districts as they design and implement their strategy for transitioning to openly licensed educational resources.
- Share the openly licensed materials they've created.

If you are interested in becoming a #GoOpen Launch or Ambassador District, please email tech@ed.gov.

How to #GoOpen

<p align="center">#GoOpen District Launch Packet</p>

Professional Development Opportunities

#GoOpen Summit

Hosted by East Noble School Corporation and the IDOE

Wednesday, August 30, 2017
Kendallville, IN
@East Noble High School

What / Where / When?

East Noble School Corporation, along with the Indiana Department of Education, will be hosting a #GoOpen Regional Summit at East Noble High School in Kendallville, Indiana, on August 30, 2017. This FREE #GoOpen Summit will provide attendees with numerous opportunities to enhance their knowledge of OER, Open Educational Resources.

Who Should Attend?

Since this event targets leaders at all levels of the continuum, districts are encouraged to send a team of three to five people interested in learning more about OER. Schools are encouraged to send teams that may consist of administrators, instruction or technology coaches, media specialists, and teacher leaders. Individual participation is also welcomed.

We hope you will consider joining us for this #GoOpen Summit. Click here to REGISTER.

For more information, contact Joanna Cook at jcook@eastnoble.net.

Professional Development Opportunities

Digital Content Workshop Tour

The Office of eLearning, with the help of the Rockstars of Curation, will travel the state to offer Digital Content Curation Workshops throughout the 2017-2018 school year. These workshops are intended to support districts and teachers who are journeying down the digital learning path. Districts are encouraged to send a team of teachers (up to 5) to learn about the process of digital content curation and best practices. The morning will focus on professional learning, and the afternoon will be a work time, with support, so teacher teams can collaborate and leave with curated digital materials. We suggest sending a grade level team or content area team of teachers. Attendees will be asked to vet and curate digital materials to use in their classrooms, but also to share with colleagues across the state via Amazon Inspire. Our goal is to grow this network of teachers and encourage collaboration within districts and across the state. While the work of curating digital content is on-going, working together makes the load lighter.

The Office of eLearning will reimburse districts for attendee substitute teacher costs:

Digital Content Curation Workshop Tour dates and locations are listed below. All workshops will be held from 9-3:30 local time. Registration will open in the fall of 2017.

- October 25, 2017 @ Center Grove Innovation Center (Greenwood, IN)
- November 1, 2017 @ Maconaquah School Corp (Bunker Hill, IN)
- January 31, 2018 @ Batesville Community School Corp (Batesville, IN)
- May 2, 2018 @ Southridge High School (Huntingburg, IN)

Great Apps & Websites for Learning Programming & Coding

ScratchJr

Drag-and-drop programming that is an effective introduction for budding programmers.

MIT App Inventor

Fun programming site gets kids to build their own mobile apps

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

www.rose-prism.org

PRISM is a free website that provides collections of online resources for Indiana educators in the fields of science, technology, engineering, and mathematics (STEM). The primary collection of digital teaching materials is indexed according to the Indiana Academic Standards for 6th, 7th, and 8th grade and secondary education courses.