

*Newsletter**Special Interest Articles*

- PRISM Summer Programs

Individual Highlights

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PRISM 2021 Summer Programs

During the Summer of 2021, the PRISM staff was very busy with STEM professional development programs for Indiana K-12 teachers. From June 7 - June 18, PRISM facilitated three, 40-hour programs with Vigo County School Corporation middle school science teachers, 5th grade teachers, and 4th grade teachers. Fourth grade teachers received professional development in math content and fifth grade teachers in science content. PRISM hosted two residential boot camps on sustainable alternative energies for K-12 STEM teachers from across Indiana. The first camp occurred July 11-18, and the second camp, from July 18-23.

The workshops for the Vigo County School Corporation's teachers were funded by a Title IV grant awarded to the school district. PRISM has a partnership agreement with them to provide STEM professional development. Three separate workshops ran concurrently. Each workshop was for a duration of 40 hours. One workshop was for middle school science teachers. Dr. Jennifer O'Connor, Associate Professor of Biology at Rose-Hulman facilitated the daily middle school science sessions. A second workshop was for 5th grade teachers. Dr. Renee Rogge, Professor of Biomedical Engineering at Rose-Hulman facilitated the daily sessions for the 5th grade teachers. The third workshop was for 4th grade teachers. Dr. Manda Riehl, Professor of Mathematics, facilitated the daily sessions for the 4th grade teachers. Dr. Riehl was joined by her colleague Ryan Harrison during the first week of the professional development program. Dr. Harrison is an Associate Professor of Mathematics at the University of Wisconsin, Eau Claire.

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PRISM 2021 Summer Programs

Duke Energy Foundation funded the first residential boot camp on sustainable, alternative energies (July 11-16). Frank and Becky Levinson, Rose-Hulman alumni, funded the second boot camp (July 18-23). Participating teachers lived in residence on the RHIT campus during each program, attended daily lectures and lab sessions of the morning. In the afternoon, they went on field trips. Field trips were taken to: Hoosier Energy's Merom Generating Station (power plant) near Sullivan, IN; NIPSCO's Sugar Creek Generating Station in rural West Terre Haute, Duke Energy's Cayuga Generating Station (power plant), Wayne Township Schools (solar farm and more) and to the Benton County wind farms.



All teachers received professional growth point certificates (PGP's) upon completion of the program (45 PGP's). Teachers also received a kit of supplies for each of the labs that were done on campus. Dr. Andrew Mech, Professor of Mechanical Engineering (Emeritus) facilitated each morning lecture (50 minutes each). Dr. Robert Bunch, Professor of Physics and Optical Engineering (Emeritus) gave a talk on lighting, types of light bulbs and energy conservation. Dr. Jennifer Mueller, Professor of Civil and Environmental Engineering, gave the keynote speech on the opening night of the Duke Energy Boot Camp (July 11). She spoke on sustainable practices and teachings at Rose-Hulman Institute of Technology. Dr. Rebecca Bercich, Assistant Professor of

Mechanical Engineering, gave the keynote speech on the opening night of the Levinson Boot Camp (July 18). She spoke on rethink, a non-profit organization that provides sustainability solutions for Terre Haute and the Wabash Valley. Each boot camp was a 45-hour professional development experience in sustainable, alternative energies.

Resources for Teachers



OER Commons is a public digital library of open education resources. Teachers, and other educators, can explore, create, collaborate, and use OER Commons resources have been created to benefit all. The move to providing free open education resources is more than a shift in content, it is an immersive experience in collaborative teaching and learning. Open education resources (OER) are leveraged to expand the role of educators, allowing teachers to become curators, curriculum designers, and content creators. In sharing teaching tools and strategies, educators network their strengths and improve the quality of education for their students. Open Educational Resources (OER) are teaching and learning materials that educators may freely use and reuse at no cost, and without needing to ask permission. From the main webpage at OER Commons, teachers can search, browse, and evaluate resources in OER Commons' growing collection of over 50,000 high-quality OER's. Some curated collections include:

- [Full university courses](#)
- [Interactive mini-lessons and simulations](#)
- [Adaptations of existing open work](#)
- [Open Textbooks](#)
- [K-12 Lesson Plans, worksheets, and activities](#)

For more information: <https://www.oercommons.org/>



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For more information: <https://openstax.org/>

Resources for Teachers



The MERLOT Collection consists of tens of thousands of discipline-specific learning materials, exercises, content builder webpages, and bookmark collections, all intended to enhance learning experiences of students using online materials. All MERLOT resources have been reviewed for appropriateness, suitability and fit for given content areas. Most go through extensive peer review prior to being made available to all in the collection. The MERLOT Collection is made up of over 91,000 materials in 22 different material type categories. MERLOT does not store the materials that are discoverable on their website. MERLOT staff maintain the metadata records for each material in the collection and link to its own website. Learning materials can include:

- Animations and Simulations
- Assessment tools
- Assignments and Exercises (Content specific)
- Case Studies
- Drill and Practice (Mastery assignments)
- Online courses including hybrid and blended courses.
- Software development applications.
- Tutorials
- Teacher professional development materials and workshops.

For more information: <https://www.merlot.org/merlot/>

Professional Development for Teachers

FREE K-12 Indiana Teacher PD in Computer Science

IndianaComputes! is a network of universities and colleges around the state that have collaborated to develop and instruct an online Computer Science teacher professional development program to help schools meet the new state requirement to include computer science in the public school's curriculum for students in kindergarten through grade 12. After a successful first cohort year, the Indiana Department of Education has provided funding support to recruit a new cohort of Indiana K-12 teachers who are interested in participating in this FREE, year-long PD program that develops CS content knowledge and pedagogy. The new Cohort kicks off August 2021.

Program Overview

- Online curriculum partnered with online coaching support from IC! Faculty and experienced Teacher Coaches.
- Exploration modules on Programming, Data, Cybersecurity, Assessment and Building Participation. Other topics may include Ethics and AI.
- All training and materials are aligned to Indiana CS Standards.
- Program begins the week of August 16, 2021, and ends May 27, 2022, and includes school and holiday breaks.

Teacher Benefits

- Differentiated learning provides instructional value to all levels of Computer Science experience and responsibility.
- All program materials are in the public domain and are available for immediate classroom use.
- Opportunities to interact with K-12 and higher ed colleagues around the state about teaching CS.
- Participants completing the program receive a \$600 stipend.

[Register here.](#)

For more information: <https://www.indianacomputes.net/>



The eLearning Lab is a personalized microlearning platform. The eLearning Lab is funded by the Indianapolis e-Learning Fund and is meant to provide educators and families with the support they need for eLearning. This support includes access to eLearning experts via live chat, weekly eLearning webinars, and an open community forum to collaborate with others across the state of Indiana. Partners in the eLearning Lab project include: Five Star Technology Solutions, the State Educational Technology Directors Association (SETDA) and the Indianapolis-based Mind Trust. Personalized resources are available for families, teachers and other educators, and school administrators. Weekly eLearning workshops and eLearning community forums are held for educators on a variety of topics.

For more information: <https://inlearninglab.com/>

What PRISM Can Do For You!

- Easily find the perfect teaching and learning resources from our library of over 5,000.
- 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