

# STEM-IN'

Indiana STEM News

Vol. 3 No. 8 August 2017

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### **PBS Community Collaborative for Early Learning and Media**

When children, adults, and PBS Kids come together with STEM, the result is purposeful learning through hands-on experiences. For more than a year, WFYI Public Media, the I-STEM Resource Network, Indiana Afterschool Network, Early Learning Indiana, Boys and Girls Clubs of Indianapolis, the YMCA of Indianapolis, MSD Warren Township, and the Indianapolis Public Library, have been working together on a multi-year initiative to build a "Community Collaborative for Early Learning and Media" in Warren Township at Liberty Park Elementary School. The work focuses on families and children 2-8 with the goal of building connected and continuous touchpoints for early STEM and literacy learning.



In the first year, the team hosted a "Scratch Jr. Family Creative Learning Workshop" at the Warren Library. Families learned early coding skills and how to use the engineering design process to create together. The team also implemented "Odd Squad be the Agent Camp" at the Boys and Girls Club's Summer Camp at Liberty Park. Agents learned how to use math skills to solve cases and staff gained new skills and confidence in leading STEM activities. As the second year begins, the collaborative looks forward finding new ways to deepen STEM and early literacy and build stronger connections between in-school and out of school experiences. You can learn more at:

<https://indiana.pbslearningmedia.org/>

**Integrating Computer Science** Indiana's First Annual K-8 Computer Science conference held at the University of

Indianapolis through a partnership with the University of Indianapolis School of Education, Indiana University School of Informatics & Computing, and the Indiana Department of Education.

### **Flipping the Switch: Integrating Computer Science Across the Indiana Curriculum September 15 & 16, 2017 University of Indianapolis**

Attendees will:

- Integrate Indiana's CS Standards Across STEAM
- Utilize Unplugged Activities
- Learn to Code
- Engage in Data Manipulation
- Produce Visual Representations
- Create a CS Pipeline Plan
- Explore Showcased CS Integration
- Investigate CS Toys & Tools
- Participate in CS challenges to win PRIZES

**Registration:** \$20/day • \$30 both days. [Register here.](#)

(The event will run from 8:30am – 4:00pm both days. Registration by Sept 1 includes: Continental breakfast, lunch, and an afternoon snack break. After Sept 1, lunch NOT included.)

**Hotel:** \$94 + tax. Group Code = FTS. [Reserve here.](#)

(Tax exempt at check in with government ID & ST105. Holiday Inn Express Indianapolis South, 5151 South East St., Indianapolis, IN 46227 • 317-788-5151)

**Presentation Proposals:** [Submit here](#) by Aug. 18 (Submissions due Friday, Aug 18. Presenters notified Aug. 25). Further Information visit:

<https://tinyurl.com/K8ComputingConference>

or Contact Nick Flowers or Dena Irwin at the IDOE.

### **PRISM Helps Teachers to Adopt Digital Learning Tools**

Funded through the Lilly Endowment, PRISM helps Indiana teachers of STEM use digital teaching resources to meet the state academic standards. The entire PRISM team takes pride in being enablers: we facilitate innovation in teaching and learning through technology. We offer digital tools that merge teachers, talent, and technology to advance student accomplishments.

PRISM ([www.rose-prism.org](http://www.rose-prism.org)) provides over 5,300 free digital resources, indexed to the Indiana academic standards. We also offer free access to Moodle, as well as distance training courses on using this top-rated Learning Management System.

**New Features Now Open:** We have curated collections to support three high-need educational areas:

- **Materials for Dual Credit Teachers:** Available for five math and seven science courses. All items are categorized and linked to the state standards. Most resources include embedded assessment and immediate feedback. Use for in-class activities or assign to students as tutorials.
- **Science Modules for Elementary School Media Specialists:** Age-appropriate units that help to integrate digital literacy, using the process and principles of science as subject matter. Resources focus on developing skills with computer tools and internet reference sources. Also emphasized are computer programs to facilitate communication / collaboration and concept exploration.
- **Resources for Computer Science Standards:** Online resources for all five core concepts (Data / Information, Computing Devices / Systems, Programs / Algorithms, Networking / Communication, and Impact / Culture). Resources are categorized for each of the three grade-level groupings (K-2, 3-5, and 6-8). Indexed by state standards.



**NEW FOR FALL 2017: Professional Development in Digital Pedagogy.** New media and internet-centric classrooms are major enablers for learning in the 21<sup>st</sup> Century. Digital resources have already replaced textbooks in some Indiana classrooms. At least seventy-five percent of Indiana school corporations are 1:1 or planning to go to 1:1 by next year. PRISM offers e-courses and online consultation for teachers to adapt their teaching styles and to revamp their classroom methods for a digital environment.

Check our website and monthly e-newsletter ([www.rose-prism.org](http://www.rose-prism.org)) for updates on these components. (Subscribe to the e-newsletter by becoming a PRISM member on the website.)

Established in 2002, PRISM is a robust and stable resource provider. All services are offered at no charge. For additional information, please contact Dr. Patricia Carlson

([carlsonp@rose-hulman.edu](mailto:carlsonp@rose-hulman.edu)), Bob Jackson ([jackson2@rose-hulman.edu](mailto:jackson2@rose-hulman.edu)) or Ryan Smith ([smithrn@rose-hulman.edu](mailto:smithrn@rose-hulman.edu)).

**100,000 Excellent STEM Teachers by 2021** 100Kin10 unites the nation's top academic institutions, nonprofits, foundations, companies, and government agencies to address the nation's STEM teacher shortage. Together, 100Kin10 is tackling systemic challenges and getting 100,000 excellent STEM teachers into classrooms nationwide. By giving STEM teachers the support they need, 100Kin10 is helping to educate the next generation of innovators and problem solvers. 100Kin10 cultivates a network of best-in-class organizations to make ambitious commitments to our shared goal, foster trust between those organizations, and facilitate networked problem-solving to tackle the biggest challenges facing STEM education. They have developed this unique approach over the past six years, and are committed to continually interrogating and refining how best to do this work, always improving the model.

**100Kin10** recently closed their fourth fund at \$28.175 Million in pledges by 19 foundations and corporations, 7 of whom are new to the Funders' Collaborative. This fund brings the total amount of dollars committed to support 100Kin10 partners' STEM teaching work to \$103 million since 2012. Additionally 100Kin10 has grown to nearly 300 partners nationwide. Through 2016, 40,000 teachers have been prepared for STEM classroom through the partners in 100Kin10.

In Indiana, the I-STEM Resource Network, the Indiana Department of Education, the University of Indianapolis, The New Teacher Project, the Richard M. Fairbanks Foundation, and Teach for America are all partners with 100Kin10.

For more information about 100Kin10 see their website [www.100kin10.org](http://www.100kin10.org) or contact Jenny Hicks at [jenny@istemnetwork.org](mailto:jenny@istemnetwork.org).

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**About STEM-IN'** This newsletter is published 12 times per year by the I-STEM Resource Network and the Indiana Afterschool Network. For inquiries and news contributions please email: [istem@istemnetwork.org](mailto:istem@istemnetwork.org). Follow I-STEM on Twitter: @IndianaSTEM Follow IAN on Twitter: @INafterschool

**EVERY** student **EVERY** school **EVERY** day