

**GREATNESS
STEMS
FROM IOWANS**

Drake
UNIVERSITY

SOUTH CENTRAL IOWA REGION GOVERNOR'S STEM ADVISORY COUNCIL

STEM Happens

Projects + Festivals + Bill Nye = STEM @ Drake



From preschool to prime time, STEM superstars filled Drake University on April 14, 2016. The day began with students presenting original research at DUCURS, the Hub hosted a free, open-to-the-public STEM festival and the Bucksbaum Lecture Series featured Bill Nye.

The SC STEM Hub hosted a festival featured 212 exhibitors



Bill Nye spoke to a packed house at Drake's Knapp Center.

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A Year of Great Festivals

Thanks to all who exhibited, volunteered and attended this year's STEM festivals. We had a great time hosting the events and look forward to more memories next year.



If you'd like information on festivals or other STEM Hub endeavors, please contact Dr. Sarah Derry, SC STEM Hub Manager, as directed below.

Manager:
Dr. Sarah Derry

Call:
515-271-2403

Find us at:
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Check out our calendar!
Remember to send us your STEM events and

and volunteers, along with 395 festival attendees. That makes about 605 people at the Bell Center for the event.

Photo by Drake University.

After, exhibitors and attendees flocked to Bill Nye's lecture. With the positive theme of "change the world," Nye talked about his family, World War II, global warming and the future of the planet, wrapping it all into a call of action for us all to make the world a better place.

Stay tuned for more great STEM programming next year, with four festivals headed to a town near you. In addition, the [Bucksbaum Lecture Series](#) is an annual spring event.



STEM Active Learning at IMPACT After School Conference

Out of school educators, there is still time to visit Iowa STEM at the IMPACT After School Conference, going on now through Friday in Des Moines! The Iowa STEM Active Learning Committee, an Iowa Governor's STEM Advisory Council working group that includes Blank Park Zoo, the Iowa Children's Museum, Science Center of Iowa and others, presented a pre-conference session at the IMPACT After School Conference.

The topic, the Dimensions of Success (DoS) planning tool, provides guidance for planning hands-on activities to maximize student engagement and impact. Join Iowa STEM for a session tomorrow at 8:30am.

Festival Time!

Tama Festival Jumps into Spring

news! We can help you promote your event.

Apply Now!

Drake STEM Camp

Come experience hands-on activities in coding and mathematics this summer at Drake University!

This camp provides a "college for high school students" experience for students who are interested in learning more about these subject areas.

In the morning, students will experience probability and statistics activities using real data and technology tools.

In the afternoon, students will engage in "app camp" and develop mobile device applications.

- **WHEN:**
August 1-4, Daily from 9:30am-3:30pm
- **WHO:**
Students entering 10th or 11th grade
- **COST:**
Free
- **TEACHERS:**
Drake faculty and local high school teachers
- **APPLICATION DEADLINE:**
May 15, 2016

[CLICK](#) to apply!

This camp will introduce computer programming at a beginner level, so minimal previous exposure to programming is desirable. We will provide all necessary devices (no phones or laptops required). There is limited space available.

For more info, contact Eric Manley:
eric.manley@drake.edu

**Reminder:
Please Complete
Scale-Up Evaluations!**



GREATNESS STEMS FROM IOWANS

GOVERNOR'S STEM ADVISORY COUNCIL

While the 2015-2016 implementation of your STEM Scale-Up Program winds down, evaluators are winding up to capture effects of your work bringing high quality STEM programming to students across Iowa.

As part of your STEM Scale-Up Program service agreement, all educators are expected to contribute to the STEM Scale-Up Program evaluation.

The evaluation is comprised of three parts:

- 1) Educator Survey,
- 2) Student Participant List, and
- 3) Student Survey.

ALL schools and organizations awarded a STEM Scale-Up Program are expected to complete the 1) Educator Survey and 2) Student Participant List. In addition, SOME schools and organizations were randomly selected to complete the 3) Student Survey.

Selected schools were notified in Fall 2016 to complete a "Beginning of the Year" (i.e. pre-program) and "End of the Year" (i.e. post-program) student survey. If you completed a "Beginning of the Year Student Survey" with your students, please remember to submit the "End of the Year Student Survey."

Instructions for the three-part evaluation can be found here: <http://iowastem.gov/scale-monitoring>. The 1) Educator Survey, 2) Student Participant List, and 3) End of the Year Student Survey can be completed at the end of your STEM Scale-Up Program.

The final DEADLINE for submitting the three evaluation tasks is May 30, 2016.

Please direct questions to:

- Erin Heiden 319-273-6506 / erin-heiden@uni.edu
- Mitch Avery 319-273-7451 / mitchell-avery@uni.edu

Evaluation is key to our future success. THANK YOU for helping us evaluate our work together!



The SC STEM Region teamed up with the Northeast STEM Region to support Tama's fourth STEM festival. With over 450 attendees, the festival was a huge draw once again.

WOTYC Festival Pulls Young Kids into STEM



Dr. Sarah Derry, the SC STEM Regional manager, helps a family build a tower from recycled brochures. Each booth featured an interactive element.

Week of the Young Child (WOTYC) is an annual event that celebrates, educates and energizes the Pre-K community. This year's Saturday festival was held at Drake University's Olmstead Center on April 16. Families visited booths hosted by organizations and businesses around the community, including the SC STEM Region.



Lions love STEM! The Asian Alliance's Lion Dancers amazed festival attendees and stopped by the booth to build a tower.

Dr. Sarah Derry notes the importance of reaching out to this age group. "Engaging our earliest learners allows them to STEM build a solid foundation in discovery, critical thinking, and identity (particularly for populations traditionally under-represented in STEM)," says Derry. "It also is an opportunity to involve parents in supporting their child's STEM pursuits."

All learning begins with the curiosity of a child. This early interest develops into great readers, empathetic problem-solvers and creative inventors. If you want to learn more about WOTYC, please visit their [website](#).

We're looking for Summer STEM



Do you know of a great Summer STEM opportunity for students age PreK-12 and their families?

If so, email us at lisa.morlock@drake.edu.

We're composing a massively awesome list of cool things to do during the hot summer months. Thanks for your help.

Check out these festival volunteers!

Ever wish you had more opportunities to do something good?

If the answer is yes, please consider volunteering for STEM. How?

- contact your community school
- host a festival exhibit
- help at a STEM festival or event
- find a community event (click [HERE](#) for a group who needs help now)

A special thank you to our 2016 Drake Festival student volunteer, Jan Hendrickson, for her assistance with the event!

For more ideas, please contact the SC STEM Hub at scstemhub@drake.edu.

Scale-Up Programming

Cathy Lents: Building a Community of Learners





Cathy Lents, center, works with students in several school districts through ISU Extension Office. Check out the other article photos of students at work.

Q: What is unique about PLTW launch?

A: Launch has students engaged. This program starts as early as Kindergarten and it will build confidence, interest, and provides a skills of problem solving that may not be given in a classroom.



Students use structured approaches, like the engineering design process, and employ critical thinking. They apply STEM knowledge, skills, and habits of mind, learning that it is OK to take risks and make mistakes. As teachers and students learn and discover together, education becomes far more engaging. It also offers flexibility for implementation as the modules can be delivered in any setting. This allows organizations, such as Extension, to be part of the process. The use of the iPads as a textbook, along with the Canvas program and the other Apps, has encouraged learning in a nontraditional approach.

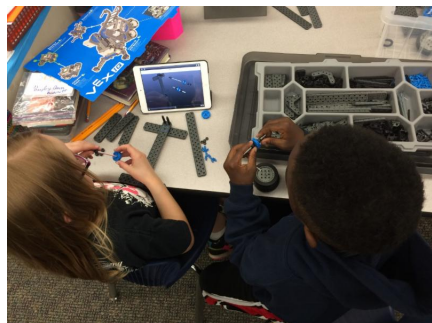


Q: How do you benefit from this Scale-Up program?

A: I love the opportunity to work with teachers, kids, and the program itself. It has been exciting to be a partner in providing the Launch program. It provides opportunity for a quality experience to work as a team of problem solvers with activities in which youth have an interest.

The materials are great. The use of Canvas, Autodesk Inventor, Popplrit and the other Apps have created tech uses for youth in my organization as well as school districts. This has been a great opportunity for my organization to be part of a STEM process, as it takes a community to build our future learners.





Events

Add these dates to your calendar!

- May 7 – SCI Starviewing Party
- May 10 – Fast Physics: Teaching STEM on the Track
- May 30 – All Scale-Up Evaluations DUE!
- June 1 – Biotechnology Educator Workshop
- June 6-8 – Iowa Geological Resources Workshop for Teachers
- June 13-16 – Educators in the Workplace
- June 14 – Coding Across the Curriculum
- June 20-23 – Teaching for the Workforce
- April 14 – Drake-Metro STEM Festival/Bill Nye Lecture
- April 16 – Week of the Young Child Storytime at Drake
- April 25 – World Food Prize Youth Institute

Spread the word about STEM EVENTS in your community!

Visit the [South Central STEM Calendar](#) to get details on these events and see LOTS more!

[To submit your STEM event, click here!](#)

