August, 2021
North Central STEM Region
Monthly News

In this Issue
Register Today to Attend the FRI Summit
Computer Science Captivates Youth this Summer
Iowa STEM Scale-Up Provider RFP is Open

Register Today!
Future Ready Iowa Summit 2021
THURSDAY, SEPTEMBER 16

The 2021 Future Ready Iowa Summit brings together leaders from business and industry, education, nonprofits, elected officials, students and others to amplify the public conversation about connecting education and the workforce, with a focus on expanding work-based learning and computer science as critical aspects of STEM education.

The day will be filled with opportunities to hear from and network with experts creating opportunities in STEM and work-based learning for students.

Educators are eligible to earn licensure renewal credit through the AEA Learning Online.

Keynote remarks will be delivered by Emily Calandrelli, Host and Co-Executive
North Central Iowa’s Regional STEM Advisory Board Member and Central Rivers AEA Consultant Kay Schmalen went the extra mile this summer to offer youth in rural communities the opportunity to attend computer science camp.

Schmalen collaborated with the Osage Community School District and the North Central STEM Hub to host the event, July 19-23. Youth were enthusiastic about the opportunity, and administrators were excited too.

"We recognized there was an opportunity to provide a unique experience for students," Schmalen said. "Students had the chance to explore computer science and problem solve with others." One of the goals for Schmalen was to show students how computer science skills carry over to a variety of applications.

Each afternoon, youth experimented with Sphero Bolt Coding Robots and learned the basics of computer programming. Facilitators followed Sphero’s Guide to the Ultimate STEM
Summer Camp and led youth through new challenges each day. Working in teams, youth built bridges and ramps for the robot to cross. The challenges gave teachers natural opportunities to explain the math and physics needed to accomplish each challenge.

“This type of coding is more difficult because it doesn’t always go where you think it will go,” one youth participant explained. “You have to do a lot more trial and error.”

“Oh yeah, a LOT of trial and error,” another youth participant agreed. “And changing one thing sometimes makes you have to change the whole code.”

Thirty youth in grades 3-6 attended the camp. Schmalen noted the spots filled quickly and said many families attended camps throughout June. July seemed to be a good time to have the camp and filled a need for additional late summer activities. As a result of their participation, students received a mini Sphero at the end of the camp.

"Participants were excited to receive a mini Sphero because they were able to take the technology home and continue their exploration with family and friends," Schmalen said. "They will be able to continue to explore on their own in a way that works for them and in an area that interests them."

Superintendent of Osage Community School District, Barb Schwamman, says administrators in the district value hands on learning experiences and have worked hard to build partnerships in the community that support STEM education.

Thank you to all the Osage teachers who also helped make this camp happen: Jenn Ham, Deb Huftalin, and Kelley Molitor.

---

Summer Professional Development Brings Hands-On Experience to Scale-Up Educators

One of the reliable pillars of STEM programs and professional development delivered through the STEM Scale-Up Program is the hands-on component! STEM Scale-Up Professional Development delivered across the state this summer provided opportunities for educators to actually experience and test their materials - even for those attending virtually. Interested in receiving high-quality STEM programming for your organization? Applications will open in January of 2022 for implementation in the 2022-2023 school year. Reach out to the North Central STEM Hub for more information: ncstem@iastate.edu.

Above: Educators work together to prepare fish tanks made out of recycled cheese-ball containers for the Ioponics Program.

Top left: Educators practice making shadow designs and shapes with different objects during Light & Shadow training.
Iowa STEM Scale-Up Provider RFP is Open

For the 2022-2023 academic year the Iowa Governor’s STEM Advisory Council is seeking program providers for the Iowa STEM Scale-Up Program. If you are interested in providing STEM programming in Iowa and would like to be considered for this initiative, please click on the link below.

STEM Scale-Up RFP

Welcome New North Central STEM Advisory Board Members

Jared Brown, Polk Co.
Teresa Green, Boone Co.
Allyson Krull, Worth Co.
Todd Oesterle, Cerro Gordo Co.
Yen Verhoven, Story Co.

Calendar of Events

**September 13**
STEM Scale-Up Provider RFP Deadline

**September 16**
Transforming Education for the Workforce Summit

**September 24**
NC STEM Region Advisory Board Meeting 12-2 PM

**October 10**
Nominations for STEM Teacher of the Year Deadline

2021-2022 NC STEM Advisory Board

Jared Brown, Ankeny
Lindsey Falk, St. Ansgar
Ashley Flatebo, Garner
Teresa Green, Boone
Allyson Krull, Mason City
Sara Nelson, Ames
Todd Oesterle, Mason City
Michael Pedersen, Marshalltown
Kathy Rogatzke, Mason City
Sarah Rosenblum, Marshalltown
Kay Schmalen, Clear Lake
Matthew Stephan, Fort Dodge
Yen Verhoven, Ames
David Zrostlik, Garner
Contact Us
NC Regional Manager:
Dr. Kelly Bergman
Phone:
515-203-7247
E-mail:
kbergman@iastate.edu
Website:
ncstemhub.iastate.edu
Address:
Iowa State University
1259 Stange Rd
Ames, IA 50011-1002