

Congratulations to STEM BEST® Program Awardees

The STEM BEST Program provides support to school-business partnerships that bring teachers and industry professionals together to design a dynamic curriculum connected to future careers. This program opens the door for students to gain authentic workplace experience where they develop greater knowledge of the skills needed in STEM fields, such as advanced manufacturing, agriculture and health care.

The 12 new or expanded partnerships will receive up to \$25,000 each. Awards can be used for curriculum development and coordination, educator training and development in workplace-classroom integration and preparing the work-based learning environment.

The 2020 STEM BEST Program awardees in the North Central STEM Region are:

Ames Community School District
Clear Lake Community School District
Marshalltown Community School District

STEM Teacher Extern, Alyssa Faylor, Links Experience at the DNR with Outdoor Classroom to Benefit Students



Educators across North Central Iowa completed their participation in the STEM Teacher Externship program this month. The STEM Externship program is a six-week opportunity for educators to work side-by-side with knowledgeable and skilled industry employees who help bring the classroom curriculum to life. The STEM Hub caught up with North Central STEM Extern, Alyssa Faylor, to learn how the experience will benefit her students:

STEM Day at the Iowa State Fair Goes Virtual

On Sunday, August 23, 2020, take part in STEM activities and experiments from the comfort of your home.

The STEM activity demonstrations will be led by Iowa STEM Teacher Awardees and partners of the STEM Council.

Find links below:

[Join the Events](#)
[Activity Guide](#)
[Follow the State Fair](#)

NEW Monthly STEM Challenge: Dancing Rice

What you need: White vinegar, baking soda, instant rice (uncooked), water, clear jar, food coloring (optional)

Method:

1. Partially fill the jar with water and a few drops of food coloring
2. Add 1 tbs baking soda, mix
3. Add 1/4 cup rice
4. Add 1-2 tbs of vinegar and more as needed. Now watch the rice dance!

Questions: *What happened when you added the vinegar? What ingredient is the vinegar reacting with? Try adding more of the ingredients to see what happens. What other materials might dance in the water?*

Upcoming Events and Deadlines

August 17

What was your position or role at the DNR and what project(s) did you work on?

At the prairie resource center our main job was to produce seed for many plant species. As a teacher extern, I was working right along with the team to meet their goal. We planted, weeded, watered, harvested plants, and worked in the greenhouse.

What did you learn that you can take back to the classroom?

I learned a lot about ecosystems and the role they play. I have not been out in nature much to stop and notice all the beauty that nature has to offer. I also learned about different plant life and about animals. Some topics that this experience will assist me teaching in will be photosynthesis, genetics, and ecosystems. I am excited to bring pictures and stories back to my classroom!

How will you be able to improve students' educational experience after being a STEM Extern?

I am a storyteller, my past students know this. The more of an authentic experience I can give my students and have real-world examples. I will bring in pictures of different plant and animal life that I witnessed in the prairie. At Fort Dodge Middle School we have an outdoor classroom with many plants from the prairie resource center. I plan on being able to take my classes out there more times than I have done in the past. My hope is to continue the partnership and one day be able to bring my students to Brushy Creek and learn in the prairie.

Did you have any "aha" moments during the Externship?

Just how important nature is in our lives. All plants and animals have a role and help us live the life we live.

**Children's Services Librarian,
Zach Stier, Message to Youth:
STEM is in the Everyday**



As the Children's Services Librarian for the past eight years at Ericson Public Library in Boone, Zach Stier has developed and help establish a wide-range of STEM programming including STEM story time called Little Makers, code club through Prenda, NASA programming through our NASA@ My Library grant, virtual reality, and 3D printing classes. To adapt to COVID-19, the library has moved their youth programming online using Zoom, Facebook and YouTube, but it is has been a challenge knowing that not everyone has access to a computer or internet. "We are working on developing opportunities for families to enjoy our programs without a computer including a grab-and-go activity option," says Mr. Stier.

**[2021-2022 STEM Scale-Up
Program Provider Applications
Open \(Programs Only\)](#)**

August 23

[VIRTUAL STEM Day at the Fair](#)

September 18

North Central Regional STEM
Advisory Board Meeting

STEM Bingo

To help encourage children to explore the world around them, the North Central STEM Region created a STEM Bingo Challenge Board containing simple activities requiring few household materials and designed to inspire kids all summer long! Download your copy here:

[STEM Bingo Challenge](#)



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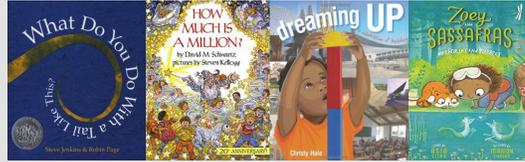
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**2019-20 NC STEM
Advisory Board**

Jerry Chizek, Manson
Lindsey Falk, St. Ansgar
Ashley Flatebo, Garner
Sara Nelson, Ames
Michael Pedersen, Marshalltown
Kristle Percy, Mason City
Kathy Rogotzke, Mason City
Sarah Rosenblum, Marshalltown
Kay Schmalen, Clear Lake
Camille Sloan Schroeder, Boone
Matthew Stephan, Fort Dodge
Kerry Weig, Nevada
Nancy Woods, Boone
Michael Young, Ames
David Zrostlik, Garner

Mr. Stier shares an important message with youth, "I believe many people have a misconception that STEM is reserved for individuals who either have a strong background in these areas or are reserved for individuals with careers or degrees. My goal is to have an open dialogue where I discuss how everyday activities such as driving or cooking and how those activities fall under STEM categories."

In selecting STEM books, Mr. Stier recommends selecting a variety of books including fiction, nonfiction, biographies and multicultural stories. "Many times, I select classic stories and create STEAM activities from them," says Mr. Stier.



Mr. Stier's book picks: What Do You Do with a Tail Like This? by Rhonda Gowler Greene, How Much is a Million by David M. Schwartz, Dreaming Up by Christy Hale, Merhorses and Bubbles by Asia Citro

STAY CONNECTED

