



# Southeast Region STEM Advisory Board

## January 18, 2018 3:00 – 5:00 pm

You can join this event from a PC, Mac, iPad, iPhone or Android device:  
 Please click this URL to start or join. <https://uni.zoom.us/j/509467428>  
 Or, go to <https://uni.zoom.us/join> and enter meeting ID: 509 467 428  
 Join from dial-in phone line:  
 Dial: +1 646 558 8656 or +1 669 900 6833  
 Meeting ID: 509 467 428

Thursday, January 18, 2018	
3:00 – 3:10 p.m.	<b>Welcome, Roll Call and Review of November Meeting Minutes</b>
3:10 – 3:15 p.m.	<b>Financial Report</b> Review of hub management and scale-up funding expenditures
3:15 – 3:25	<b>Executive Leadership Changes</b> Dr. Weld will be taking a one year fellowship in D.C. and Cindy Dietz of Rockwell Collins will assume his duties on an interim basis.
3:25 – 3:45 p.m.	<b>2018-2019 STEM Scale-Ups</b> The FY19 scale-up application will open January 22 – March 5. Board members will discuss the program menu, the new application system and the new board member review process. Board members will approve the list of awardees on March 27.
3:45 – 3:55 p.m.	<b>STEM Teacher Award</b> Cassidy Reinken from Johnson STEAM Academy in Cedar Rapids in the 2018 I.O.W.A. STEM Teacher awardee. Information about Cassidy and the award will be shared.
3:55 – 4:10 p.m.	<b>5% Carry Over Dollars for Summer Programming</b> Board members will review the hub renewal support submitted to the state. A formal renewal vote will occur at the Executive Council meeting in December.
4:10 – 4:35 p.m.	<b>Externships – Teacher and Business Recruiting</b> The Southeast STEM region is actively seeking teachers and business hosts for the 2018 externship program. Review the table for current businesses and teacher applicants. Businesses are encouraged to support 50% of the cost for the externship. Apply <a href="#">here</a> as a business host and apply <a href="#">here</a> as a teacher.
4:35 – 4:40 p.m.	<b>Mid-Year Regional Report</b> The regional report will be submitted to Pat Barnes for review from the board. Board members are encouraged to identify growth opportunities as well as established regional strengths. Board Member Engagement Survey: <a href="https://www.surveymonkey.com/r/JQKZS36">https://www.surveymonkey.com/r/JQKZS36</a>
4:40 – 4:50 p.m.	<b>Upcoming Events/ Board Needs</b> Discussion of events including list provided and <a href="#">summer camps across the region</a> . Board members can submit additional summer camp opportunities <a href="#">here</a> .
4:50 – 5:00 p.m.	<b>Public Comments</b>

<b>Next Meeting</b>
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March 27 – Iowa City 3:00 – 5:00 p.m.
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## 2018 STEM Council Structure Changes

- Dr. Jeff Weld, executive director of the Iowa Governor’s STEM Advisory Council, has accepted a one-year assignment as senior policy advisor and assistant director for STEM Education at the White House Office of Science and Technology Policy and staff associate in the Directorate for Education and Human Resources at the National Science Foundation.
  - o This agreement was made with the National Science Foundation and the University of Northern Iowa.
  - o Weld’s assignment is effective immediately and extends through December 10, 2018.
- Cindy Dietz, director of business communications for Rockwell Collins, has been appointed as interim executive director of the STEM Council.
  - o Dietz has been integral in expanding STEM education in the state. She contributed to the Iowa STEM Education Roadmap, which ultimately shaped the STEM Council charge. As one of the original STEM Council members, she has been involved in various working groups and initiatives that have impacted students across Iowa.
  - o Dietz will serve in a visionary role and will help guide STEM Council efforts in 2018. She will bring unique experience and ideas, including how to further engage students with Iowa businesses, better connect with underrepresented student populations, and provide line of sight to exciting and fulfilling STEM careers right here in our state.
  - o Dietz will maintain her current position at Rockwell Collins, serving the STEM Council part-time.
  - o No taxpayer dollars will be allocated towards Dietz’s salary. Travel reimbursements will be provided as necessary.
- Carrie Rankin will serve as the managing director of the STEM Council.
  - o Rankin has been the STEM Council assistant director for development since 2013 and will maintain her current role in addition to managing director.
  - o Rankin will primarily be responsible for operational STEM Council management.

## Externships

Business	City	Number of Extern
Centro Incorporated	North Liberty	2
Climax Molybdenum	Fort Madison	1
John Deere Accelerated Design Verification Lab	Milan	1-2
John Deere Parts Distribution Center	Milan	1
Rockwell Collins	Cedar Rapids	1
Rockwell Collins	Coralville	1
State Hygienic Lab	Coralville	1-2
US Army Corps of Engineers	Rock Island	1-2

School	Number of Educators
Davenport West High School	2
Northeast Community School	1
Central Lee High School	1
Bettendorf High School	1

## 2018-19 STEM SCALE-UP PROGRAM MENU

A (\*) Indicates new programs offered for the 2017-18 academic year

### PROGRAMS

#### **Curriculum for Agricultural Science Education (CASE) - Animal and Plant Biotech\***

**Description:** Experience industry appropriate applications of biotechnology-related plant and animal agriculture through hands-on activities, projects and problems in biotechnology. Research and experimental design will be highlighted in industry-appropriate investigations that involve micropipetting, bacterial cultures and transformations, electrophoresis, and the polymerase chain.

**Grade Level:** 10-12

**For Settings:** In school

**For more information:** <http://www.case4learning.org/>

#### **Curriculum for Agricultural Science Education (CASE) - Environmental Sci Issues\***

**Description:** Investigate areas that include ecosystem management, sustainable agriculture, energy choices, and pollution. Students will research, investigate, experiment, and document a project, and communicate solutions to peers and members of the professional community.

**Grade Level:** 10-12

**For Settings:** In school

**For more information:** <http://www.case4learning.org/>

#### **Computer Science Principles\***

**Description:** A year-long Code.org course that aligns with CSTA standards and 21st Century Learning Skills. It can be delivered as an Advanced Placement course. Teachers need no prior computer technology experience to qualify for training.

**Grade Level:** 9-12

**For Settings:** In school

**For more information:** [www.code.org/educate/csp](http://www.code.org/educate/csp)

#### **Engineering Everywhere\***

**Description:** Helps students think creatively and solve globally relevant engineering challenges during out-of-school programs. Each unit has an introduction to the engineering process, culminating design challenge, science and mathematics standards, and 21st Century Learning Skills.

**Grade Level:** 6-8

**For Settings:** Out of school

**For more information:** [www.eie.org/engineering-everywhere](http://www.eie.org/engineering-everywhere)

#### **Making STEM Connections**

**Description:** Activities that help students connect STEM to their daily lives and develop competencies essential to Iowa's future workforce. Grounded in making, safety, upcycling, creative constraints, art, and reinventing technologies. Lessons build on NGSS standards, reflect Iowa Common Core, and include National CORE Art Standards.

**Grade Level:** K-9

**For Settings:** In school and out of school

**For more information:** [www.sciowa.org/makingstemconnections](http://www.sciowa.org/makingstemconnections)

#### **Pint Size Science\***

**Description:** Four hands-on modules: one introductory unit and three chosen by the educator. Features Iowa Early Learning Standards/GOLD Objectives, NGSS, Iowa Common Core math and literacy and 21st Century Learning Skills. Includes kit materials, curriculum guides, website and webinar support.

**Grade Level:** PreK-2

**For Settings:** In school and out of school

**For more information:** [www.sciowa.org/pss](http://www.sciowa.org/pss)

### **PowerTeaching Math**

**Description:** Includes active instruction, team practice, formative and formal assessments, feedback and motivation, and a designated PowerTeaching coach. Contains Iowa Common Core Mathematics Standards and 21st Century Learning Skills.

**Grade Level:** 6-8

**For Settings:** In school

**For more information:** [www.successforall.org](http://www.successforall.org)

### **Project Lead The Way (PLTW): Computer Science for Innovators and Makers\***

**Description:** Using real-world scenarios, students use the design process, which includes defining the problem, generating concepts, and designing and presenting a solution. Aligns to NGSS, Iowa Common Core for Mathematics and ELA, and CSTA Standards.

**Grade Level:** 6-8

**For Settings:** In school

**For more information:** <http://www.pltw.org>

### **Ramps and Pathways**

**Description:** Explore the engineering process and mathematics of spatial thinking and geometry through construction of marble runs; mathematics and literacy skills through data collection; physics of force and motion through conversations and retesting; and 21st Century Learning Skills related to creation and innovation.

**Grade Level:** K-2

**For Settings:** In school and out of school

**For more information:** [www.rampsandpathways.org](http://www.rampsandpathways.org)

### **STEM in Action\***

**Description:** With options in Life, Earth and Physical Sciences, each educator-chosen kit (5 for PreK, 9 for K-2, 9 for 3-5) is formatted into small, manageable bits of time with limited consumable items. Available in English and Spanish.

**Grade Level:** PreK-5

**For Settings:** In school and out of school

**For more information:** [www.hand2mind.com/steminaction](http://www.hand2mind.com/steminaction)

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### **Upcoming Events:**

- [Iowa STEM Scale-Up Application Opens](#) – January 22
- [QCESC STEM Teacher Night Out](#) – January 24 5:45-8:00 Assumption High School, Davenport
- [Southeast STEMFest](#) – February 10 from 10:00-1:00 Southeastern Community College, West Burlington
- [GirlsCode++](#) - February 10 9:00-3:00 Geonetric Building, Cedar Rapids
- [UI WiSE STEM Extravaganza](#) – February 12 1:00 – 5:00 Kirkwood Regional Center at UI, Coralville
- [Linn County STEM Festival](#) – February 20 from 4:00 – 7:00 at Kirkwood Linn Regional Center, Hiawatha
- [Quad City Engineering and Science Council Banquet](#) – February 22 5-8:45 Putnam Museum, Davenport
- [Iowa FTC Championship](#) – February 24-25 Marriot, Coralville
- [PLTW Iowa Workshops](#) – February 28 9:00-3:00 Kirkwood Regional Center at UI, Coralville
- [STEM Pre-Service Teacher Conference](#) – March 2-3 at Kirkwood Regional Center at UI, Coralville
- FIRST FRC Regional – March 21-24 UNI, Cedar Falls
- Future Ready Iowa Conference – April 3 in Des Moines
- Mount Pleasant STEM Festival – April 5 Iowa Wesleyan University
- [Black Girls Do Science](#) – April 21 9:30 – 3:30 Kirkwood Regional Center at UI, Coralville