NC STEM REGION ADVISORY BOARD MEETING
January 20, 2016

Present: John Bonner, Julie Graber, Doug Jacobson, Ben Petty, Jan Westrum, Rich Wrage

Absent: Jose Amaya, Robin Anderson, Emily Banks, David Barajas, Paul Bartelt, Richard Ritter, Kathy Rogotzke, Camille Sloan Schroeder

NC STEM Staff: Paul Gibbins, Carol Tierney

Phone: Robin Anderson, Angel Mendez, Sarah Rosenblum, Jeff Weld, Heidi Pierson, Martha Ellen Tye Foundation, Josh Johnson, Charles City High School Principal, and Ashely Flatebo, Mason City Lincoln Intermediate Teacher

Advisory Board Chair Update
All board members received an email from Julie regarding the STEM Hub Manager Mid-Year Review document. Please respond to her by January 21.

Board Chair Call:
• Reviewed form and made changes to the Mid-Year Review document.
• Mega Meeting/STEM Day at the Capitol - February 15
• Represent our hub at the STEM Day booth. Please let Paul know if you are available.
• Angel asked for feedback on a 45-minute session to engage with our counterparts. What would be valuable to you as board members?
• Scale-Up providers have been chosen.

Governor’s STEM Advisory Council update – Jeff Weld and Angel Mendez
Forty-two proposals were received and evaluated and eleven of those have been chosen.

Curriculum for Agricultural Science Education (CASE) - Introduction to Agriculture, Food and Natural Resources: CASE utilizes science inquiry for lesson foundation, and concepts are taught using activity-, project- and problem-based instructional strategies.

Curriculum for Agricultural Science Education (CASE) - Natural Resources and Ecology
CASE utilizes science inquiry for lesson foundation, and concepts are taught using activity-, project- and problem-base instructional strategies. In addition to the curriculum aspect of CASE, the project ensures quality teaching by providing extensive professional development for teachers that leads to certification.

Engineering is Elementary (EiE)
Engineering is Elementary is a research-based, standards-driven, and classroom-tested curriculum that integrates engineering and technology concepts and skills with elementary science topics.

FIRST Robotics Competition*
Under strict rules, limited resources and an intense, six-week time limit, teams of 10 or more students are challenged to raise funds, design a team “brand,” hone teamwork skills and build and program industrial-size robots to play a difficult field game against like-minded competitors.
HyperStream fosters real-world learning for 5th-12th graders through hands-on technology projects, competitions, showcases and engaging presentations through after-school clubs or integrated into curriculum, combined with the opportunity to work with technology mentors.

Making STEM Connections*
The Science Center of Iowa’s Making STEM Connections program provides a kit, including tools, teacher resources and lessons to inspire the “makers mentality” in youth ages 5-12 through highly engaging, interactive and safe experiences.

PowerTeaching Math*
PowerTeaching Math is the leader in cooperative learning mathematics instruction helping teachers transform their classrooms environments to engage ALL students.

Project Lead The Way (PLTW): Introduction to Computer Science*
Designed for students who have never programmed before, ICS is an optional starting point for the PLTW Computer Science program.

Project Lead The Way (PLTW): Principles of Biomedical Science*
Students explore concepts of biology and medicine to determine factors that led to the death of a fictional person.

Science Education for Public Understanding Program (SEPUP) - Science and Global Issues: Biology*
Science and Global Issues: Biology is a research-based high school biology course.

Spatial-Temporal (ST) Math
ST Math is game-based instructional software designed to boost math comprehension and proficiency through visual learning.

Please RSVP by January 29 if you plan to attend the Mega Meeting/Power Hour STEM Day at the Capitol 10-2:00 pm.
Power hour 2:30-4:00 pm

Hub Update –
Manager Report -
Fort Dodge – Has met with Greater Fort Dodge Growth Alliance, Rotary, Fort Dodge Senior High - Would like to add an Ag Program. New Coop will help fund some of the new Ag programming. Possibility of a STEM Festival.

Branding for the NC STEM Hub – changes are being made to identify ISU instead of ISUEO. President Leath will attend two of the Executive Board Meetings and Provost Jonathan Wickert will attend the other meetings. Dr. Kress will still be Paul’s direct supervisor and the hub will stay in the same location.

STEM Best - Charles City – Three teachers attended Iowa Big School in Cedar Rapids. Have held two community information meetings. Districts engaged are Charles City, New Hampton, Osage, and Rockford.

STEM RLE - Mason City Lincoln Intermediate – presentation (link was included in email sent to board)
Six new business partnerships that are working with sixth graders to discuss real world problems.

Julie shared concerns with the STEM Best/RLE applications. There are areas in the grants that were a little weak and wondered what steps will be taken to address those area of concern and what has been done as a result to strengthen. Paul has been in communication with Cory Rogers, AEA 267 Consultant and she has been in contact with Lincoln Intermediate.

**Leveraging Board Member Connections**

How are we as a board Determine board member actively involved in informing the public? We all have connections throughout the region either with civic organizations, business or schools. The region map and list of school districts in the North Central Region was included in the packet. Let Paul know if you are willing to help connect with the districts. Paul will make available all of the scale-up information in electronic and printed form for your use.

North Central STEM name badges are available for board members to wear when acting on behalf of the hub.

**Scale-up**

Thank you to the board for your work on the STEM Best/RLE and Scale-Up application/rubrics. State STEM has adopted our verbiage for the teacher application this year. All of the program providers will host a webinar to address frequent asked questions the first week of February and they will be archived and available on the website.

Scoring applications –
-Paul will send pdf of applications
-three people read each of the applications
-online portal to add scores and comments

Top priorities – new applicant, number of students impacted, high need
Bottom priorities - funding toward a single scale up program, returning to program another year

**Financials** –five provider invoices were paid in the month of December with one pending invoice for ST Math.

**Calendar Updates**

- Jan 25, — STEM Scale-Up Program application for educators opens
- Jan 29, I.O.W.A. STEM Teacher Award applications due
- Feb 12, 8:30 – 3:30 Ed Camp Iowa, Ames Middle School [www.edcampiowa.gov](http://www.edcampiowa.gov)
- Feb 17, 10 – 11 AM, conference call regarding STEM Scale-up application process
- Feb 18, 10 – 2 PM, STEM Day at Capital
- Feb 18, 2:30 – 4 PM, Mega Boards Communication Training, Des Moines
- March 1 — STEM Scale-Up Program application for educators closes
- March 7-31 — Review of STEM Scale-Up Program applications
- **March 23, 3 – 6 PM, STEM Scale-up final decision in Ames at Hub office (date changed to accommodate final due date for decisions re: scale-up awards)
- April 4 — STEM Scale-Up Program awardees announced
- **May 10, Noon – 3 PM, Hub office, (*date changed due to Paul traveling for STEM Conference*)
• June 15, Noon – 3 PM, Hub office, end of year review
• July 22, Marshalltown STEM Festival, Fisher Controls
• August 17, Noon – 3 PM, Hub office