

STEM AC Newsletter Volume 1 Issue 1 January 2016

WELCOME!

SECTIONS:

- <u>Welcome</u>
- Meet the Staff
- Grants & Funding
- Idaho STEM News
- STEM Resources
- Board News

ACTION ITEMS:

- 1. Forward this newsletter to teachers and colleagues.
- Sign up for LearnStorm (Math, Grades 3-12) and earn prizes for your school.
- 3. <u>Attend or view</u> the next STEM AC board meeting on 1/14/2016.
- 4. <u>Follow us on Facebook</u> for STEM resources, grants, news, and more!

The STEM Action Center wants to welcome you to the first issue of our monthly letter.

The Action Center's mission as outlined in <u>Idaho Code §67-823</u> is to coordinate and promote science, technology, engineering, and math initiatives and education across the state.

This newsletter will be used to communicate all STEM-related initiatives in Idaho including grants, competitions, events, free resources, and relevant education news. If you have any ideas or feedback to make this newsletter more useful, please let us know by filling out a quick (1 question!) survey:

Feedback Survey

STEM.IDAHO.GOV Launching Soon!

We have been working hard on the website and will launch in late January. Check back often to learn all about grants, STEM news, and more!

Donate Now Feature Added to Site

Looking to donate to STEM Education in Idaho? We have made it easy to do via a DONATE button on the website. You can even choose what area you want your donation to support.



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MEET THE CENTER'S STAFF: Angela Hemingway



Angela Hemingway Executive Director Angela.hemingway@stem.idaho.gov 208-332-1726 Angela was born and raised in Idaho. She received her B.S. and M.S. from Boise State and is currently working on her doctorate in curriculum and instruction. She spent 14 years teaching in a variety of STEM classrooms in Meridian, Boise, Kuna, as well as at BSU. She taught AP biology, AP statistics, chemistry, microbiology, and general level biology.

While in the classroom she inspired students to participate in various science competitions and community service events. She grew Kuna High School's science club from 10 students to over 200 in just three years. Her students competed in a variety of events including Science Olympiad, INL Scholastic Tournament, Bronco Bowl, FIRST Robotics, TARC and Engineer Girl, among others. She organized the annual Rake Up Kuna event, pairing over 300 volunteers and raking 100 homes.

Her knowledge of science and love of teaching led to her winning a number of awards including Idaho Biology Teacher of the Year and the GIANTS award (Governor's and Industry's Award for Notable Teachers of STEM) among others. In her role as a teacher, Angela also participated on many state committees for science standards and assessments.

It was from her experience with standards, assessment and measurement that she transitioned to the State Department of Education where she served as Assessment and Accountability Director. In this role, Angela represented Idaho in national forums including CCSSO and USED. She has presented at state and national conferences including the Idaho Math and Science Conference, various Superintendents and School Board conference and the National Conference on Student Assessment. She worked with the legislature and created the process by which every ISAT test question is reviewed by a panel of Idahoans prior to the testing window.

In August 2015, Governor Otter appointed her to the Executive Director position in the newly formed Idaho STEM Action Center. Her top priorities include providing STEM grants to educators, bringing a statewide science competition to Idaho, promoting teacher education and retention and partnering with industry and universities to ensure Idaho's long-term economic prosperity. When asked, "What is the best part of your job?, she replied, "I have the opportunity to work to increase STEM-awareness in Idaho. I work with educators, students, legislators and industry to ensure Idaho will continue to prosper. I respect the work that educators do every day in the classroom and I am fortunate to be able to support them."

Erica Compton



Erica Compton Program Manager Erica.compton@stem.idaho.gov 208-332-1725 Erica Compton is an Idaho native with a background in education, technology, and training. Erica has worked primarily with educational and training organizations for over 25 years. Much of her work has been in the area of STEAM (Science, Technology, Engineering, Arts, and Math) education with students ages 5-18.

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In 1998 Erica co-founded an education company and spent four years as Director of Operations and Lead trainer. The company developed a product where tweens and teens could design and build their own 3D environments to address complex challenges and interact in those environments in fully-immersive virtual reality. She was also fortunate to work on two incredible projects in California and Florida designed to address the issue of underrepresentation of women in STEAM fields of study. Both projects focused on introducing middle school girls to STEAM education, with the goal of increasing the percentage of women pursuing careers in related fields.

Erica joined the Idaho Commission for Libraries in February of 2010 as a Project Coordinator. She co-developed the *Make It at the Library* project which implements 'making' in Idaho libraries with the goal of strengthening STEAM skills and supporting entrepreneurship for people of all ages. Erica has had the privilege of participating at a national level in the Maker Movement through a variety of presentations and committee memberships including the Capitol Hill Maker Faire, Mayors Conference on Entrepreneurship, and the National Advisory Board on 3D Printing in Education & Accessibility.

Erica joined the Idaho STEM Action Center as Program Manager in November 2015 and will assist in best practice research and dissemination, grant development and management, and building partnerships with STEM organizations nationwide.

GRANTS & FUNDING:

PK12 STEM Grants

The first grant opportunity released by the Action Center was a huge hit with over 100 applications received by the deadline of December 18. The Center has set aside \$45,000 to award for innovative in-school and out-of-school programs. A list of the funded projects will be released by January 22nd so check our <u>Facebook</u> page or <u>website</u> for the announcement.

Family STEM Night Grant Coming Soon

The Center will be opening up application for another STEM grant in late January! This opportunity will support the implementation of STEM Events to share the importance of STEM with families and the broader community. Watch our <u>Facebook</u> page or website for the official announcement and link to the application.

Check Your Local Community Education Foundation For Grants

Local education foundations often provide grant opportunities to schools in need. STEMfinity has compiled a partial list of education foundation grants in Idaho, as well as a list of national grant opportunities.

View Resource

Virtual STEAM Competition

Forensic Research is launching a worldwide, entirely free STEAM (science, technology, engineering, art and math) competition for schools in partnership with science education supplier, Ward's Science, in February 2016.

The competition consists of three downloadable mini-challenges — to be completed and submitted by a participating classroom — that focus on chemistry, mathematics and art history.

An FBI cryptanalyst, as well as some of the world's most distinguished experts in art conservation and history, have worked with us to create the underlying curriculum and in some cases, will also judge entries.

Learn More

IDAHO STEM NEWS:

STEM Action Center Supports FIRST Robotics Regional Competition

On March 30 – April 2, 2016, Idaho will hold its inaugural FIRST Robotics Regional Competition at Boise State's Taco Bell Arena. This competition pits high school teams and their student-designed robots against each other in a fun and competitive robotic game. An estimated 45 teams and 1,500 students are expected to attend the multi-day event described as part competition, part rock concert and part sporting event.

"It's exactly the type of program that the STEM Action Center believes in and seeks to support." stated Angela Hemingway, Executive Director STEM Action Center. "It's a logical partnership and an investment in Idaho. " The Action Center presented a

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\$50,000 check to FIRST Robotics to support the implementation of the regional competition. The Center has also committed \$12,500 to support travel for teams who would otherwise be unable to afford to travel to Boise for the competition.

"For years our Idaho teams have had to leave the state to find places to compete." said Idaho's FIRST Regional Competition Chairman Lisa Lalliss-Skogsberg. "We want our kids to stay in Idaho and to have other state teams compete here too. With the support of organizations like the STEM Action Center, Boise State University and others, we can make an impact on these students and demonstrate through our actions that Idaho is leading-edge when it comes to technology, STEM education and workforce development."

Dr. Amy Moll, Dean of the College of Engineering at Boise State University and FIRST Committee Member challenges, "The Idaho STEM Action Center has set the bar extremely high, but it's going to take a lot of support from our business community to make this a success. We must invest in Idaho's future."

LearnStorm Math Challenge Begins January 29th for Idaho Students

Khan Academy has just opened signups for <u>LearnStorm</u>, a free math challenge designed to build perseverance and grit here in Idaho. From **January 29th to April 1st**, students in grades 3-12 will be able to earn points to unlock prizes for themselves and their school by practicing Common Core math on KhanAcademy.org.

Here are some key details about LearnStorm:

- **Builds confidence in** *every* **student** LearnStorm rewards growth and diligence as much as achievement, so that every student has the opportunity to be recognized for their hard work.
- Strengthens Common Core math skills With thousands of interactive exercises, hints, and videos, LearnStorm is flexible for remediation and for advanced learning.
- **Rewards school teams as well as individual students** Students can work independently *and* as members of their school team, building school pride and earning the chance to attend an epic, in-person final celebration.
- Is easy to sign up and flexible to participate It's quick for teachers to get their students going and requires NO changes to the classroom. Students can work anywhere with an internet connection.

Sign-ups are now open at LearnStorm2016.org! Take a look at <u>this introductory video</u> to learn more. Get inspired and watch the video <u>You Can Learn Anything</u> created by the Khan Academy.

Register Here

Hour Of Code in Idaho!

The Hour of Code took Idaho by storm in December. Kids of all ages learned to code in schools, libraries, Boys & Girls Clubs, at home and even on buses! Check out this recent article from Idaho Ed News on Hour of Code in Idaho:

Learn More

STEM RESOURCES:

The Museum Of Science, Boston

The Museum of Science, Boston has released a series of videos to help K -12 educators understand and implement new academic standards. Created by Engineering is Elementary® (EiE®), the award-winning curriculum project of the Museum's National Center for Technological Literacy® (NCTL®), the "EiE Video Snippets" illuminate the science and engineering practices specified in the Next Generation Science Standards (NGSS), showing what these practices look like when young children try them in real classrooms.

View Resource

STEMfinity

STEMfinity – an Idaho-based company has developed a comprehensive site of free STEM resources for you to enjoy!

View Resource

Virtual Science Lab for K-12 Students

Students 2 Science, Inc., (S2S) has created a first-of-its-kind virtual science lab to bring hands-on science learning to K-12 students across the country. It has launched the Virtual Laboratory Program (V-Lab), which is a "[w]eb-based, hybrid, distance learning program for K-12 students. It delivers high quality, standards-aligned inquiry-based, hands-on science education to students -- including those with special needs -- in classroom settings, as well as at hospitals and after-school programs," S2S said in a statement. The V-Lab was conceptualized after S2S sought out ways to reach more students other than the ones in close proximity to the brick-and-mortar facilities it was previously providing.

BOARD NEWS:

Advisory Board Members

The STEM Action Center has a nine-member advisory board that includes leaders from education, industry, and government.

Dave Hill - Chairman State Board of Education member

Todd Allen Laboratory

Kenneth Edmunds Director, Idaho Department of Labor

Lorna Finman Chief Executive Officer, LCF Enterprises

Chuck Zimmerly Community Relations Officer, State Department of Education

Dee Mooney – Vice Chair Executive Director, Micron Foundation

Megan Ronk Deputy Director, Idaho National Director, Idaho Department of Commerce

> **Jeff Williams** CEO (retired), Glanbia Foods

> > Von Hansen CEO, AlertSense Inc.

Board Meeting Schedule

The Idaho STEM Action Center Board Meeting may be viewed via livestream at http://idahoptv.org/insession/ for those not able to attend in person. You may also access the archived recordings of past Board meetings at this link.

January 14, 2016 1:00 – 4:00 p.m. Capitol Building Room WW17

March - TBD Location TBD

May - TBD
 March - IBD
 Iviay - 1:00

 1:00 - 4:00 p.m.
 1:00 - 4:00 p.m.
Location TBD

Our mailing address is:

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Contact Information

To contribute or provide suggestions, please 208.994.2573.

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