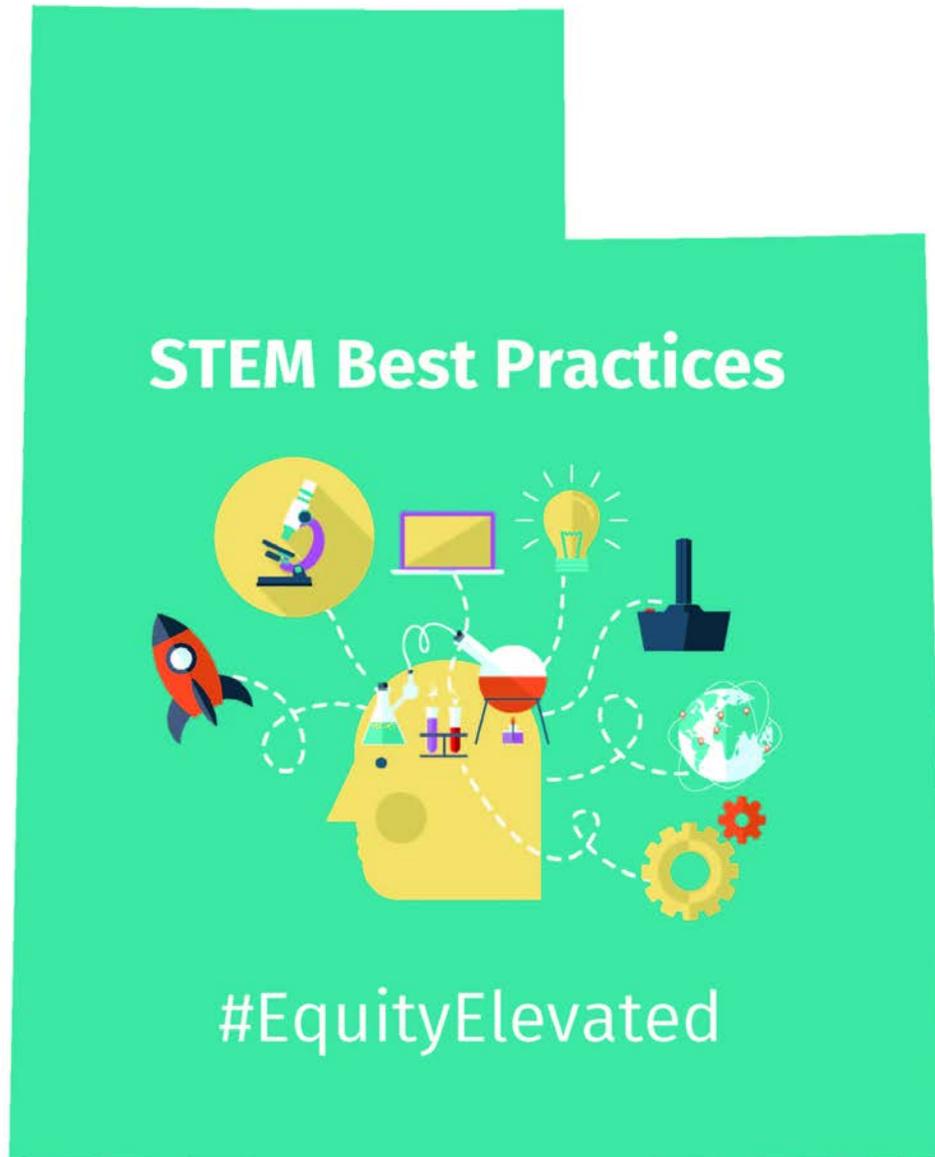


[View this email in your browser](#)



May 2019 Newsletter



## STEM Best Practices Conference 2019

Registration is now open!! The STEM Best Practices Conference is June 10, 2019 at the Davis Conference Center in Layton. This is an opportunity to learn about STEM Best Practices from Utah experts and leaders in our K-12 STEM community. The conference will highlight projects and communities from across the state who are experiencing success with STEM learning, and announce new opportunities for engaging with the STEM Action Center. It will also provide excellent opportunities for networking with other STEM

stakeholders to form new partnerships. Seven re-licensure points are available for full-day attendees. Registration closes May 31, 2019.

[More Information](#)



## STEM Fest 2019

Registration is now open! STEM Fest will take place Monday - October 7th & Tuesday October 8th, 2019. This event is for 6th through 10th grade students. Registration is required for schools to attend. Family Night (open to all ages) will be Monday - October 7th from 4:30 - 8:30 pm. Registration closes on May 31, 2019.

[More Information](#)

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STEM NEWS



## STEM Students Get a Sports-like Signing Day

SALT LAKE CITY -- Stand out math and science students don't get the attention awarded to quarterbacks and point guards, but last Monday's (April 29, 2019) event at Utah's State Capitol aimed to change that.

Boeing sponsored the first annual STEM Signing Day and the Utah STEM Foundation organized much of the event.

[Read More](#)



## Jazz CenturyLink STEM Excellence Awardee

Trinity Mauer, a junior at Beehive Science and Technology Academy, began receiving recognition and awards for her passionate STEM pursuits since the fifth grade, maintaining exceptional grades and scoring several notable wins along the way. Trinity added another accolade to her roster in receiving the CenturyLink STEM Excellence Award at halftime during the Utah Jazz's April 9, 2019 game against the Denver Nuggets at Vivint Smart Home Arena in downtown Salt Lake City, to cap this season's STEM Excellence Award program.

[Read More](#)



## Increase Diversity in STEM

For the past 30 years, minority students who are part of the Meyerhoff program are coached to sit in the front rows of their classes, raise their hands to ask challenging questions, and stay after class to engage their professors. These cohorts of students attend a summer bridge program before their first semester in college, live on the same residence hall and form study groups. They also volunteer in communities, work in laboratories on campus during the semesters and off-campus during summers throughout college.

[Read More](#)



## World's Best STEM Students to Compete at International Fair in Phoenix

More than a thousand students from around the world are gearing up to head to Phoenix for the 2019 Intel International Science and Engineering Fair, or ISEF.

The five-day event, which will last from May 13-17 and is hosted by the Society for Science and the Public, is the largest pre-collegiate STEM competition in the world.

[Read More](#)



### Southern Utah Holds First-Ever STEM Expo

ST. GEORGE, Utah (ABC4 News) - Southern Utah hosted its first-ever STEM Expo Friday, April 12, 2019.

The event was possible due to a partnership between George Washington Academy, a charter school in Washington County, Dixie State University, and Dixie Technical College.

"One of the key staples in Southern Utah is the focus on education and we are excited to work with so many of those educational platforms every year. We pride ourselves on being a community of learners and this event highlighted that mission" said Blake Clark, the Academy's Executive Director.

[Read More](#)



### STEM Action Center Awards Girls in Entrepreneurial Challenge

(KUTV) — The Utah STEM Foundation just wrapped up its "Entrepreneurial Challenge Event" with an awards ceremony.

"Girls Who Code" is a non-profit program that has taken on the mission to close the gender gap in technology and to change the image of what a programmer looks like for young girls.

This program is about not only supporting the growth of technical skills for young girls, but helping them to understand the importance of being able to communicate and work as a team while bettering their communities.

[Read More](#)



### Utah High School's Robotics Club Make Huge Impression

(KUTV) — Students from Judge Memorial Catholic High School's robotics club made huge



### Hill STEM Reaches Students in Southeast Utah

KAYENTA, Utah — The Hill Air Force Base Science, Technology, Engineering and Math Outreach Program recently teamed with Junior Achievement of Utah at the San Juan Career Fair

impressions at FIRST Robotics Competition in Houston on Saturday, April 12, 2019.

The Salt Lake City high school's team "JudgeMent Call" was ranked first in Utah, second in the Utah Regional and 12th in the Worlds categories at the international robotics competition.

[Read More](#)



## We're Looking for America's Next Top Young Scientist!

All students need is inspiration, an idea and a passion for science and they could be...America's Next Top Scientist! The 3M Young Scientist Challenge is searching for curious students in grades 5-8 with a unique innovation that aims to improve lives. All students need to do is submit a 1-2 minute video explaining their innovation.

Grand Prize Winner: \$25,000

Top 10 Finalists: \$1,000, an exclusive mentorship with a 3M scientist, and a trip to 3M's World Headquarters in St. Paul, MN!

[More Information & to Apply](#)



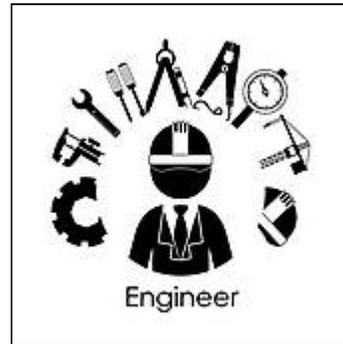
## Young Engineers Building The Car of Tomorrow

In the UPR original series [Driven To Succeed](#), we've been following seven college freshman and their mentors as they work to build a wirelessly powered electric car. In this second installment, we get to know the students a bit better, as they

at Monument Valley in southeastern Utah.

The annual two-day event, held at Monument Valley and Whitehorse High School, provides rural students an eye-opening career expo with a wide variety of options showing possibilities for their future they may never have imagined.

[Read More](#)



## An Unconventional Way to Address Our Homegrown Engineer Shortage

A critical chapter in the story of Utah's success over the last decade has been our growing tech and innovation sector. Silicon Slopes has become the envy of the world, as companies from across the country have come to enjoy our incredible business climate, impressive workforce and myriad soft drink offerings.

[Read More](#)



## Fashion Enters STEM

The fashion design industry is an ever-changing career field that goes hand in hand with many technological and science-related aspects.

Sarah Cobb, a freshman family and consumer sciences major, has experience with fashion and

work through the trials of engineering a car using brand new technology.

[Read More](#)



## College Loops 2019 Application is Now Live!

Apply now to bring Girls Who Code to your college. In the fall of 2019, [College Loops](#) will expand to 300 colleges and universities across the country. Each College Loop will center on custom challenges encouraging members to: connect with women in computer science, participate in regional events with our corporate partners, and receive exclusive swag as part of being in our sisterhood.

[Apply Here](#)



## Bill Nye Wants to Educate the Public About Science

If you grew up in the 1990's, you're probably familiar with Bill Nye. He was the host of the popular PBS series Bill Nye the Science Guy, a TV program that ran for a hundred episodes and introduced kids to a range of science concepts. More recently, he hosted Bill Nye Saves the World, a Netflix series designed to educate the wider public about the importance of science. Now, Nye has a new project: a science-themed

technology from working at the store Ruby.

[Read More](#)



## Apply Now to Start a Girls Who Code Club

As an international non-profit, Girls Who Code is proud to work alongside Community Partners to close the gender gap in technology. Now in their 7th year, they have reached 185,000 girls supporting their passion to code!

This is an exciting time to join the movement--they received 6,500 Club applications for just the 2018-19 year alone--and they are hoping others will join them!

[Learn More](#)



## The Science of Baking

Ever wondered how your oven can transform a pale blob of dough into a crisp, brown sugar cookie? Or a pan full of gooey batter into a fluffy cake? It's not magic. Well...maybe it's a little magical, because all cooking is one part art, especially when it comes to inventing new recipes and baked treats. The other part, of course is science. That's the part that does all the browning, crisping and batter fluffing. It's all explained in our fun and informative infographic.

[Read More](#)

podcast called [Science Rules](#), which will launch on May 16th.

[Read More](#)



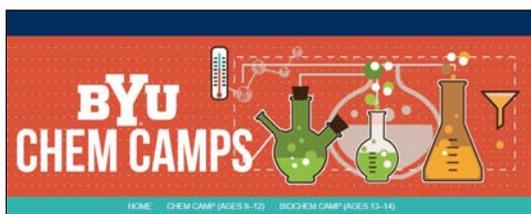
## Bring a Smithsonian Scientist into Your Classroom

These free, interactive, live video webcasts take questions from your students while introducing them to science concepts and practices through the lens of Smithsonian research and experts.

May 17, 2019 - Forgotten Elephants with Paleobiologist Advait Jukar

May 30, 2019 - Fossil Ammonites with Paleobiologist Lucy Chang

[Read More](#)



## BYU Chem Camps

*Discover how chemistry makes a difference in your everyday life!*

- Ages 9-14
- 9-10 year olds, 4 half-days; 11-12 year olds 2 full days, 13-14 year olds 3 full days Biochem Camp
- June and July 2019
- \$135 - Scholarships for free and reduced school lunch recipients
- 100 slots (50 boys & 50 girls)

[More information](#)



## 8 Great Videos to Teach the Engineering Design Process

Quiz: What one thing can make a football helmet, the International Space Station, and a taco party all even better than they already are?

Answer: The engineering design process.

[More Information](#)



## Code Ninja Summer Camps

Fun and rewarding coding camps for kids ages 7 - 14.

Summer Classes: Game Builders' Club, Beginning Javascript, Minecraft Create, Roblox Create, Browse & Build, App Builders' Club and Hack Attack!

[More information](#)



### USU Summer App Camps

Join us this summer for fun and exciting weeklong computer science camps. Learn how to make phone apps! We will hold four camps in June 2019 on the USU Logan Campus. We are also recruiting high school aged youth to be camp mentors. Mentor training will be held June 3-7. Registration is now open.

[Read More](#)



### BYU Girls Code Camp

The Computer Science Department is running a coding camp for girls ages 8-11. This camp is for beginning coders. The 2019 camp will be June 3-6 from 1 pm to 5 pm daily.

The students will be learning through coding activities, both plugged and unplugged, have snacks, enjoy team building activities, get a fun t-shirt, and more. The students will have personal instruction from BYU counselors.

[More information](#)

**National Youth Science Camp**

Apply online: <http://apply.nyscamp.org>

Established in 1953 in West Virginia, the **National Youth Science Camp** is a honors program for two accomplished high school graduates from each state in the United States of America and others from around the world. The 2019 NYSCamp begins on June 27 and ends on July 20, 2019.

**Overview:** The NYSCamp is a broad science, technology, engineering, and mathematics program that incorporates both creative and performing arts as well as an outdoor adventure series including opportunities for rock climbing, mountain biking, spelunking, whitewater kayaking, and overnight backpacking. The delegation travels to Washington, D.C. where they are able to tour museums and other attractions near the National Mall and attend a panel discussion held at the *American Association for the Advancement of Science*. See <http://www.nyscamp.org> for more information or to apply.

**Highlights:**

- Lectures and Seminars with leading scientists from across the United States
- Directed Studies alongside visiting and resident STEM professionals
- Dedicated natural science, physical science, computer science, creative arts, performing arts, and outdoor recreation program areas.
- Delegates attend **free of charge** – transportation included!

**Application Requirements:**

- Graduate from high school between July 1, 2018 and June 30, 2019.
- Documented superior academic proficiency.
- Recognition for notable achievement in mathematics or science.
- Skills and achievements outside of STEM and outside academics.
- Intent to pursue higher education and career in STEM.
- Availability to participate in entire NYSCamp program.
- Submit your application online at <http://apply.nyscamp.org>.

Post Office Box 3387 – Charleston – West Virginia 25333-3387 USA  
 (304) 205-6724 – FAX (800) 833-4873 – [www.nysf.com](http://www.nysf.com)

### Science Teacher and Leaders

The National Youth Science camp is an event where 2 High School Seniors from every state are selected to attend an all-expenses paid STEM-Based camp in West Virginia and Washington D.C. Utah has a selection committee that reviews applications and selects 2 finalist that will attend to camp. Application is based on a student essay, letters of recommendation, involvement in STEM base course and activities, student high school course selection and grades, and ACT/SAT scores.

Please pass on this opportunity to your High School teachers so they can pass it on to their High School Seniors. Attached is a flyer that can be printed and placed on classroom walls.

# STEM EVENTS



PC Codes offers technology summer camps for students in the Park City area. Our camps are designed to be engaging, hands-on, creative and fun. In our week-long sessions, students will learn about a concept in computer science, practice that concept, and work with other campers to create and display an end-of-week capstone project. We are able to differentiate our camps so that both beginners and experts will feel challenged and have fun. Who we are: Christian Waters is the Director of Technology Integration at the Rowland Hall School and Kelly Henderson is a Computer Science teacher at Park City High School. We are both career educators specializing in making computer science approachable and fun.



Camps will take place at the Park City High School. Contact [info@pccodes.net](mailto:info@pccodes.net) with questions.

#### Robo Wars



July 22 - 26 for students ages 8 - 14. 8:30 - 12:00, \$289

In this week-long camp, kids will learn how robotics work, and build projects for a variety of different robots: Wonder Workshop, Lego Mindstorms, and Vex robotics kits to accomplish such missions as robot soccer and robot sumo wrestling. Students will also build their own interactive robotic machines that can sense and react to the world around them. This camp welcomes beginners and experts alike.

#### Video Game Design



July 22 - 26 for students ages 9 - 13. 12:30 - 4:00, \$289

This camp takes students on a deep-dive exploration of video games and how they are designed. We will use Scratch, Python and Arduino to make some amazing video games. At the end of the week, campers will create an interactive video game controller that connects to the game that they designed. This camp will appeal to both newbies and pros.

#### Girls in Tech



July 29 - Aug. 2 for students ages 9 - 13, 8:30 - 12:00, \$289

In this girls-only camp we will use Micro:bits to build digital pets that respond to us, throw a robotic dance party with dances choreographed to the music of your choosing and create some wearable tech. Let's design, invent, create and code together. Grab a friend and sign up!

#### Learning Architecture with Minecraft



July 29 - Aug. 2 for students ages 9 - 13, 12:30 - 4:00, \$289

Take your Minecraft skills to the next level with this fun, collaborative camp where students learn about some of humanity's most famous buildings and work together to reconstruct them in the world of Minecraft. Students will learn that Minecraft is more than just a game, it can also be a first step in immersive, computer aided 3D Design. Students will have to work together to design, collect resources, and construct buildings. At the end of camp, we will present a gallery tour of the campers' creations.

**AWE + SUM**  
ATTEND • WESTMINSTER • EXPLORE • SCIENCE • USE • MATH

**SUMMER CAMP**  
**JUNE 17-20, 2019**  
FOR GIRLS CURRENTLY IN 7th AND 8th GRADES

WESTMINSTER COLLEGE

This camp is a unique opportunity for current 7th and 8th grade girls to spend four days enjoying hands-on math and science workshops and other activities on Westminister's campus. Girls stay in a residence hall at Westminister and are supervised by adult chaperones during daytime activities and during their overnight stays.

To attend, submit an application and ask your math or science teacher to submit a teacher recommendation form. In the first round of acceptances, by March 15, generally no more than two girls per school will be admitted, with some exceptions. Go to [westministercollege.edu/camps](http://westministercollege.edu/camps) for more information and application forms. Scholarships available.

[WESTMINSTERCOLLEGE.EDU/CAMPS](http://WESTMINSTERCOLLEGE.EDU/CAMPS)

## UPCOMING STEM EVENTS

- May 7, 2019 - 3M Young Scientist Challenge - [More Information](#)
- May 10-12, 2019 - Golden Spike 150 year celebration (Our STEM Bus will be there) - [More information](#)
- May 17, 2019 - USU Physics Day at Lagoon - [Register here](#)
- Summer 2019 - Code Ninjas Summer Camps - [More information](#)
- June 3 - 6, 2019 - BYU Girls Code at BYU - [More information](#)
- June 2019 - USU Summer App Camps - [More information](#)
- June 2019 - UVU Summer STEM Camps - [More information](#)
- June 10, 2019 - STEM Best Practices - Davis Conference Center, [More information](#)
- June 17 - 20, 2019 - AWE+SUM Summer Camp at Westminister College - [More information](#)
- June & July, 2019 - BYU Chem Camp - [More information](#)
- July 15 - 19, 2019 - Professional Learning workshop in Vancouver, WA - [Apply here](#)
- July 15, 2019 - Altec Design Web Scholarship applications due - [More information](#)
- July 22 - 26, 2019 - [www.pccodes.net](http://www.pccodes.net) Summer Camps - [More information](#)
- July 22 - 26, 2019 - AccessCSforAll for teachers working with hearing-impaired - [More information](#)
- July 29 - August 2, 2019 - [www.pccodes.net](http://www.pccodes.net) Summer Camps - [More information](#)
- October 7 & 8, 2019 - STEM Fest 2019 - Mountain America Expo - [More information](#)
- October 21 - 23, 2019 - CSForAll Summit - University of Utah - more information to come

## STEM PROGRAMS & GRANTS

### CSforAll Training

The STEM Action Center, in partnership with CSforAll and several local LEAs, are offering day workshops to support districts of a strategic plan. If your district is interested in forming a team for a strategic planning workshop, please feel free to contact Tami Goetz at the STEM Action Center ([tgoetz@utah.gov](mailto:tgoetz@utah.gov); 801-674-2405).

## STEM Code.org Training

Applications are now open for Code.org professional learning program. For middle school teachers, we have spaces available for our Computer Science Discoveries (CSD) program. CSD is designed for students 6th-10th grade, and can be taught as a semester or full year program. For high school teachers, we have spaces available in our Computer Science Principles (CSP) program, which is designed for students 9th-12th grade. It can be taught as a full year introductory course or as a full year AP course. More information about CSD can be found here: <https://code.org/educate/csd> and more information about CSP can be found here: <https://code.org/educate/csp>

The professional learning program consists of a 5-day workshop from June 24-June 28 at Dell EMC in Draper, and several academic year workshops held on Saturdays in the Fall and Spring. We cover the costs for training, including your materials, supplies and lunches.

To apply, visit <https://code.org/educate/professional-learning/program-information>, and fill out an application. Teachers will need their principal's approval and must commit to attending all workshop days, including the academic year workshops.

Any questions about the professional learning program can be directed to Lynn Purdin ([lpurdin@utah.gov](mailto:lpurdin@utah.gov)).

## STEM SCHOOL DESIGNATIONS

We want to congratulate our new STEM Schools! We had 9 schools receive STEM School designations this year, and want to recognize those communities for their hard work and dedication to STEM for their students. The schools are:

Vanguard Academy- Bronze

Horizon Elementary- Bronze

Eastwood Elementary- Bronze

Valley View Elementary-Silver

Canyon Creek Elementary- Silver

Bonneville Academy- Gold

Vae View Elementary -Platinum

Jennie P. Stewart Elementary-Platinum

Cedar North Elementary- Platinum (formerly Gold)

Interested in becoming a STEM School? Intent to apply due in October.

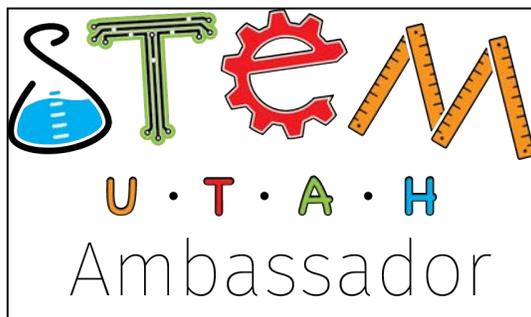
[To see a list of our STEM School Designation Awardees](#)

## STEM BUS



The STEM Bus Program is on its final stretch for the 2018-2019 school year! We will be heading down south to Kanab and Antimony next week, followed by St. George the following week, and wrapping up by heading north to Wellsville at the end of May for our final school visit this year. If you'd like to get on our STEM Bus Program Interest list for the 2019-2020 school year and hear about updates with the program, please add your school to the following list: [2019-2020 STEM Bus Interest List](#)

## STEM AMBASSADORS



The Utah STEM Action Center is always looking for high school and college students as well as recent college graduates and industry professionals who have a passion for STEM and would like to volunteer their time promoting science, technology, engineering, and math to K-12 students and educators throughout the State of Utah.

[Apply to become an ambassador](#)

## STEM SPOTLIGHT



### Coding to Learn

Park City School District's K-5 coding program translates to better problem solving & learning across all subjects.

[Read More](#)

# STEM CURRICULUM IDEAS

## NASA Kids' Club

Check out this place to play games and learn about NASA!

[Learn More](#)



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Utah Governor's Office of Economic Development

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stem@utah.gov

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