

#### STEM Action Center FY20 At-A-Glance

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# Unleashing Curiosity

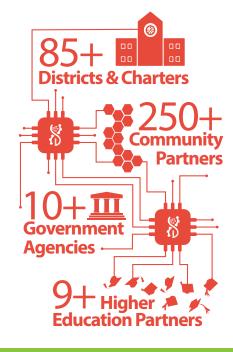


## **Connecting Community**

305,694+ Student Experiences



- Math Personalized Learning
- Innovation Incubator Grants
- Computing Partnerships
- Elementary STEM Show
- STEM Fest
- STEM in Motion



# **Building Capacity**



## Adapting & Innovating

12,604+
STEM Professional

Learning opportunities

For teachers, facilitators, and administrators statewide



157 STEM kits distributed

10+ new distance learning programs

\$70K supporting COVID-19 relief







#### Innovation Incubators FY20 Report

For more information contact: Sue Redington | sredington@utah.gov | 801-535-3972

#### Small dollar amounts











Funding allowed underrepresented students from around the state to participate in STEM competitions



28 students experimented with pulleys, inclined planes, levers, sparking a love of science for an entire first grade classroom







Alliance for Innovative Education doubled the number of girls participating in STEM programming in a rural community





208 Ideas Funded

**Schools Impacted** 





three times more likely to want a STEM job\*

\*International Journal of Science Education





## **Utah STEM Foundation FY20 Report**

For more information contact: Allison Spencer | aspencer@utah.gov | 801-520-5235

## **Supporting STEM in Utah**

The Utah STEM Foundation works to support a STEM-competitive workforce through collaborations with industry and community partners to increase engagement and industry alignment for STEM education.



of funding received by the foundation is invested back into the community to support STEM in Utah.

## **Foundation Funding Priorities:**



Students will thrive in STEM and contribute to Utah's workforce



We will work to close the gender gap in STEM fields



We will use creativity and innovation to solve challenging problems



We will provide Utah communities with equitable access to STEM opportunities

## **Company Support During COVID-19**

The Utah STEM Foundation has worked with several industry partners to donate over \$70,000 in personal protective equipment (PPE), 3D Printers, and operational assistance to Arts and Humanities non-profit organizations during the pandemic.











#### In-Kind Highlight: New STEM Hub

MHTN Architects contributed several hundred hours and other in-kind contributions designing the new STEM AC offices, including the Innovation Hub.

R&O Construction contributed nearly \$40,000 in in-kind work for the Innovation Hub.





#### STEM in Motion FY20 Report

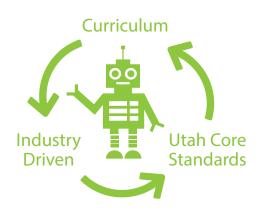


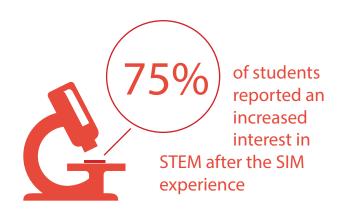
For more information contact: Colleen Fisher | colleenfisher@utah.gov | 801-535-3979

STEM in Motion (SIM) is a mobile education program that works with schools and communities across Utah to provide hands-on learning and inspire the next generation of STEM leaders.

#### Curriculum

## **Student Impact**





#### **Quick Facts**

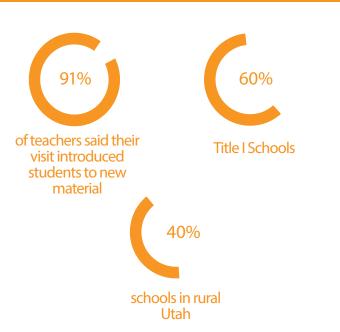
## **Equity & Access**

6,171 students impacted

47 schools visited

**7** school districts

1 new STEM kits









#### Professional Learning FY20 Report

For more information contact: Kellie Yates | kellieyates@utah.gov | 801-535-3976



#### Percentage of teachers who reported positive impacts:













#### STUDENT OUTCOMES



### **QUICK FACTS**

Teachers reported increases in students' ability to:



communicate collaborate think critically think creatively



be self directed learners



solve real world problems

teacher and administrator participants

locally designed STEM professional learning plans

multi-year projects, showing long term commitment and teacher buy-in









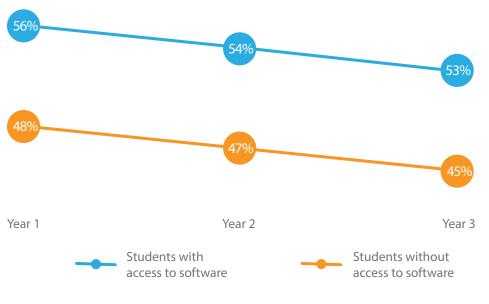


#### Math Personalized Learning FY20 Report

For more information contact: Clarence Ames | cames@utah.gov | 801-535-3974

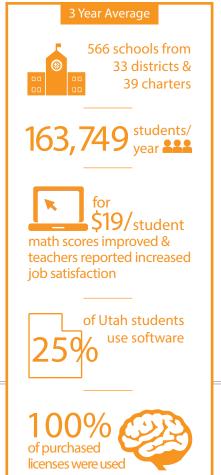


Over three years, students who used math software were **consistently more likely to be proficient in math** than similar students with no access to STEM AC approved math software.\*



Teacher and administrator commitment, support, and feedback averaged from three years of survey information.

- 80% of teachers agreed the software increased their instructional effectiveness.
- 95% of teachers agreed the software helped students strengthen important skills.
- 95% of administrators agreed the software had a positive impact on students' math performance.
- 71% of teachers agreed the math software increased their satisfaction with their job.



\*Programs assess students' understanding of math and provide personalized content, adaptively targeting knowledge gaps and providing immediate feedback. Of the six providers on the approved vendor list (AVL), two programs had sufficient data for longitudinal analysis.

The K-12 Mathematics Personalized Learning program provides resources to LEAs and schools through a competitive grant process to support the use of mathematics software that is individualized, self-adapting, engaging, and provides frequent feedback while addressing core standards in math. The Utah Education Policy Center, a research center at the University of Utah, provides external evaluation for the program.







#### Computing Partnerships FY20 Report

For more information contact: Lynn Purdin | Ipurdin@utah.gov | 801-535-3977



The Computing Partnerships program helps identify gaps in, and provide solutions for, computing opportunities for students and teachers in Utah.

#### TEACHER OUTCOMES

Teachers reported increases in

**QUICK FACTS** 





their ability to:

provide equitable opportunities in computing

develop project-based teaching strategies

use technology to

enhance student learning

impacted





participants

new class sections







59% of projects in rural Utah

Percentage of teachers reporting positive student impacts:















