

GREATNESS STEMS FROM IOWANS

GOVERNOR'S STEM ADVISORY COUNCIL

www.iowaSTEM.gov

Begun in 2011 and led by co-chairs Lt. Governor Kim Reynolds and Vermeer CEO Mary Ardning, the Governor's STEM Advisory Council is a partnership of educators, business and industry, nonprofits, state agencies and community leaders working to increase student interest and achievement in STEM and promote STEM economic development.

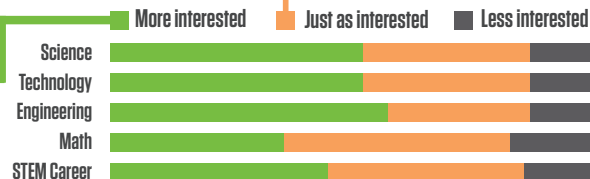
SCALE-UP
of Exemplary STEM Programs

3,106 classrooms and clubs engaged in 2013-14

More than **100,000** Iowa youth involved in 2013-14

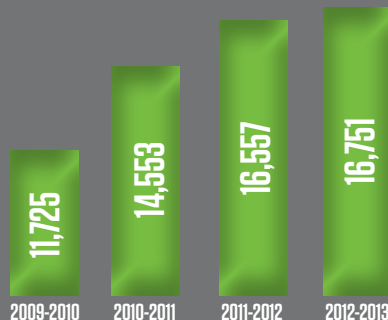
All 9 Scale-Up programs in 2013-14 had a positive effect on student interest in STEM topics and careers

STATS
of
2013-14



STEM College Graduates

43% increase in degrees awarded in STEM fields from Iowa's 4-year colleges and universities since 2009-2010.



88% of teachers agreed Externships were relevant to the courses they teach in school.

87% of teachers agreed Externships impacted their understanding of 21st century skills.

93% of teachers agreed Externships were more valuable than any other professional development.

Real World EXTERNSHIPS for Teachers

The number of teachers in Iowa with at least one teaching endorsement in science or math increased by 13% from 2012 to 2014.

Microsoft IT Academy

Since November 2013:

150 schools registered
1,016 students certified
169 teachers certified

From **2012 to 2014**, awareness in STEM has increased from **26% to 41%**.

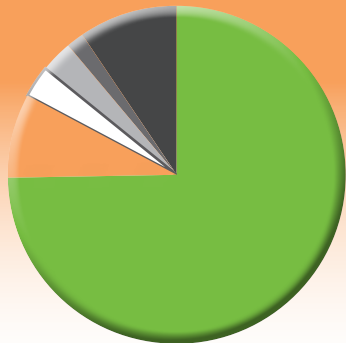
That's an estimated **963,078** Iowans who know about the importance of STEM education.

About **75%** of past Scale-Up educators are sustaining their STEM programs long after seed funding from the STEM Council.

\$5.2M

Legislative
Appropriation
2014-2015

WHERE DOES THE FUNDING GO?



- 75% on Learner Programs
- 8% on Regional STEM Network
- 3% on STEM Initiative Evaluation
- 3% on Public Awareness Campaign
- 2% on Conferences and Events
- 9% on Operations, Coordination

PRIVATE SECTOR INVESTMENT

\$462,500 in 2013 and 2014

\$100,000 from John Deere Foundation
\$100,000 from MidAmerican Energy
\$51,000 from Principal Financial
\$36,000 from Rockwell Collins
\$21,000 from Google, Inc.
\$20,000 from Lennox Industries
\$20,000 from Verizon
...and **\$114,500** from 35 others
at IowaSTEM.gov/Corporate-Partners

COST-SHARING SAVINGS

\$3,549,689 in 2014

\$160,000 by Strategic America
\$300,000 by Regional Hubs
\$200,000 by STEM Classroom Partners
\$27,550 by Externship Business Hosts
\$2,862,139 by Scale-Up Providers

GRANTS

\$1,008,000 for FY15

\$1.2M for State STEM Evaluation
— 3-year grant from NSF

\$900,000 for Noyce STEM Teacher Scholarships
— 5-year grant from NSF

\$1.3M for Teacher Externships
— 4-year grant from NSF

\$103,000 for Physics Workshops
— Carver Charitable Trust

GREAT OUTCOMES

More than 75% of educators reported they gained skills and confidence in teaching STEM topics as a result of their participation in Scale-Up programs.

Among students who participated in a Scale-Up program from 2012-14, 9 out of 10 reported higher interest in at least one STEM subject or career following participation.

Roughly 84% or 167 schools or organizations reported developing a new partnership with a businesses in their area to enhance students' opportunities to learn STEM topics during the 2013-2014 school year.

**SKILLS
GAINED**

**INTEREST
GAINED**

**PARTNERS
GAINED**

...and OTHER IOWA STEM INDICATORS

24%

The percentage of Iowa students meeting benchmarks for science on the ACT increased 24% from 8,800 students in 2012 to 10,800 students in 2014.

**80%
LIKE
STEM**

Approximately 80% of students who took the Iowa Assessments from 2012-14 reported being interested in STEM careers, or roughly 139,347 students were either "very interested" or "somewhat interested" in a STEM career across all grades from elementary to high school.

>200%

Minority student STEM degree completion at four-year institutions increased from 490 degrees in 2009 to 1,877 degrees in 2013. Community colleges saw a rise in completions from 244 degrees in 2009 to 775 in 2013.