

► PreK-12 Student Interest and Achievement in STEM

Students who participate in STEM Council programs show gains in interest and achievement in STEM. And, those students are also more interested in working in Iowa after graduation. A high priority for the STEM Council is to equalize STEM access and opportunity across geographic, demographic, gender and racial/ethnic groups.

Figure 1 **STEM interest among Scale-Up students vs. students statewide**

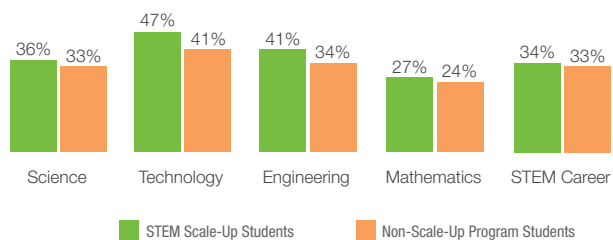
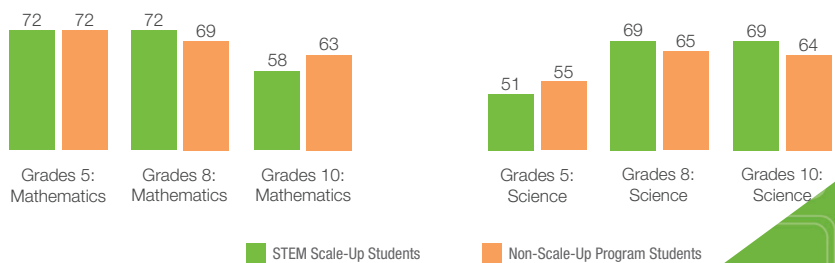
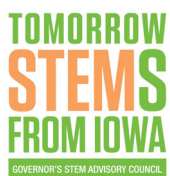


Figure 2 **Student Achievement in National Percentile Rank**



Data Source: Center for Social and Behavioral Research, University of Northern Iowa



Everyone encounters STEM on a daily basis in making decisions about parenting, health care, transportation, leisure and overall quality of life. Help us spread the word and contribute to Iowa's STEM future for the benefit of our youth and the health of our economy.

Join the conversation by tagging @IowaSTEM, visiting our website at www.IowaSTEM.org and e-mailing your thoughts to info@Iowastem.org because Tomorrow STEMs from Iowans like you.

TOMORROW STEMS FROM IOWA

GOVERNOR'S STEM ADVISORY COUNCIL



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What is STEM?

STEM education has evolved from a convenient clustering of four overlapping disciplines toward a cohesive knowledge base and skill set critical to the economy of the 21st century. STEM education provides an interdisciplinary approach to learning, where rigorous academic concepts are coupled with real-world applications and students use STEM in contexts that make connections between school, community, work and the wider world.

Why does this matter?

STEM professions are projected to grow faster, provide greater earning potential and produce lower rates of unemployment than non-STEM jobs over the next decade. Iowa's economy not only relies on STEM professionals but STEM understanding across all careers requiring analytical reasoning and critical thinking. The mindset that has fueled innovation and invention in Iowa relies on people who have STEM mindsets and training. The next generation of innovators and entrepreneurs are in our hands and counting on us to set them up for success.

Who is leading this effort?

The Iowa Governor's STEM Advisory Council is committed to increasing student interest and achievement in STEM, cultivate STEM-literacy and promote economic development and community vitality in Iowa. Thanks to ongoing, bipartisan support of the Iowa Legislature, this effort continues to gain momentum and demonstrate impact. The STEM Council is led by co-chair Gov. Kim Reynolds along with Council membership comprised of dedicated stakeholders from education, business and industry, nonprofits, agencies and legislature.

► Current STEM Events for Iowa Families



STEM Day at the Iowa State Fair

The STEM Council partners with Iowa organizations to fill the State Fair's Grand Concourse with hands-on STEM activities for thousands of families and students of all ages.

For more information about STEM Day at the Iowa State Fair, visit: www.iowaSTEM.org/STEM-Day-Fair



Regional Family STEM Festivals

Each Iowa STEM Region hosts several family STEM festivals throughout the year to offer hands-on learning experiences provided by businesses and educational organizations local to each community.

Visit the Iowa STEM YouTube Channel and click on the "Cedar Valley Family STEM Festival" video as an example of a Regional Family STEM Festival.

► Programs

STEM Scale-Up Program

A menu of exemplary STEM programs available to Iowa educators across the state at little to no cost. www.iowaSTEM.org/Scale-Up

STEM BEST® Program (Businesses Engaging Students and Teachers)

School+business partnerships that provide work-based learning experiences for students. www.iowaSTEM.org/STEMBEST

Iowa STEM Teacher Externships Program

Secondary STEM teachers immersed in local businesses and agencies for 6 weeks in the summer. www.iowaSTEM.org/Externships

Iowa STEM Teacher Award Program

An award sponsored by Kemin Industries to honor Iowa educators inspiring students in STEM subjects. www.iowaSTEM.org/TeacherAward

Microsoft Imagine Academy

Provides a complete IT education solution that bridges the world of education with the world of work. www.iowaSTEM.org/mita



STEM Scale-Up Program



STEM BEST® Program



Iowa STEM Teacher Externship Program



Iowa STEM Teacher Award Program

The six Iowa STEM Regions and their higher education Network Hub Institutions:



The STEM Council's Seal of Approval recognizes a non-Council program or event that exemplifies and contributes to the STEM Council's mission. For more information or to apply for the Seal of Approval, visit www.iowaSTEM.org/seal.