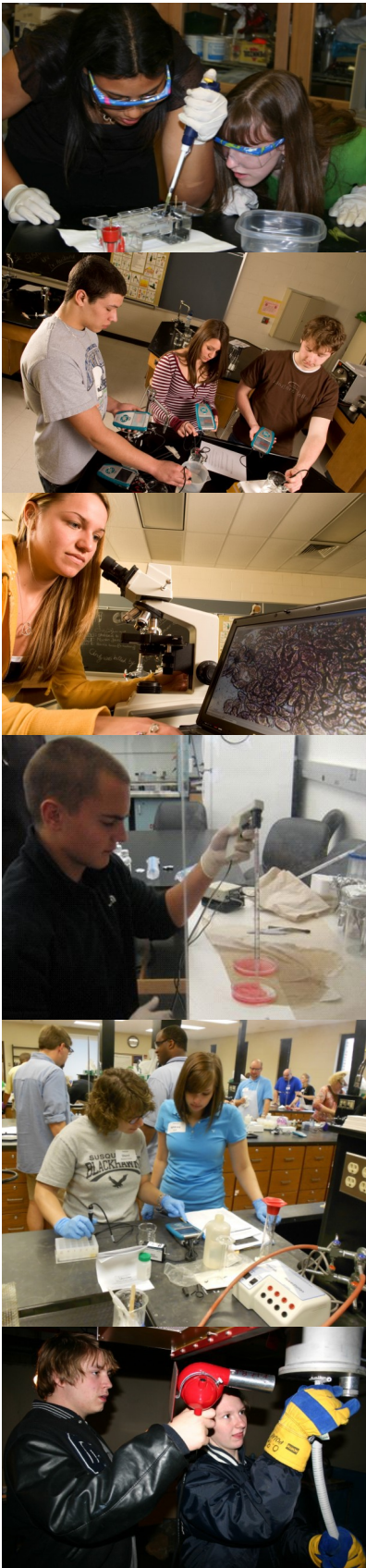




Science in Motion

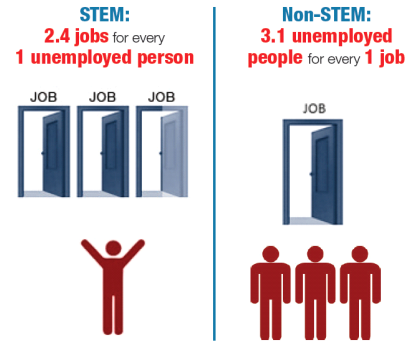
A Pennsylvania Statewide STEM Education Network



Recognized Nationally as Exemplar STEM Program

Change the Equation, a nonprofit, nonpartisan, CEO-led initiative to improve STEM education includes more than 100 of the Nation's top business leaders. The group recently recognized the SIM program in Pennsylvania as "*exemplar*" and "*a program that deepens young people's learning in STEM and maximizes the return on investment.*" STEM skills and work force development are in demand in Pennsylvania and Science in Motion is making a difference!

Pennsylvania Jobs



Change the Equation - <http://changetheequation.org/>

What is Science In Motion (SIM)?

The SIM Program started in 2001 as a state-wide grass-roots initiative designed to improve STEM education. Essentially a partnership between higher education and secondary schools, this program provides state-of-the-art scientific equipment, standards aligned curriculum, and professional development for science teachers and their students. A highly trained specialist, the Mobile Science Educator, brings equipment and labs to the classroom facilitating inquiry-based practices. Resources are shared between schools across the State creating a low-cost high-impact network currently including 11 colleges and universities and nearly 300 schools.

Why is Science In Motion such a good investment?

- SIM is the *only statewide STEM education network* between colleges and universities and schools in Pennsylvania. Currently the network is made up of 11 institutions that provide over **\$600,000 annually in in-kind contributions** and **share over \$3.5 million in equipment and materials** with schools throughout Pennsylvania. The network infrastructure took millions of dollars and many years to build, and through this network thousands of teachers and 100's of thousands of students can easily be reached. Every new dollar invested in SIM takes advantage of this existing STEM network to maximize return on investment.
- SIM *levels the playing field*. Schools located in rural parts of the State as well inner city schools often lack STEM resources. They can't afford needed lab equipment and materials, and STEM related industry partners that typically provide STEM expertise and resources just don't exist in these areas.
- SIM *inspires the next generation STEM Workforce*. If not for Science in Motion the vast majority of these students would get little exposure to lab equipment and techniques necessary for success in college. Nor would they be introduced to a growing number of potential STEM career opportunities. SIM changes what happens in the classroom; the nature of delivering advanced lab experiences significantly improves the lab experience for students.
- SIM provides "*embedded professional development*" opportunities for teachers. During mobile educator visits teachers are receiving training in use of the latest STEM equipment and inquiry teaching strategies. And the best part is teachers never leave their classroom.
- SIM is an *evidence-based success story*. Research shows students who receive SIM services score significantly higher on achievement tests compared to students who do not, and also demonstrate higher science process skills. Teachers who participate in SIM use technology more frequently in the classroom and use more effective teaching practices.
- SIM *addresses State and National needs in STEM education*. The National Science Board, National Academy of Sciences, the bi-partisan America Competes Act, and the President's Council of Advisors on Science and Technology are just a few initiatives *calling for the establishment of STEM partnerships between secondary schools and higher education* as well as business.