

Franken-Kirk-Murray Title II STEM Amendment

What Does the STEM Amendment Do?

The Amendment would establish a program to provide each state with formula-based funding that would be used to support partnerships between local schools, businesses, universities, and non-profit organizations to improve student learning in the critical science, technology, engineering, and mathematics (STEM) subjects. Each state would choose how to spend and prioritize these funds, which can support a wide range of STEM activities from in-depth teacher training, to engineering design competitions, to improving the diversity of the STEM workforce.

Why is STEM Education Important?

Over the past 10 years, growth in STEM jobs was three times as fast as growth in non-STEM jobs. STEM jobs make up 20% all jobs today and the top 10 bachelor-degree majors with the highest earnings are all in STEM fields. And right now, we are falling further behind, not gaining ground because the number of U.S. companies reporting difficulty in filling positions because of a lack of skills grew from 14 percent in 2010 to almost 40 percent in 2013. At the same time, by the 4th Grade, only 13% of African-American, 29% of Hispanic, and 40% of White students are considered “proficient” in math, with similar results for science. These numbers all go down by the 8th grade.¹

How Do We Know This Program Will Be Effective?

The Amendment would build-upon the Department of Education’s existing and highly effective Math and Science Partnership program, which is providing dedicated STEM resources to more than 7000 schools and 49,000 educators. More than two-thirds of the math and science teachers who have received in-depth training through the program have shown significant gains in their content knowledge. Over half of students taught by teachers in a Partnership program scored at the proficient level or above in state assessments in math and science (55 percent and 69 percent, respectively).² This is nearly twice the national average. The language of the amendment reflects extensive input from the STEM education community to help improve this program further.

Aren’t There Already Too Many Federal STEM Education Programs?

There are currently 180 STEM related federal programs and \$3 billion in annual funding. However, 2/3 of this funding supports scholarships (about \$1 billion) and education related research (\$1 billion). Of the remaining \$1 billion, the largest single program is the Math and Science Program in ESEA funded at \$150 million, which is the ONLY STEM-focused K-12 teacher quality program money that reaches schools directly. That’s just 0.22% of ED’s \$67 billion budget! One of the biggest misperceptions is that all the \$3 billion goes to schools. The fact is, most of it flows to universities. We need a strong investment in STEM in K-12 to improve the pipeline of students prepared pursue an academic path, and future employment, in the STEM fields.

¹ Based on 2011 National Assessment of Education Progress (NAEP) testing.

² http://www.ed-sp.net/images/public_documents/document/annual/MSP%20PP12%20Annual%20Final%20Report%2012-1-14%20FINAL.pdf