EDUCATION WEEK

School Systems Get More Say on STEM Education

By Liana Heitin

The new federal education bill gives states and districts more leeway in many areas, including how they use federal dollars for science, technology, engineering, and math programs.

And while the bill eliminates authorization for a key STEM initiative—the Math Science Partnerships program—advocates say it more than makes up for the loss.

The Every Student Succeeds Act also maintains the current requirement around science and math testing. Students will have to take math tests annually in grades 3-8 and once in high school, and science tests three times between grades 3 and 12.

"That's a huge victory because you could have easily seen science testing disappear," said James Brown, the executive director of the **STEM Education Coalition**.

And the law establishes dedicated federal funding for either a state-led STEM master-teacher corps or STEM professional development. **President Barack Obama has been pushing for the creation of a STEM masterteacher** corps for some time, and Sen. Al Franken, D-Minn., has championed it. Under the law, the education secretary can create a competitive-grant program for states to attract, retain, and reward exceptional STEM teachers, especially in high-need and rural schools. The secretary could also use that funding to bolster STEM professional development.

More Changes Ahead

Among other key STEM education provisions in the law:

• It lets states use federal funds to integrate engineering into science assessments. A third of **states have now adopted the Next Generation Science Standards**, which emphasize engineering practices, and many more states are moving toward including more engineering in their science instruction. But as of now, there are no standardized tests aligned to the new standards.

• It allows both Title II and IV funding, which address teacher quality and 21st-century schools, respectively, to be used for improving STEM instruction.

• It supports alternative certification for STEM teachers, as well as differential pay. States can use federal funds to "establish, expand, or improve alternative routes" for STEM teachers. They can also use federal funds to pay teachers more for high-need subjects, including STEM.

STEM advocates **opposed some early versions of the bill that abolished the Math and Science Partnerships**, which put about \$150 million annually toward collaborations between higher education institutions and high-need school districts.

But ESSA offers many more possible funding streams for STEM than the previous law, said Brown of the STEM Education Coalition—even without the partnership grants. And those could also still receive funding through appropriations.

"The Math and Science Partnerships had perhaps 100 grantees every year," Brown said. "Now, there will be literally thousands of districts spending federal funds on STEM education activities."