

BAKER HOPING STEM WEEK WILL BECOME AN ANNUAL THING

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State House News Service

BOSTON, OCT. 25, 2018....With less than three weeks until election day in Massachusetts, Gov. Charlie Baker's administration spent the week celebrating the state's inaugural STEM Week in an effort to raise awareness of science, technology, engineering and math education.

Students from pre-kindergarten through high school were all encouraged to take part in activities that align topics across STEM subjects and connect them to other curricula. At the behest of the governor's office, schools hosted speaking events and field trips, while companies provided grants and scholarships.

The administration's STEM Advisory Council is co-chaired by Lt. Gov. Karyn Polito, Congressman Joseph Kennedy III and Vertex Pharmaceuticals President and CEO Jeffrey Leiden. The three appeared alongside Gov. Baker on Tuesday afternoon to spotlight the week's events with the announcement of a \$4.4 million grant from the National Science Foundation. The grant will fund scholarships for low-income and under-represented minority students who are in associate's and master's degree programs in biotechnology. Northeastern University and Middlesex Community College are partners in the initiative, known as "A2M."

Kennedy, Baker, Polito and Leiden joined Northeastern President Joseph Aoun and Middlesex Community College President James Mabry at the university's Interdisciplinary Science and Engineering Center for a ceremony touting the \$4 million grant. "When we think about the fact that there are 50 communities participating this year in over 500 events, my guess is that next year it will be 150 communities and 1,500 events," Baker said at the ceremony. "STEM all by itself is going to create one million jobs between 2012 and 2022."

Baker, along with members of the advisory council, also visited schools around the state to speak with students and participate in learning programs. Different departments under Baker's administration have also been working to promote the week's events and message.

The MBTA announced Thursday that it would partner with researchers to develop a science and engineering curriculum for Boston Public Schools students. Education Secretary James Peyser hosted students at different spots throughout the state, including the Museum of Science, for educational programs.

On Oct. 22, Polito, Kennedy and Leiden published an editorial in The Boston Globe, calling for diversity in the STEM fields nationwide.

"We need more businesses to offer internships and apprenticeships in STEM fields, particularly for young women and minority students. Our quasi-public entities, such as the Mass Life Sciences Center and Mass Clean Energy Center, can help by increasing diversity within internship programs in the life sciences and clean energy sectors," they wrote.

More to be Done

According to the governor's office, Massachusetts has the most technology jobs per capita in the nation, and STEM occupations represent 17 percent of all employment in the Commonwealth. But despite the abundance of jobs in the sector, standardized testing company ACT says that just one in six American high school seniors are interested in studying STEM in college. According to Code.org, only 37 percent of Massachusetts schools with AP programs offer the AP computer science course.

Kennedy on Tuesday said that while there is "extraordinary ingenuity" among students in the state, there is a lack of access that needs to be addressed. "What we need to acknowledge and wrestle with is that even in a state like Massachusetts, there are so many students that don't quite have the means to access the resources that will maximize their potential," Kennedy said. "Particularly when it comes to STEM fields, that gap is alarming. We only offer these benefits to a small slice of our society."

Leiden, CEO of Vertex, said that despite successes, the STEM field still faces serious challenges. "We're not competing with California or North Carolina, we're competing globally for this talent," Leiden said. "It's up to us to make sure we can compete. It's a shame that we are sitting on a sea of talent here in Massachusetts, and we're not providing what they need."

The event also served to highlight Baker's approach to establishing STEM week. Most of the events, grants and scholarships awarded were done in coordination between public and private partners. Leiden, the CEO of a private corporation, sits on a council established by the governor's office. Private institutions like Northeastern, along with Pfizer, Novartis and Shire, teamed up with public or quasi-public groups like the MassBioEd Foundation, the National Science Foundation and the Massachusetts Life Sciences Center to sponsor events and provide students with paid internships.

"We are thankful to those companies that support us in this program and make it meaningful for students with workplace opportunities, hands-on research, and mentoring by professionals in the industry," Polito said Tuesday.

In June, the governor also touted a \$20 million investment the state would be making to 23 companies in the form of awards through the Massachusetts Life Sciences Center. Baker took the stage at the Biotechnology Innovation Organization International Convention to advocate for continued public-private relationships and for continued investment in the STEM field.

"One of the best ways we as a commonwealth can ensure the success of this industry going forward is to continue to invest in STEM education, higher education, and K-12 education," Baker said in his opening remarks. Baker called the money "our way of saying we appreciate the work that's done by this industry, the jobs that it creates and most importantly, the success that it creates for people who in many cases are told a very terrible tale about what the likely future for themselves or their families might be."

Baker and Polito said on Tuesday that they plan to cap the week off with further daily events at different schools across the Commonwealth. Baker also said that he hopes the educational week will become a recurring part of the state's activities every October.

"I want to say how much we look forward to, if we have an opportunity to look forward, LG," Baker said, pointing and smiling at Polito. "...to continue to work with people on this, because this is the start of something that I believe will be very big, very special and very important to the future of the Commonwealth."