

Opening Remarks Given by the Massachusetts Secretary of Education, Jim Peyser, Friday, January 19, 2018, NASA Downlink with the International Space Station, Framingham State University
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It's an honor to be here today for this exciting event and to recognize the great work of NASA, the Challenger Center, and Framingham State.

In Ronald Reagan's eulogy to the seven Challenger astronauts, he said the following: "We remember Christa McAuliffe, who captured the imagination of the entire nation, inspiring us with her pluck, her restless spirit of discovery; a teacher, not just to her students but to an entire people, instilling us all with the excitement of this journey we ride into the future."

Today, we honor the memory of Christa McAuliffe and her fellow Challenger crewmembers by rededicating ourselves to her commitment to teaching and inspiring young people about their potential for learning and discovery – even to the point of risking and ultimately sacrificing her own life.

It is, of course, fitting that today's event is being held here at her alma mater and the home of the McAuliffe Center for Integrated Science Learning, which not only carries her name, but is dedicated to training the science teachers of tomorrow and inspiring students to pursue science as a course of study and a career path.

It's no news to anyone that Massachusetts is a world leader when it comes to the educational attainment of its citizens and the technological sophistication of our economy.

Nevertheless, we do not have the luxury of resting on our laurels. The rapidly changing shape of our economy and society at large is demanding ever higher levels of academic preparation – especially in STEM fields.

Although we produce more bachelor's degrees per capita than any other state, we are not producing enough degrees in the right fields to meet the evolving needs of our knowledge-based, technology-intensive economy. Most noteworthy, only 3 percent of undergraduate certificates and degrees are in computer science or information technology. More broadly, we are falling far short of the projected need for skilled workers with technical credentials or associates degrees.

The good news is that the Commonwealth has been ramping up its focus on STEM for the past decade and the collective impact of these efforts has helped raise awareness

about the importance of STEM education, not just for our strengthening our economy, but for opening doors of opportunity to our young people – especially those who are under-represented in STEM fields.

But even though there are signs of impact and progress, we are nowhere close to where we need to be. Math and science proficiency rates are up, but unevenly and sometimes marginally. And although achievement gaps between low-income students their higher income peers are shrinking, they are still large – averaging 25-30 percentage points in math and well over 30 points in science.

Over the past 5 years, the number of post-secondary STEM certificates and degrees has grown by only 2 percentage points and still comprise less than one-third of all certificates and degrees conferred. The number of degrees in engineering and computer science has barely changed in 5 years, and the gender gap in computer science remains stark, with men receiving 6 times the number of degrees as women. And we are producing only a handful of new teachers each year in subjects like physics, chemistry, engineering and computer science.

To address these persistent gaps, we must continue to support awareness campaigns, like STEM on Station. But we also need to create new capacity that will provide young people with real opportunities to convert their new-found interest in STEM fields into academic attainment and career success.

That's why institutions like the McAuliffe Center are so important.

One of my favorite old TV shows is "The Wonder Years," which is the story of a suburban boy named Kevin Arnold. My favorite episode is about Kevin's decision to give up piano lessons. The episode opens up with Kevin as an adult reflecting back on this time in his life, and he says: "When you're a kid, you're a little bit of everything: artist, scientist, athlete, scholar. Sometimes it seems that growing up is giving those things up, one-by-one."

Our collective challenge is to ensure that this generation of youth and the ones to come, do not give up on science.

The future of Massachusetts depends on our ability to significantly and persistently improve science education, not just to increase test scores or produce degrees, but to fuel our economy and create opportunity for our people. This challenge is especially urgent in low-income communities, because if we don't make a special effort to address the needs of these students there is a grave risk that they will fall even further behind as the pace of change in our society rockets ahead.

I thank you all for the important work that you all are doing in the spirit of Christa McAuliffe and I look forward to joining you in this effort in the months and years ahead.