

Arming under-resourced students with STEM education is key to growing Mass. workforce

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Guest Columnist

A few weeks ago, Massachusetts lawmakers and residents watched as Gov. Maura Healey delivered her inaugural State of the Commonwealth address, outlining her priorities for the second year of her term. Among the top issues for 2024, Healey highlighted the need to equip the next generation of our workforce with the tools they need to succeed and address cross-industry workforce shortages that have constrained our state's economic growth.

Healey has not shied away from confronting our state's labor supply challenges, noting last year that the problem had reached a "crisis point." In fact, data shows that our state only has 42 available workers for every 100 open jobs, one of the most severe shortfalls in the U.S.

In one of the most alarming examples, Massachusetts hospitals had to spend over \$1.5 billion to hire temporary workers to maintain acceptable patient care levels.

The Healey administration has taken significant steps to boost the Bay State's workforce. In August, the governor launched the MassReconnect program, allowing Massachusetts residents over 25 to attend community college for free. That is a short-term solution; the longer-term solution will be providing a vigorous STEM (science, technology, engineering and math) education for our students starting in middle school and continuing into high school.

In the right direction

This push toward alleviating our state's labor shortages by increasing access to opportunity is a step in the right direction. To put the challenge in perspective, 10,000 baby boomers turn 65 every day. Combine that with many companies understanding the urgency that 35% of the jobs and careers in 2030 do not even exist now. Developing our young people's critical thinking skills is imperative. However, there is still far more work to be done, which requires a collaborative approach across industries, academia and government.

Motivated by these challenges, Empower Yourself works with universities, businesses and STEM organizations across the state to uplift underserved communities through access to STEM programs.

Through our work with partners such as the Northeastern College of Engineering, Lincoln Labs/MIT, Matrix Space, SAP, AUVSI, and AIAA, we offer courses in crucial skills such as coding, drones, autonomous cars/flights, and engineering. These programs are designed to help prepare under-resourced students, who might otherwise not have access to STEM resources, to step into high-paying, quality careers in growing industries.

Ultimately, these pathways help to break cycles of poverty, increase generational wealth and increase the representation of African American and Hispanic communities in STEM fields, which have seen continued underrepresentation.

No one is left behind

Recently, in response to the growing development and adoption of innovative digital tools and emerging technologies such as artificial intelligence (AI), Empower Yourself began to integrate these technologies into our curriculum to help students prepare to leverage them in their future careers. Since many of our students would not usually have access to these systems, our courses help ensure that no one is left behind when it comes to learning their vast

capabilities and applications. This instruction is especially vital amid calls from the governor for speedier adoption of AI into our economy's growing sectors.

As Healey gets to work on the priorities laid out in her State of the Commonwealth speech, Empower Yourself and other Massachusetts organizations are demonstrating that access to STEM-focused curricula can help to drive equitable educational outcomes and alleviate our state's persistent workforce challenges. Maintaining that access should be a priority.

Lawmakers must keep these efforts in mind when considering any measure that could limit the use of digital tools and emerging technologies. Well-intentioned initiatives could inadvertently harm educational and professional opportunities in underserved communities.

Policymakers should expand access to the latest technological innovations to all corners of the commonwealth so we can train our brightest minds for the jobs of tomorrow.

Cedric Turner is the founder and executive director of Empower Yourself, an organization that works with industry and academic partners to offer an academic curriculum and specialized programs centered around economic literacy, life skills and the STEM fields.