A Proposal to Expand Opportunities to Earn Industry-Recognized Credentials

75% of Massachusetts employers say they can’t find qualified candidates to fill open positions. Companies are bumping up against a pervasive shortage of skilled workers across multiple industries, threatening their ability to find workers they need to grow.

At the same time, too many students graduate our high schools and fail to go on to earn the degree or credential they need to enter, thrive and advance in Massachusetts’ competitive workforce.

- 72% of Massachusetts jobs will require a career certificate or college degree by 2020\[^{i}\]
- 13% of jobs in computer and mathematical occupations specify industry certifications\[^{ii}\]
- By 2019, demand for workers to fill middle skills jobs—jobs that require a high school diploma and some education or training post high school—is expected to exceed supply by an estimated 150,000 positions\[^{iv}\]
- In the next decade 660,000 college educated workers across Massachusetts will retire\[^{v}\]

Massachusetts can adopt a proven model successful in other states to help students earn industry-recognized credentials of high value.

Massachusetts has several efforts underway to prepare students for the workforce by:

- Expanding funding to vocational technical education, skills training and apprenticeships particularly in high wage, in-demand fields such as healthcare, advanced manufacturing and STEM
- Increasing access to career exploration and preparation through the High-Quality College and Career Pathways (HQCCP) initiative
- Focusing the Innovation Pathway on five in-demand industry sectors identified within the Regional Blueprints—Healthcare, Information Technology, Advanced Manufacturing, Finance and Professional, Scientific and Technical

The Governor and the Workforce Skills cabinet, employers, school administrators and outside groups such as the Alliance for Technical Education are working collaboratively to support and advance this work. The Massachusetts Business Alliance for Education supports this approach, but believes these efforts can be enhanced by providing the option for all students to earn an industry-recognized credential in a high wage, in-demand field.
Expanding Opportunities to Earn Credentials in High School

While industry certification courses are often embedded within the curriculum of the Commonwealth's vocational technical schools, the opportunity to expand this concept across all high schools should be a priority. Massachusetts career vocational technical schools serve 20% of the student population. The majority of Massachusetts high school students receive little or no career preparation.

A credential can be a ticket to upward economic mobility. Industry-Recognized Credentials (IRCs) are credentials that employers use to certify that an applicant is qualified for a job. Credential programs where high school students earn industry-recognized credentials have been implemented successfully in other states.

Students who earn industry certifications have an advantage finding high-demand jobs with good wages because the certifications are globally portable and valuable to employers. Often, these industry certifications are "stackable", which means multiple credentials can be accumulated over time to build up an individual’s qualifications to pursue a career pathway or another postsecondary credential. Industry certifications help employers find qualified applicants and fill vacant positions.

<table>
<thead>
<tr>
<th>Industry Occupation</th>
<th>Health Care</th>
<th>Information Technology</th>
<th>Manufacturing and Engineering Technology</th>
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</thead>
<tbody>
<tr>
<td>Credentials</td>
<td>OSHA General Industry–10 Hours</td>
<td>OSHA General Industry–10 Hours</td>
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<td></td>
<td>CPR for the Health Care Professional</td>
<td>Microsoft Office 2016 Specialist Master</td>
<td>MACWIC Level 1 Certification</td>
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<td></td>
<td>American Red Cross First Aid</td>
<td>Site Development Associate</td>
<td>MACWIC Level 2 Certification</td>
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<td></td>
<td>Medical Lab Assistant</td>
<td>Advanced HTML5 and CSS3 Specialist</td>
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<td></td>
<td>Certified Nursing Assistant/Home Health Aide (CNA)</td>
<td>Database Design Specialist</td>
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<td></td>
<td></td>
<td>AP Computer Science</td>
<td></td>
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<tr>
<td>Career Pathways after High School</td>
<td>Home health aide</td>
<td>Fiber and cable technician</td>
<td>Fabricator</td>
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<tr>
<td></td>
<td>Nursing assistant</td>
<td>Telecom specialist</td>
<td>Welder</td>
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<tr>
<td></td>
<td>Clerical positions</td>
<td>Network technician</td>
<td>Quality control inspector</td>
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<tr>
<td></td>
<td>$28,000–$38,000 per year</td>
<td>$25,000–$58,000 per year</td>
<td>$35,000–$50,000 per year</td>
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<tr>
<td>Career Pathways after Associates Degree</td>
<td>EKG technician</td>
<td>Web designer/Programmer</td>
<td>Tool and die machinist</td>
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<td></td>
<td>Registered nurse (RN) ASN</td>
<td>Network Administrator</td>
<td>CNC programmer</td>
</tr>
<tr>
<td></td>
<td>Pharmacy technician</td>
<td>Database Administrator</td>
<td>Production engineer</td>
</tr>
<tr>
<td></td>
<td>$55,000–$85,000 per year</td>
<td>$64,000–$74,000 per year</td>
<td>$45,000–$62,000 per year</td>
</tr>
<tr>
<td>Career Pathways after Bachelor’s Degree</td>
<td>Physical therapist</td>
<td>Computer Engineer</td>
<td>Mechanical engineer</td>
</tr>
<tr>
<td></td>
<td>Registered nurse (RN) BSN</td>
<td>Cyber Security</td>
<td>Metallurgist</td>
</tr>
<tr>
<td></td>
<td>Speech pathologist</td>
<td>Network Security Specialist</td>
<td>Welding engineer</td>
</tr>
<tr>
<td></td>
<td>$85,000–$110,000+ per year</td>
<td>$78,000 + per year</td>
<td>$65,000+ per year</td>
</tr>
</tbody>
</table>
These are examples of credentials and pathways aligned with the state’s high priority industries provided by BAETEC and Blackstone Valley Vocational Regional School District.

States can encourage school districts to offer industry certification courses to students by creating a financial incentive tied to performance and/or by adopting these industry-recognized credentials into the school accountability rating. Seven states currently provide financial incentives for each student who earns an industry certification and several others are moving in this direction by enacting legislation.

Enacting legislation creates incentives for school districts and high schools to help students earn industry-recognized credentials. Incentives are provided for industry certifications tied to workforce demand.

A Model for Student Pathways to Success

More states recognize the value of students earning industry-recognized credentials in high school and have adopted strategies to increase access to credentials to set students on a path to careers in high demand fields. Industry-recognized credentials programs were created to meet labor market demands and at the same time provide students opportunities for upward mobility. Florida, Wisconsin and Louisiana have seen success growing participation using financial incentives.

In Florida, the program was established in 2007 with 803 students. By 2016, over 71,000 students earned industry certifications in 2016. The state’s current investment in the program is $50 million as a result of rising student demand and enrollment in the program. In Florida, students who graduate with an industry certification outperformed peers who graduate without an industry certification, with a higher placement rate in employment or postsecondary education at 82% and 84%, respectively. Data also indicates that high school graduates with industry certifications surpassed peers in overall average earnings by the third year.

Additional states have observed the success of industry-recognized credential programs and have enacted legislation between 2016-2017 to appropriate funds to create incentive programs for students to earn industry-recognized credentials.

- **Colorado**: $1 million annually
- **North Carolina**: $600,000 for 2016-2017
- **Nevada**: $2.9 million
- **Minnesota**: $1 million annually
- **South Carolina**: $3 million for 2016-2017

The investments these states have made underscore the value of this approach and while they can be a guide for the state, Massachusetts can customize and improve upon this model.

More information about state industry-recognized credential programs appears in the Proven Model document.

Closing the Skills Gap and Fueling the Growth of a Diverse Workforce Pipeline

Not all credentials are created equal. Some credentials are quite popular among students, but do not lead to opportunities in jobs that pay family sustaining wages and upward mobility. Our focus will be on credentials in high demand industries with value now and in the future.

Our proposal fuels a diverse, highly skilled workforce pipeline that is the engine of growth and prosperity and helps close the equity, skills, and education achievement gaps by putting students on pathways to success. It will strengthen businesses and our economy.
MBAE Plan of Action and Proposal

The Massachusetts Business Alliance for Education is taking action to expand opportunities for high school students to earn industry-recognized credentials that are linked to labor market demand in fields and jobs that pay higher living wages. Our action plan would include the following:

- **Audit the landscape of credentials in Massachusetts**
  We must identify which credentials are currently offered, how many students earn them, and how many schools offer them. The data is essential and currently lacking.

- **Identify labor market demand**
  Identify the skills and credentials that are missing among job applicants; and verify which credentials are most in labor market demand

- **Enact legislation to incentivize high schools to offer industry certifications and credentials**
  MBAE will propose legislation that would incentivize school districts and high schools to offer industry certification courses to students through financial incentive tied to performance.

- **Promote partnerships between school districts and employers**
  MBAE will continue to work with our partners and affiliates to promote partnerships between schools and local companies.

The Proposal

Legislation will create incentives for school districts and high schools to offer industry certification courses to students tied to workforce demand. MBAE’s proposal will require the state to:

- Produce an annual list, available to all school districts and the public, of high need occupations that require an industry-recognized credential

- Award each school a financial incentive for every student who earns an industry certification for an occupation that has high employment value or is recognized by a higher education institution

Districts would have to allocate at least 80% of the award to the school whose students obtained the certification; allocation may not be used to supplant funds for school operations.

MBAE’s proposal will call for alignment of industry-recognized credentials with the state’s high priority industry sectors and address issues of equity by including funding for implementation to encourage less well-resources districts to participate in the program. The funds can support teacher training, cover assessment costs or equipment needs.

An industry-recognized credential program compliments Massachusetts’ current career preparation efforts and can be customized to address workforce challenges highlighted in the Regional Blueprints. A credential program will also provide students opportunities to develop essential skills valuable in the workplace and higher education. Massachusetts should adopt an industry-recognized credential program to address the state’s urgent skills gap and accelerate access to career preparation and pathways for every student in the Commonwealth.

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1 Associated Industries of Massachusetts’ Business Confidence Index, 2018
2 Georgetown University Center on Education and the Workforce
3 The Narrow Ladder: The Value of Industry Certifications in the Job Market, Burning Glass Technologies
4 New England Public Policy Center, Federal Reserve Bank of Boston
5 Massachusetts Department of Higher Education