ALIGNING COLLEGE AND CAREER

Expanding Citywide Pathways for Boston Youth

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About the Project on Workforce at Harvard

The Project on Workforce is an interdisciplinary, collaborative project between the Harvard Kennedy School’s Malcolm Wiener Center for Social Policy, the Harvard Business School Managing the Future of Work Project, and the Harvard Graduate School of Education. The Project produces and catalyzes basic and applied research at the intersection of education and labor markets for leaders in business, education, and policy. The Project’s research aims to help shape a postsecondary system of the future that creates more and better pathways to economic mobility and forges smoother transitions between education and careers. Learn more at www.pw.hks.harvard.edu.

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Executive Summary

Access to work and college prep experiences helps prepare young people to succeed in obtaining post-secondary credentials, securing high-demand jobs, and contributing to community-wide economic prosperity.

Research has shown that completing college-level courses while in high school, and participating in learning-focused youth employment opportunities, improve a student’s college and career readiness.

With Boston’s extensive network of stakeholders in college and career prep, the City of Boston can use its convening and coordinating power to scale and expand Early College programs in high schools, dual enrollment opportunities at higher education institutions, and work-based learning. Altogether, these efforts will better prepare all Boston students for the world of work.

This report, prepared by summer fellows from the Project on Workforce at Harvard, provides analysis and recommendations aimed at ensuring efficient coordination and deployment of existing resources, as well as activating new opportunities, with the goal of improving access to truly equitable learning and skill-building for Boston’s youth. Recommendations include increasing student advising capacity, integrating and expanding data systems, and unlocking additional funding sources across the educational and workforce sectors to strengthen college and career pipelines.

The City of Boston, together in partnership with Boston Public Schools, higher education, employers and business leaders, and youth-serving organizations, can and must build strong and lasting public learning infrastructure that enables all Boston youth to successfully pursue college and career pathways.
Introduction

The City of Boston, private industry employers, community-based organizations, Boston Public Schools (BPS), and local higher education institutions all work toward preparing and cultivating a workforce that aims to make Boston one of the most prosperous regions in the world. However, the changing nature of work and the COVID-19 pandemic have amplified existing opportunity gaps for young people in Boston to persist in postsecondary credential opportunities and participate in high-demand local careers.

Previous literature suggests that high school students who successfully complete college coursework and who participate in work-based learning experiences are more likely to persist in postsecondary education, increasing their lifetime earning power.\(^1\) Furthermore, Massachusetts community college students who earn credentials that are aligned with their career aspirations earn up to $15,000 more per year than their peers with a terminal high school degree.\(^2\)

While evidence suggests that Early College programs and meaningful work-based learning experiences can greatly benefit students and decrease achievement gaps among underrepresented students, expanding and scaling programming across K12, employment, and higher education systems can be challenging to coordinate, implement, and measure.

This report provides recommendations for the City of Boston to address how these systems can collaborate to ensure all Boston students from the Class of 2024 and beyond graduate from high school college- and career-ready.

Moreover, our analysis and recommendations are intended to be viewed through an equity lens – the goal is, and must be, equitable pathways and opportunity for all Boston youth.

Data & Methodology

To inform this research question, the Project on Workforce summer fellows:

1. Interviewed 33 stakeholders in Boston’s college- and career-readiness space;
2. Collected data on over 80 Boston community organizations who contribute to Boston students’ college- and career-readiness; and
3. Analyzed open data from the Massachusetts Department of Elementary and Secondary Education, Boston Public Schools, Massachusetts Department of Higher Education, City of Boston Department of Youth Engagement and Employment, City of Boston Planning and Development Agency, and American Community Survey population and demographic information.

Through this analysis, we aimed to better understand Boston’s college- and career-readiness landscape, organizational and sector involvement, student participation in current initiatives, and future plans to engage more youth and organizations, as well as the feasibility of scaling and expanding efforts for Boston youth, education institutions, employers, and local government. Our analysis builds upon prior research by the Boston Private Industry Council and the Boston Foundation regarding the rates of college enrollment and completion and attainment of good first jobs for Boston Public School students.

Project Goal:

Ensure all Boston students from the Class of 2024 and beyond graduate from high school college- and career-ready
Boston’s College- & Career-Readiness Landscape

Boston boasts a vast array of stakeholders in the college- and career-readiness space. While BPS holds the primary responsibility of educating young people in Boston, stakeholders in private industries, community-based organizations, government, and higher education play critical roles to ensure students succeed in postsecondary endeavors.

College Readiness in Boston Public Schools

Students in BPS can take college-level coursework through:

- Early College programs where students take courses in cohorts at local colleges
- Dual enrollment courses at a local higher education institution
- Advanced Placement (AP) courses in their high school, or
- International Baccalaureate (IB) programs at their high school.

Although 57.7% of 11th and 12th grade BPS students took a high school advanced course or a Chapter 74 Career Technical Education (CTE) course during the 2019-2020 school year, only 6.9% of 11th and 12th grade students enrolled in either Early College or dual enrollment courses the following school year. Growth in Early College programming is school-dependent. However, early success in Early College programming with Bunker Hill Community College and Benjamin Franklin Institute of Technology is spurring interest and shows a great opportunity for more high schools, higher education institutions, and students to get involved in future years.

In- and Out-of-School Work-based Learning Participation by Boston Youth

The two largest opportunities for students to participate in work-based learning opportunities are through (1) BPS career pathways such as Career Technical Education and Innovation career pathways, and (2) City- and Boston Private Industry Council (PIC)-coordinated youth summer employment. Approximately one-third of BPS students participated in a BPS career pathway (2046 students during the 2020-21 school year), and approximately 13,000 Boston youth participate in City- and PIC-coordinated summer youth employment.

Although approximately 3,000 students earn summer internships in private industry organizations that align with BPS career pathways, most of students’ out-of-school work-based learning opportunities do not necessarily align with this work.

As shown in Figures 1 and 2 below, BPS career pathways align with in-demand careers, however, only a small percentage of City-coordinated jobs are in these same fields (highlighted in blue).

[FIGURE 1] 11th and 12th Grade Student Participation in Top 5 BP Career Pathways (2,385 youth, 2020-21 School Year)

[FIGURE 2] Top 6 Employer Sectors in City-Coordinated Summer Youth Jobs (~10,000 youth, 2020 Summer)
Key Findings and Recommendations

**Key Findings**

Our findings are grounded in quantitative and qualitative analysis, including interviews with experts and practitioners, as well as desk research. We arrived at five key findings, which focus on equity, immediacy, and feasibility.

1. **Early College and Dual Enrollment** increase students’ learning achievements and lifetime earning power, but most BPS students don’t have access or don’t participate.

2. **Work-based learning (WBL)** prepares students to succeed in academics and careers. Boston offers many youth jobs, but without overarching alignment and defined learning objectives.

3. Boston is well-resourced and boasts a plethora of impactful actors. Yet, there isn’t enough proactive guidance and mapping to help students and parents navigate the myriad options.

4. **Data systems and metrics** are disparate and do not unify the full range of stakeholders committed to developing Boston’s youth.

5. Efforts will require authoritative **policy leadership**, as well as an accountable **coordination body** and sustainable funding.

**Recommendations**

The following five recommendations shed light on five key areas where the City of Boston can capitalize on its vast stakeholder network and plethora of resources to scale and expand existing programming that is shown to work for students and employers. Our recommendations center on bolstering and further aligning Boston’s actors and resources, with particular emphasis on feasibility and implementation.

**More Early College and Dual Enrollment Programming**

- **Scale Early College pathway programs** across Boston High Schools through specific local college and community organization partnerships so that as many BPS high schools as possible have an Early College pathway opportunity by the 2024-25 academic year.

- **Expand dual enrollment offerings** through community-based organizations and remote options for students who may not be able to access state-designated Early College Programs.
More and Better Work-based Learning

- **Look to City of Boston and PIC employers as early adopters and partners**, producing quick wins and building momentum for deeper conversations with private sector employers.
- **Expand participation of both private sector and governmental employers** as key partners, with an eye towards the longer view—take the time to do this intentionally and be proactive in addressing likely apprehensions from private employers.
- **Begin career exposure early** (i.e., Grade 7), and formalize a progressive system that builds year-by-year on a mix of different work experiences.

Aligned and Proactive College and Career Guidance

- **Work with college and career stakeholders to build comprehensive career maps** to provide structured “birds-eye views” of career progressions and benefits from both the student and employer perspective. The maps should be informed by employers and educators to convey the connection between the school curriculum and future career and college opportunities.
- **Increase the capacity of counseling services** to provide comprehensive one-on-one support to students through scaling existing guidance counseling offered through BPS and community partners.

Unified Data Structures and Success Metrics

- **Implement a digital infrastructure that houses information about college- and career-readiness opportunities** such as work experiences, dual enrollment opportunities, and support services. This should be unified, transparent, easy-to-use, inclusive, and accessible.
- **Define a set of college- and career-readiness metrics and goals for employers, community organizations, K12, and higher education institutions** to better understand institution-specific progress and student longitudinal outcomes.

Focused & Centralized Teams and Sustainable Funding

- **Use the Mayor’s Children and Youth Cabinet as a catalyst for speedy, impactful change** in Boston’s fundamental approach to college-ready and career-ready initiatives.
- **Determine a central coordinating entity** to take responsibility for leading unification and integration across stakeholders and programming. (Potentially outside of government, e.g., non-profits, foundations, higher education institutions.)
- **Aggressively pursue funding** for these efforts, both near-term surge dollars and longer-term recurring dollars.

Conclusion

Boston has a wealth of committed stakeholders who play a critical role in students’ college and career readiness and success. The recommendations of this research seek to better coordinate these actors to improve access to programs and outcomes for youth.

In the next phase of this work, the City of Boston, in partnership with higher education and business leaders, can build strong infrastructure for Boston youth to obtain a quality, work-informed education and secure a good career. The City will continue to play a key role in convening, communicating, and coordinating across the educational and workforce development arenas to strengthen college and career pipelines for all youth to succeed.
Appendix

Figure 3. 11th and 12th Grade Participation in Boston Public Schools College and Career Pathways

Additional Insights on Boston’s College and Career Pathways Landscape

There are over 80 nonprofit, higher education, government, and private industry organizations that supplement work-based learning, career readiness, and college and career exposure opportunities for youth in the Greater Boston area. Boston After School & Beyond’s network of summer and after-school programs includes the largest reach of youth outside of school time, with over 300 extracurricular, employment, and academic programs serving over 20,000 youth each year. Of the 80 programs specifically focused on college and career readiness, 73 of these 80 organizations serve high school-aged students, where some of these organizations serve high school grades in addition to middle grade-aged and college-aged students. Figure 4 shows the distribution of Boston college- and career-readiness organizations’ grade-level focus.

Sources: Massachusetts Department of Elementary and Secondary Education, 2021; Benjamin Franklin Institute of Technology, 2021; Bunker Hill Community College, 2021; Boston Public Schools, 2021.
Some of these programs span several age groups or have different sub-programs that serve different age groups. For example, Sociedad Latina provides tiered educational programming for over 1,200 Latino youth per year through middle school, high school, and the first two years of college. Programs such as the Mayor’s Summer Jobs Program, Boston PIC and Career Specialists, Action for Boston Community Development (ABCD), MassPort, and WriteBoston also span a wide range of work-based learning opportunities. However, all of these programs only report serving a fraction of Boston middle grade through college-aged youth (serving ~25,000 out of ~75,000 young people in Boston). Additionally, organizations such as YOU Boston, Youth Harbors, and Mission Safe support court-involved youth, youth experiencing homelessness, and youth facing social and financial barriers to accessing work and educational opportunities.
Endnotes


2 Ibid.


4 Roshni Wadhwani, “Re: Quick Followup Re: Number of Dual Enrollment BPS Students & Credits?,” July 14, 2021.


7 “Massachusetts Pathways Map.”


