

# Worcester Education Collaborative



## Early College: The Best Investment for College Success

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## Overview

Massachusetts is home to some of the best public schools in the country and, increasingly, to a knowledge-based labor economy that requires postsecondary education to access good jobs with family-sustaining wages. Worcester, the third largest school district in the Commonwealth, is charged with providing its 24,000 students with an education designed to allow its students to be competitive in an increasingly demanding labor market, and provide students and families with opportunities for economic mobility. Currently, too few of Worcester's students make it through high school and continue to complete a college degree. To ensure Worcester students can compete for good jobs in Massachusetts, the Worcester Public Schools and its partners need to invest in innovative solutions that make college enrollment and, indeed, college success, more accessible and affordable to all of the city's young people.

Early College is the most promising single education initiative in which Worcester can invest to improve college-going and college success rates among its students. It is also particularly effective at boosting attainment outcomes for students historically-underrepresented in higher education. Early College is a structured program of study and supports that increases college success and career readiness. In Early College, high school students take strategically-sequenced college classes and receive enhanced academic and guidance support to ensure that they thrive in rigorous college coursework and the challenging college environment. They graduate from high school with significant college credits, reducing the cost and time to degree completion, and graduate with the confidence, habits, and skills needed to be successful in college and career. We know from both national and state data that Early College programs are incredibly successful at driving increases in college enrollment, persistence, and completion. In Massachusetts, Early College students are 15 to 16 percentage-points more likely to enroll and persist in college than their peers, even when controlling for differences in demographics, school type, and test scores. At scale, this means thousands more students annually accessing college, and walking the stage with a postsecondary degree.

While Worcester is off to a strong start in providing students with access to Early College, the Worcester Public Schools can and should take its investment in Early College to the next level. Worcester is currently serving about 750 students in its Early College Worcester program, which represents about 11% of total high school enrollment for the district. Students in the program have access to seven different pathways which allow them to earn college credits in a variety of classes leading to credentials in different career fields. Now that Worcester has built the framework for its Early College program, it should use that foundation to invest more deeply in this evidence-based and proven initiative.

There are a number of steps that Worcester should take in order to deepen its investment in Early College. First and foremost, the Worcester Public Schools should significantly increase the number of students who are enrolled in the program, from 750 students to 2,000 students. Increasing to this scale will allow Worcester to serve hundreds more students, and will provide an incentive for the district to invest in the kind of structural changes that make Early College effective, while realizing the economies of scale that come along with those changes. Second, Worcester should deepen the number of credits students are earning through their Early College pathways. While the state requires schools to provide a minimum of 12 credits in order to become a designated Early College program, Worcester should focus on more students earning 30 college credits (equivalent to a full year of college) by the time they finish high school and at Claremont Academy, which is transitioning to a full-school Early College model, up to 60 credits (two years of college). This increased credit depth aligns with proven Early College models throughout the country, will significantly reduce the ultimate cost and time to degree completion, and significantly increase the likelihood of degree completion. Third, Worcester should make Early College a top-five priority and invest the funding and staffing necessary for success.

# The College Success Equity Gap

## Massachusetts Context

Massachusetts boasts one of the most well-funded and effective systems of public education in the country. Recent analyses by researchers for [WalletHub](#) and [U.S. News](#) rank Massachusetts' public education system first and second in the country, respectively, based on measures like test scores, student-to-teacher ratios, student safety, and college readiness. Despite these successes, Massachusetts continues to face persistent and growing equity gaps in college success for Black and Latino students, and students from low-income families. In particular, 45% of white students and 53% of students from non-low-income homes will earn a postsecondary degree within six years of high school graduation, according to a [MassINC analysis](#) of data from the Department of Elementary and Secondary Education. In that same analysis, MassINC finds that six-year postsecondary attainment rates are significantly lower for Black students (21%), Latino students (15%), and students from low-income families (18%).

The equity gap in postsecondary attainment rates is stark, and the current trends indicate that these gaps are widening over time, instead of narrowing. A [June 2020 report](#) from Brown University indicates that while the high school graduation gap between low-income and non-low-income students is shrinking over time, the income gap in college completion is actually growing. Moreover, even when controlling for differences in MCAS scores, low-income students are 21 percentage-points less likely to enroll in college, and 23 percentage-points less likely to complete a degree. Similar gaps exist across racial categories; Latino students are 15 percentage-points less likely to enroll in college than White students, and 20 percentage-points less likely to graduate. While Black students with similar MCAS scores enroll in college at about the same rate as White students, they are 11 percentage-points less likely to complete a college degree.

Addressing these major inequities in college success is critical for Massachusetts' public education system, as the impacts of this completion gap are severe. Recent research and labor market analyses continue to demonstrate that a postsecondary degree is increasingly necessary for high quality, well-paying jobs. Today, 80% of good-paying jobs require a postsecondary education, according to a [report from Georgetown's Center on Education and the Workforce](#).

Further, differences in educational attainment have a profound impact on students' future earnings. According to a [Bureau of Labor Statistics analysis](#), median earnings are 20% higher for associate degree holders and 67% higher for Bachelor's degree holders than for high school graduates. Additionally, high school graduates with no postsecondary education are 27% more likely to be unemployed than associate degree holders, and 64% more likely to be unemployed than Bachelor's degree holders.

*Today, 80% of good-paying jobs require postsecondary education. Moreover, earnings are 20% higher for associate Degree holders and 67% higher for bachelor's Degree holders than high school graduates.*

## Local Context

In Worcester, there are approximately 7,200 students in grades 9 - 12 across the seven district high schools. In addition to being one of the state's largest districts, Worcester is also one of its most diverse. About 62% of Worcester students are Black or Latino, compared to a statewide average of 31%. About 74% of Worcester students come from low-income families - nearly double the statewide average of 44%. Worcester Public Schools also exceeds state averages in the percentage of English Language Learners (28%) and students with disabilities (21%) it serves. Overall, Worcester serves significant proportions of students historically underrepresented in college and career.

Outcomes for Black students in Worcester Public Schools are strong; Black students exceed the district average in graduation rate, Advanced Course Completion rate, and are more likely to immediately enroll in college, according to [data from the Department of Elementary and Secondary Education](#). However, significant gaps in student success exist for other historically-underserved student groups. For example, graduation rates for Latino students (83%) and low-income students (85%) are lower than the district average of 88% in 2021. Graduation rates for English Language Learners and students with disabilities are less than 80%. Meanwhile, while 46% of students district-wide are completing at least one Advanced Course in high school, only 37% of Latino students and 38% of low-income students are doing the same. And while 48% of 2020–21 Worcester high school graduates enrolled in a 2- or 4-year college, only 32% Latino students and 41% of low-income students took the next step into postsecondary education.

These numbers add up to a challenging reality for the college and career outlook of Worcester students. An analysis of data from the [Department of Elementary and Secondary Education](#) shows that, for the most recent data available, only 21% of Worcester Public Schools graduates go on to earn a college degree within six years of high school graduation. Unfortunately, the numbers are even lower for Latino students (11%), English Language Learners (15%), and students with disabilities (8%). Without intervention, these gaps will continue to contribute to and sustain historical inequities in career success, wages, and life outcomes for Worcester students. Furthermore, these gaps have an undeniable impact on Worcester’s quality of life and economic outlook.

POSTSECONDARY OUTCOMES FOR WORCESTER PUBLIC SCHOOLS CLASS OF 2012 GRADUATES					
	Students in grad cohort 2012	Graduated within 5 years	Enrolled in college immediately	Persistently enrolled in college	Obtained a degree within six years
Black Students	233	197	122	94	58
	100%	85%	52%	40%	25%
Hispanic Students	623	435	215	156	71
	100%	70%	35%	25%	11%
English Language Learners	341	237	136	101	52
	100%	70%	40%	30%	15%
Students with Disabilities	378	252	85	58	27
	100%	74%	25%	17%	8%
All Students	1737	1369	804	614	373
	100%	79%	46%	35%	21%

## Early College as a Solution

### Early College Definition and National Evidence

Early College is a leading evidence-based solution to dramatically increase college degree attainment, and is particularly effective at boosting attainment outcomes for students who are

historically-underrepresented in higher education. While Early College incorporates dual enrollment courses as one of its program components, it is different from traditional dual enrollment programs in several important ways. Early College is designed for students who are traditionally-underrepresented in higher education and, without the program, are less likely to enroll and succeed in college. Early College programs broaden college access by embedding dual enrollment courses in a comprehensive program structure that includes rigorous academic preparation and significant wraparound support services. Enrolled students benefit from the advising structures at both the high school and college partners, in addition to program-specific guidance and counseling designed to help students explore their postsecondary options and learn key skills for college success like time management, working under deadlines, and navigating resources on the college campus.

[Gold-standard research](#) from early adopter states shows that Early College is working to increase college enrollment, persistence, and ultimately, completion. For example, an [independent evaluation found](#) that Early College students were nearly three times as likely as their peers to earn an associate degree or certificate within six years of graduating from high school.

### ***Massachusetts' Early College Initiative***

In a few short years, Massachusetts has laid a strong foundation for Early College success and scale. The state's Early College Designation requires programs to align with five Design Principles, intended to ensure Early College programs achieve intended outcomes for the students who can most benefit.

#### **Massachusetts Early College Initiative Design Principles**

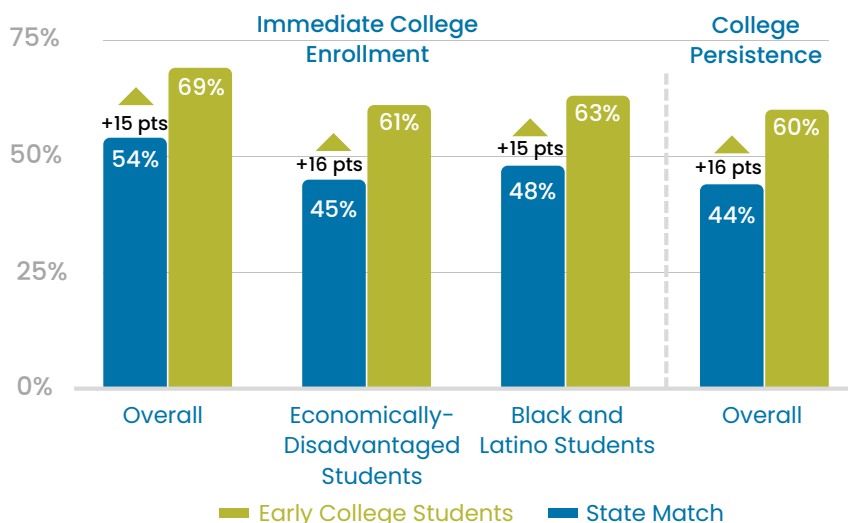
1. [Equitable Access](#) to target students underrepresented in higher education
2. [Academic Pathways](#) that are well-integrated and aligned with college and career
3. [Robust Student Support](#) in both academics and advising
4. [Connections to Career](#) through workplace and experiential learning
5. [High-quality and Deep Partnerships](#) between high schools and colleges

Since 2017, the state has designated 39 Early College partnerships across 50 high schools and 24 institutions of higher education. More than 50% of all high schools in Gateway Cities and five of the state's seven workforce regions have designated Early College programs. The growth in the Initiative has come as a result of broad community support for the program and bold leadership by school districts and college systems. The Initiative has also benefited from major funding investments; the state's Early College budget has grown incredibly from just \$870,000 in school year 2017-18 to \$19 million in school year 2022-23. This has resulted in a commensurate growth in enrollment to more than 4,000 students in school year 2021-22, and a projected 7,000 students in school year 2022-23. This program growth is translating to increased financial savings for students and families. The number of free college credits students are earning has increased from 5,000 credits in school year 2018-19 to 30,000 credits in school year 2021-22, producing a projected financial savings to families of more than \$6 million in college tuition and fees.

Not only is the Massachusetts Early College Initiative growing, but early indicators show that Early College is working to increase both college access and college success, particularly for students that have been historically underrepresented in higher education.

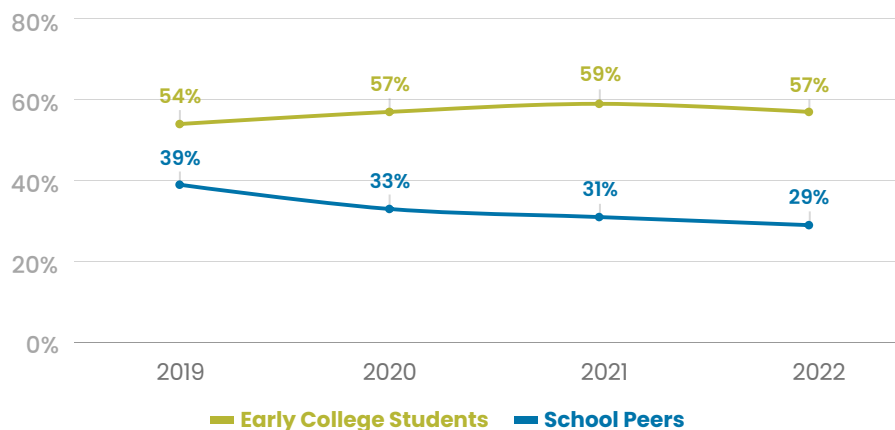
Currently, two-thirds of Early College students in Massachusetts are Black or Latino, and more than half are from low-income homes. Rigorous evaluation by the Department of Elementary and Secondary Education demonstrates that Early College is generating a 15 percentage-point increase in immediate college enrollment and a 16 percentage-point increase in college persistence for Early College students overall. Importantly, these gains are consistent for Black and Latino students and students who come from economically-disadvantaged backgrounds.

Using well-controlled matched pair methodology, Early College produces significant gains in college matriculation and persistence



### FAFSA Completion Rates for Massachusetts Seniors

Percentage of 12th Graders Completing their FAFSA by March 1

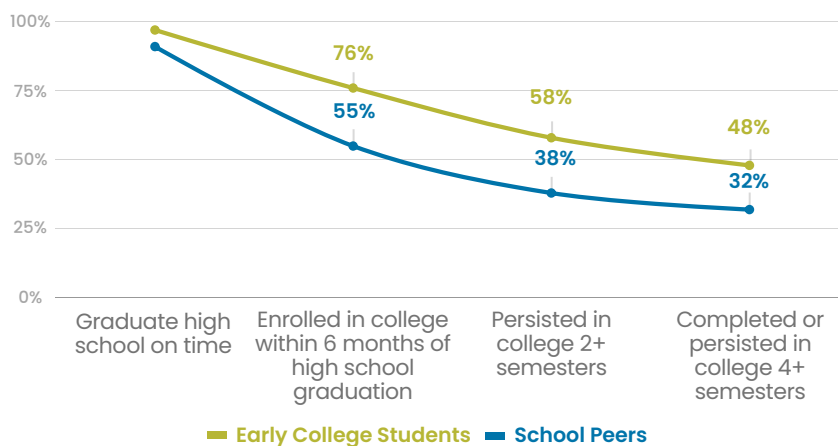


The rate at which students complete their FAFSA is a key predictor of college enrollment (72% of low-income students who complete the FAFSA enroll in college compared to 18% who do not complete). Due to the robust wraparound support and college planning and preparation in Early College programs, enrolled students are twice as likely to complete their FAFSA as school peers.

Even two years after high school graduation, Early College students continue to benefit from participation. Early College drives significant gains at all points along students' college journeys, from a 21 percentage-point increase in the number of students who matriculate immediately to college, to a 16 percentage-point increase in the number of students persisting in college 2+ years after high school. Early College is the most promising initiative currently working to close college success equity gaps, as shown by both national and local data.

### Postsecondary Journey of Early College Students and School Peers

Class of 2019



The Early College program is moving from pilot phase to widespread, robust implementation. Leading advocates, including the Massachusetts Alliance for Early College - a coalition of more than 100

organizations supportive of Early College – are calling for 45,000 students to be enrolled in Early College programs by school year 2026–27. At that scale, and with high-quality programs across the state, Massachusetts can make tremendous progress closing the college success equity gap that reinforces deep and enduring inequities in college and career outcomes for students across the Commonwealth. Worcester can play a key role in advancing that goal.

**Early College Worcester**

Worcester was an early adopter of Early College in Massachusetts, and its program benefits from broad enrollment across the district, and bold, cross-sector collaboration and leadership. The Worcester Public Schools, the only large district in that state to offer Early College across all its high schools, is currently partnering with Quinsigamond Community College and Worcester State University to offer a wide array of classes and pathways to Worcester students under the Early College Worcester (ECW) program. Currently, Early College Worcester (ECW) provides students with access to up to 12 college credits on well-aligned academic pathways, including connections to career pathways, and increases access to college for students who are underrepresented in higher education.

### Current Career Pathways Offered

Advanced Manufacturing

Computer & Information Technology

Criminal Justice

Elementary Education Transfer Pathway

Engineering & Biotechnology

Healthcare / Nurse Education Pathway

Hospitality & Recreation Management

Worcester’s Early College Program has a total of 758 students currently enrolled across seven high schools – 11% of Worcester’s total high school enrollment. Worcester has succeeded so far in engaging a diverse range of students in Early College opportunities. 21% of Early College Worcester students are Black, 12% are Asian, 36% are Hispanic, and 27% are White. Furthermore, 64% of Early College Worcester students are low-income, 10% are English Language Learners, and 5% are students with disabilities.

Early College Enrollment by School	
School	Number of Students
Worcester Technical High School	243
Claremont Academy	23
Burncoat High School	106
North High School	99
South Community High School	83
Doherty High School	129
University Park Campus School	38
Other (alternative programs)	37

The Worcester Public Schools was a key early adopter of Early College, and is now leading in efforts to improve program quality and provide access for more students.

**Recommendation for Policy and Practice**

**Framing**

Worcester boasts 18% of the state’s total Early College enrollment and with a commitment so scaling up, is positioned to lead the state into the next phase of Early College. Early College Worcester has recently been awarded two grants from the Department of Elementary and Secondary Education to

significantly increase access to Early College for Worcester students. The first, a Full School Grant, will support Early College Worcester in building a wall-to-wall Early College model at Claremont Academy, the high school with currently the lowest Early College enrollment in the district. The second, an Expansion grant, will support the Worcester public schools in building participation in Early College to 25% of total high school enrollment, bringing the total number of Early College students in Worcester to a minimum of 1,800 by school year 2024-25. The following recommendations for policy and practice build on Worcester's existing commitment and offer strategies for enhancing program quality and expanding access, particularly to student populations underrepresented in higher education.

### ***Equitable Access: Increasing Scale while Maintaining Quality***

We urge the Worcester Public Schools and its partners to act to increase the scale and depth of their Early College programming. In order to drive the systems-change required to realize the full benefit of Early College, districts also need to effect structural change in both the K-12 and higher education institutions. Advocates and leaders in Worcester have discussed reaching 2,000 students in Early College programs. This scale would be game-changing. At this scale, while ensuring program quality, Worcester can lead the state's Early College efforts, and can significantly increase degree attainment and decrease pervasive equity gaps for its students. Toward that end, Worcester should:

- » **Deepen enrollment across the district** to 2,000 students in Early College programs by school year 2024-25.
- » Double down on efforts to build a **full school Early College at Claremont Academy** through the recent Full School grant.
- » Grow enrollment at each participating high school to **reach at least 25% of students**, necessitating the development of complementary school-level policies.
- » At the same time, **increase quality and depth of offerings**, as described below.
- » Improve curriculum alignment between high school and college and put students on an Early College pathway **earlier in their academic trajectory** to ensure academic readiness for college coursework in 11th and 12th grade.

### ***Quality Design: Building Toward College Degree Attainment***

While scale is a critical component of the Worcester strategy for improving college access and success for students, it is equally important to promote deep partnership between the high schools and colleges to refine a robust set of programming that drives significant credit accumulation, meaningful engagement with the college experience, substantial career exploration and awareness, and rigorous academic skills development. To achieve this, it will be important to:

- » **Deepen credit accumulation to 30 credits** by the end of the 12th grade to significantly reduce the time and cost to degree completion, and ensure all credits are strategically-sequenced towards degree completion.
- » **Explore potential partnerships** with workforce agencies, community organizations, and industry partnerships to enhance Early College program offerings and increase college and career exposure and social capital.
- » **Consider the Early College Promise or 13th year model** as a way to bring students not just to college but through college. The Early College Promise is a pilot approved at the state level to allow students to remain in the Early College program for a year after high school graduation, taking a full set of college courses and continuing to receive strong wraparound support, with the opportunity to earn an associate degree or two-years of credit towards a Bachelor's degree at no cost.



## ***Sustainability: Ensuring the Long-Term Success of Early College***

While program scale and quality should be the primary focus in delivering results for students, long-term program sustainability is key to ensuring the viability of Early College. Since the launch of the Massachusetts Early College Initiative in 2017, the state of Massachusetts has provided increasing funding to help programs get off the ground, and to support the ongoing costs related to the college instruction required for programs to be successful. However, the most successful Early College programs embed associated costs in district budgets to ensure program longevity and sustainability. Based on available state funding through competitive and noncompetitive grants, Worcester stands to receive about \$1.25 million in funding for Early College from the Department of Elementary and Secondary Education in school year 2022-23 to fund the significant expansion projects it has proposed to the state. Given the size of the state's investment in Worcester this year and as Worcester moves from the pilot phase to robust Early College offerings, it is even more critical that the district's budget and strategic plan include significant investments in maintaining, sustaining, and growing local efforts over time. With sustainability in mind, Worcester must:

- » **Embed Early College into the district budget** to absorb the core costs of the Early College program. Specifically, Worcester should plan for Early College to be a core pillar of its expansion plan under the Student Opportunity Act.
- » **Build and invest in the operational and staff capacity necessary to lead** and support Early College programming within the district, high schools and higher education partners.

In order to succeed in making Early College an accessible reality for any Worcester student who can benefit from the program, program leaders will need to promote broad alignment and ownership among key constituencies about the importance and impact of Early College by:

- » **Ensuring alignment in support of Early College among key Worcester constituencies**, including K12 leadership, higher education leadership, city leadership, and community leadership.
- » **Maintaining a focus on collaboration** between the Worcester Public Schools, Quinsigamond Community College, and Worcester State University.

The evidence of the effectiveness of Early College is irrefutable. It is an approach to meeting college costs, promoting equity, and increasing college persistence and completion rates for students whose time has come. Worcester should seize the moment and continue to forge this path as means of increasing the prospects of its students and of the city overall now and into the future.

## About the Worcester Education Collaborative

The mission of the Worcester Education Collaborative (WEC) is to advance excellence and equity in education for all Worcester Public Schools (WPS) students. WEC envisions a transformational education community that enables all WPS students to achieve their full potential. WEC is committed to catalyzing, convening, and championing a wide variety of partnerships among families, schools, organizations, and businesses that enhance the quality of public education and drive progress toward our overarching goal of transformational, systemic change.

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