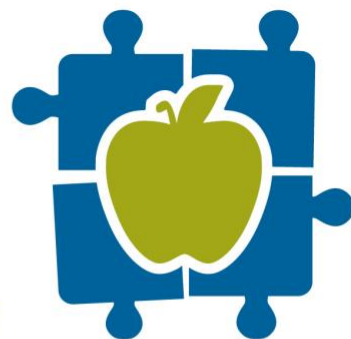


Worcester Education Collaborative



Early College- An Equity Based Solution to Post-Secondary Success

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Overview

Massachusetts' economy is reliant on educated workers, with roughly 70% of jobs requiring a credential beyond the high school diploma. However, we are not adequately preparing all high school students to be a part of that workforce. Higher-income students are three times as likely as their lower-income peers to complete a post-secondary degree. In 2010, while 82% of economically disadvantaged students graduated high school, only 18% made it through college to earn a two- or four-year degree compared to 52% of their peers. If we do not work to substantially increase the post-secondary completion rates of economically disadvantaged students and students of color, we will see a significant decline in the college educated workforce over the next decade and an inability to meet local industry demands.ⁱ

Early College programs, in which high school students take college courses that offer credit toward a high school diploma and the college degree, present a scalable education model that meets the needs of historically underserved young people by leveraging the assets of our state's higher education system. These programs ultimately reduce the time and cost of degree completion while giving young people the confidence to succeed in college.

The Early College Worcester program, a strong partnership between the Worcester Public Schools, Worcester State University, and Quinsigamond Community College, makes Worcester a leader in the state in Early College programming. Despite the local successes with Early College programming, Massachusetts lacks a sustainable mechanism to sustain and expand Early College programming.

Early College as a Best Practice

A structured academic program with critical supports to increase college success and career readiness, Early College is a sound educational strategy to boost post-secondary completion rates while reducing inequities within those rates. Students can take carefully sequenced college courses with strong career orientations during the school day at no cost to them or their families.

For twenty years, states across the U.S. have fostered partnerships between high school and colleges to develop Early College programs to build bridges and break down their siloed systems. Gold-standard evaluations in some of the pioneering states reveal that Early College works, particularly for economically disadvantaged students who, if enrolled in these programs, are *twice as likely* as their peers to complete post-secondary degrees.ⁱⁱ Early College differs from traditional dual enrollment programs by providing enhanced advising, prescribed course

selection , and in some case mentoring. These additional features address important barriers faced by economically disadvantaged students. Specifically,

- ➔ Early College helps to identify any academic gaps before a student enrolls in college and potentially uses prized Pell grants for remedial classes.
- ➔ Students receiving advising that increases students' chances of entering programs that prepare them for high-demand jobs with competitive salaries.
- ➔ The free credits reduce the financial hurdle of college and have the potential to give students credentials to pursue jobs that have higher pay while they pursue their post-secondary degree.
- ➔ To reach underrepresented students, Early College programs admit applicants using alternative measures from traditional higher education. Instead of looking solely at standardized test scores, programs look at multiple measures like GPA, attendance, and recommendations.ⁱⁱⁱ

The five design principles recommended by Parthenon for successful Early College programs are: equitable access, guided academic pathway, enhanced student support, relevant connection to career, and deep partnerships^{iv}. Massachusetts has created a formal designation for high quality Early College programs using these 5 design criteria. In this way, Early College programs

*Students of color who attend Early College High Schools are nearly **ten times more likely** to obtain a college degree than students of color who attend traditional high schools.*

go beyond just academics. Students also receive guidance and academic advice to ensure their success in their coursework and within the university environment. The assistance embedded in Early College sets this model apart from dual enrollment programs which focus exclusively on credit attainment. A recent study from Texas showed that traditional dual enrollment

programs tend to better support high achieving students. The study also indicated ^v that disadvantaged students may be worse off if they enroll in dual enrollment programs without adequate advising and support. ^{vi}

Ensuring Access to Early College is Equitable

While Massachusetts is a national leader in educational achievement, we also have some of the greatest educational inequities in the nation. Early College programs demonstrate the ability to serve the needs of all students – the historically underserved, accelerated learners, those interested in pursuing a subject more deeply, or honing a particular skill. According to research by American University, Early College can double Associate degree attainment and significantly boost four-year completion rates, yielding broad economic benefits. Early College

programming is evidence-based and scalable, with the potential to also strengthen higher education institutions and our Commonwealth overall through a more equitable representation of students graduating.

The Rennie Center for Education Research & Policy's 2019 report, *Early College Blueprint: A Guide to Getting Started with Early College in Massachusetts*, outlines key practices to ensure "programs provide students of color, low-income students, English learners, first-generation college students, and students with disabilities exposure to the instructional rigor, habits of mind, campus experience, and robust supports that will allow them to persist through college graduation". The table below includes the recommendations from the Rennie Center's report on ensuring Early College programs are equitable:

Program is offered within school hours and at no cost to participants

- School district/ institution of higher education covers costs of tuition, fees, textbooks, and transportation
- Early college courses occur during typical school hours
- Courses take place on a college campus

Recruitment is culturally relevant and focuses on students underrepresented in higher education

- Focus recruitment on students of color, low-income students, English language learners, first-generation college students, and students with disabilities
- Ensure recruitment strategies are culturally relevant
- Inform students and families of targeted supports designed to meet the needs of English learners and students with disabilities
- Provide recruitment materials in multiple languages
- Provide professional development for program leaders and faculty on eliminating implicit or unintended bias in student selection
- Base eligibility for college courses on multiple measures of readiness (no minimum GPA)
- Provide direct outreach to all students interested in early college (measured by survey or other methods)
- Partner with guidance counselors to identify students and conduct targeted outreach
- Offer college courses at every level including remedial, foundational, and advanced
- Provide academic English as a Second Language (ESL) classes to prepare English language learners for academic content courses

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Learning from Other States

Many states invest heavily in Early College. North Carolina and Texas are leaders in funding as well as the level of effort they have made to ensure the investment is used to have the greatest impact for disadvantaged students.

North Carolina

In addition to Early College high schools that serve more than 15,000 students across 75 Early College High Schools (ECHS), North Carolina has over 90 Cooperative Innovative High Schools (CIHS) that support Early College programs. CIHSs are small public high schools, often located on the campus of a university or community college, that expand students' opportunities for education success through high quality instructional programming. The program caps grade enrollment at 100 students to ensure that they can offer smaller classes and usually focus on students struggling in a traditional environment. The goal of ECHSs and CIHSs is that students graduate high school with an Associate's degree and/or two years of transferable college credits. North Carolina's Early College model is "stand-alone" with each district managing partnerships with local community colleges and state universities. Between the CIHS grants and the tuition reimbursement for students enrolled in early college, North Carolina's investment in early college is roughly \$3,300 per student.^{viii}

Texas

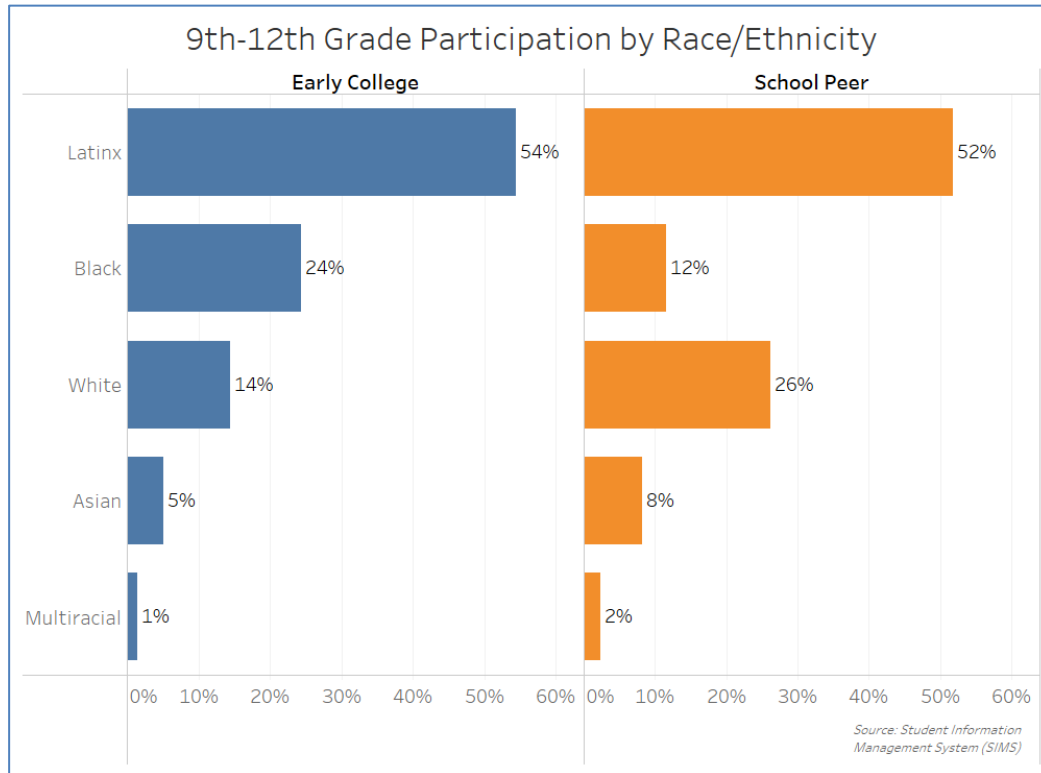
Texas' substantial state funding allowed Early College programs to explode in in 2004 with both colleges and high schools receiving funding for dual-credit instruction. Now Texas has 200 Early College High Schools and serves roughly 70,000 students^{ix}. Early College High Schools must follow six design standards outlined by the state: 1) target population, 2) partnership agreement, 3) leadership initiative, 4) curriculum and support, 5) academic rigor and readiness, and 6) school design. Texas' programs must intentionally serve historically underserved students, particularly those who are underrepresented in higher education, include personalized supports, and offer a course of study that allows students the opportunity to earn a high school diploma and an associate's degree, or 60 hours of credit towards a Bachelor's degree in order to receive state funding^x. Unlike North Carolina whose ECHS are stand alone programs, Texas ECHS are designated by the state and required to meet outcome measurements that indicate access, achievement, and attainment.

Local Context

Massachusetts has done the research and laid a strong foundation for Early College success and scale. To date, twenty-three programs involving 37 high schools and 19 higher education institutions have been designated by the state as Early College sites. Moreover, nearly two-thirds of students enrolled in 2020 are Black or Latinx, and 45% of students enrolled in 2020 are economically disadvantaged. More than 4,000 students are benefitting from Early College today and Early College graduates are attending college at a rate that is 20 percentage points higher than their state and school peers.

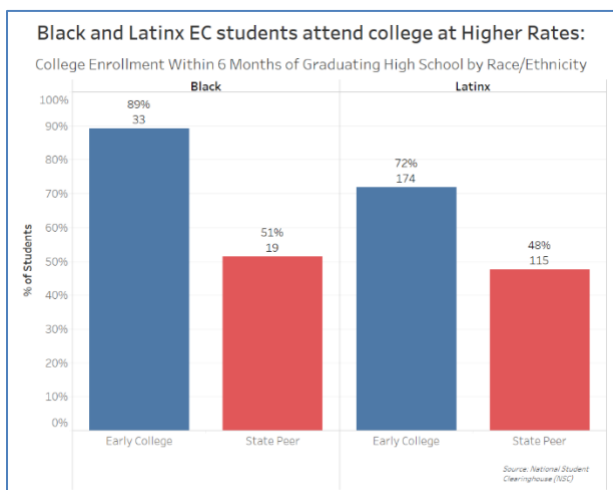
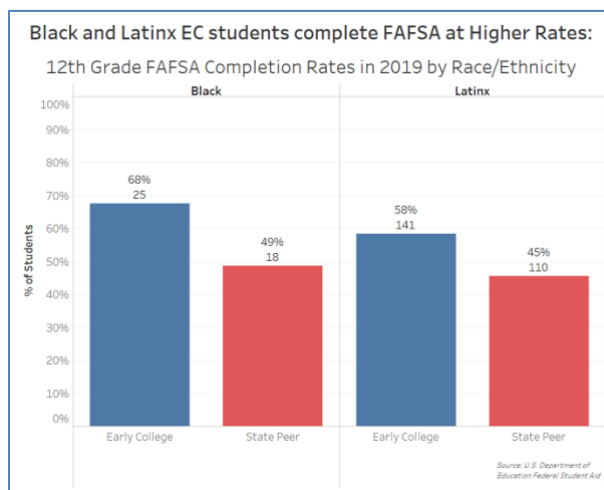
Early College as a Solution to Equity Gap

Early outcomes data released in August 2020 indicate that Early College offers a strong solution to Massachusetts' equity gaps in post-secondary education. Addressing one of the central goals of the program, the majority of Early College students in 2019 were students of color^{xi}.



Source: Department of Elementary and Secondary Education

Among the most notable outcomes, students enrolled in Early College were more likely to earn college credits in high school, more likely to complete financial aid applications, and more likely to enroll in college than their peers.

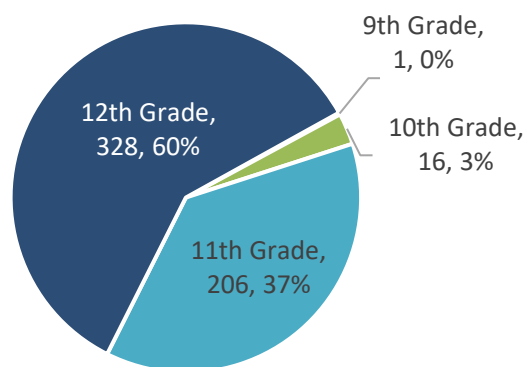


Source: Department of Elementary and Secondary Education

Early College Worcester

Worcester is leading the Commonwealth in Early College efforts, boasting 25% of the state's total student enrollment in Early College programming. The Worcester Public Schools are partnering with Quinsigamond Community College and Worcester State University to offer a wide array of classes and pathways to their students. Worcester is also the only large district in that state to offer Early College across all its high schools. Worcester's Early College Program has a total of 825 students enrolled in the program for the 2020-21 academic year, with 110 students taking classes this past summer, 300 students taking classes in the fall and 342 students currently enrolled in spring classes at either WSU or QCC.

Worcester Enrollment in Early College by Grade 2019-20



The **Early College Worcester** program allows students to earn 12 free college credits, enroll in college prep workshops and bootcamps, and receive mentoring supports. College courses are offered during the Fall, Spring, and Summer sessions at Quinsigamond Community College and at Worcester State University.

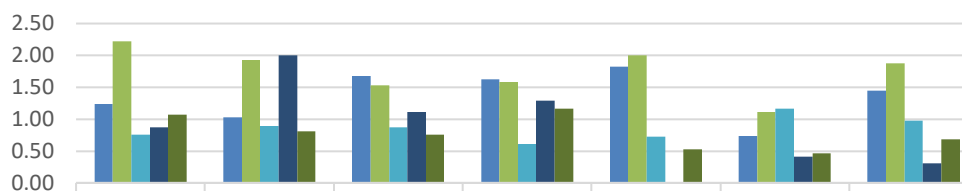
Current Career Pathways Offered:

- | | |
|--------------------------------------|---------------------------------------|
| ✓ Advanced Manufacturing | ✓ Engineering & Biotechnology |
| ✓ Computer & Information Technology | ✓ Hospitality & Recreation Management |
| ✓ Healthcare/Nurse Education Pathway | ✓ Criminal Justice |
| ✓ Elementary Education Transfer | |

Early College enrollment also represents the diversity of the district with students of color making up 71% of currently enrolled students in the 2020-21 academic year. When looking at racial parity of school enrollment compared to enrollment in Early College Worcester, we see an overrepresentation of African American and Asian students contrasting an underrepresentation of Latinx, Multi-Racial, and White students enrolled in most of the high schools. The figure below shows the racial parity ratio comparing school enrollment by race to enrollment in Early College.^{xii} A ratio of 1.00 represents parity between Early College and general enrollment.

Racial Parity in Early College Enrollment by School 2019-2020

■ African American ■ Asian ■ Latinx ■ Multi-Racial, Non-Latinx ■ White



	Burncoat	Claremont Academy	Doherty	North	South	University Pk Campus School	Worcester Technical
African American	1.24	1.03	1.68	1.62	1.82	0.74	1.45
Asian	2.22	1.93	1.53	1.58	2.00	1.12	1.88
Latinx	0.75	0.89	0.87	0.61	0.73	1.17	0.98
Multi-Racial, Non-Latinx	0.87	2.00	1.11	1.29	0.00	0.41	0.30
White	1.07	0.81	0.76	1.17	0.52	0.47	0.68

When looking at English learner enrollment, 21% of Burncoat High's Early College students are English learners, closely matching their English learning student body enrollment of 24.7%. The other high schools, however, have much less parity between the English learner Early College enrollment and student enrollment with almost half the percentage of English learners enrolled in Early College. A best practice to support high school students learning to speak English is by enrolling them in a college level language course simultaneously with college-level English.

100 Males to College

Now in its fifth year of operation, 100 Males to College Worcester is a program designed to prepare 100 historically underrepresented young men for post-secondary education through mentoring, dual enrollment, remediation, wrap-around services, and more. The overall project framework is anchored in strengthening young people through a positive youth development model that embraces culture, identity and community. Although 100 Males to College began implementation before Early College Worcester, it has been integrated well into Worcester's Early College program. Students who are in Early College, for instance, can complete Early College credits through 100 Males to College while also benefiting from the distinctive approach of 100 Males to College. The coordinating body for both 100 Males to College and Early College is comprised of committed individuals from Worcester State University, Quinsigamond Community College, and the Worcester Public Schools.

Research shows male students are three to five times as likely as their female peers to drop out of college in their first year. What sets 100 Males to College apart from Early College Worcester is that it is programmatically driven and designed with the specific goal to prepare under-

represented, under-served, low-income, and first-generation college students for the challenges faced during year one of college while offering, optional, 12 college credits at Worcester State University or Quinsigamond Community college.

During the 2019-2020 academic year, 87 students were enrolled in the 100 MTC Worcester program. Students were 43.7% seniors, 56.3% juniors, 10.3% white, 47.1% Latinx, 32.3% Black, 9.2% Asian, 1.1% American Indian, and 56.8% first-generation.

A significant aspect of this program is that it creates a cohort of young men, which turn into a supportive brotherhood with emotional bonds that continue past the program.

85 of the students in 100 Males to College enrolled in dual enrollment courses and 75 (88%) of them completed the course(s). 100% of the completers finished with a passing grade.

A Worthwhile Investment

No other program to increase college participation yields this large a return on public investment. A study by MassInc shows that for each dollar of spending, Early College generates six dollars of public benefits and nine dollars of private benefits.^{xiii} The American Research Institute found that, over 4 years, Early Colleges cost about \$3,800 more per student than traditional high schools however, an estimated return on that investment was about \$33,709 in increased lifetime earnings for each student^{xiv}.

Currently, Massachusetts lacks a funding mechanism to sustain and expand Early College programming. Advocates have proposed an increase of \$2.25 million for Concurrent and Dual Enrollment Programs and \$500,000 for an Early College line item. The Student Opportunities Act, passed in 2019, adds significant new funding for K-12 districts with concentrated high needs and whose students are particularly well-suited for Early College. However, there is no reliable funding mechanism for public higher education institutions struggling to assume their share of the associated costs. To leverage the investment of Student Opportunity Act funds and to continue the growth of Early College program, predictable funding is needed for our public colleges and universities to sustain this work.

Early College is a creative approach to rigorous teaching and learning that provides significant opportunities to high school students, addresses issue of equity, and leverages the unique assets of the Commonwealth's system of higher education. A sound, reliable mechanism for its sustainability and expansion deserves close consideration by our elected officials and citizens statewide.

End Notes

- ⁱ Ben Forman. "Drafting an Action Plan for Early College Expansion Discussion Paper." (Boston, Massachusetts: MassINC, November 6, 2019).
- ⁱⁱ "The impact, Costs, and Benefits to NC's Early College Model". (Greensboro, NC: UNC SERVE Center).
- ⁱⁱⁱ Ben Forman. "Investing in Early College: Our Most Promising Pathway." (Boston, Massachusetts: MassINC, June 10, 2019).
- ^{iv} Kasia Lundy and Chris Librizzi. "Breaking down silos to put students on the path to success: The promise of early college in Massachusetts". (Parthenon-EY Education Practice, December 2016)
- ^v Andrea Berger, Lori Turk-Bicakci, Michael Gare, Joel Knudson, and Gur Hoshen. "Early College, Continued Success: Early College High School Initiative Impact Study". (Washington, DC: American Institutes for Research, January 2014).
- ^{vi} Trey Miller and others. "Dual Credit Education Programs in Texas: Phase II." (Washington, DC: American Institutes for Research, 2018).
- ^{vii} Rennie Center for Education Research & Policy. "Early College Blueprint: A Guide to Getting Started with Early College in Massachusetts." (Boston, Massachusetts: Rennie Center for Education Research & Policy, September 2019).
- ^{viii} "Report to the North Carolina General Assembly: Career and College Promise." (Public Schools of North Carolina, March 2019).
- ^{ix} Aaron Henricksen. "Texas Education Agency: Summary of Recommendations" (Austin, TX: Legislative Budget Board, February 6, 2019).
- ^x Trey Miller and others. "Dual Credit Education in Texas: Interim Report." (Santa Monica, CA: RAND, 2017).
- ^{xi} Pierre Lucien. "Massachusetts Early College Preliminary Outcomes." (Boston, MA: Massachusetts Department of Elementary and Secondary Education, 2020).
- ^{xii} Department of Elementary and Secondary Education
- ^{xiii} Ben Forman. "Investing in Early College: Our Most Promising Pathway." (Boston, Massachusetts: MassINC, June 10, 2019).
- ^{xiv} Drew Atchison, Kristina Zeiser, Salma Mohammed, David Knight, and Jesse D. Levin. "The Costs and Benefits of Early College High Schools". (Washington, DC: American Institutes for Research, University of Washington, December 2019).

About the Worcester Education Collaborative

WEC is an independent organization working to ensure that students in the Worcester Public Schools are given the opportunity to succeed at the highest possible level and to acquire the skills and knowledge to master the challenges of the 21st century. WEC is committed to supporting, facilitating, and developing a wide variety of partnerships among families, schools, organizations, and businesses that will both enhance the quality of public education in Worcester and the quality of our common life. As a non-profit education fund, WEC's independent voice speaks for the children and for the community to create a system of effective schools in which every child is prepared for success in college, career, and life.

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