

The Impact of Early College

Agenda

- I. Brief overview of Early College program
- II. Executive summary of findings from analysis
- III. Matching methodology used to identify comparison group
- IV. Balance between Early College and matched comparison group
- V. Limitations of the use of this particular match
- VI. Estimated effects of Early College Participation in Massachusetts
- VII. Estimated effects of other college prep programs in high school
- VIII. Estimated effects of Early College on second year persistence
- IX. Variation in college enrollment at Early College high schools

Overview of Early College Program

What is Early College?

- Simultaneous enrollment in high school and college courses to reduce the time and expense of earning a post-secondary credential while increasing the likelihood of completion

Guiding Principles:

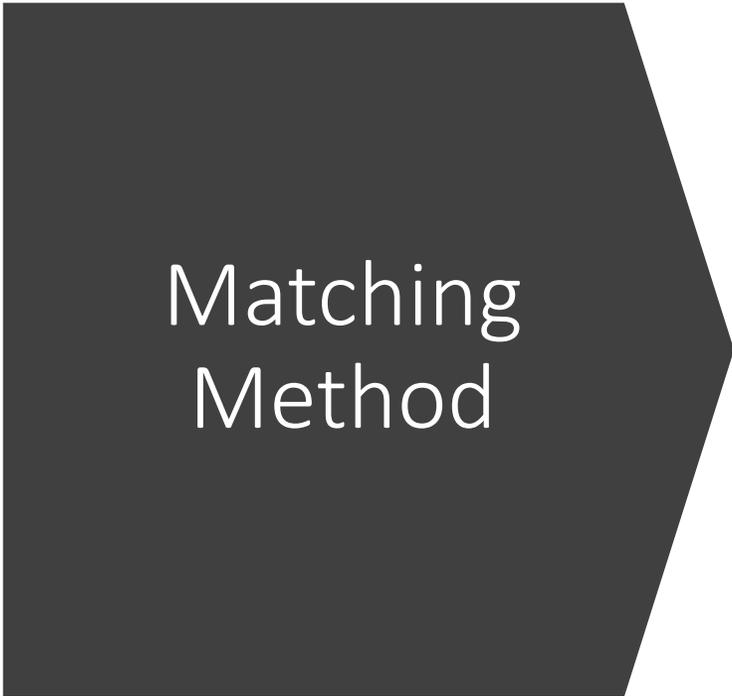
- Equitable Access
- Connections to Career
- Academic Pathways
- High Quality Partnerships
- Robust Student Support

Quick Facts:

- 51 high schools (2022-23)
- 24 colleges or universities (2022-23)
- 4,281 students (2021-22)
- ~30,000 college credits earned (2021-22)

Executive Summary

- Early College participants in 12th grade immediately enrolled in college at higher rates than similar non-participating students from 2019-2021
- Positive differences remain when looking at economically disadvantaged students as well as Black and Latinx students
- Early college graduates who enrolled in college also persisted to a second year in college at higher rates than similar non-participating students
- There is great variation in the rates of immediate college enrollment by designated high school



Matching Method

Data Sources:

- Student Information Management System (SIMS)
- Massachusetts Comprehensive Assessment System (MCAS)
- National Student Clearinghouse (NSC)
- Free Application for Federal Student Aid (FAFSA)

Methodology:

- Match EC participants with students of similar demographics within same range of test scores from similar high schools
- Matches are students whose observable characteristics suggest they have a similar likelihood of participating but did not

Definitions:

- Early College- 12th grade program participants from 2019, 2020, & 2021
- State Match- matched group from propensity scores with similar demographics and similar test scores from similar schools

Balance Between Comparison Groups

	Early College	State Match
Number of 12th Graders	2579	2580
Asian	9%	7%
Black	13%	13%
Latinx	45%	48%
White	29%	29%
Female	63%	62%
Economically Disadvantaged	44%	45%
Student with a Disability	4%	5%
Proficient or Meeting Expectations in ELA	68%	66%
Proficient or Meeting Expectations in Math	56%	54%
Advanced or Exceeding Expectations in ELA	14%	13%
Advanced or Exceeding Expectations in Math	20%	18%
Attend a school that is majority Black or Latinx	67%	70%
Attend a school that is majority economically disadvantaged	56%	55%



Limitations of this Match

Internal Validity:

- We do not know if there are systematic differences between participants and matched group on unobservable characteristics
 - Parental Involvement
 - Individual Motivation

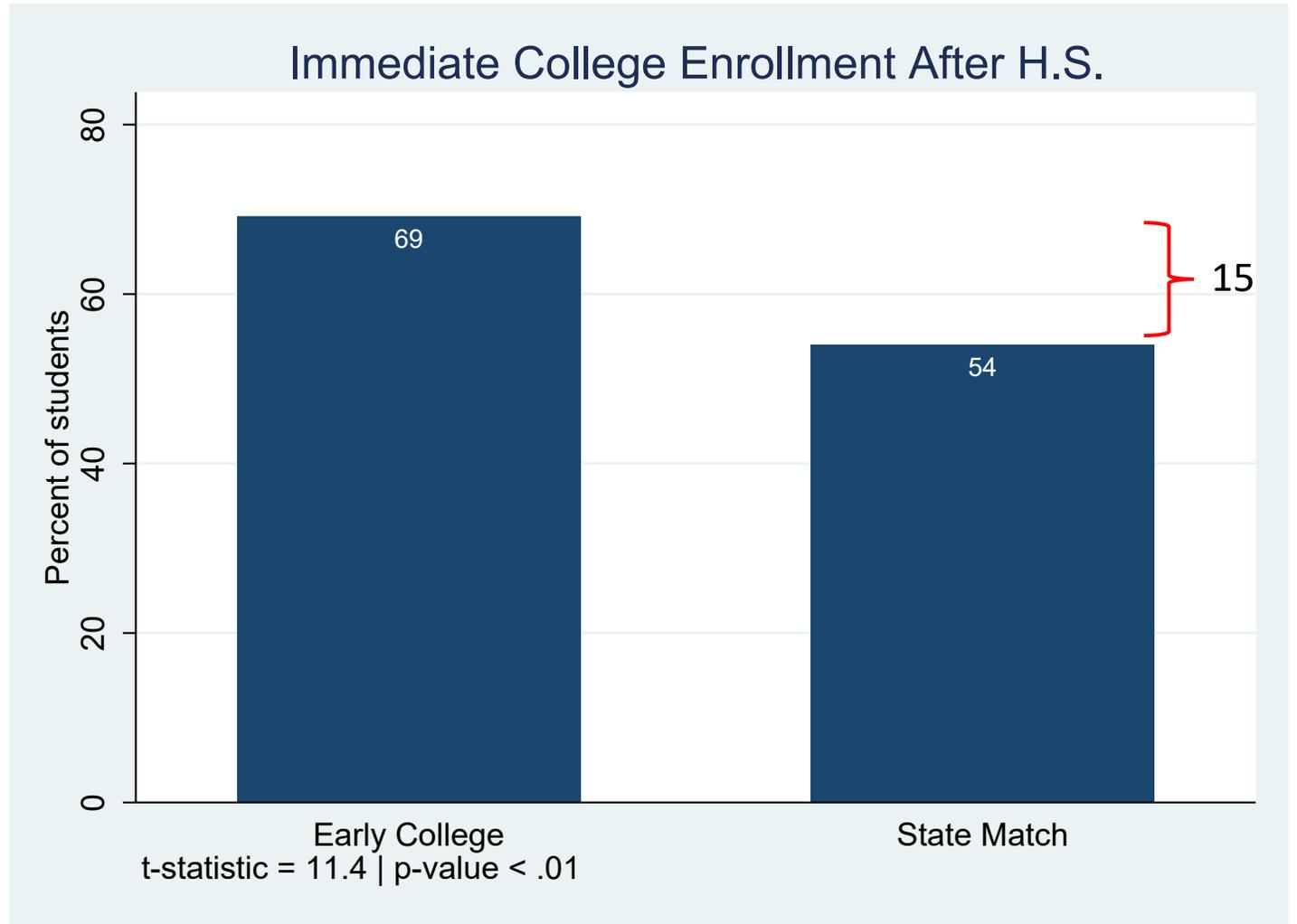
External Validity:

- Estimated effects apply directly to participants and matched comparison group included in the study for 2019, 2020, and 2021 but do not extrapolate beyond
 - Non-included students
 - Future years

Accountability:

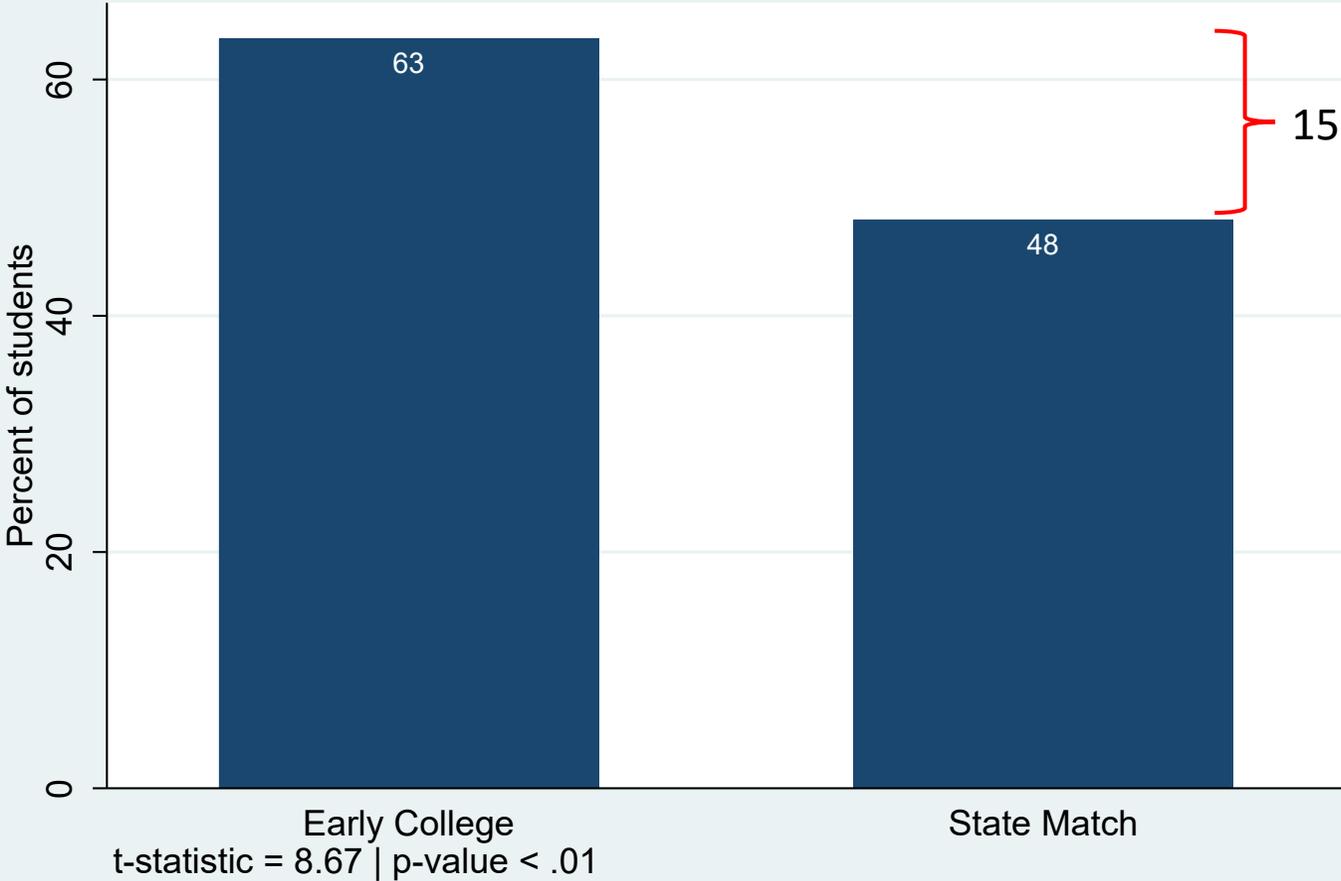
- This match was neither designed for school-to-school comparisons nor to hold individual schools or districts accountable
 - Data were pooled, so estimates are aggregated effects and do not apply to any individual school or district

Estimated Effects
of Program
Participation on
College
Enrollment

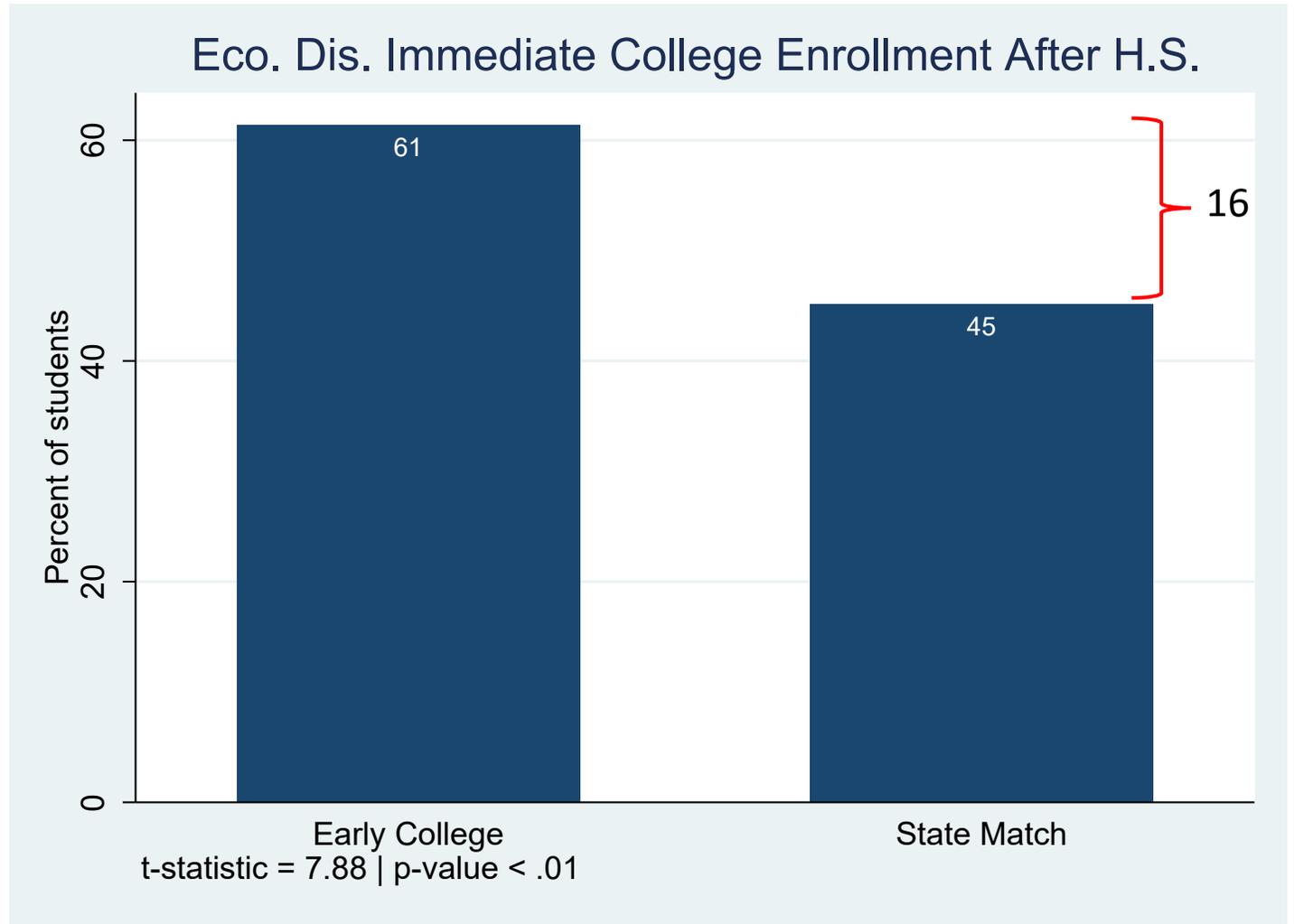


Estimated Effects on Black and Latinx Students

Black/Latinx Immediate College Enrollment After H.S.



Estimated Effects on Economically Disadvantaged Students

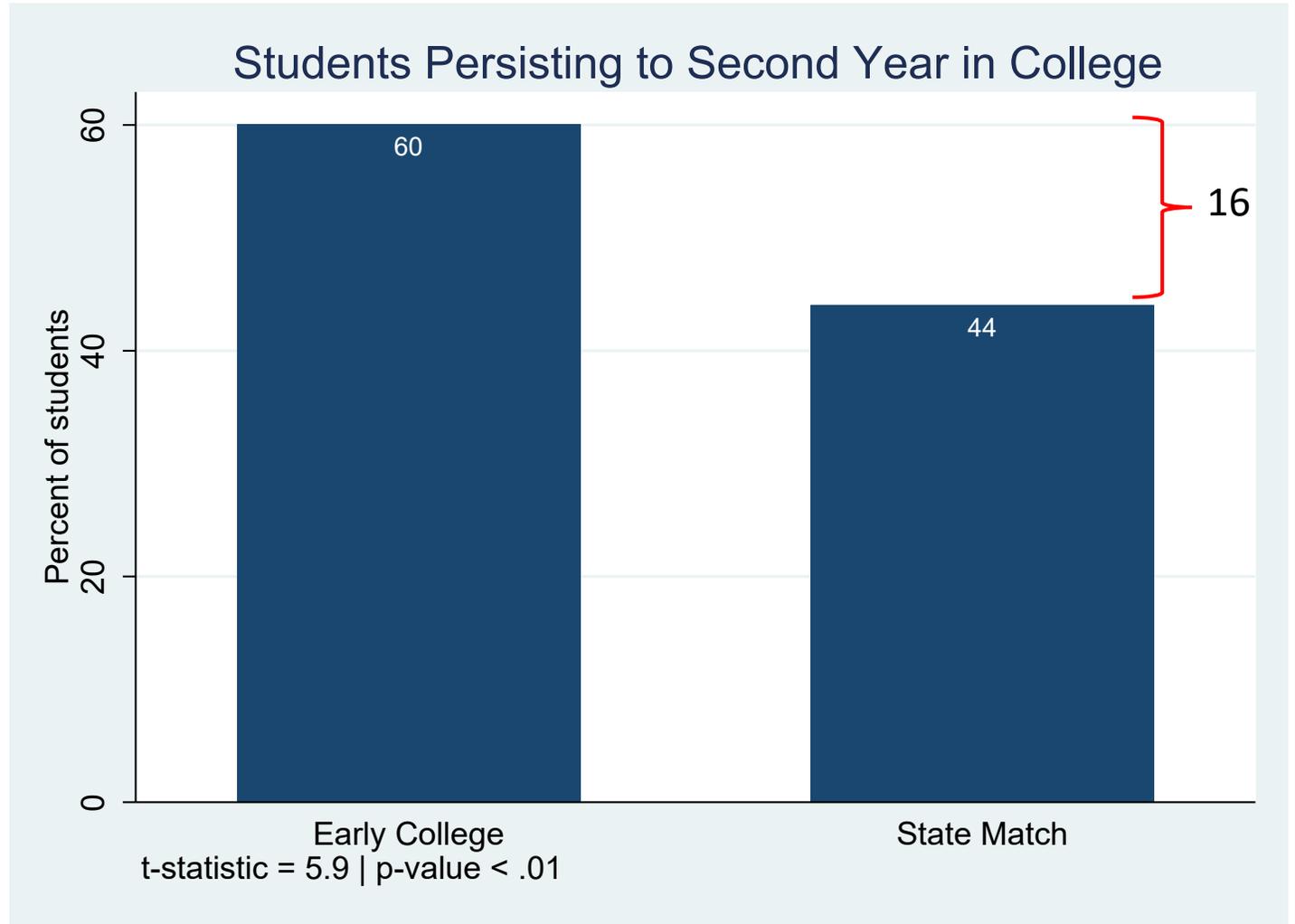


Estimated
Effects of
Other College
Prep Programs
on College
Enrollment

Results from a brief review of relevant literature:

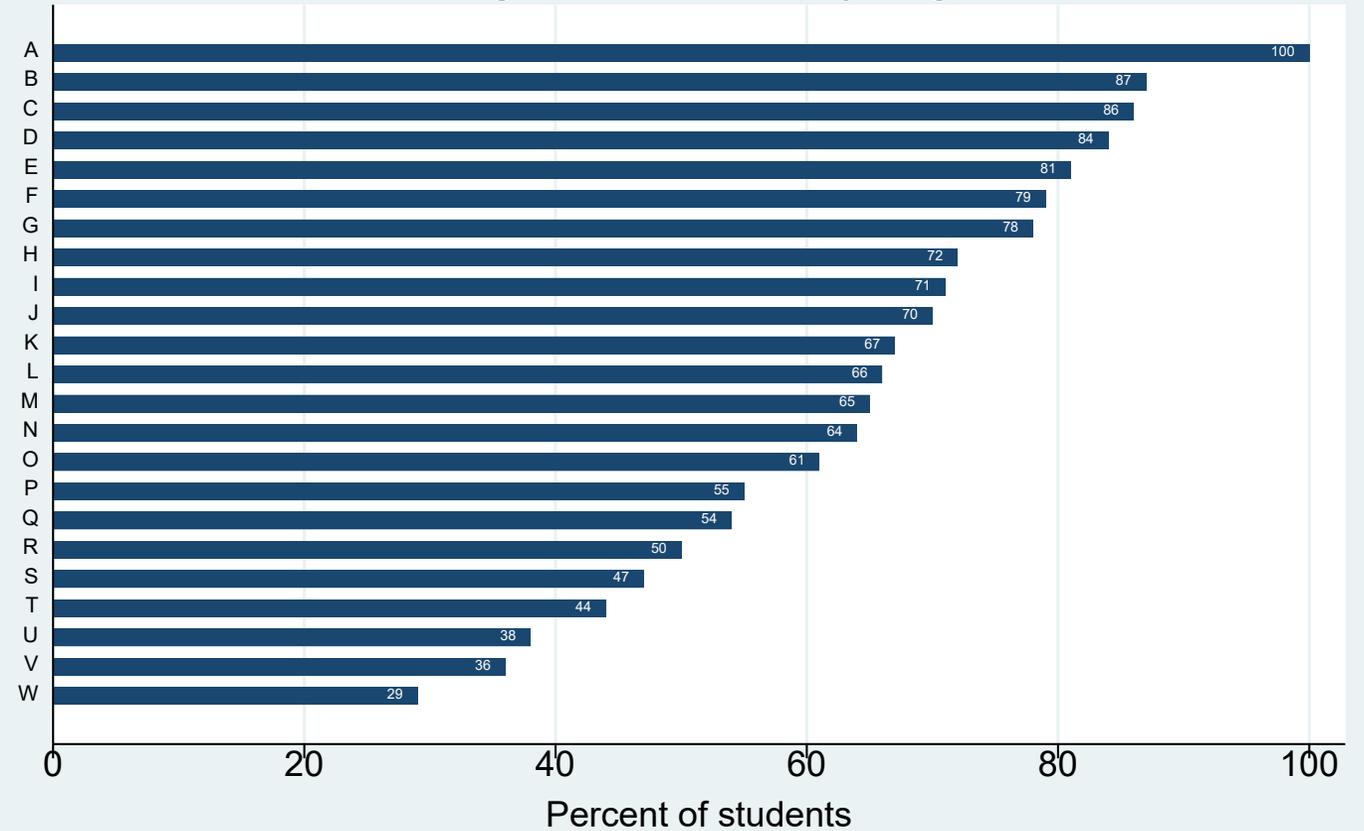
- 7 Comprehensive college preparation programs across various states and regions
- Have Tier 2/moderate evidence according to US Department of Education
- Unable to make direct comparisons due to variant features of programs
- Effect sizes ranging from 0 to 18 percentage points suggest that MAEC is among those making an impact

Estimated Effects
of Program
Participation on
2nd Year
Persistence



There is Great
Variation in
College
Enrollment
by EC School

EC Students' College Enrollment by High School in 2021



*Many schools excluded from graph due to suppression rules