



The Long-term Impact of NMSI's College Readiness Program

WHITE PAPER

2022 UPDATE



NATIONAL
MATH + SCIENCE
INITIATIVE

Transforming Math + Science Education

nms.org

A SHARED VISION FOR COLLEGE READINESS

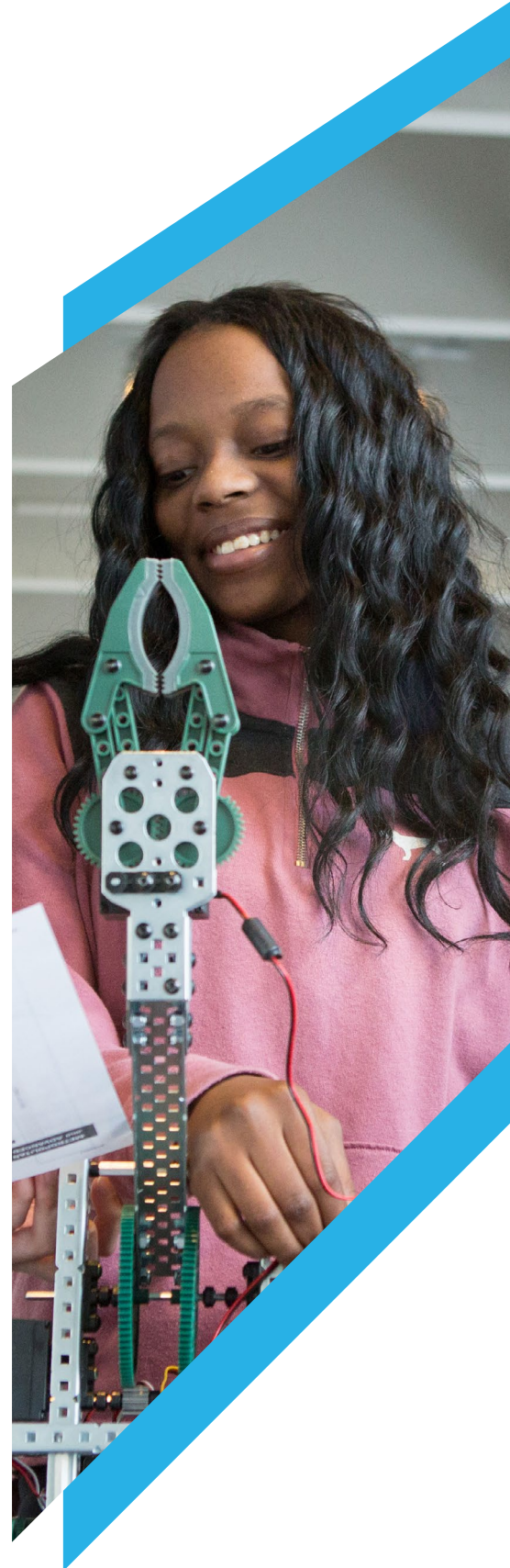
STEM education is widely recognized as mission-critical for preparing students for success in postsecondary education and in their future careers. In fact, the U.S. Department of Education is committed to making the country a global leader in STEM literacy, innovation and employment.

Despite a clear and shared vision for STEM education, [recent ACT score data](#) indicate a decline in students who are interested in pursuing a STEM-related major - especially students from underserved groups. It's obvious that there's more work to be done.

At the [National Math and Science Initiative](#), we believe STEM education is the greatest lever to unlock student potential, and help every learner achieve success in both college and career.

NMSI views Advanced Placement® courses as a primary vehicle for including high school [students of all backgrounds](#) in high-quality STEM education and promoting college readiness. We put this belief into action through our [College Readiness Program](#).

In this white paper, you'll find evidence of the real-world, long-term impact and outcomes of the College Readiness Program. Continue reading to learn how NMSI is making a measurable difference for students, teachers and schools across the country.





PROGRAM OVERVIEW

The College Readiness Program is a multi-year program that provides teacher, student, and school supports to promote high school students' success in rigorous, college-level courses, particularly in STEM subjects. The goals are to ensure equitable access and achievement based on community populations. It's based on the premise that all students can master rigorous AP coursework with the right supports in place.

Through the College Readiness Program, schools receive:



Teacher training and mentoring



Additional instructional time for students outside the classroom



Instructional resources



Financial recognition for educators and scholarships for students engaged in the work



Funding for purchasing equipment and supplies

OUTCOMES AND IMPACTS

NMSI grounds its effectiveness in the measurable outcomes we achieve for educators and students. The impact of each program is regularly studied and measured across our partnering school systems, using independent, evidenced-based practices.

To judge the long-term impact of the College Readiness Program, we compared College Board data for students enrolled in NMSI programs against national averages provided by the National Student Clearinghouse between 2015-2021. Here's what we found.

[View our methods of measurements on page 11](#)

1

Schools participating in CRP expand opportunities and outcomes for students

- NMSI consistently increases or maintains high AP course enrollment from non-white students, females, and students experiencing poverty
- The percentage of NMSI students earning qualifying scores has increased more quickly than their peers across the country

2

Students enrolled in schools where teachers participate in NMSI's College Readiness Program are more likely to attend, persist in, and earn degrees from postsecondary institutions than those not impacted by CRP

- Greater percentages of NMSI students attend postsecondary institutions compare to national averages, especially four-year institutions
- NMSI students are much more likely to persist in their postsecondary education compare to the national average
- NMSI students are more likely to earn postsecondary degrees compare to national averages

3

NMSI students are dramatically more likely to earn STEM degrees than the national average

4

NMSI students, in all targeted demographic groups (Black, Latino, Female, FRL qualified), see strong long-term outcomes

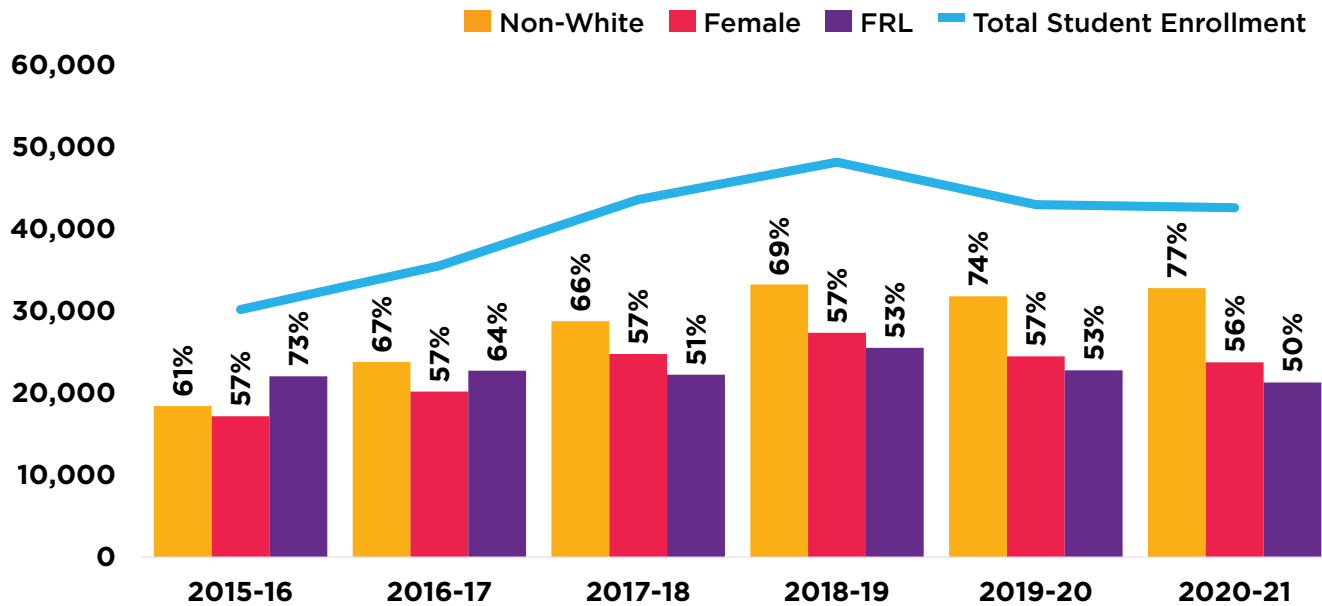
A CLOSER LOOK

We believe STEM education provides critical skills students need to excel in academia and postsecondary life. In this section, we illustrate CRP's impact by breaking down the data around schools participating in CRP and NMSI students in postsecondary education.



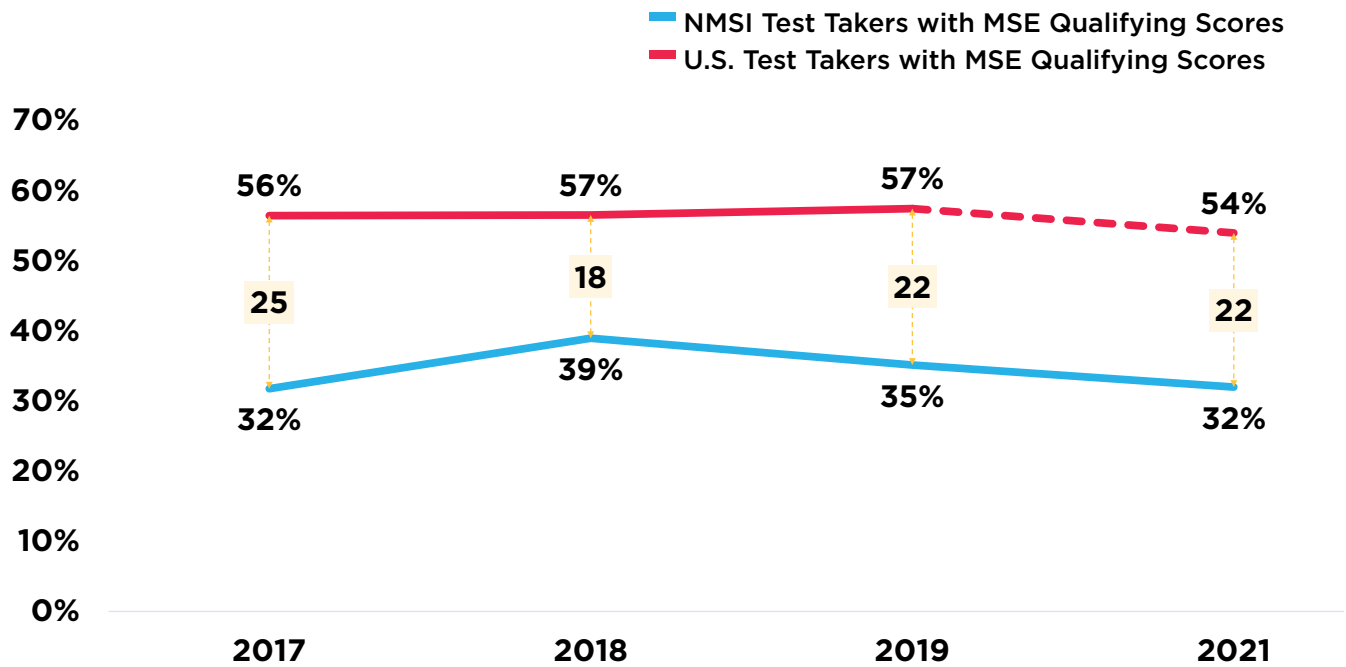
NMSI Student AP Enrollment

Since 2015, AP enrollment from NMSI students who identify as non-white has increased, and there's steady participation among female students and students who qualify for free or reduced-price lunch.



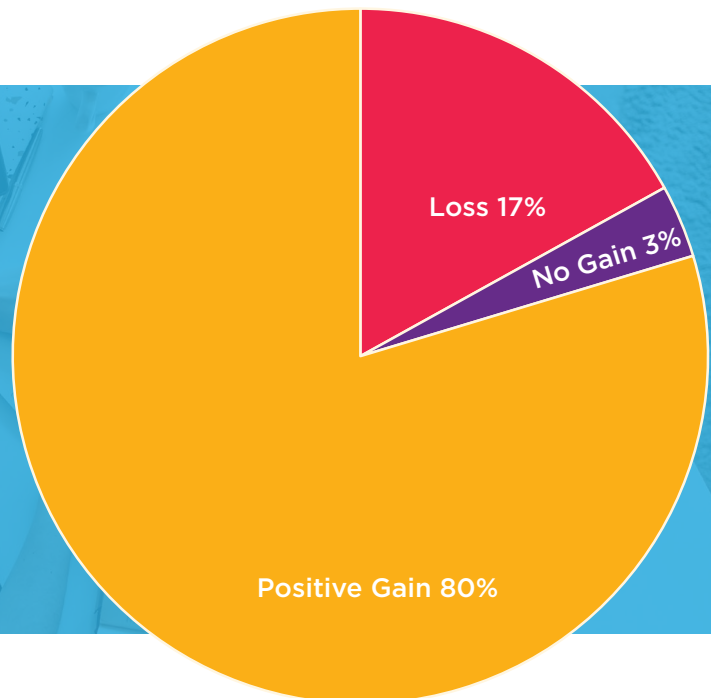
Math, Science, and English Test Takers Earning Qualifying Scores on AP Exams Over Time | All U.S. Students vs. NMSI Students

Over the past four years, the percentage of NMSI students earning qualifying scores follows the same pattern as all U.S. student AP test-takers. However, the rate of NMSI students earning qualifying scores has increased more quickly than their peers across the country.



School Level Performance Over Three Years

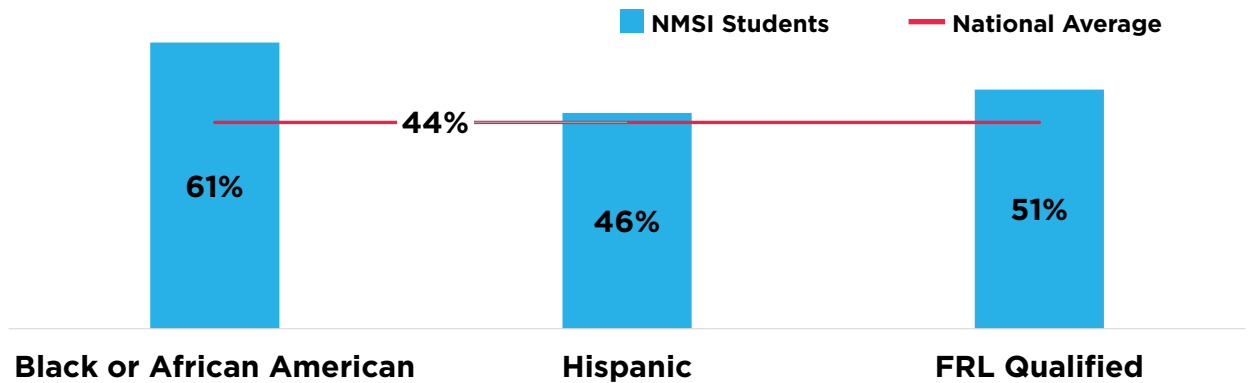
Eighty percent of Cohort 11 schools demonstrated positive gains of any size from baseline to year 3 in the percent of Qualifying Scores earned



Postsecondary Findings: Enroll, Persist and Earning a Degree

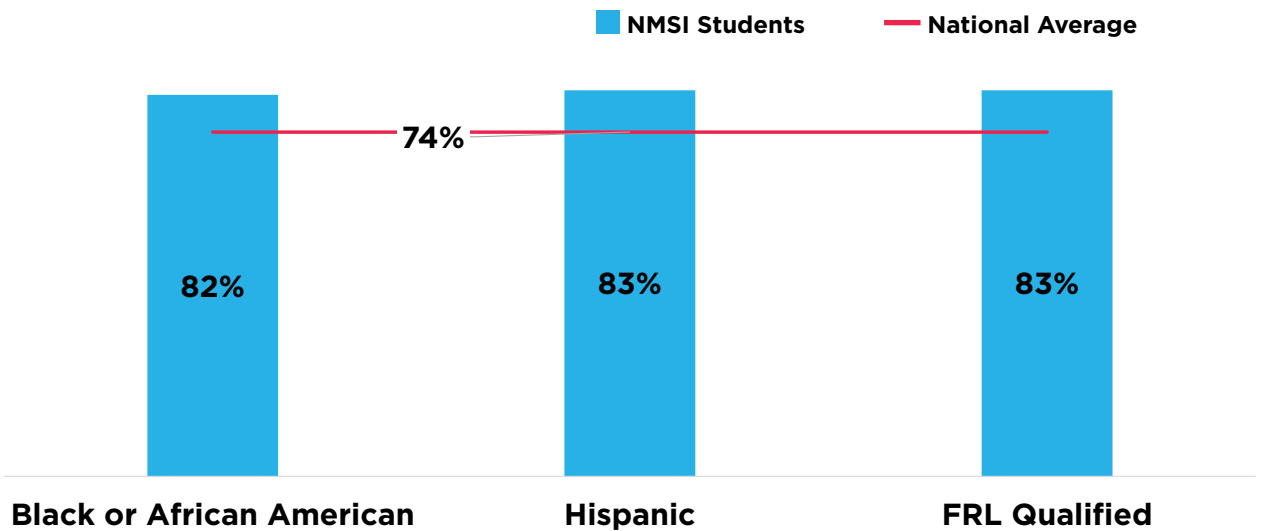
ENROLL

- ▶ 73% of NMSI students attended any postsecondary institution, exceeding the national average
- ▶ 57% of NMSI students attended four-year institutions, 25% more than non-NMSI students
- ▶ Black, Hispanic and FRL Qualified NMSI Students attend four-year schools at higher rates than the national average



PERSIST

- ▶ NMSI students are far more likely to **persist** in postsecondary institutions than the national average of 74%
- ▶ Black, Hispanic and FRL Qualified NMSI Students persist in postsecondary institutions at higher rates than the national average



EARNING A DEGREE

► NMSI students **earn** degrees at higher rates than the national average

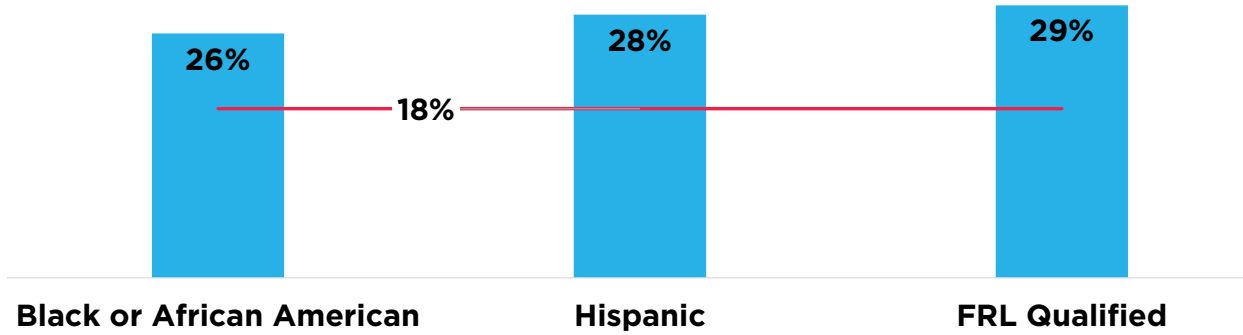
High school graduation year in Spring	NMSI students enrolled in college	% of NMSI students earning a degree	The national average % of students earning a degree
2015	78.30%	60.80% within 6 years	54.80% within 6 years
2016	76.10%	52.90% within 4 years	41% within 4 years
2017	76.80%	43.10% within 4 years	41% within 4 years

► Across all racial and ethnic groups, NMSI students earn postsecondary degrees at higher rates than the national six-year averages

Race/Ethnicity	Enrolled	Earned Degree	National Average (6 years)
Asian, Asian American	83.60%	72.50%	71.70%
Black or African American	83.80%	51.60%	45.90%
Hispanic	72.10%	57.20%	55.00%
White	83.10%	72.10%	67.20%
Grand Total	78.60%	62.10%	54.80%

STEM DEGREE

- ▶ NMSI students **earn STEM degrees** at higher rates than the national average
- ▶ Black, Hispanic, and FRL Qualified NMSI Students earn STEM degrees at higher rates than the national average



NMSI remains focused on supporting the students we serve. We continue to see strong long-term outcomes for Black, Latino, female, and FRL qualified-connected students who learn from teachers that participate in NMSI's College Readiness Program

NMSI is meeting its mission by consistently serving students furthest from opportunity, ensuring that they earn credits in advanced level high school courses; attend, persist in, and earn degrees from postsecondary institutions; and complete their degrees in a STEM field



For more research findings and analysis, [download our guide book](#)

ADVANCE STEM EDUCATION, EMPOWER CHANGE

Helping every student achieve success is no small feat – but NMSI is here to help. Through our College Readiness Program, we offer extensive supports for schools, teachers and students, including training, after-hours instruction and financial incentives.

By working together, we've shown that we can help level the playing field for students of all backgrounds by engaging them in high-quality STEM education, promoting college readiness, and ultimately, helping them thrive in college and beyond.

To learn more about NMSI and how we support rigorous STEM learning for all students, visit the [College Readiness Program](#) page on our website.

[Bring NMSI to my schools](#)





METHODS OF MEASUREMENT

National Student Clearinghouse Data

All NMSI CRP students enrolled in 12th grade between Spring 2015 and Spring 2021, inclusive of students graduating in 2021

Outcomes explored

- Postsecondary Enrollment Rates
81,947 students
- Postsecondary Persistence Rates
47,258 students
- Degree Completion Rates
17,881 students
- Total Degrees Completed (looking at STEM)
9,507 students

NMSI Roster and College Board Data

All students enrolled in NMSI-supported Advanced Placement courses taught by teachers, engaged with the College Readiness Program

Outcomes explored

- Student AP Course Enrollment
- Student AP Exam Participation
- Student AP Exam Performance
- School-level AP Exam Performance

All data disaggregated by race, gender, military-connected status, and free or reduced-price lunch (FRL) qualifying status