

## INTRODUCTION

Critical transitions occur at every point in a student's life: from elementary to middle school, middle to high school, and high school to postsecondary schooling or work.<sup>1</sup> For the 2 million children who are sons and daughters of our nation's Active Duty, Reserve and National Guard military members, those transitions are compounded by the addition of new locations, districts and schools.<sup>2</sup> Students of military families attend six to nine different school systems on average, making consistent access to high-quality teaching and education an ongoing concern. Moreover, too many students are graduating from high school without the foundational math and science skills they need to succeed in today's knowledge-based economy. **The National Math and Science Initiative is meeting these challenges head-on through expansion of its proven College Readiness Program to military-connected schools across the country.**

“As a global security company, Lockheed Martin is committed to educating our young people in science and math. Our future success, and the future technological success of our nation, is dependent on a pipeline of highly trained, highly capable technical talent. This project will help ensure children of service members have access to the best education resources possible.”

—Dr. Ray O. Johnson, Former Senior Vice President and Chief Technology Officer, Lockheed Martin

## ABOUT NMSI'S COLLEGE READINESS PROGRAM

Through our College Readiness Program, NMSI is partnering with high schools across the country that are committed to raising the academic bar and working with students, teachers and administrators to set and achieve ambitious performance goals. The comprehensive program is dramatically increasing the number of students taking and earning qualifying scores on Advanced Placement® math, science and English exams, while expanding access to rigorous coursework to traditionally underrepresented students.

AP® exam scores of three or higher (on a five-point scale) qualify students for credit at many colleges and universities and are the best indicator available of college preparedness and success. Students who master AP courses in high school are three times more likely to graduate from college. African American and Hispanic students who succeed in AP courses are four times more likely to graduate from college.



**By fostering learning environments in which all students are seen as capable of succeeding in advanced coursework, NMSI's College Readiness Program is transforming school cultures and expanding the pipeline of students meeting and exceeding college and career readiness expectations.**

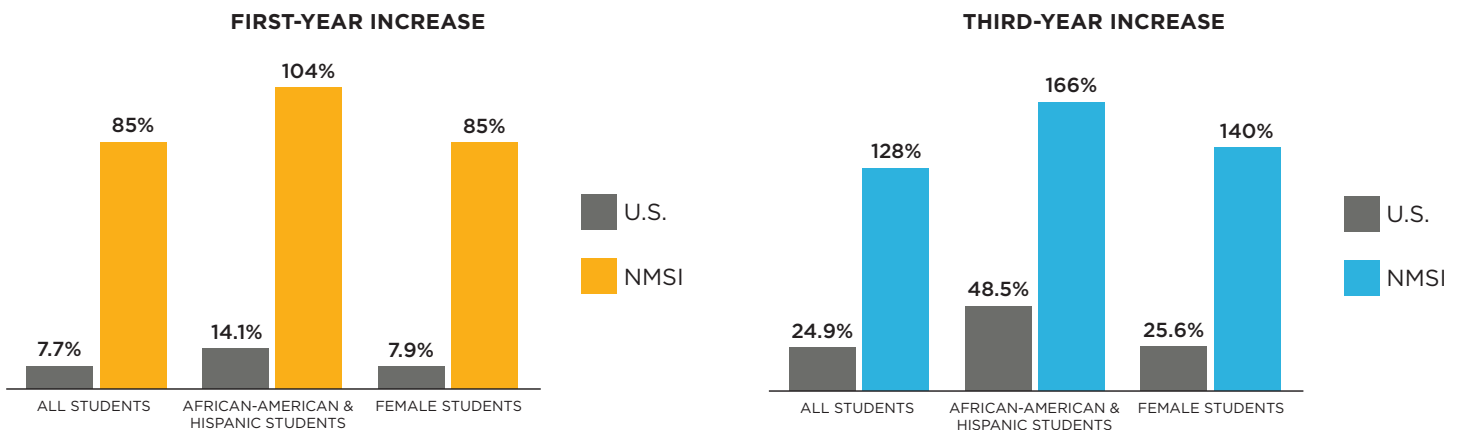
Recognizing the need to improve educational opportunities for students of military families, in 2010, NMSI launched an effort to expand the College Readiness Program to schools with a large population of military-connected students. At the high school level, the initiative supports and expands campus AP programs. Training, resources and support are also provided to the middle and elementary schools that feed into the high schools so students arrive better prepared for the rigors of these classes. Because the AP curriculum is uniform across the country, NMSI's program provides excellence and continuity for students whenever and wherever their families are transferred.

## EXPANSION AND RESULTS

By partnering with businesses and foundations nationwide, NMSI has successfully grown the program from just four military-connected schools in 2010 (serving Fort Hood in Killeen, Texas and Fort Campbell in Hopkinsville, Kentucky) to 160 schools across 29 states and has produced remarkable improvements in student outcomes:

- After just one year of the program, students in NMSI's military-connected partner schools show an 85 percent increase in qualifying AP math and science exam scores — 11 times the national average of 7.7 percent. For African-American and Hispanic students, the increase is more than seven times the national average, and for female students, more than 10 times the national average.
- These positive outcomes are sustained over time. After three years of the program, the increase in qualifying math and science exam scores among NMSI partner schools is five times the national average.
- At Buena High School in Arizona — serving Fort Huachuca — AP qualifying scores on math, science, and English exams increased 209 percent in their first year, ranking them third in the nation for percent increase in these subjects.
- Waynesville High School in Missouri — serving Fort Leonard Wood — led the state with a 257% increase in math, science and English AP qualifying scores over the past two years, compared with only 16% for the rest of the state over the same period.
- Ocean Springs High School in Mississippi — serving Keesler Air Force Base, Naval Construction Battalion Center Gulfport, and Naval Research Laboratory Stennis Space Center — increased AP qualifying scores in math, science, and English from 18 to 246 over the past three years, accounting for 25% of the entire state's increase in these subjects.

**FIGURE:** Increase in math and science qualifying scores after the first year and third year of program implementation in NMSI's military-connected partner schools compared with the average national increase. Source: College Board.



## PARTNERS AND DONORS

NMSI's military initiative is supported by partners who are committed to championing opportunities for service members, veterans and their families, including the U.S. Department of Defense, the Office of Naval Research, the Military Child Education Coalition, the Military Impacted Schools Association, the Army Education Outreach Program and the Joining Forces initiative.

In addition, major funding is provided by a broad coalition of corporations and philanthropic foundations including Amgen, BAE Systems, The Boeing Company, ExxonMobil, the Jack Kent Cooke Foundation, Lockheed Martin Corporation, Northrop Grumman and the O'Donnell Foundation.

<sup>1</sup> Callina, Kristina Schmid, (2015) Research Key to Better Programs for Military Children. On the Move. (9)1, 22.

<sup>2</sup> Conley, David T., Getting Ready for College, Careers and the Common Core. Jossey-Bass, San Francisco, CA, 2014.

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