Why parents should encourage their students to "stay the course" in APTIP.

The Advanced Placement* courses that are at the heart of the Advanced Placement Training and Incentive Program are challenging – they require more intense study from students. But the rewards are extensive. Steady support from parents can be instrumental in helping students stretch themselves academically, so they can reap the considerable benefits that AP offers.

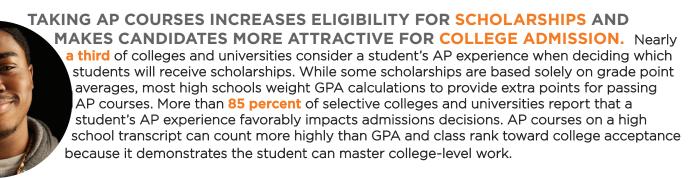
MASTERING AP COURSEWORK HELPS STUDENTS SUCCEED IN COLLEGE. Students who earn qualifying scores on AP exams are **three times more likely** to complete a college degree than students who do not. Recent research into first-year college outcomes in Arkansas showed that AP graduates achieved more credit hours their freshman year (28.57) compared to students who did not take AP courses (17.68 credit hours). AP students also had a higher first-year college GPA (2.84 compared to 2.19 for non-AP students) and required less remediation (28 percent compared to 64 percent). Even the students who participate in an AP course but do not earn a qualifying score on the national exam have **higher college GPAs and graduate at faster rates** than students who never experienced an AP class. The exposure to the study discipline of AP classes can be life-changing.



PASSING AP COURSES HELPS MORE STUDENTS GRADUATE ON TIME FROM

COLLEGE. Most students today take five or six years to earn their bachelor's degrees. Students who master AP coursework are much **more likely to graduate in four years.** More than 3,200 colleges and universities in the United States offer credit and/or advanced placement for qualifying AP scores, giving students a head start completing their degrees.

GRADUATING FROM COLLEGE IN FOUR YEARS SAVES STUDENTS AND THEIR PARENTS THOUSANDS OF DOLLARS. Students who take longer to graduate from a public college or university typically pay between \$8,000 and \$19,000 for each additional year. Students attending a private institution might incur as much as \$26,197 for each additional year it takes to earn a bachelor's degree.



THE APTIP MAKES ADVANCED MATH AND SCIENCE COURSES MORE ACCESSIBLE FOR AFRICAN-AMERICAN AND HISPANIC STUDENTS, who are often under-represented in science, technology, engineering, and math (STEM) fields. African-American and Hispanic students who pass an AP exam are **four times more likely** to earn a college degree than those who do not pass. In its first year, the schools receiving grants from NMSI saw a **122 percent increase** in enrollment of African-American and Hispanic students.





THE APTIP MAKES ADVANCED MATH AND SCIENCE COURSES MORE

ACCESSIBLE FOR FEMALE STUDENTS, who also are often under-represented in STEM fields. Women contribute 48 percent of the workforce in the U.S., but hold just 24 percent of the jobs in engineering, science, and technology. The initial NMSI program schools saw a

74 percent increase in enrollments in AP math, science and English classes by female students.



APTIP DEVELOPS STEM TEACHERS WHO CAN INSPIRE AND EQUIP MORE STUDENTS TO SUCCEED, CHANGING LIVES IN THE PROCESS. In the last three years, NMSI has trained more than 8,000 pre-AP and AP teachers who have significant content knowledge and the skills to motivate students.

APTIP PROVIDES STRONG SUPPORT FOR STUDENTS TO SUCCEED.

- Open enrollment so all students regardless of income, gender, race or ethnicity have a chance to succeed.
- More student time-on-task in after-school or Saturday prep sessions. Students learn study habits that pay off in college.
- + Exam fee support to make advanced courses affordable for more students.
- + Student recruitment/counseling so more students will have the confidence and support to take advanced courses.
- Mini-scholarship incentives for success for students.
- Supplies and equipment that facilitate the state-of-the-art lab projects essential for exploratory learning.

APTIP EXPANDS CAREER OPPORTUNITIES. Earning a college degree thanks to AP credits pays off. The unemployment rate for workers with only a high school degree is **twice** that of college graduates. Graduates in STEM fields are in particular demand – eight of the 10 fastest-growing jobs require knowledge in math and science. A 2011 study by Georgetown University showed the **10 majors with the highest median earnings** were petroleum engineering, pharmaceutical sciences, mathematics and computer science, aerospace engineering, chemical engineering, naval architecture and marine engineering, mechanical engineering, metallurgical engineering and mining and mineral engineering.

THE APTIP APPROACH PRODUCES RESULTS. There is no other formal program in the country that has produced the level of results that NMSI has achieved. NMSI has nearly doubled the number of students taking and passing AP exams in grantee states.

- Schools participating in APTIP for the last three years have produced an average increase of 124 percent in AP math, science and English passing scores, nearly six times the national average.
- The impact on under-represented groups has been even more pronounced. The passing scores for African-American and Hispanic students in AP math, science and English exams have been **boosted 216 percent** during the last three years. And the passing rate for females on AP math and science exams has been **boosted 144 percent**, significantly increasing access to promising STEM fields.

325 North Saint Paul Street | Suite 2900 | Dallas, TX 75201 | 214.665.2500 | nationalmathandscience.org

WE'VE GOT A FORMULA THAT WORKS