College and Career Readiness

South Orange & Maplewood School District

College and Career Readiness

- The definition of student success is shifting from proficiency standards to college and career readiness.
- The purpose is to ensure all students graduating high school are prepared and have a **choice** to pursue a postsecondary education without remediation and/or attainment of a viable career.

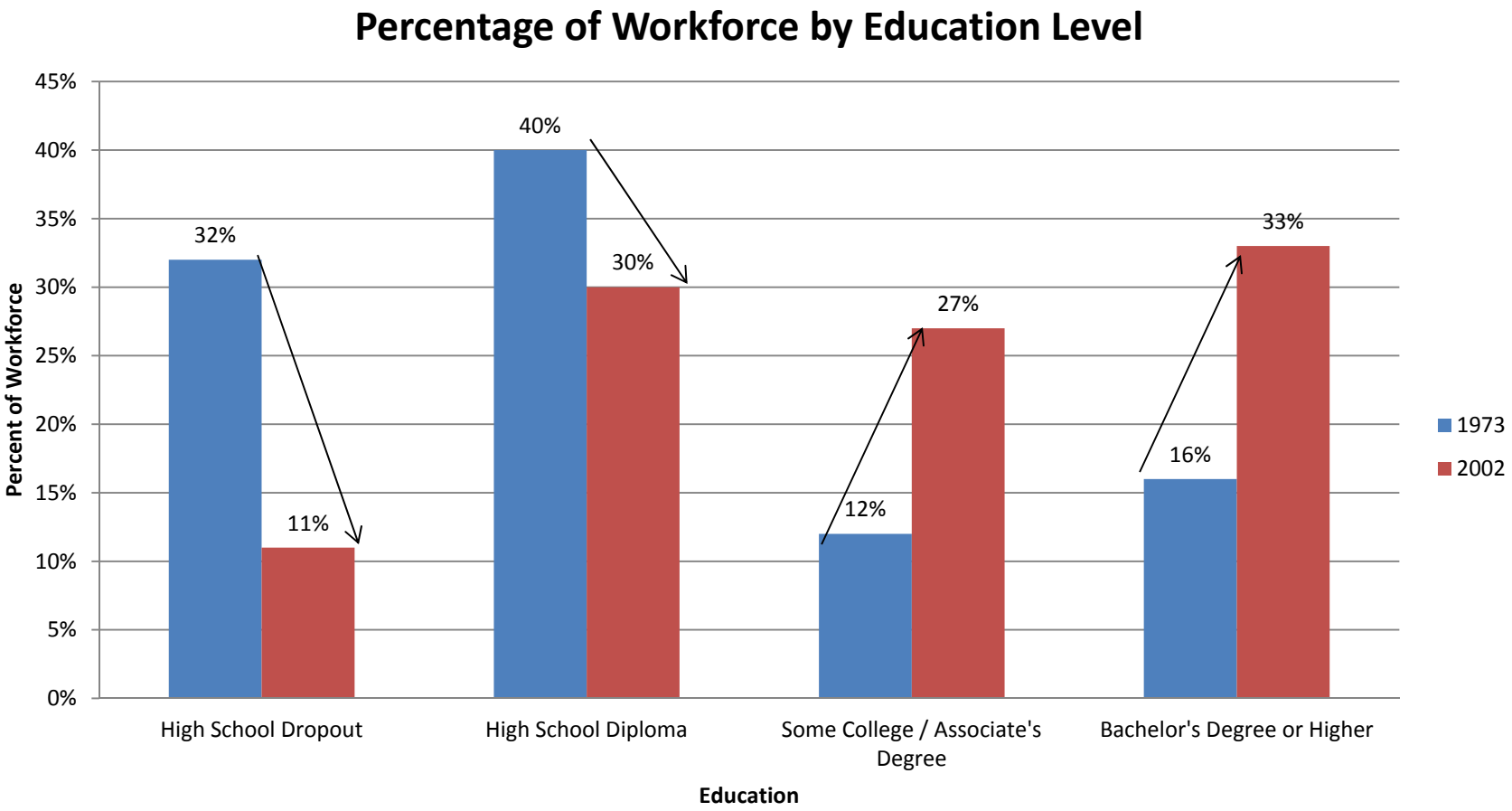
Why College and Career Readiness?

- A high school diploma is no longer enough. Many jobs require some education beyond high school
  - Associate's or bachelor's degree
  - Certificate
  - License
  - Completion of an apprenticeship
  - Significant on-the-job training

Many students graduate from high school without the knowledge and skills required for success, closing doors and limiting their post-high school opportunities.

Source: "How Well is New Jersey Preparing All Students for College, Careers and Life", May 2011, Achieve

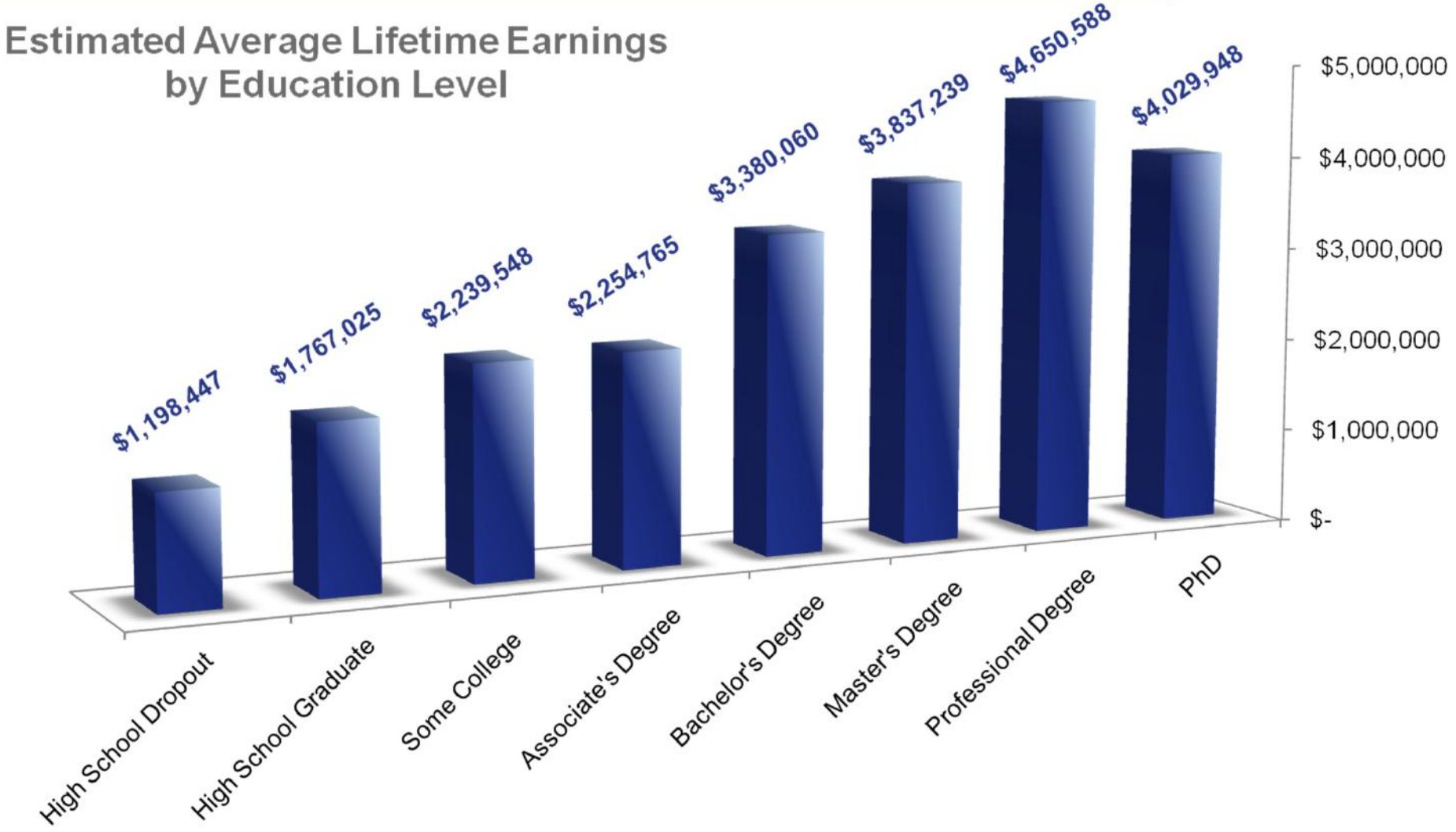
Why College and Career Readiness?



Source: Carnevale, Anthony P. et al. (June 2010). *Help Wanted: Projections of Jobs and Education Requirements Through 2018.* Georgetown Center on Education and the Workforce. ww9.georgetown.edu/grad/gppi/hpi/cew/pdfs/FullReport.pdf

Benefits to Education





What does it mean to be college and career ready?

According to Jay Westover and Lynn Hatton, authors or Closing the Gaps of College and Career Readiness, “students develop the **attributes** of college and career readiness from successful completion of a rigorous, college-aligned course of study.

Source: “Closing the Gaps of College and Career Readiness”, March 1, 2011, Jay Westover and Lynn Hatton.

What attributes are vital to be college and career ready?

- Skills
  - Accessing text resources
  - Critical Thinking
  - Effectively communicating
  - Ability to solve problems, interpret information, and use reasoning with precision and accuracy.
- Academic Behaviors
  - Self-monitoring
  - Study skills that enable students to become self-directed learners

Source: “Closing the Gaps of College and Career Readiness”, March 1, 2011, Jay Westover and Lynn Hatton.

What K-12 performance indicators can be used to determine if a student is on a path to college and career readiness?

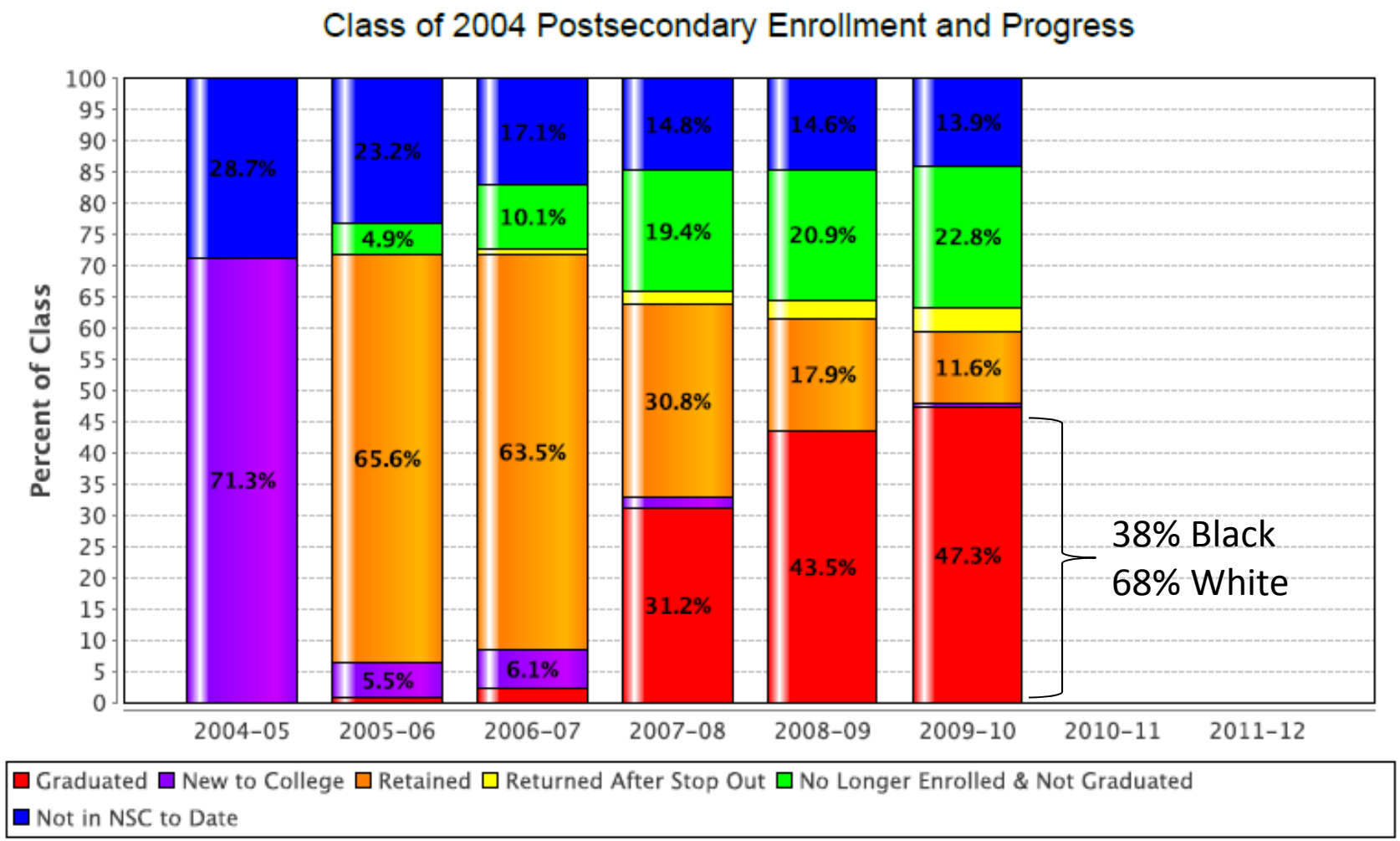
- ACT – research and statistics
- SAT – research and statistics
- Identify students earning a college degree and analyze the students' K-12 academic indicators.

Post Secondary School Statistics

- We submitted graduating student to the National Student Clearing House (NSCH).
- We used the data to identify graduating students that earned a college degree and analyzed their high school academic record to determine common indicators leading to success.
- We receive NSCH reports in December. The NSCH data used in this presentation is as of December 2010.

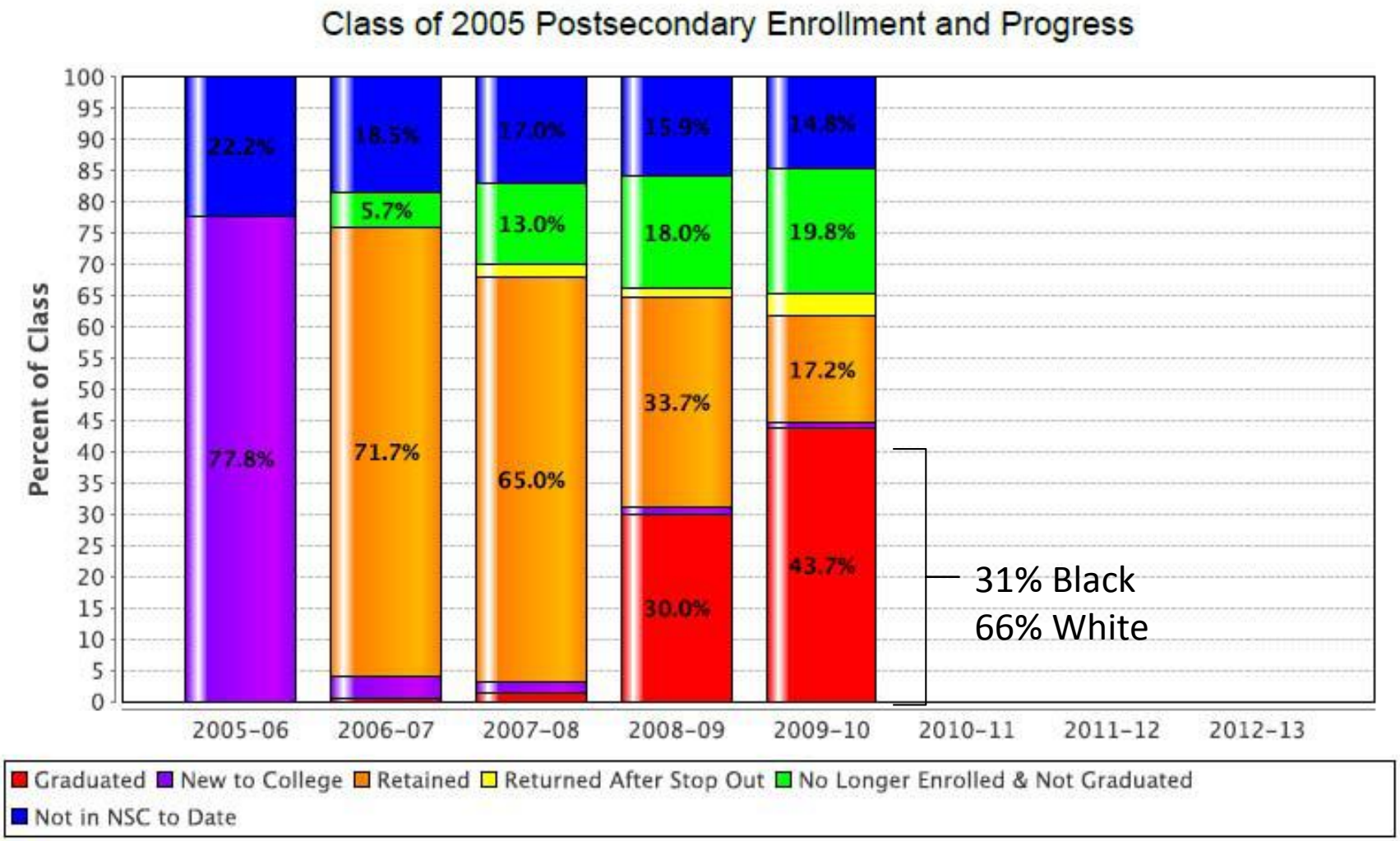
Why did we use the National Student Clearinghouse?

- The National Student Clearinghouse enables school district administrators to access the Clearinghouse's records on over 100 million students, which represent postsecondary enrollments and achievements nationwide. They maintain these records on behalf of the more than 3,300 colleges and universities that enroll 17 million students (92% of total U.S. enrollment in higher education). These institutions have authorized the Clearinghouse to provide this information to school districts in order to help them improve their educational programs.



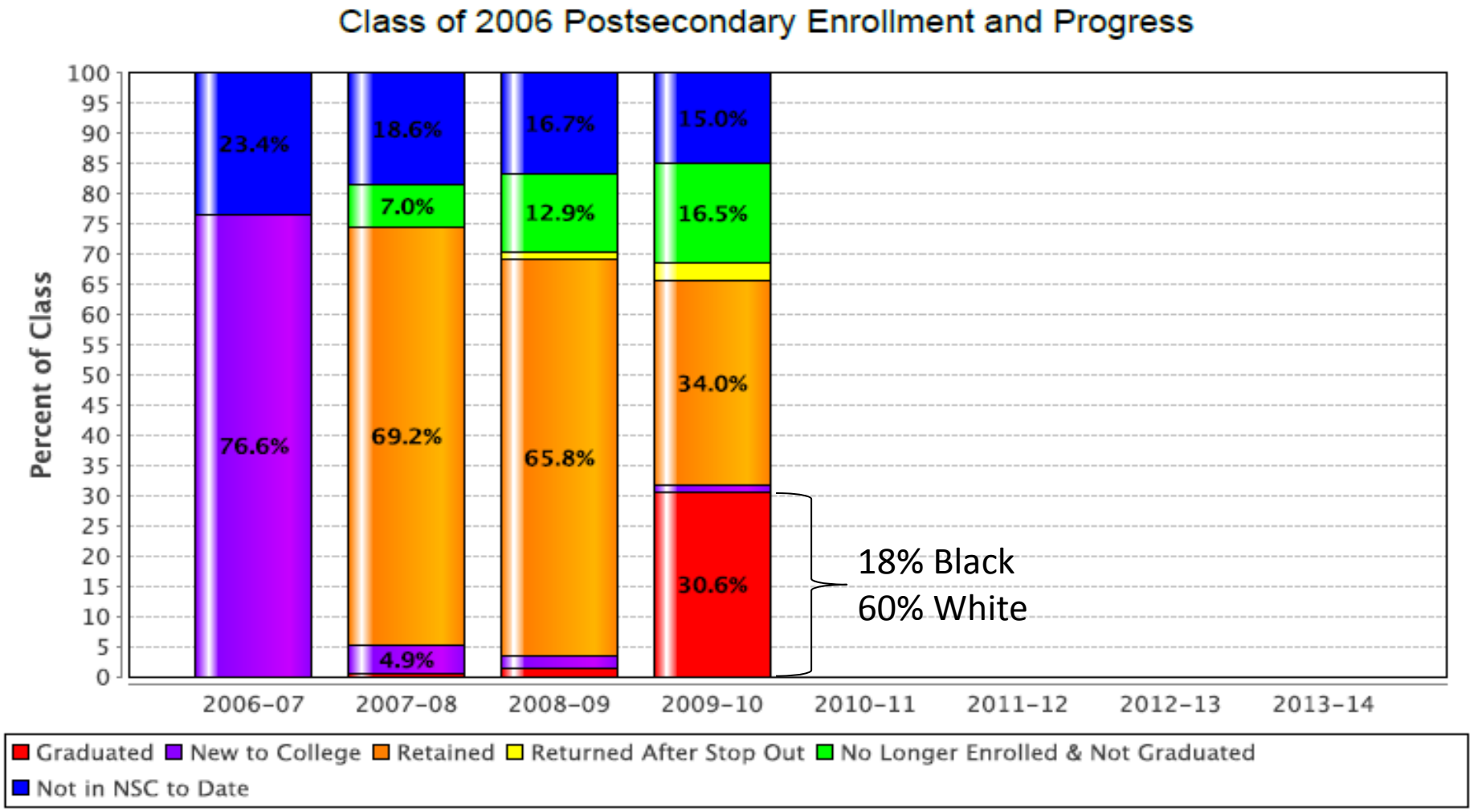
47% of all students in the class of 2004 (Columbia High School graduates) earned a college degree in 6 years. 13.9% may have attended a college not reporting enrollment to the National Student Clearing House or did not attend college.

474 students in data set



44% of all students in the class of 2005 (Columbia High School graduates) earned a college degree in 5 years. 14.8% may have attended a college not reporting enrollment to the National Student Clearing House or did not attend college.

460 students in data set

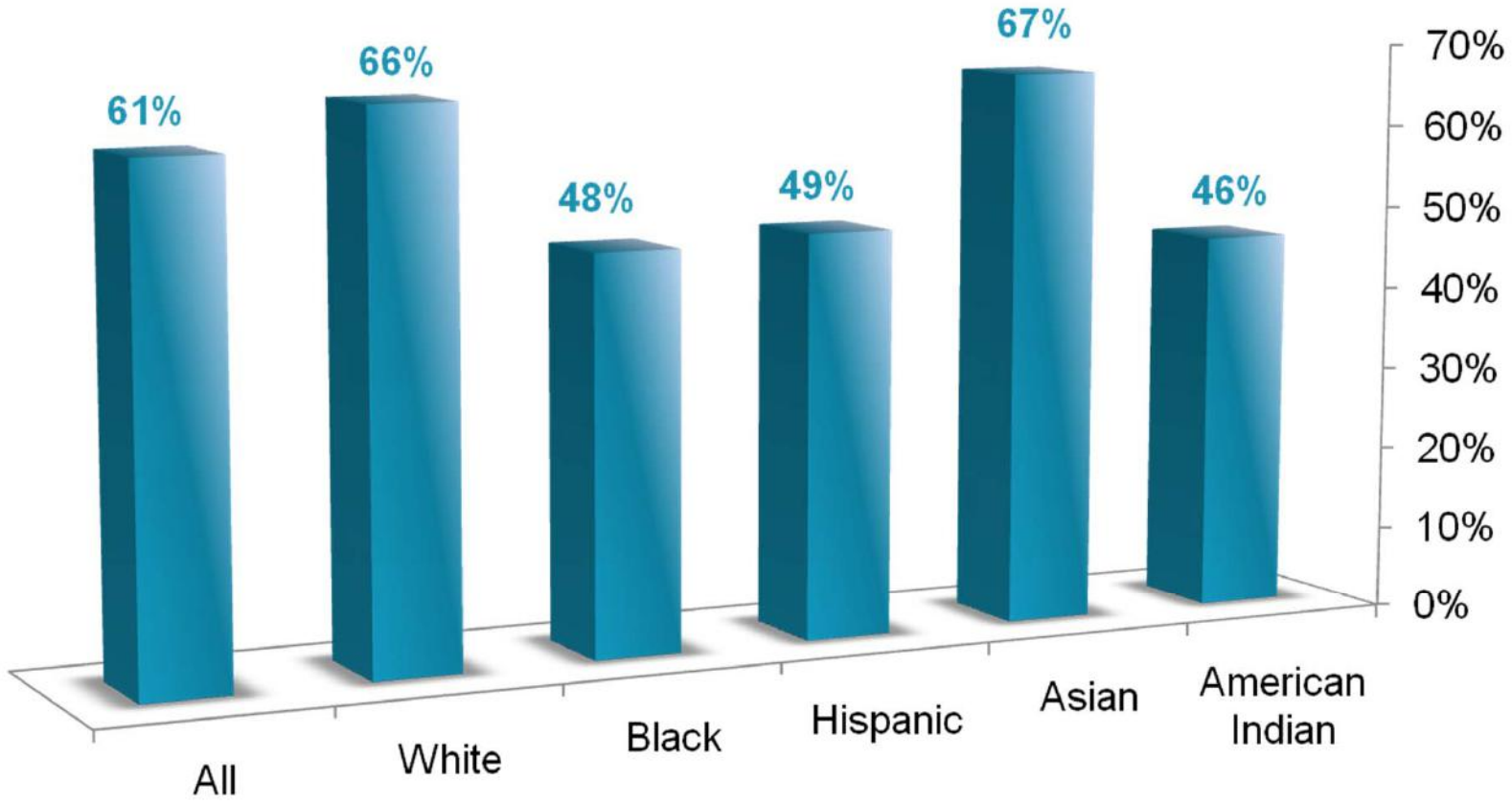


31% of all students in the class of 206 (Columbia High School graduates) earned a college degree in 4 years. 15% may have attended a college not reporting enrollment to the National Student Clearing House or did not attend college.

474 students in data set

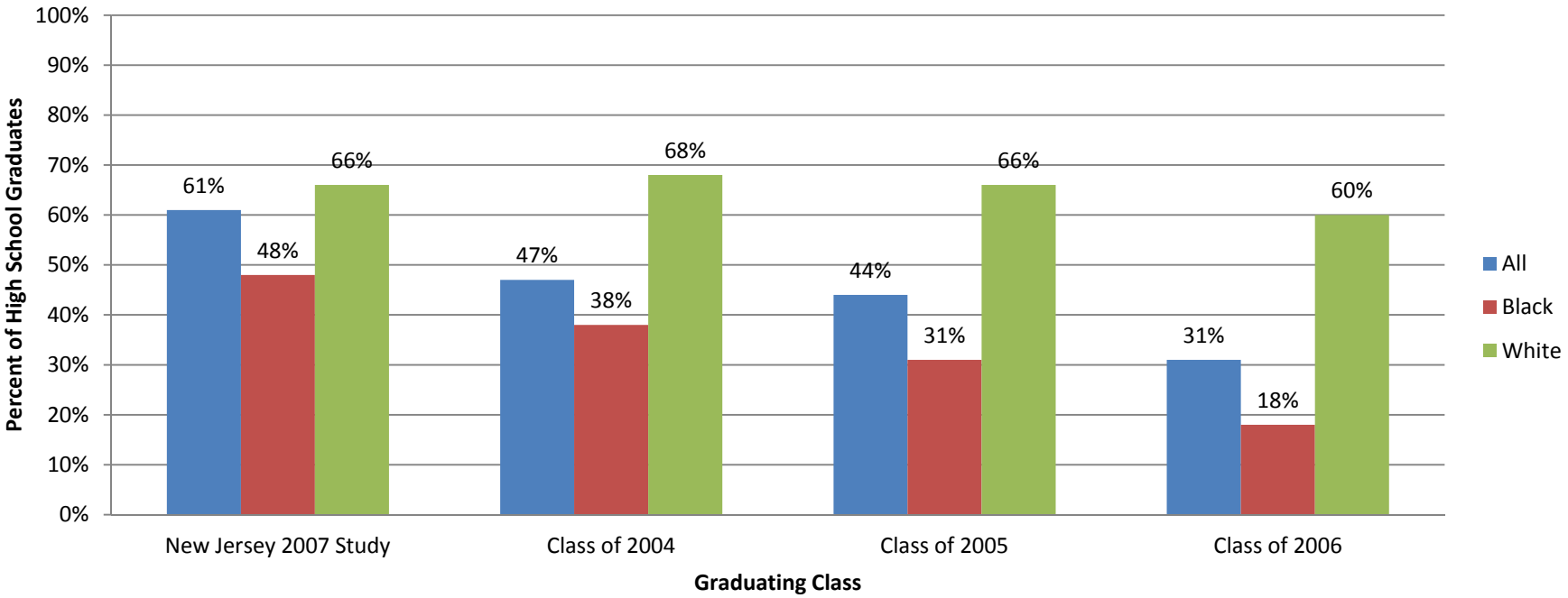
Percent of students earning a bachelor's degree within six years in New Jersey, 2007

Many College Students Fail to Earn a Degree in New Jersey



Source: NCES. *IPEDS Graduation Rate Survey,* analyzed by National Center for Management of Higher Education Systems.

Percent of High School Graduates Earning a College Degree as of 12/2010

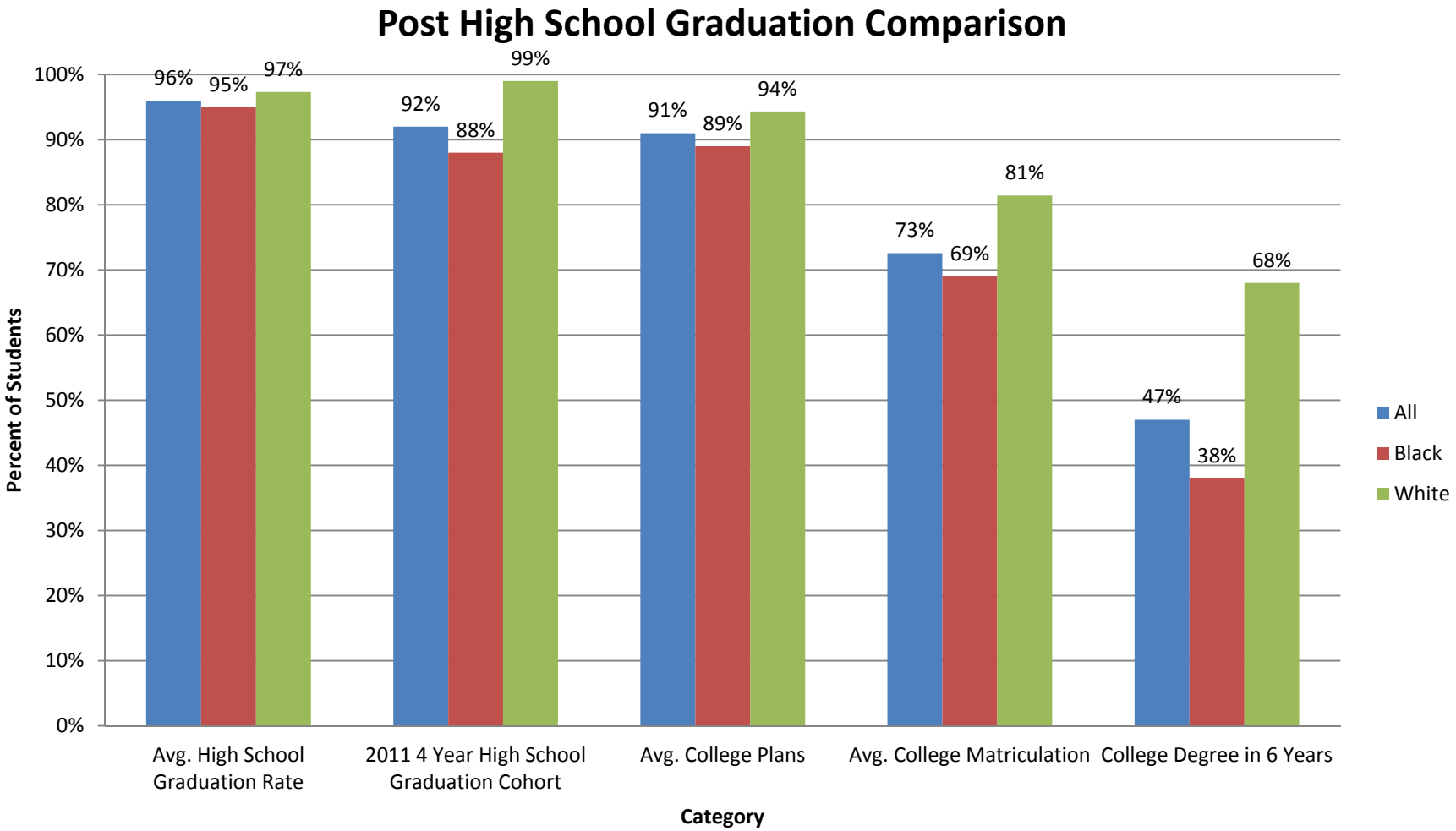


- About 47% of our students earn a college degree 6 years after high school graduation.
- There is approximately a 30 percent point gap between the percent of black and white students earning a college degree.

Columbia High School data as of December 2010 and New Jersey data from a 2007 study.

2 ways to calculate a “High School Graduation Rate”

- The percent of the schools senior high school population that graduated high school in a particular school year. We have been reporting on this statistic each year.
- The percent of high school students that graduated high school in 4 years. This is the first year reporting on this statistic.
  - The state of New Jersey will begin using the 4 year high school graduation rate in the future.



Graduating high school and matriculating into college are not enough to determine success post high school.

What is the high school academic experience of students who earn a college degree?

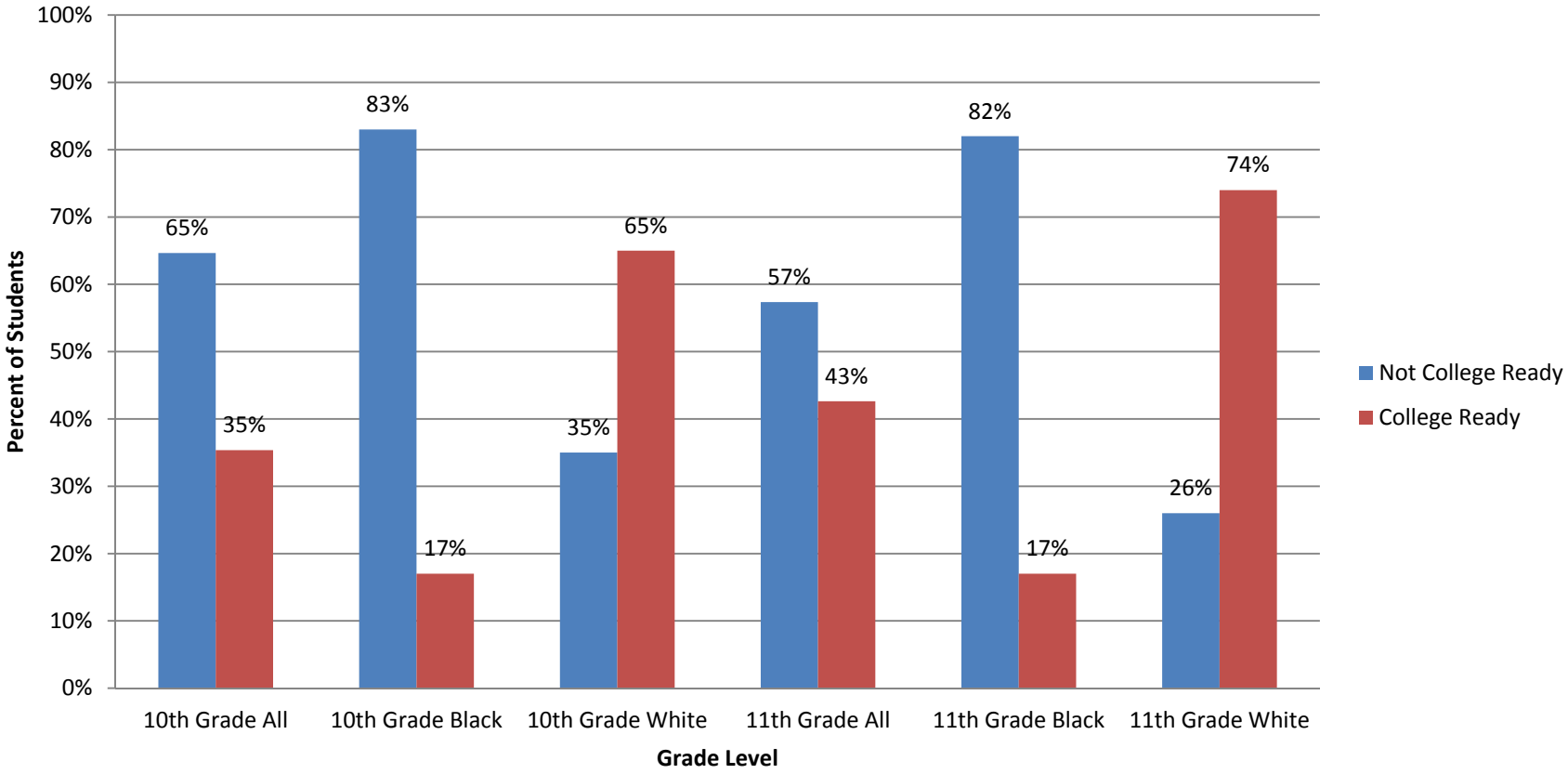
According to the 2010 **College Bound Seniors** New Jersey State Profile Report Published by the College Board…

- 81% of students taking the SAT had 4 years of study in Language Arts
- 68% of students taking the SAT had 4 years of study in Math. 53% were enrolled in pre-calculus or calculus in high school.
- 54% of students taking the SAT had 4 years of study in Natural Science.
- 50% of students taking the SAT had 4 years of study in Social Science.

Through collaborative research with postsecondary institutions ACT established the following benchmarks:

- Minimum course work for college readiness
  - 4 years of Language Arts
  - 3 years of Math, Social Science, and Natural Science
- Course work that typically achieves the highest ACT scores
  - 4 years Language Arts
  - Algebra 1, Algebra II, Trigonometry, Calculus
  - US History, World History, American Government, and an additional Social Science course
  - General Science, Biology, Chemistry, Physics

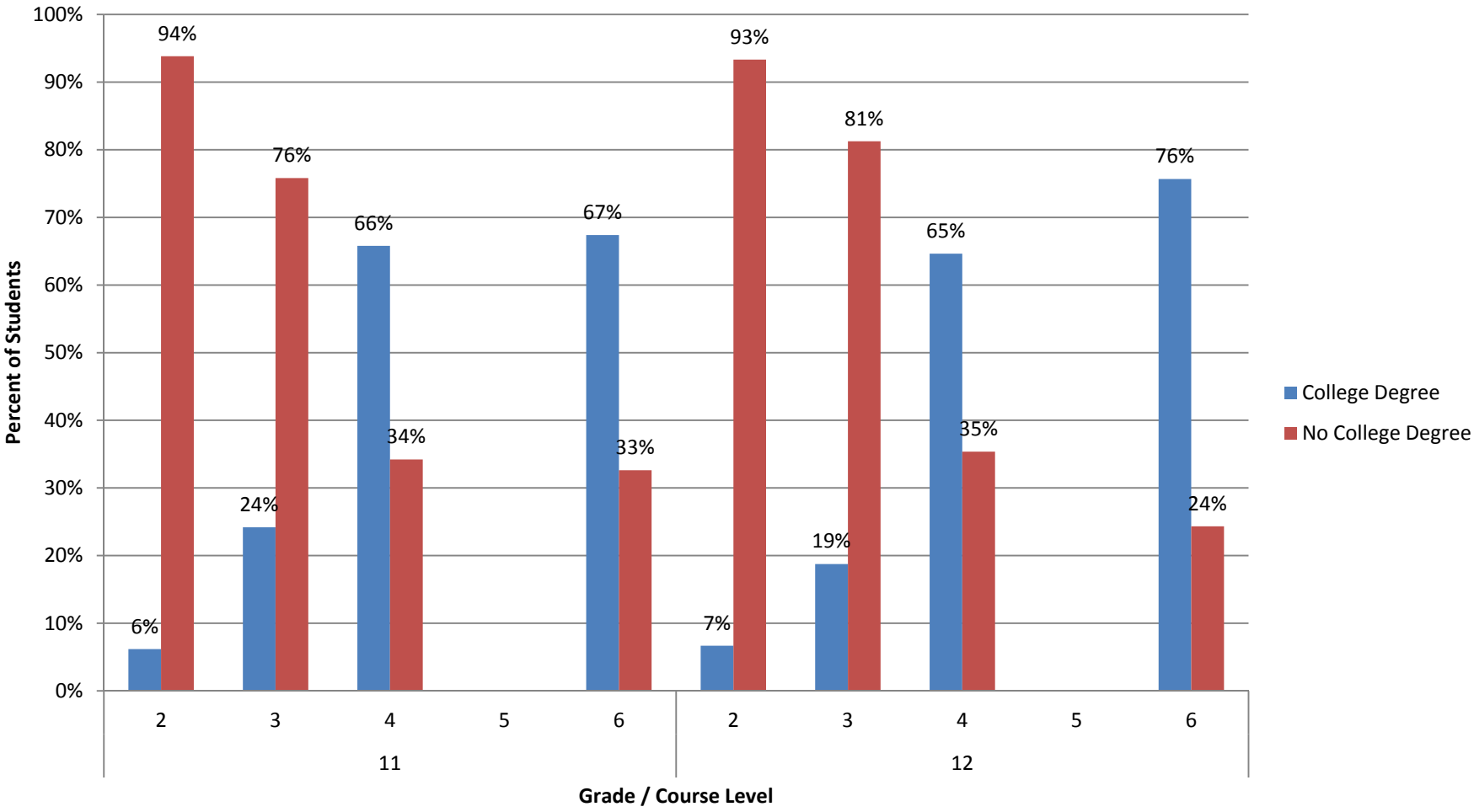
2010-2011 PSAT Results by Grade Level



- 43% of Juniors were designated as college ready on the PSAT college exam.
- The college readiness indicator was established by the College Boards.
- All though there is not enough data to draw a correlation between PSAT scores and earning a college degree, the percent of students designated as college ready is similar to the percent of students earning a college degree over 5 years.

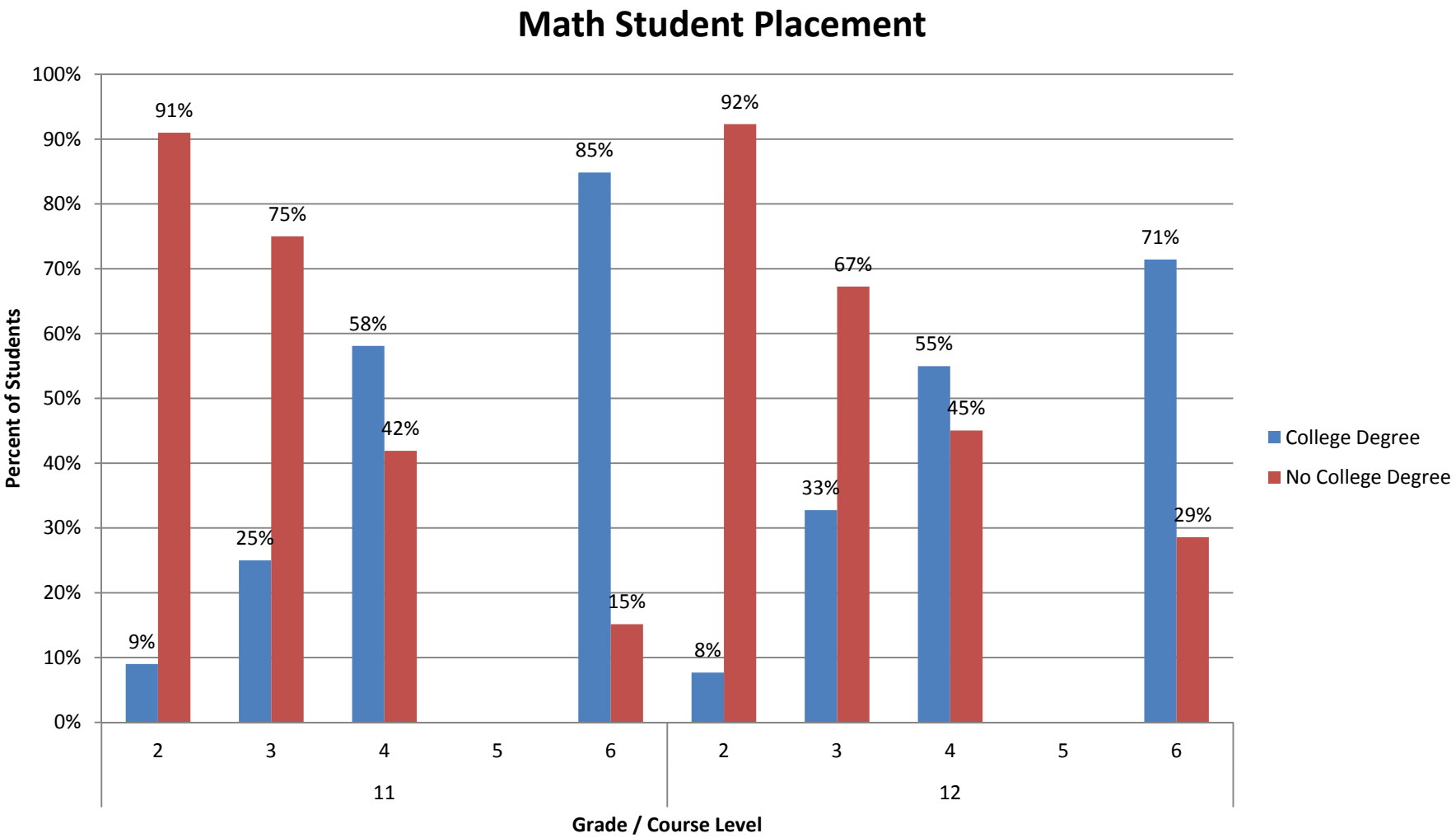
879 students in data set. Students taking the fall HSPA did not take the PSAT exam.

Language Arts Student Placement



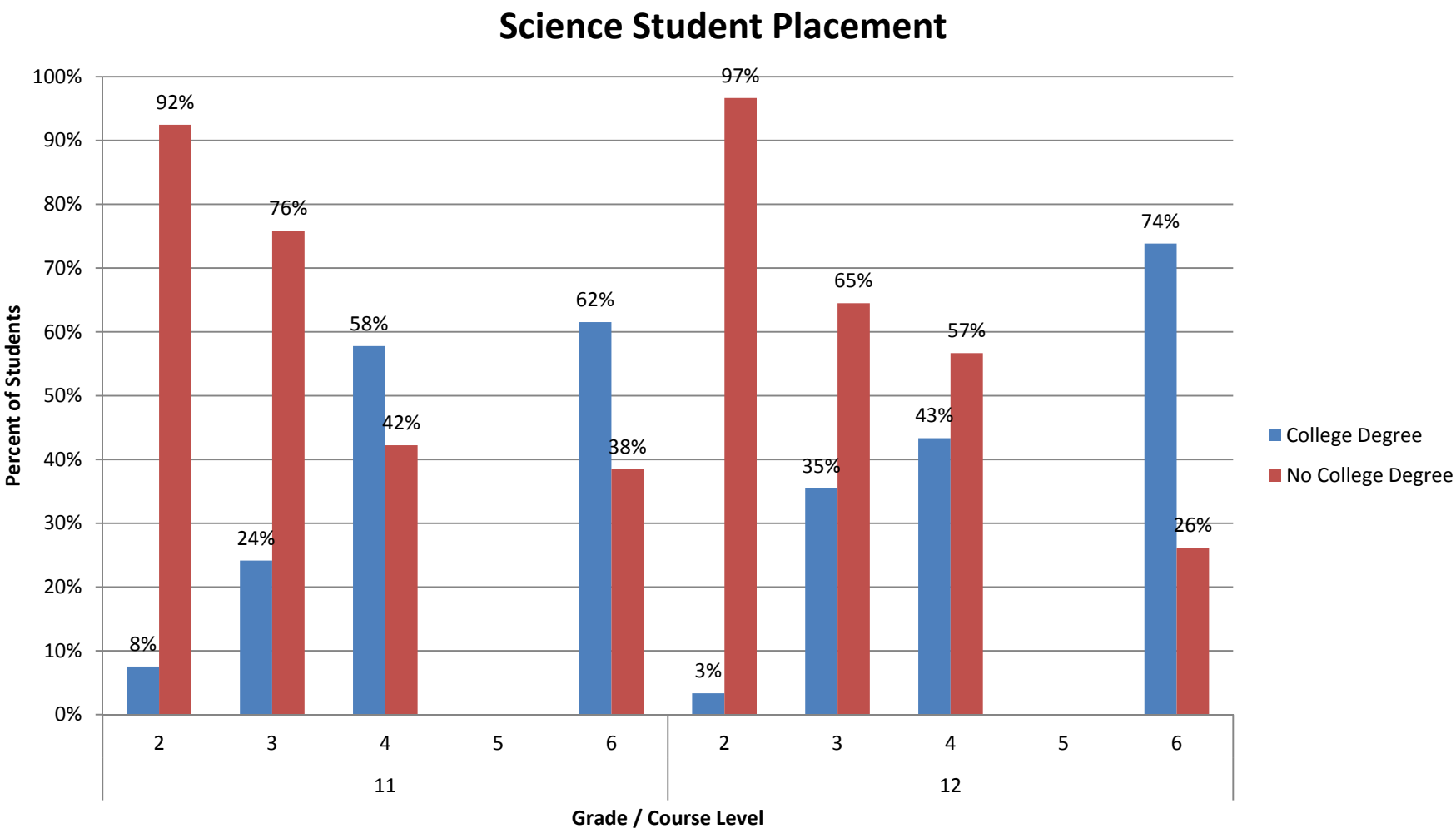
Class of 2005 - A majority of student earning a college degree participated in level 4 classes or higher in grades 11 and 12.

436 students in this cohort



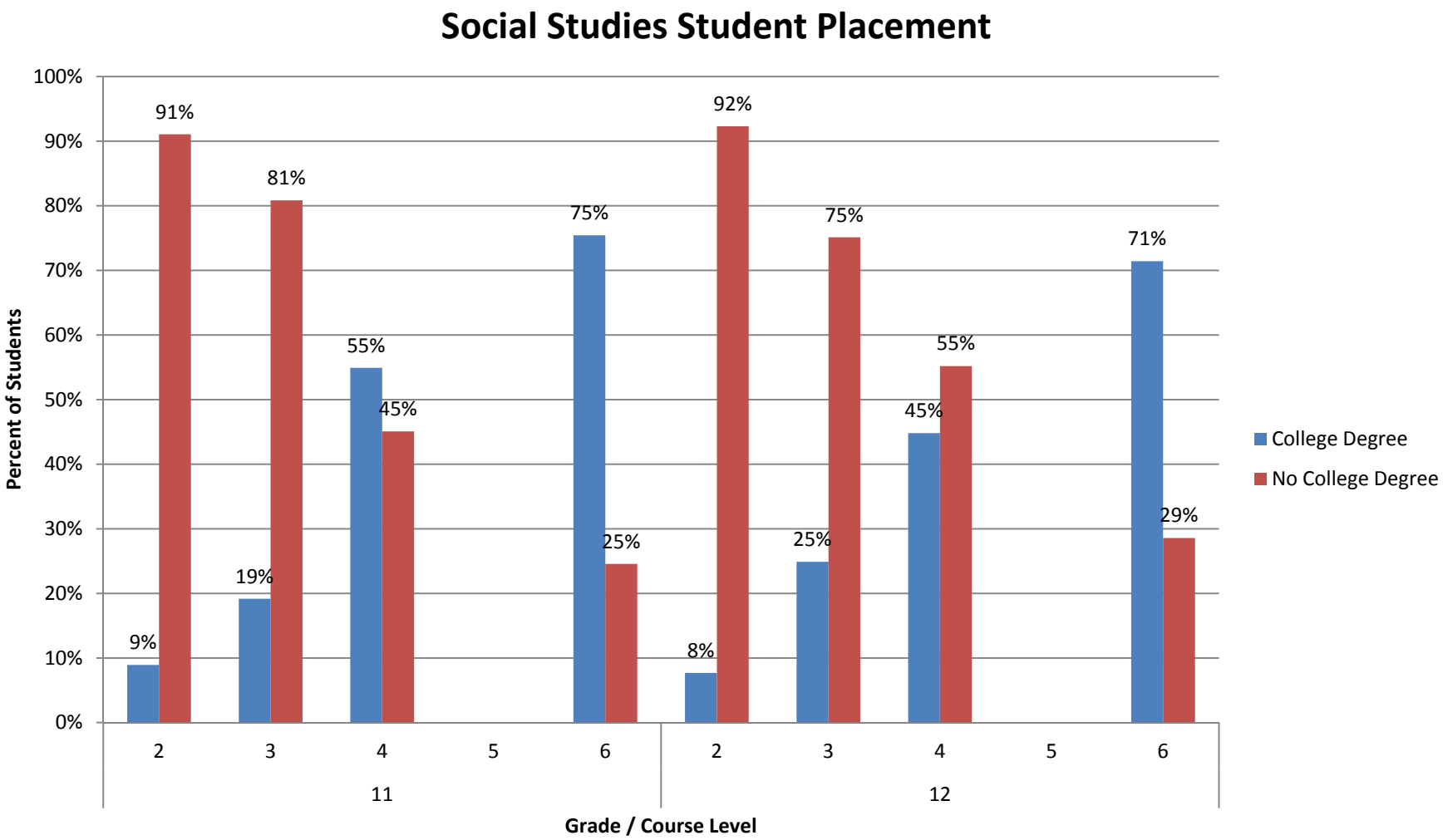
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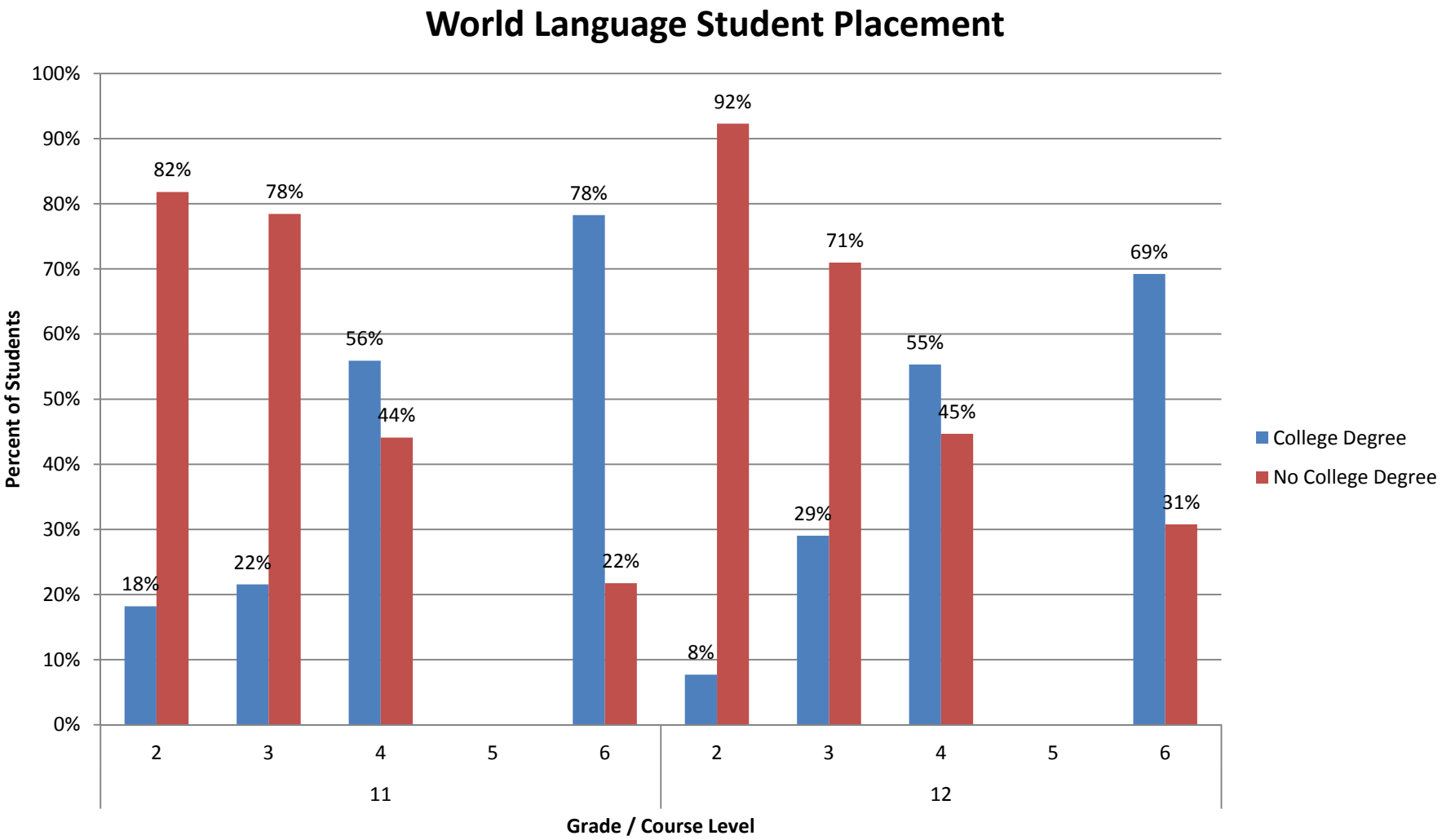
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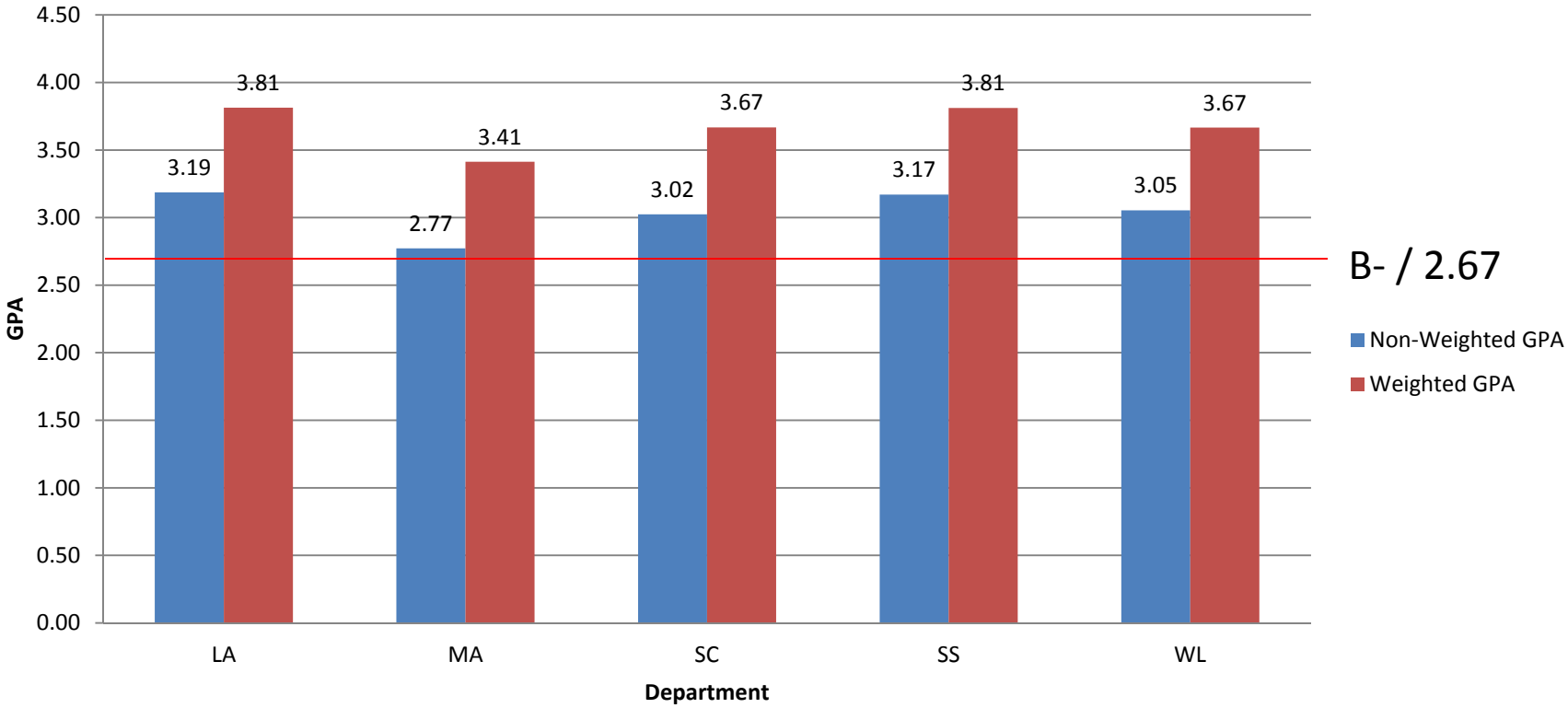
Class of 2005 - A majority of student earning a college degree participated in level 4 classes or higher in grades 11 and 12.

436 students in this cohort

What is the high school academic experience of students who earn a college degree?

On average, about 75% of a students schedule who earned a college degree was comprised of level 4 or higher courses in their junior and senior year.

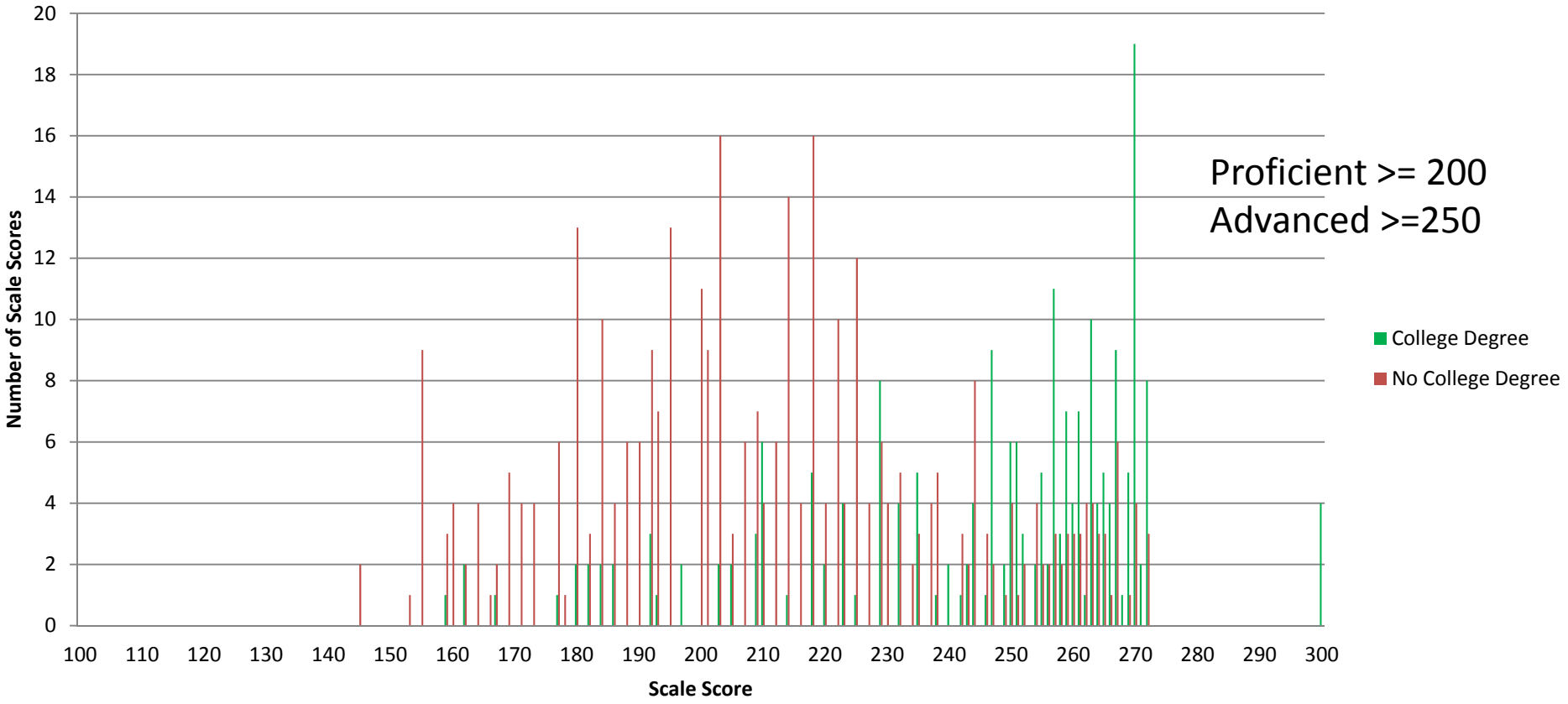
Student GPA's of Courses Taken in Grades 11 and 12 by Department



On Average, students earning a college degree earn a B- or higher as a final grade.

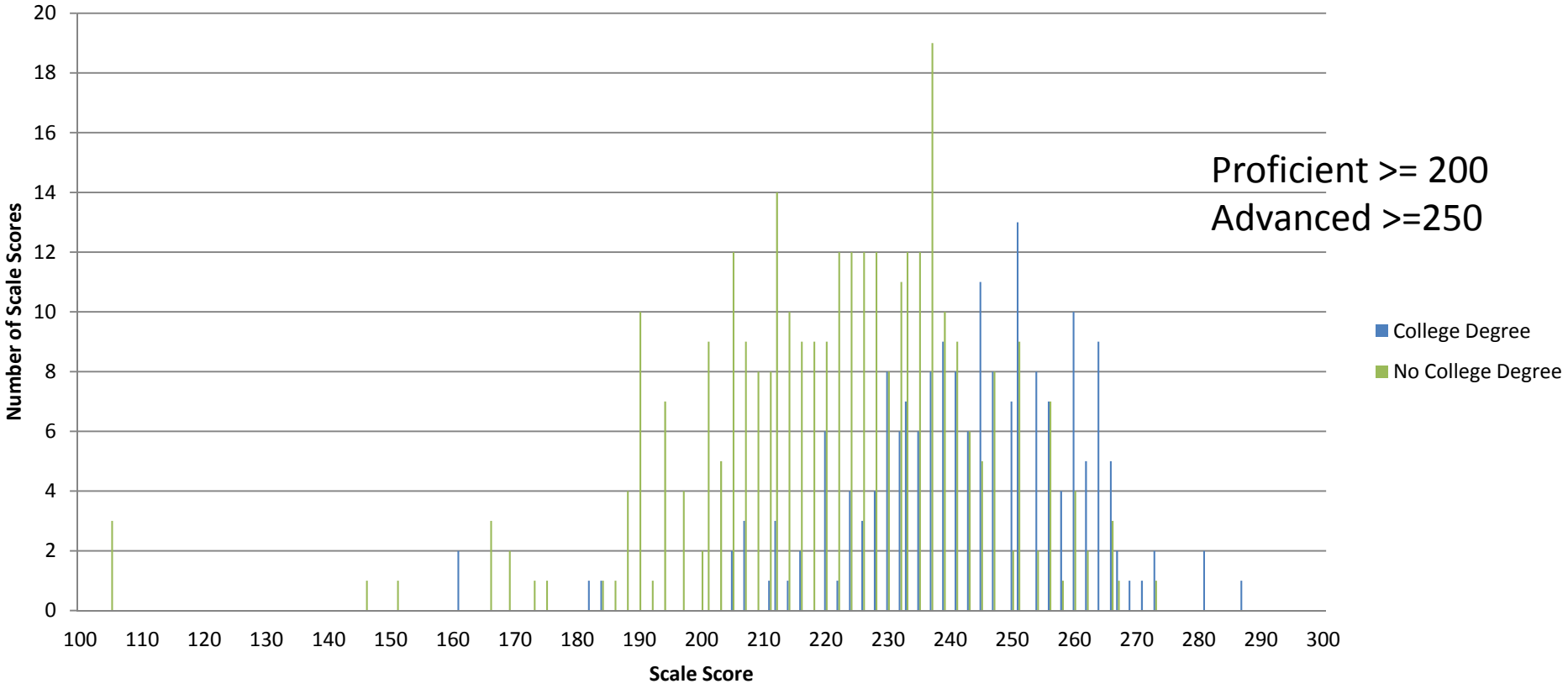
436 students in this cohort

Class of 2005
HSPA Math Results



91% of the students earning a college degree scored proficient on the Math HSPA exam
66% of the students not earning a college degree scored proficient on the Math HSPA exam
66% of the students earning a college degree scored advanced on the Math HSPA exam
25% of the students not earning a college degree scored advanced on the Math HSPA exam

Class of 2005
HSPA Language Arts Results



97% of the students earning a college degree scored proficient on the Language Arts HSPA exam
87% of the students not earning a college degree scored proficient on the Language Arts HSPA exam
42% of the students earning a college degree scored advanced on the Language Arts HSPA exam
11% of the students not earning a college degree scored advanced on the Language Arts HSPA exam

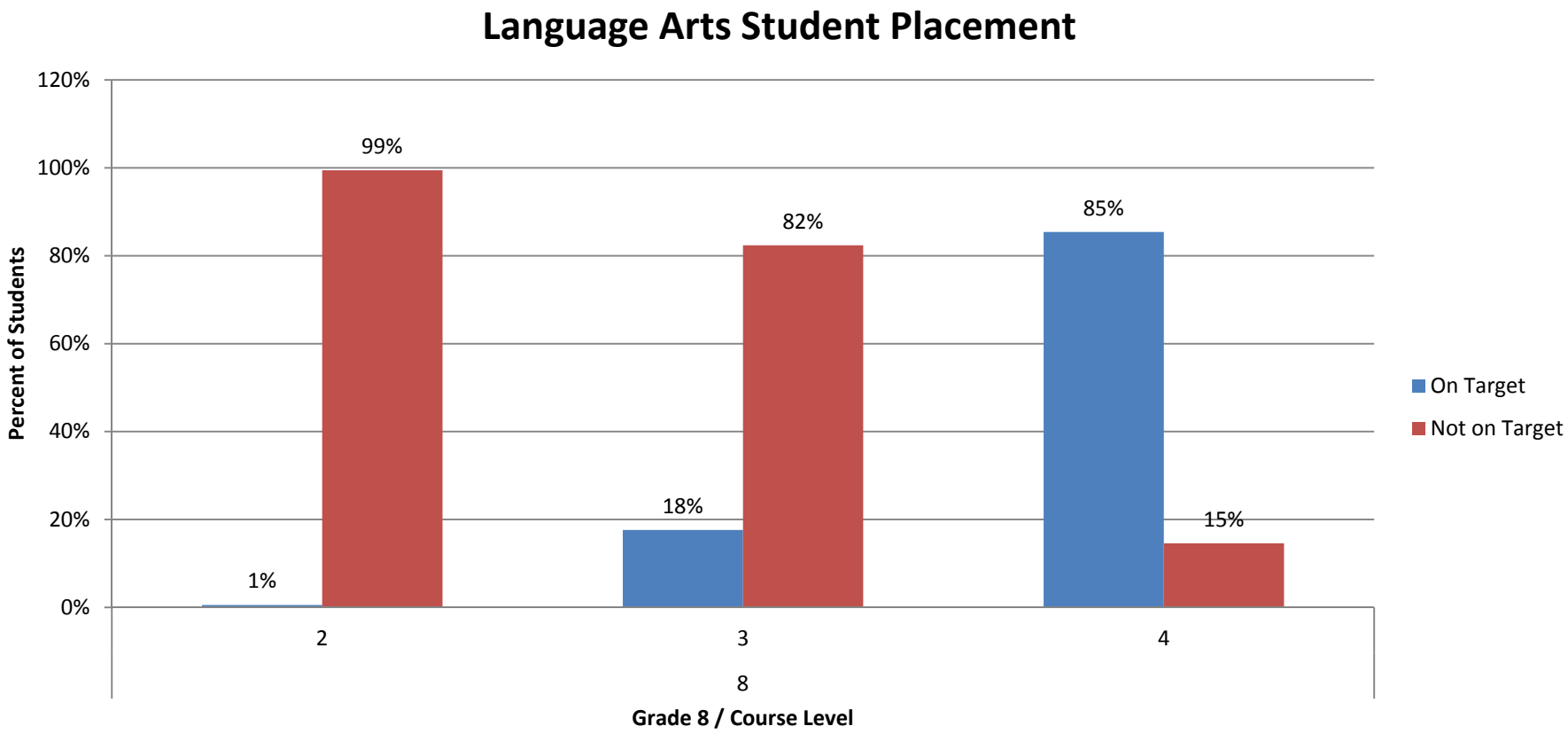
What is the high school academic experience of students who earned a college degree?

- Participation in level 4 classes or higher.
- Final Grades of a B- or higher in core subjects.
- Scoring proficient on the Language Arts and Math HSPA exam.
- *Designated as college ready on the PSAT exam.

**Patterns in the data suggest there is a correlation. There is not enough historical data to construct a cohort and exam this in greater detail.*

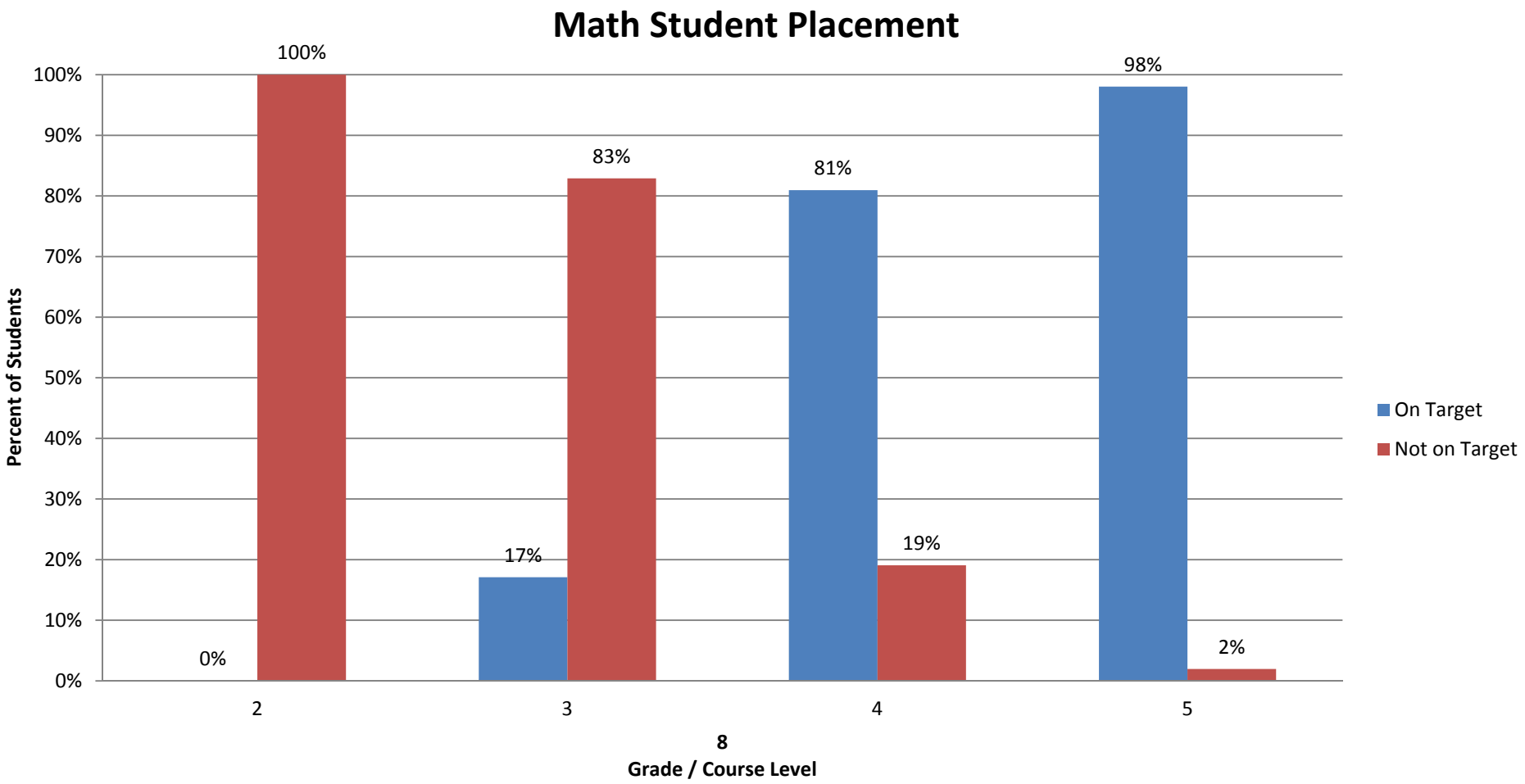
What was the middle school academic experience of students earning a college degree?

- Do not have the longitudinal data to build a cohort from grade 8 through college graduation.
- We selected 5 years (2006-2007 through 2010-2011) of high school student data and examined the student schedules. From this data we examined the grade 8 schedules of students who had similar high school schedules of students earning a college degree and examined grade 8 schedules of students who had similar schedules of students not earning a college degree.



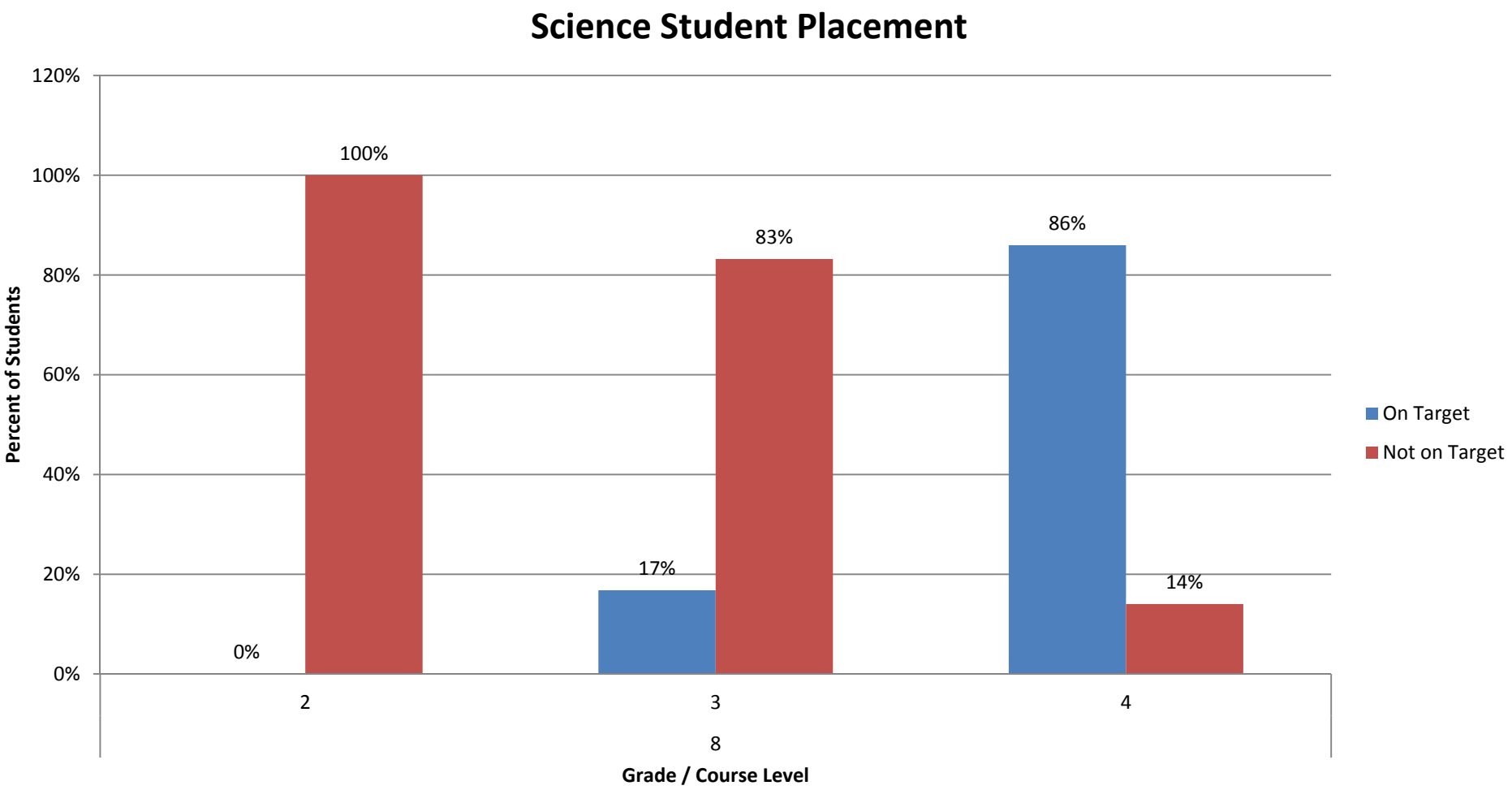
Students in level 2 grade 8 Language Arts are not on target to participate in level 4 or higher level Language Arts high school courses. This does not suggest that students taking a level 2 grade 8 Language Arts course cannot earn a college degree or that the student will not participate in level 4 or higher courses in other disciplines.

1,800 students in this cohort



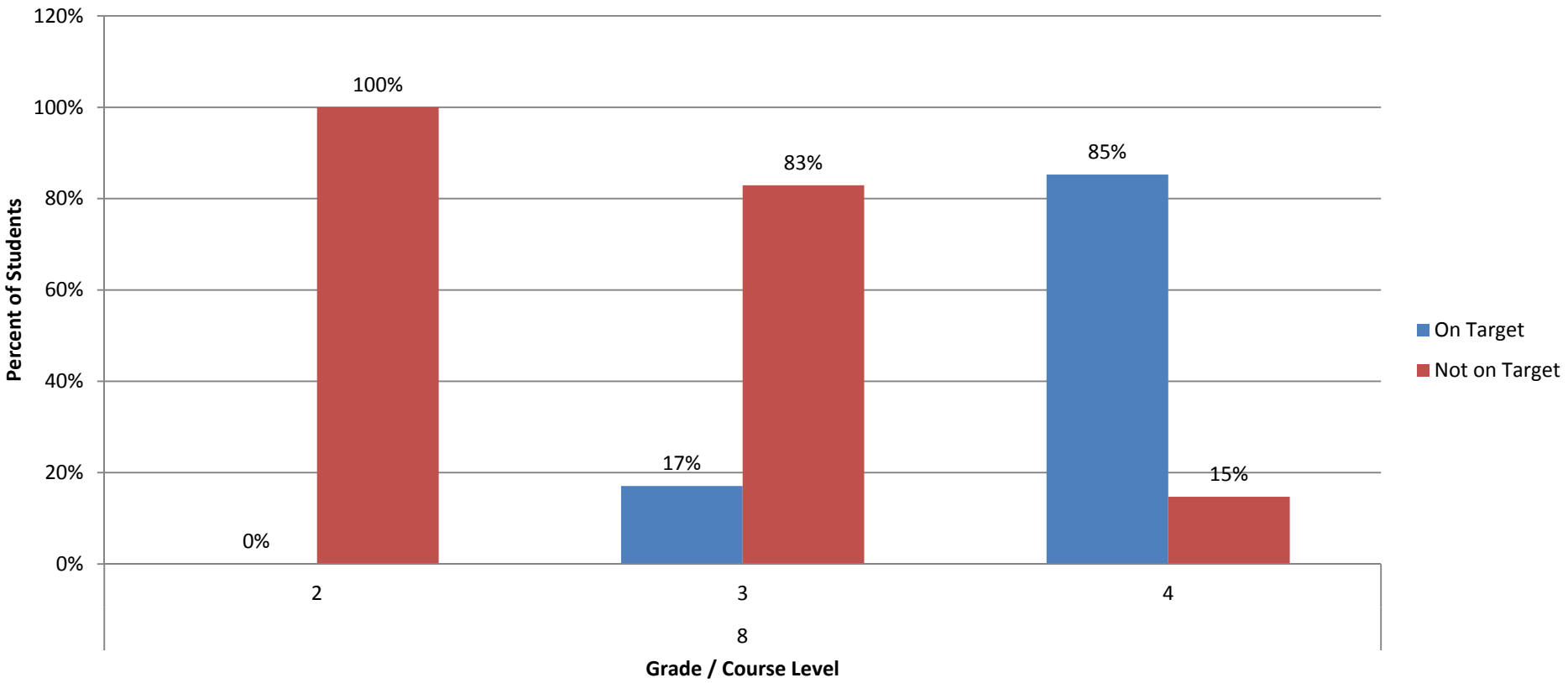
Students in level 2 grade 8 Math are not on target to participate in level 4 or higher Math high school courses. This does not suggest that students taking a level 2 grade 8 Math course cannot earn a college degree or that the student will not participate in level 4 of higher courses in other disciplines.

1,800 students in this cohort



Students in level 2 grade 8 Science are not on target to participate in level 4 or higher Science high school courses. This does not suggest that students taking a level 2 grade 8 Science course cannot earn a college degree or that the student will not participate in level 4 or higher courses in other disciplines.

1,800 students in this cohort

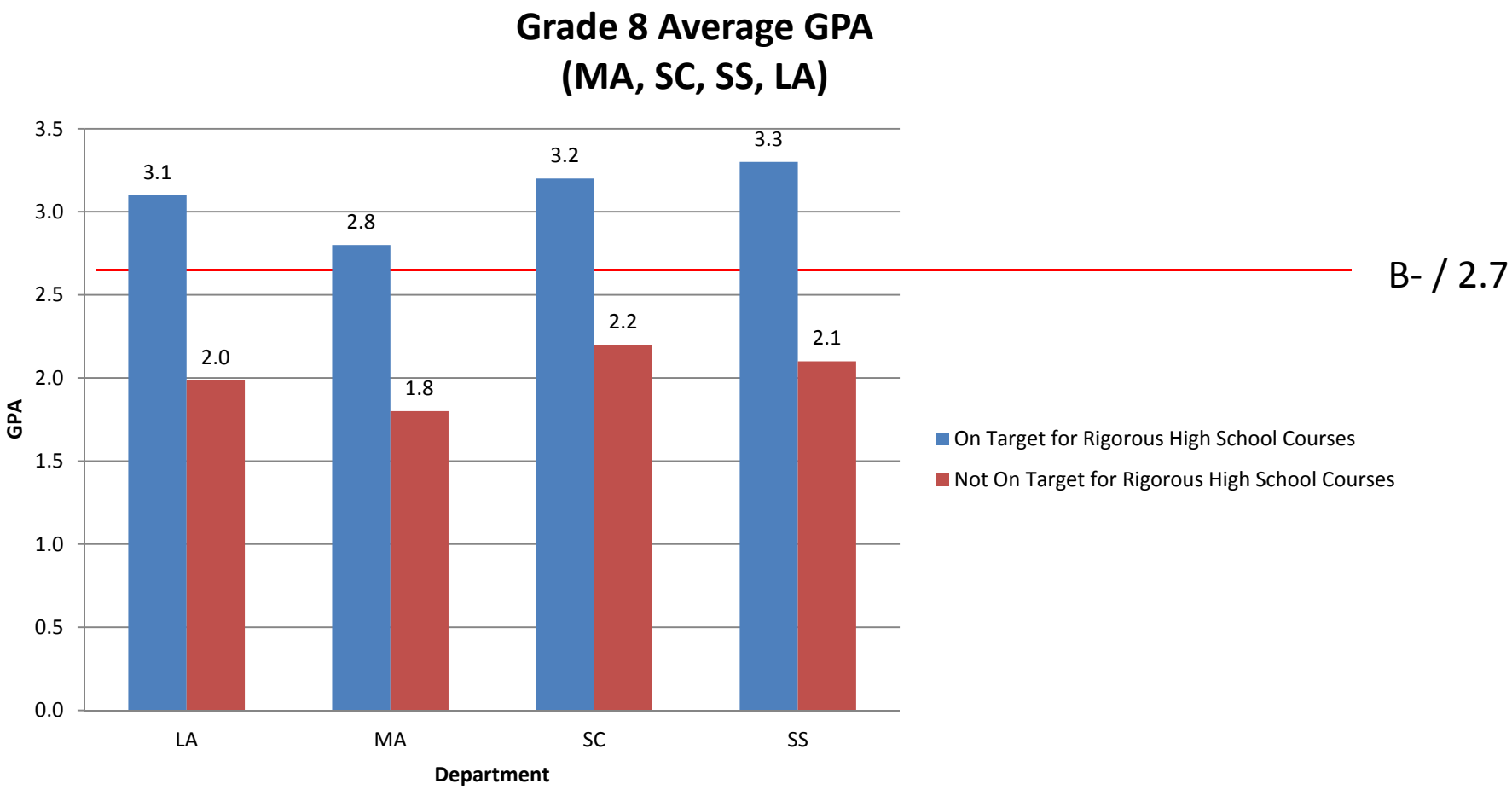


Students in level 2 grade 8 Social Studies are not on target to participate in level 4 or higher social Studies high school courses. This does not suggest that students taking a level 2 grade 8 Social Studies course cannot earn a college degree or that the student will not participate in level 4 or higher courses in other disciplines.

1,800 students in this cohort

What was the middle school academic experience of students earning a college degree?

- On average, students whose high school schedule was rigorous in grades 11 and 12, participated in 3 or 4 level 4 or higher courses (Language Arts, Math, Science, social Studies) in grade 8.



On average, students that are on target for rigorous high school course work earn a B- or higher as a final grade in grade 8 in core subjects.

1,806 students in this cohort

What was the middle school academic experience of students who participated in a large percent of higher level course in grade 11 and 12?

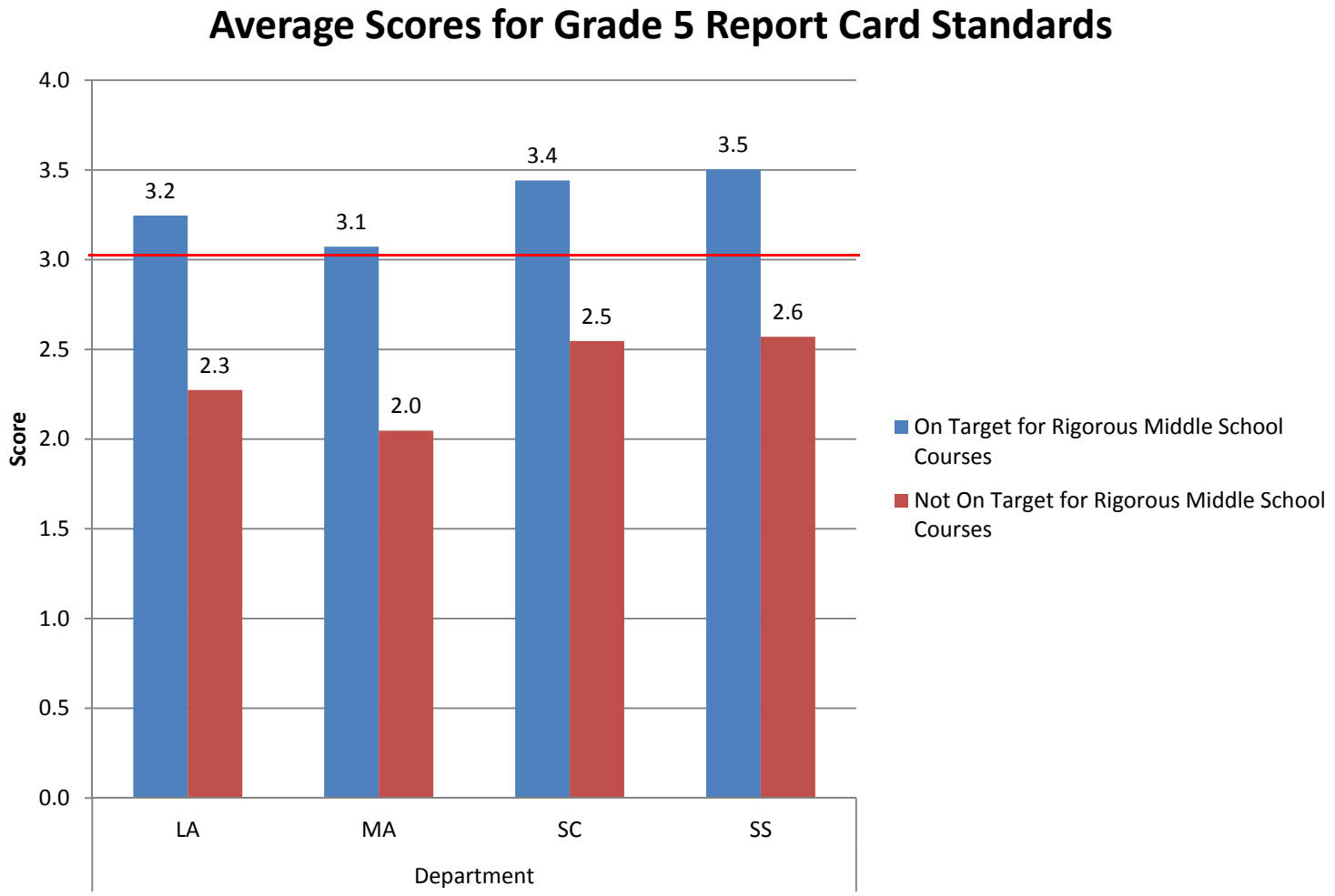
- Participation in level 4 courses or higher.
- Final grades of a B- or higher in core subjects.
- Scoring proficient on the Language Arts and Math NJASK exam.

What was the elementary school academic experience of students who earned a college degree?

- Do not have enough longitudinal data to construct a cohort from grade 5 through college graduation.
- Selected students in the 2009-2010 grade 8 class whose schedules were similar to the middle school schedules of students on target to earn a college degree and examined the students grade 5 academic experience.
- Selected students in the 2009-2010 grade 8 class whose schedules were similar to the middle school schedules of students not on target to earn a college degree and examined the students grade 5 academic experience.

Elementary School Performance Key

- **4** Consistently with reasoning, connections, or extensions
- **3** Independently with competence
- **2** With support
- **1** Of concern and below grade level



Students participating in level 4 or higher courses in grade 8 earn average scores of 3 and higher across standards in grade 5.

307 students in this cohort

Research identified the following indicators as a pathway to success.

- High School
  - Rigorous high school courses
  - Completion of Algebra II by grade 11
  - Scoring 3 or higher on AP exams
  - Score of 1550 or higher on the SAT
  - 24 or higher on the ACT
- Middle School - Eighth-grade academic achievement has a significant impact on students' ability to become college and career ready by the end of high school.
  - Algebra in Grade 8.
  - Advanced Reading 6-8
- Elementary School
  - Advanced Math in grade 5
  - Advanced Reading K-5

Our findings are in line with research

- High School
  - Rigorous high school courses
  - Final grades of a B- or higher in core subjects
  - PSAT Results indicating college readiness
  - Scoring 3 or higher on AP exams
  - Scoring proficient on the Math and Language Arts HSPA exam
- Middle School - Eighth-grade academic achievement has a significant impact on students' ability to become college and career ready by the end of high school.
  - Algebra in Grade 8.
  - Rigorous coursework in Language Arts, Science and Social Studies.
  - Final grades of a B or higher in core subjects
  - Scoring proficient on the Math and Language Arts NJASK exam
- Elementary School
  - Ability to work independently with competence in elementary school
  - Scoring proficient on the Math and Language Arts NJASK exam

Combining the results is a good place to start

- High School
  - Rigorous high school courses in grades 11 and 12.
  - Final grades of a B- or higher.
  - Completion of Algebra II by grade 11.
  - Scoring 3 or higher on AP exams.
  - Score of 1550 or higher on the SAT
  - 24 or higher on the ACT.
  - PSAT Results indicating college readiness.
  - Score proficient on the HSPA Math and Language Arts exams.
- Middle School - Eighth-grade academic achievement has a significant impact on students' ability to become college and career ready by the end of high school.
  - Algebra in Grade 8.
  - Rigorous coursework in Language Arts, Science and Social Studies.
  - Final grades of a B- or higher.
  - Score proficient on the NJASK Math and Language Arts exams.
- Elementary School
  - Ability to work independently with competence in elementary school. Average score of 3 or higher in each discipline.
  - Advanced Math in grade 5. Level 4 or higher.
  - Advanced Reading K-8.
  - Score proficient on the NJASK Math and Language Arts exams.

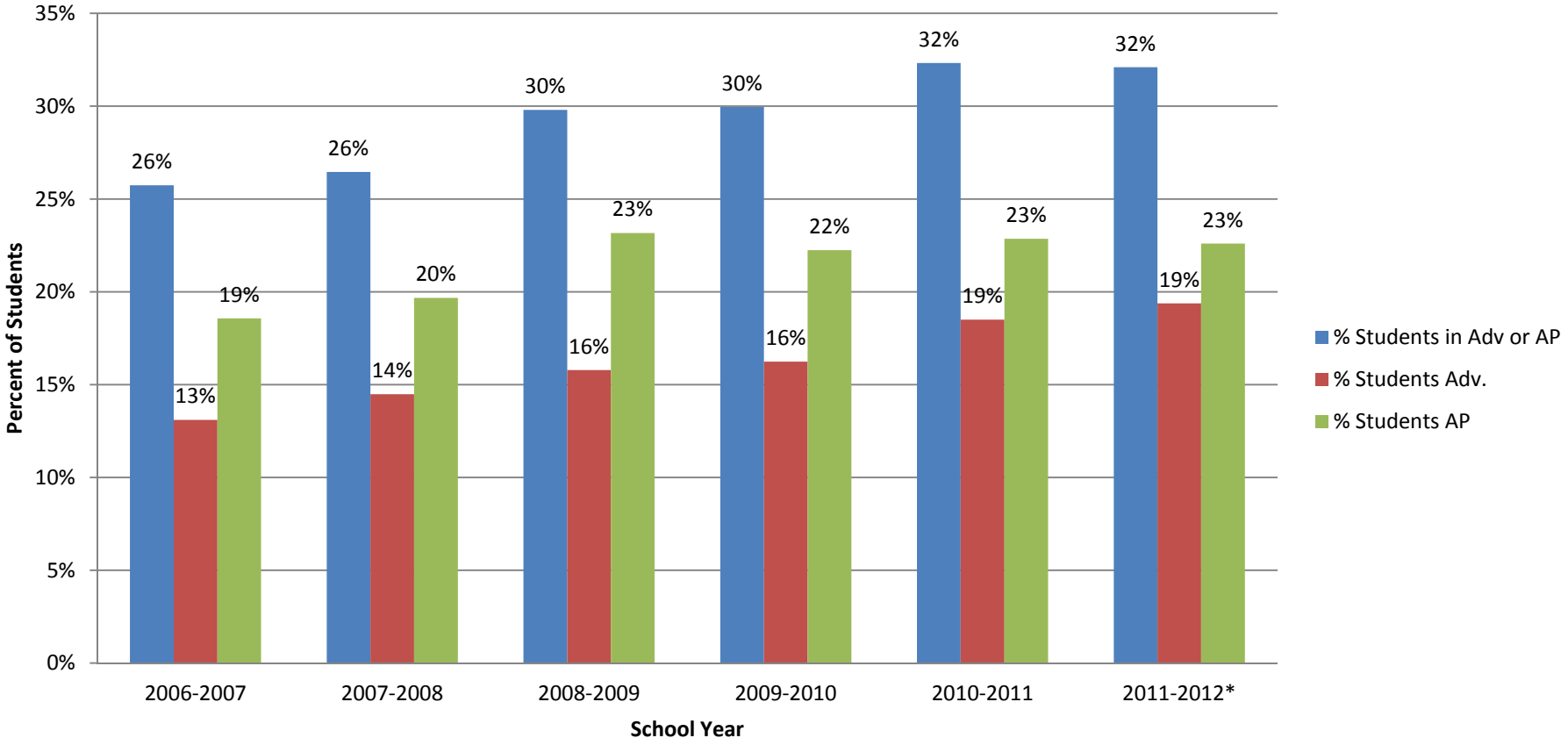
Creating indicators of college readiness for grade K-12 …

- Define and communicate student performance measures that maximize a students postsecondary school options.

2010-2011 AP Results

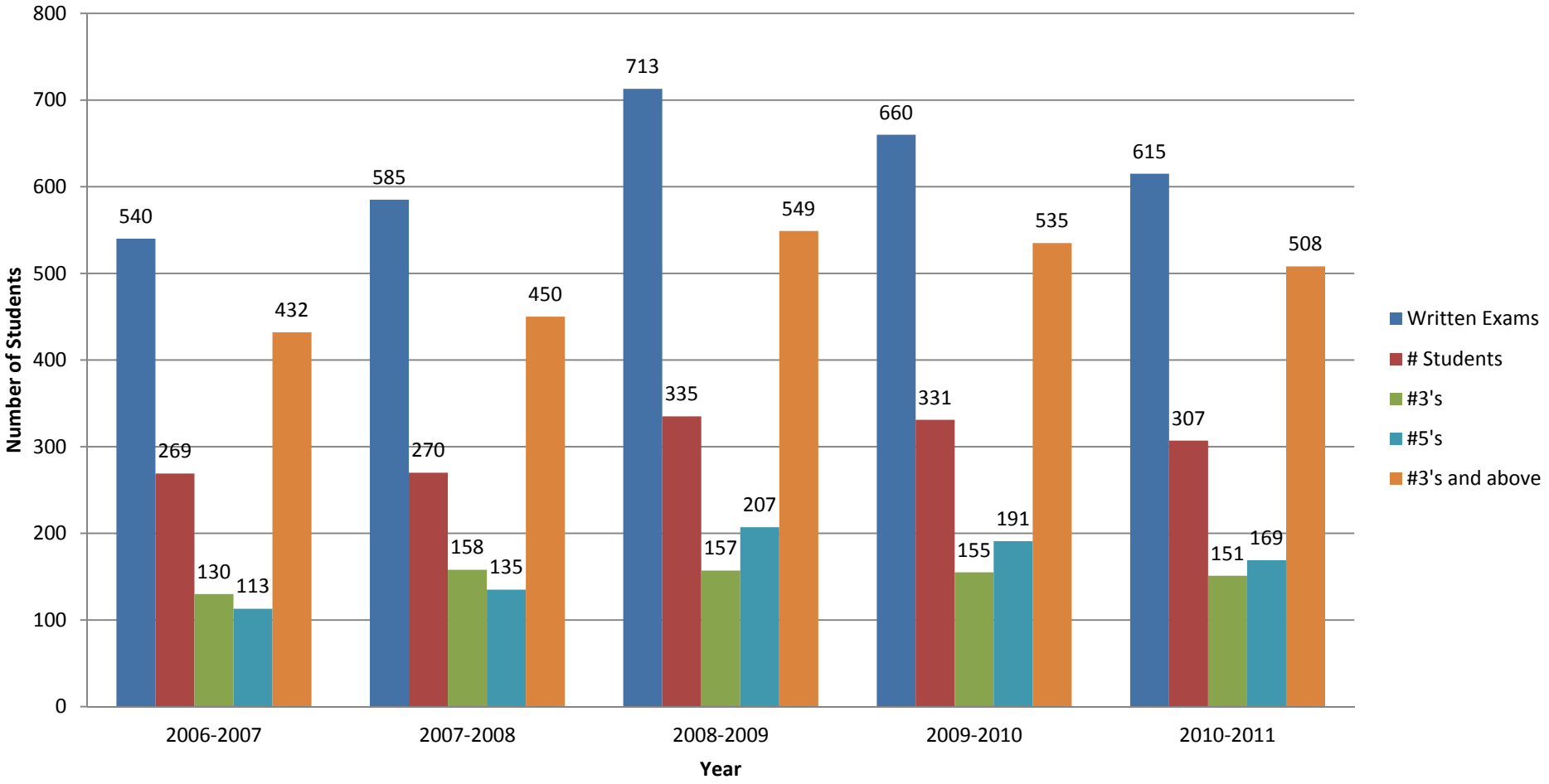
South Orange & Maplewood School District

Columbia High School Student Participation in Advanced and AP Courses



*Based upon quarter 1 enrollment. Number may change during the year as students enter/exit the school system and add/drop classes.

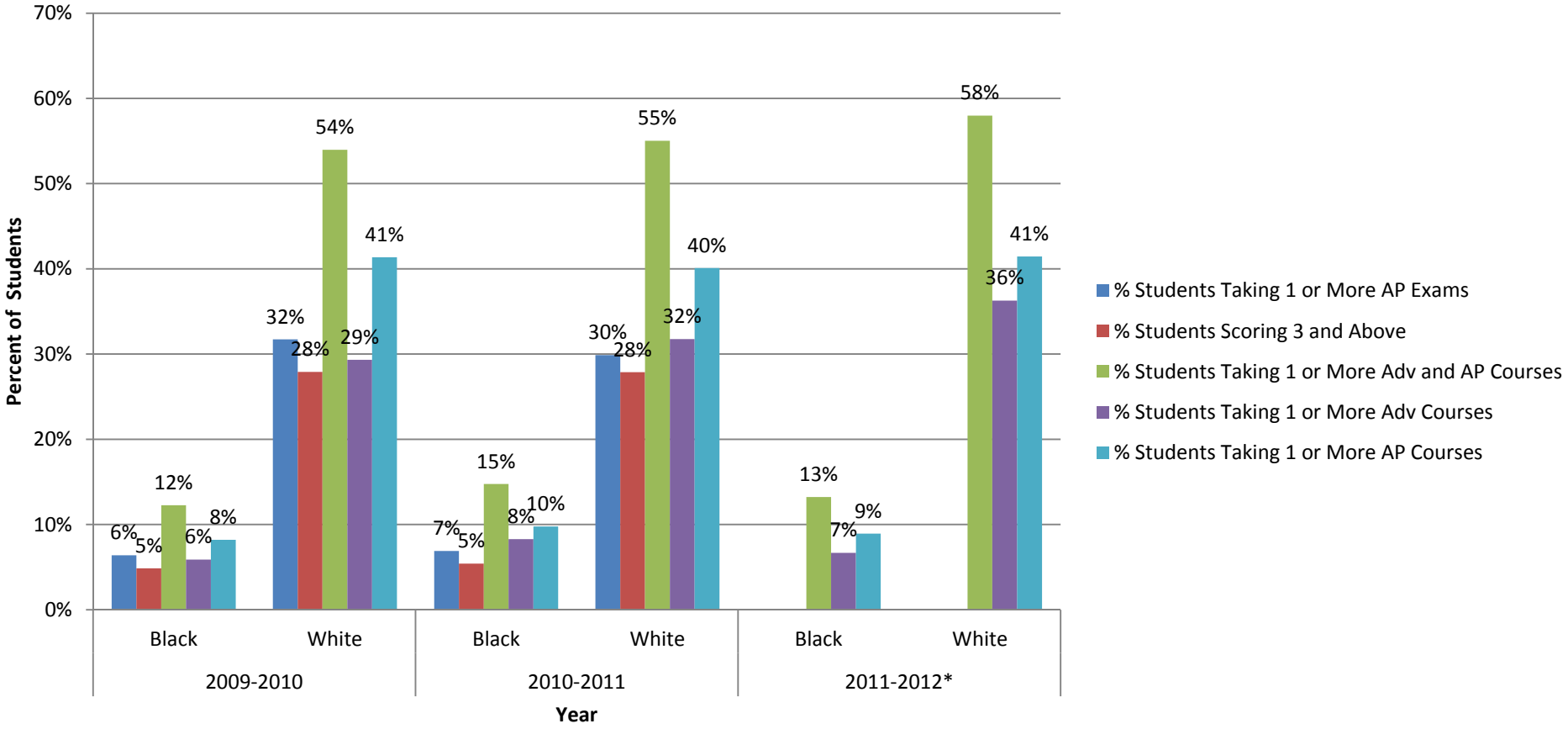
Columbia High School Student Participation on AP Exams



The # of AP exams declined from 660 to 615 mainly due to a change in course offerings for Social Studies.

2009-2010 results were updated by the College Boards after Last Falls Presentation.

Student Participation in Advanced Courses, AP Courses, and AP Exams by Ethnicity



*Based upon quarter 1 enrollment. Number may change during the year as students enter/exit the school system and add/drop classes.