



Student Academic Outcomes in the Anchorage School District, November 2011

How well does the Anchorage School District educate its students? As with any large district, there's a wide range of student outcomes. Some students excel, taking advantage of opportunities ranging from an International Baccalaureate program to dozens of AP classes to Health and Engineering Academies, and gaining admission to some of the most selective universities in the nation. Others struggle even to finish school – every year, a few dozen students drop out of Anchorage's middle schools, not even reaching, let alone completing, high school. But neither extreme tells us much about how well the district educates the majority of its students.

Typical student outcome measures include test scores and graduation and dropout rates. Measures of post-secondary success (college attendance and completion, employment) would be helpful, and the Anchorage School District does conduct surveys of its graduates that provide limited information on those outcomes as well.

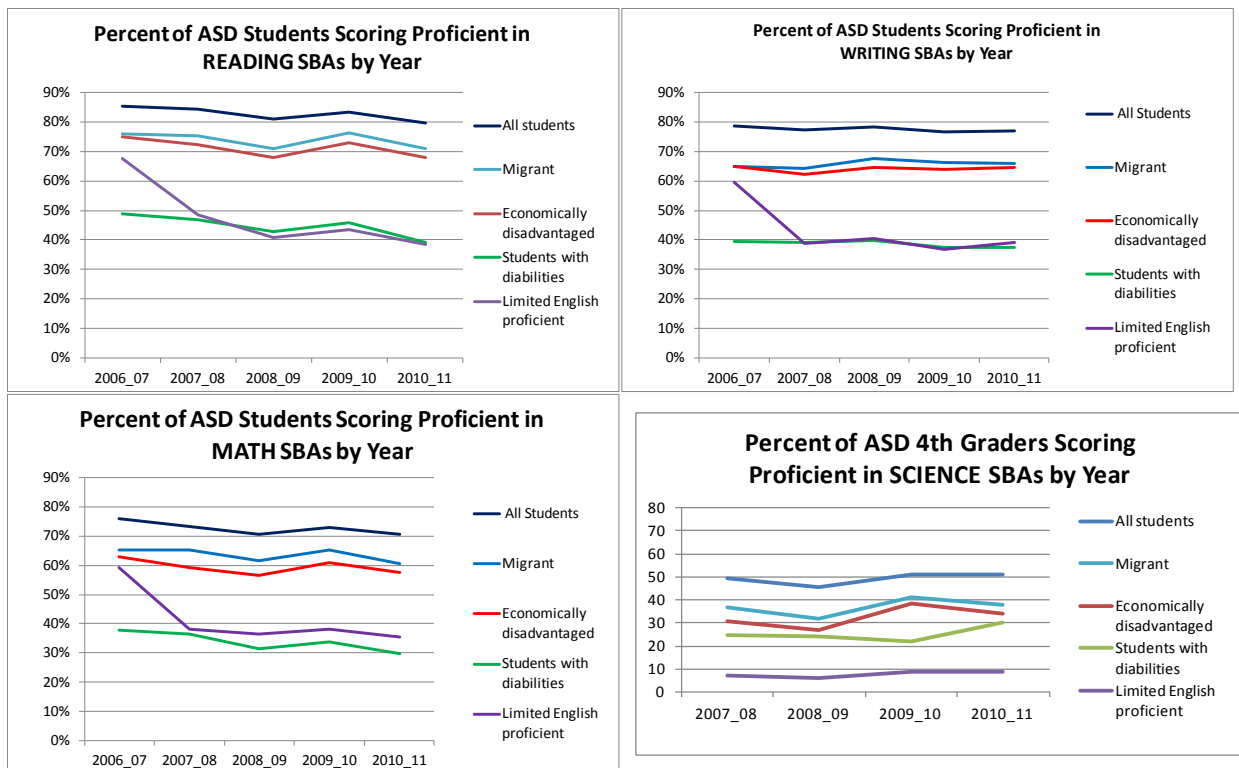
Tests they take

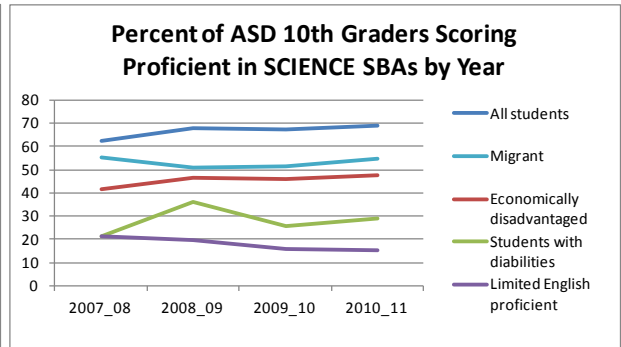
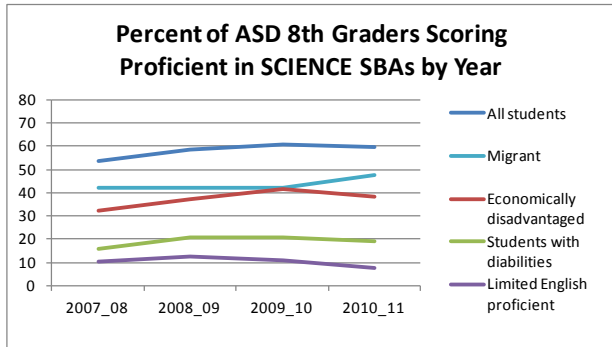
Anchorage School District students take many different assessments for different purposes. Students entering the district for the first time in Kindergarten or 1st grade take the Alaska Developmental Profile (technically a screening tool and not an assessment). Beginning in 2012-13, students' reading skills will be assessed using AIMSweb (K-4th grade) or COREK12 (5th - 10th grade) in Fall, Winter and Spring to help their teachers identify their specific learning needs. In 2014-15, all students' math skills will be assessed. 3rd through 10th grade students take the Alaska Standards-Based Assessments in reading, writing and math in April; 4th, 8th and 10th grade students take a Standards-Based Assessment in science as well. The Standards-Based Assessments are the tests Alaska uses for accountability requirements under NCLB. 10th graders' tests are combined with the High School Graduation Qualifying Examination into a single assessment; students who don't pass all three sections of the High School Graduation Qualifying Examination as 10th graders re-take the sections they failed at least once a year and potentially twice a year—retakes are offered in fall and spring—until they pass. 5th and 7th graders take the TerraNova, a nationally norm-referenced test of reading, language and math. As part of the district's College and Career Ready initiative, 8th graders take EXPLORE and 10th graders will take PLAN (not on this year's calendar), both nationally normed assessments (from ACT) of reading, English, math and science that also include a high school course planning and career interest component. 11th graders will take WorkKeys, ACT's job skills assessment system, in Applied Mathematics, Reading for Information and Locating Information.

Test types

Most of the test results reported here are from standards-based rather than norm-referenced tests. Standards-based tests are those where scores are determined by how students perform relative to a set of standards – in simple terms, how many questions they get right compared to how many students at that level are expected to know. In norm-referenced tests, student scores are determined by how many questions they answer correctly compared to a previously tested group of students selected to be representative of a population – typically in this case, the population of all students in the US. The Standards-Based Assessments, and the High School Graduation Qualifying Examination are standards-based tests; TerraNova, EXPLORE and PLAN are nationally normed tests.

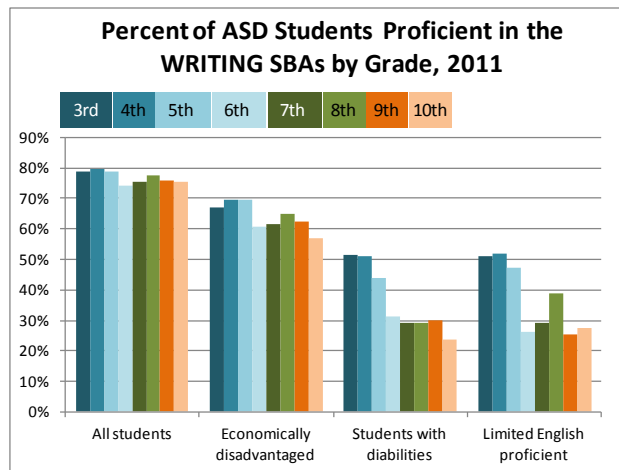
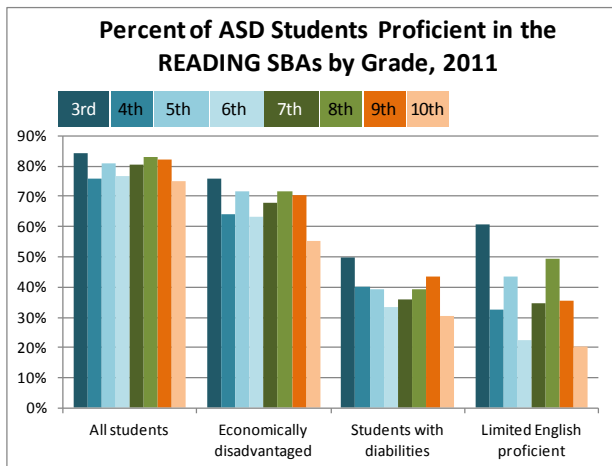
Standards-Based Assessments Results: Over the last five years, there has been a modest downward trend in the number of students who score proficient or above on the state’s Standards-Based Assessments of Reading, Writing and Mathematics. This may be partially due to changing district demographics (for example, the proportion of students identified as economically disadvantaged increased from 37 to 44 percent in that time period); however, results declined for subgroups as well as the total population.

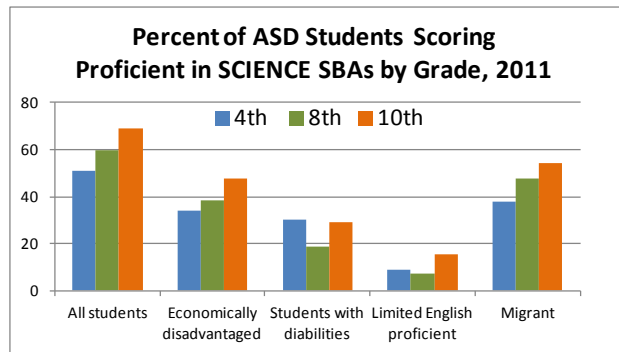
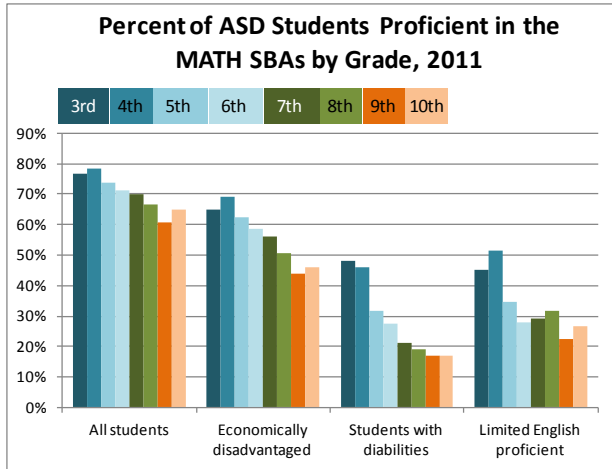




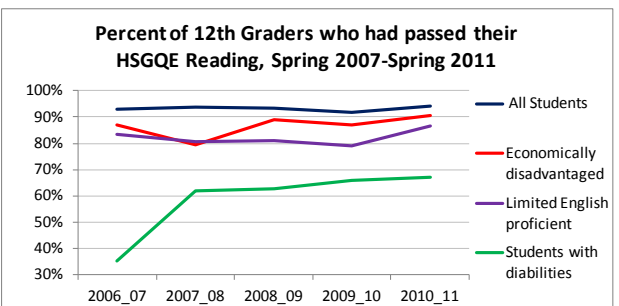
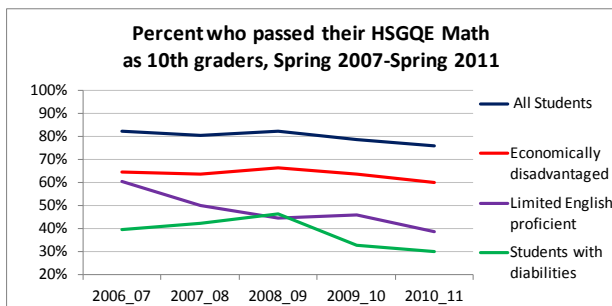
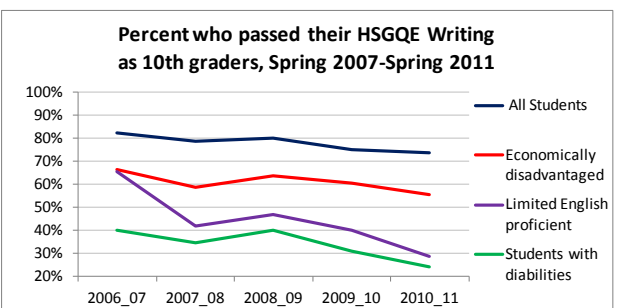
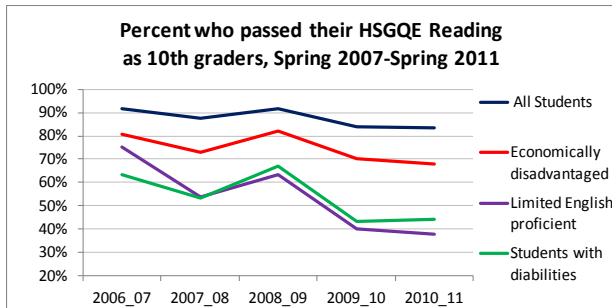
Only 4th, 8th, and 10th graders take the science Standards-Based Assessments, and there are only four years of science scores. Overall, students showed gains from 2008 to 2011, with 8th and 10th graders grades showing greater improvement than 4th graders. Limited English Proficient 8th and 10th graders showed slight declines.

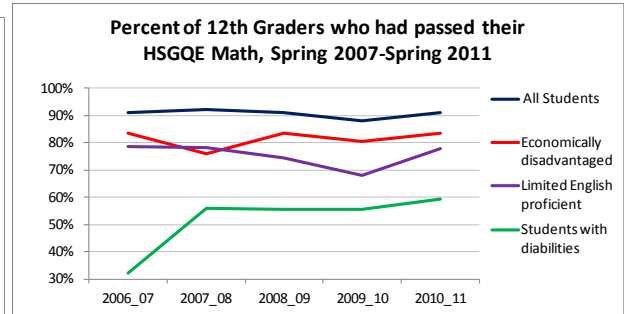
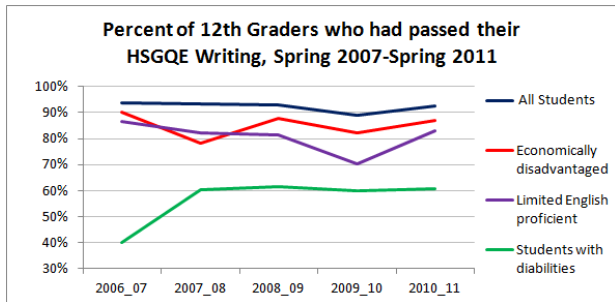
A look at Standards-Based Assessment scores by grade shows other patterns. In reading, writing and math, higher-grade students are less likely to be proficient than lower grade students; in science, however, 8th and 10th grade students score higher than 4th grade students in most subgroups.





As mentioned above, the 10th grade High School Graduation Qualifying Examination is administered in the same test session as the 10th grade Standards-Based Assessment; some questions are specific to each of these assessments, but many are shared. So 10th graders may be proficient on their Standards-Based Assessment and pass their High School Graduation Qualifying Examination, fail both, or pass one and fail the other. Tenth grade High School Graduation Qualifying Examination pass rates, like Standards-Based Assessment scores, declined between the spring, 2007 and spring, 2011. However, 10th graders who do not pass the exam on their first try take it again as 11th and if necessary 12th graders. The percent of 12th graders who have passed each High School Graduation Qualifying Examination subject (whether on their first try or on a subsequent attempt) is relatively constant between 2007 and 2011, and increased sharply for students with disabilities between 2007 and 2008.



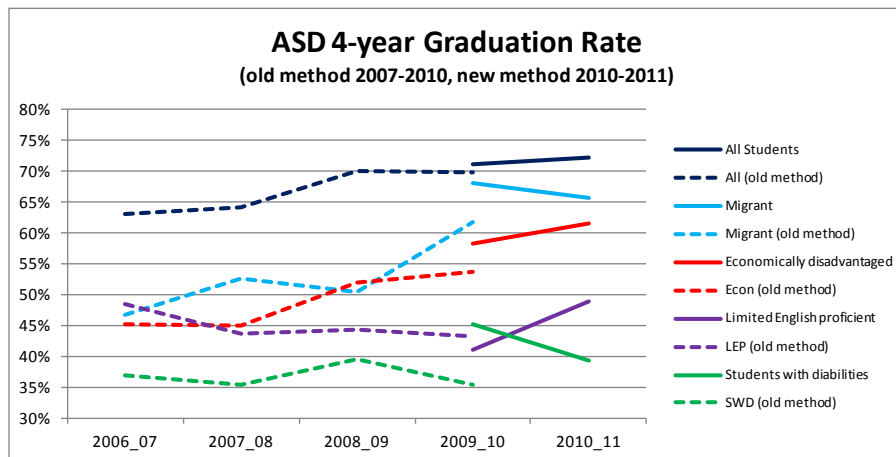


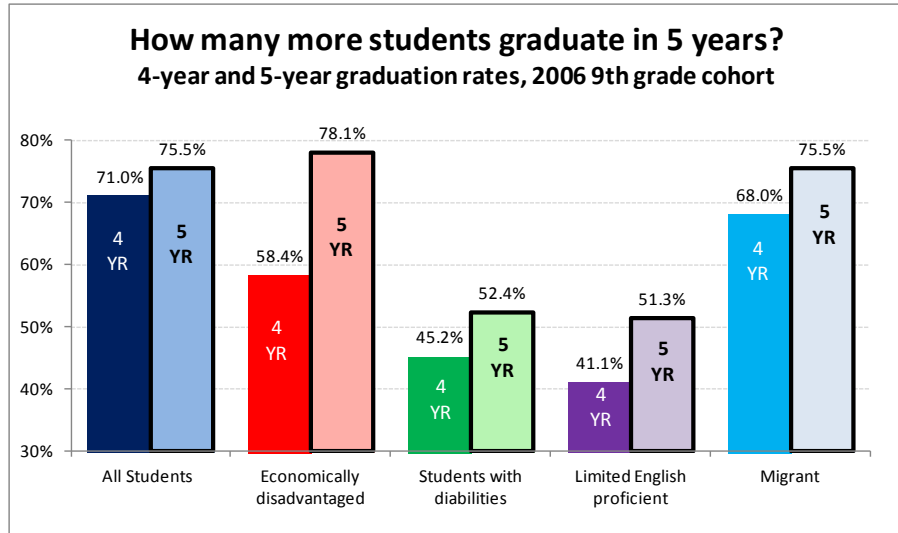
Graduation rates

In 2010-2011 year, the state changed how it calculates the high school graduation rate. The new four-year graduation rate shows the number of students who enter ninth-grade and graduate in four years or less. The five-year rate shows the number of students who enter ninth-grade and graduate in five years or less. If the new state calculation was applied to the Anchorage School District's 2010 graduating class, the four-year graduation rate would have been 71.04 percent. The four-year graduation rate increased by 1.1 percentage points from the 2009-2010 to the 2010-2011 school year.

The first graph below shows district four-year graduation rates from 2006_07 to 2010_11. The two calculation methods are not completely comparable, so rates calculated with the old method are shown with dotted lines and the new method, solid lines. Colors indicate the student subgroup. Four-year graduation rates for most subgroups have risen over the last 5 years.

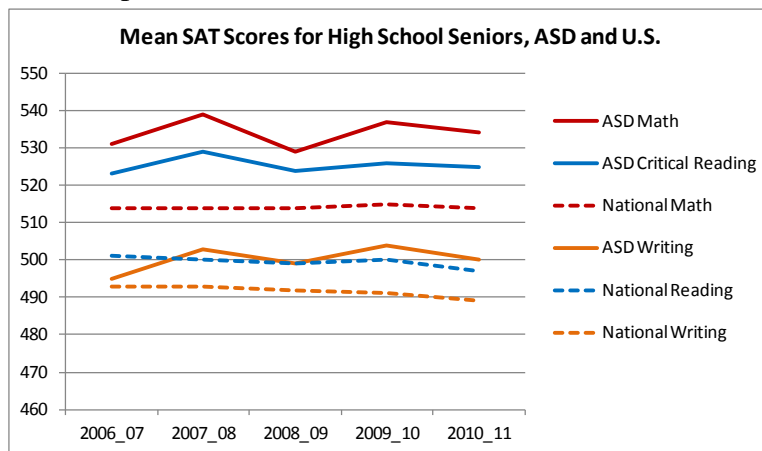
The second graph compares the four- and five-year graduation rates of students who started 9th grade in the fall of 2006—that is, the four-year graduation rate in 2010 with the five-year graduation rate in 2011. (Both rates were calculated using the new method) The five-year rate is by definition higher than the four-year rate, since it includes all the four year graduates as well as those who took up to an extra year to graduate. While all groups gained, economically disadvantaged students gained remarkably – their 5-year graduation rate was slightly higher than the average rate for all students.



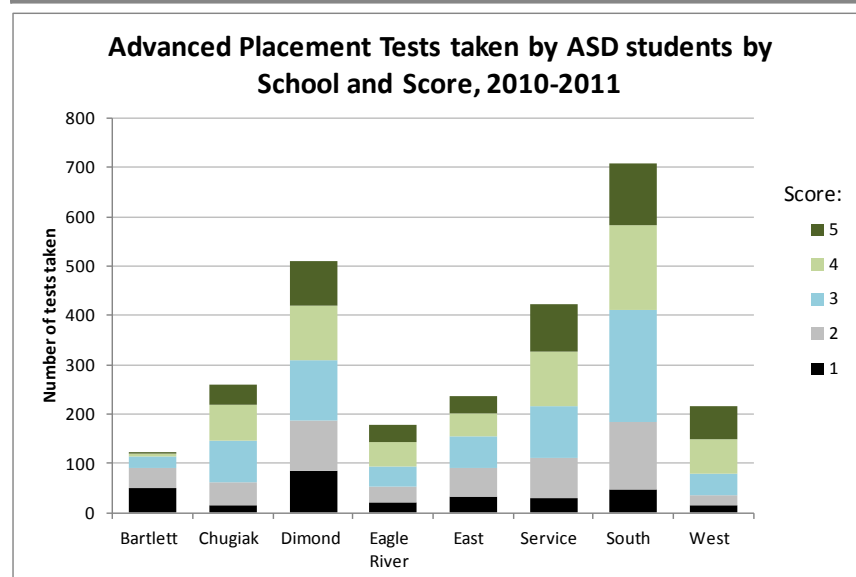
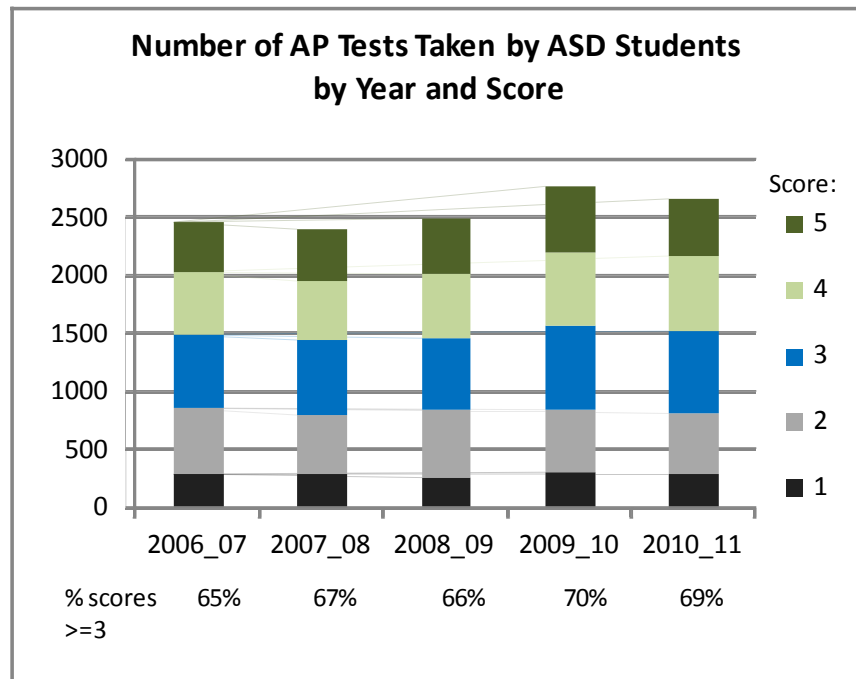


Non-comprehensive measures

While not all Anchorage School District students take the SAT tests, many do, and for college-bound seniors, the SAT can provide one indication of where they stand relative to students nationally. The graph below compares the SAT scores of district 12th graders who took the test (source: Profile of Performance p 258) with national averages for high school seniors who took the test (as reported by the College Board). Anchorage seniors do somewhat better than the national average in reading, writing and math. In 2011, a smaller proportion of district seniors took the SAT (45 percent) than seniors nationally (53 percent). If the national test population includes more students at lower achievement levels, this could account for national means being lower. However, the score gap in math and reading has remained relatively constant since 2006. In that year, 52 percent of Anchorage seniors took the SAT compared to 53 percent of seniors nationally. So while having relatively fewer students take the test may account for some of Anchorage's higher score (especially in writing, where the score gap grows as the difference in the percent tested grows) in reading and math ASD students appear to perform better, on average, than their national peers.



Advanced Placement test-taking provides another indicator of how well the Anchorage School District is educating their college bound students. Students take Advanced Placement courses to prepare for the test, and can typically receive college credit (or placement out of required courses) for a score of 3 or above. As the graph below shows, the number of tests taken each year has increased over the last five years, as has the percent of scores that are 3 or above. Most students taking Advanced Placement tests take more than one, and data aren't available providing unduplicated counts of students, so we don't know how many students took these tests. As the second graph shows, there's considerable variation between schools in both how many tests students take, and how well they score.

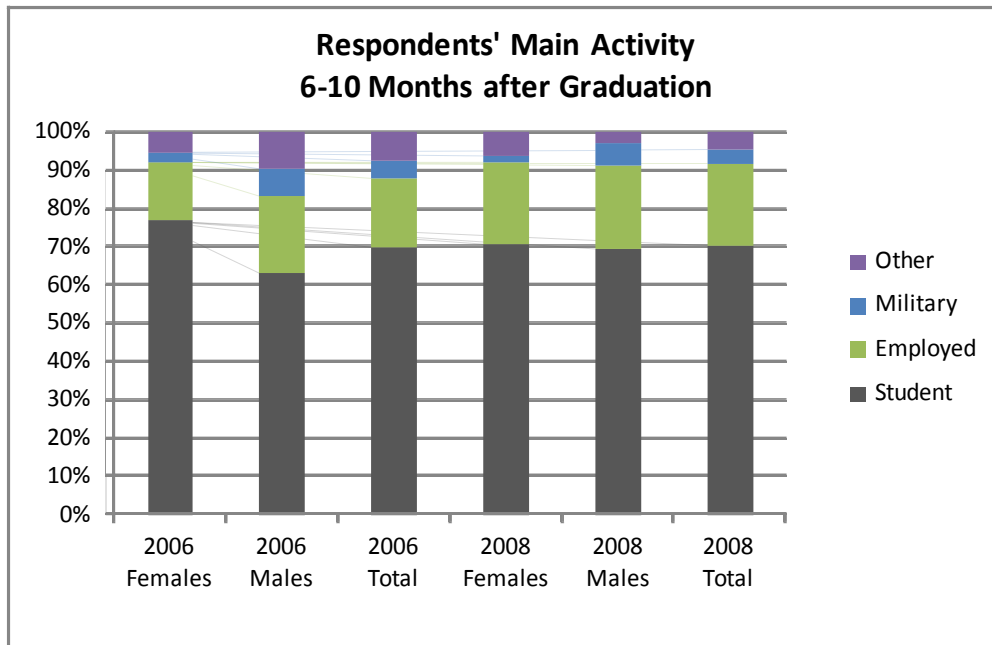


Career paths and college attendance among Anchorage School District graduates

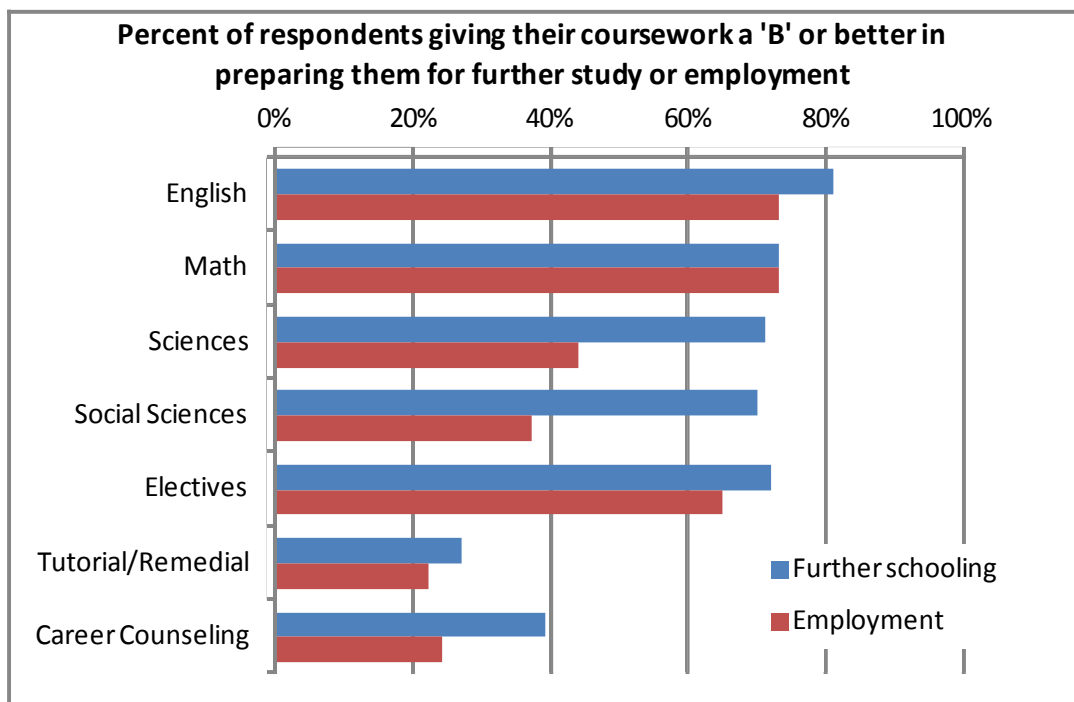
The district also collects data on its graduates, through periodic surveys and with information from the National Student Clearinghouse Student Tracker Program, which provides information about enrollment in post-secondary institutions. The Student Tracker information is limited, providing only the fact of enrollment and the name of the institution attended, but it is relatively complete, and provides a way for the district to know how many of its graduates attend college. The survey data is much richer, but depends on a sample and thus may not be representative of all graduates.

The most recent graduate surveys were completed in 2006 and 2008. Out of 2,807 graduates in the class of 2006, there were 660 respondents, or about 24% of the class. In the class of 2008, there were 2,963 graduates, and 460 responses or about 16 % of the class. These low response rates mean that the samples may not be representative of all graduates. They are representative on both gender and ethnicity (2006 responses were weighted to correct for ethnicity) but we don't know if they're representative in terms of academic achievement or of post-graduate success. Comparison of the percent of class of 2008 respondents enrolled in college (70%) with Student Tracker data on the percent of 2008 graduates enrolled in May, 2009 (43%) and the percent who had been enrolled at any time from graduation until May 2008 (61%) suggests that the survey may over-represent graduates in college.

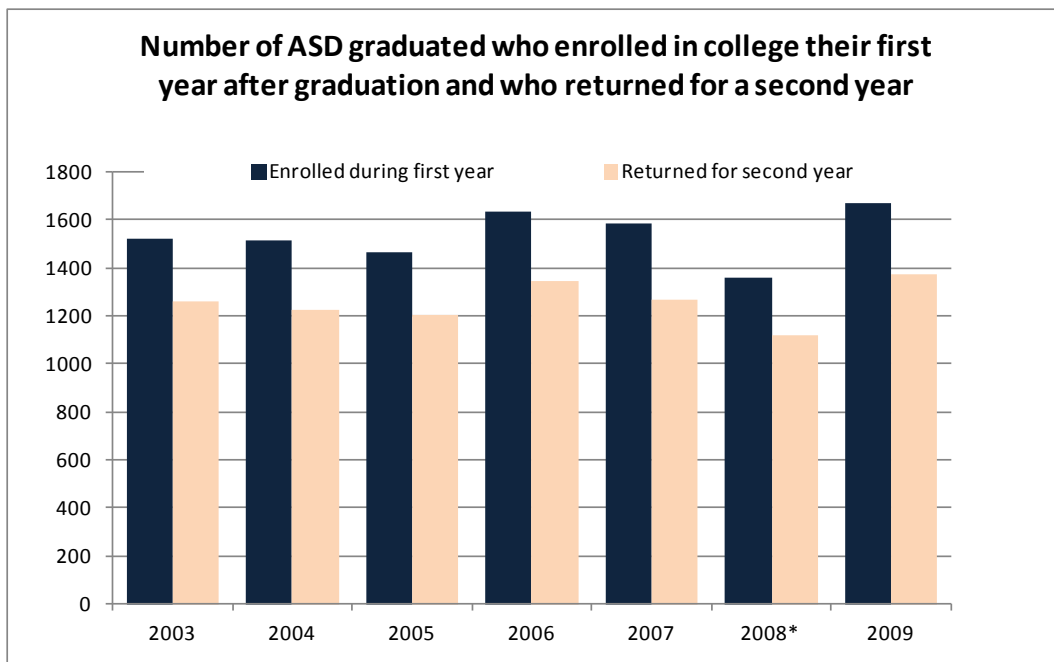
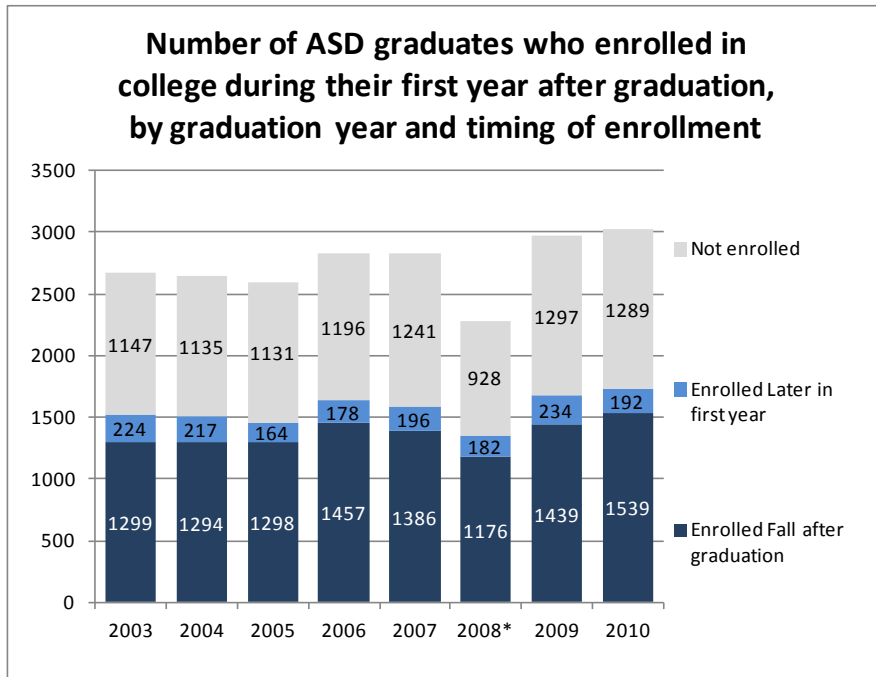
The graph below shows what the respondents reported as their primary activity (many reported more than one activity, such as being a student and also in the military or employed). By far the most common response was student (about 70 percent) followed by employment (15-20 percent) with fewer than 10 percent of respondents in the military, or "other". The two graphs that follow it show the Student Tracker information, first on students from the classes of 2006 and 2008, and then on what percent of students from graduating classes going back to 1998 have enrolled in post-secondary education at some time between graduation and May, 2009. As that graph shows, the percent of graduates who enroll in college climbs from just over 60 percent in the first year after graduation to around 70 percent by five years after graduation, where it levels off.



Finally, the graduate survey asks how students would grade their high school coursework in preparing them for further study (asked of those who are students) and employment (asked of those who are employed). The majority of respondents give their English and Math courses a 'B' or better in both categories.



Data from the Student Tracker show that about half of Anchorage School District graduates enroll in a two- or four-year postsecondary institution in the fall immediately following their graduation. An additional six to eight percent enroll later in their first year after graduation, and over 80 percent of students who enroll sometime during the first year after their graduation return to college for a second year.



Additional students enroll in postsecondary education in subsequent years; some graduate, some leave college and then return to school, and some continue to work on their degree. The chart below shows how the graduating class of 2005 fared in college in the six years following their graduation. By 2011, over 70 percent of the class had enrolled at some point since graduation, and while 26 percent had left college without graduating, 46 percent had either graduated or were still enrolled.

