



A PROFILE OF 2014 STUDENTS WHO
TOOK THE ACT EXPLORE® AND
ACT PLAN® TESTS

Building Momentum: The Condition of Progress Toward College Readiness

ACT®

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About Building Momentum: The Condition of Progress toward College Readiness 2014

Over nearly six decades, ACT has been a trusted leader in providing research and data about student readiness for college and careers. This report looks at the progress toward college readiness made by middle school students and students at the midpoint of high school who took ACT Explore® and ACT Plan® during the 2013–2014 school year.¹ The report offers insights that will help guide our collective efforts to improve college and career readiness for the generation of students now making their way through the US education system.

ACT has developed a suite of integrated, curriculum-based assessments that provide a longitudinal approach to assessment, career and educational planning, instructional support, and evaluation. At the time data were collected for this report, there were three components to the system—ACT Explore for 8th-grade students, ACT Plan for 10th-grade students, and the ACT® test for 11th- and 12th-grade students. In 2014, ACT began to migrate users from ACT Explore and ACT Plan to the new ACT Aspire® system, which measures student skills from grade 3 through early high school (grades 9–10). All of the assessments measure English, mathematics, reading, and science skills in addition to behavioral aspects and career interests, and are designed to provide insights into college and career readiness.

In the future, ACT plans to expand its research and data collection to cover not only academic achievement, but also student behaviors and goals. These additional insights will help individuals better prepare for success throughout their lives, from kindergarten through career. The new efforts will broaden and support ACT's core mission: helping people achieve education and career success.

What Do the ACT Explore and ACT Plan Benchmarks Mean for College Readiness?

The ACT Explore and ACT Plan Benchmarks² can be used to gauge a student's progress in the 8th and 10th grades toward becoming academically ready for college. These Benchmarks gauge this progress by estimating a student's probability of successfully meeting the four ACT College Readiness Benchmarks. Students who meet a Benchmark on ACT Explore or ACT Plan are likely to have a 50% chance of earning grade of a B or higher or about a 75% chance of earning a grade of C or higher in the corresponding college courses by the time they graduate from high school.

ACT utilizes data from the ACT assessment to measure information about academic performance in the context of college and career readiness for *The Condition of College & Career Readiness*, which is published annually. However, looking at progress toward college readiness during the middle school

¹ The data in this report are from the 2009–2010 to 2013–2014 ACT Explore and ACT Plan National Data Release Files. Prior to the 2012–2013 school year, students were excluded from analyses if they tested under extended time or participated in an equating study. Starting in the 2012–2013 school year, students were excluded from analyses if they participated in an equating study, but students tested under ACT-approved accommodated administrations that result in college-reportable ACT scores were included. ACT Explore analyses were limited to 8th-grade participants, and ACT Plan analyses were limited to 10th-grade participants. Students were only included if they had a valid (non-missing) ACT Composite score. For the 2013–2014 ACT Explore cohort, N = 1,065,332; for the 2013–2014 ACT Plan cohort, N = 1,335,510.

² The ACT Explore and ACT Plan College Readiness Benchmarks used in this report are aligned for the sample of students described in Footnote 1. In 2013, new ACT College Readiness Benchmarks were developed for students taking ACT Explore and ACT Plan during the 2012–2013 school year. The new Benchmarks were used for any results pertaining to students tested during and/or after the 2012–2013 school year, whereas the old Benchmarks were used for any results pertaining to students tested prior to the 2012–2013 school year. For more information, please see the "Notes" section of this report.

and early high school years—focusing on the number or percentages of students meeting or exceeding the ACT Explore and ACT Plan Benchmarks—adds to the college readiness conversation by providing meaningful and compelling information about the earlier academic achievement of students. For students, parents, teachers, and other educators, having such information early provides more opportunity to capitalize on academic strengths, address academic challenges, and better plan for high school and college. This report highlights that information.

This report has three parts. First, the cross-sectional portion of the report presents the results of 8th-grade students who took ACT Explore and 10th-grade students who took ACT Plan during the 2013–2014 school year. Second, the longitudinal portion of the report presents the results of a cohort of students who graduated from high school in 2014 and took ACT Explore during 8th grade in 2009–2010, ACT Plan during 10th grade in 2011–2012, and the ACT during 11th or 12th grade in 2012–2013 or 2013–

2014. Each of these two parts have been organized into three sections:

- **Progress toward College Readiness**—the percentage of students meeting the ACT Explore and ACT Plan Benchmarks in each subject area
- **Access**—the number of students exposed to ACT Explore or ACT Plan
- **Academic Performance and Preparation**—student test performance and the impact of rigorous coursework on Benchmark attainment

The third and final part of the report, *Policy and Practice Recommendations for Increasing Readiness*, suggests policies and practices states and schools can implement to improve the college readiness of students.

ACT encourages educators to focus on trends (e.g., three, five, ten years), not year-to-year changes, which can represent normal—even expected—fluctuations. Trend lines offer more insight into what is happening in a school, district, state, or the nation than can data from any single year.

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Cross-Sectional Analyses: Students Taking ACT Explore and ACT Plan During the 2013–2014 School Year

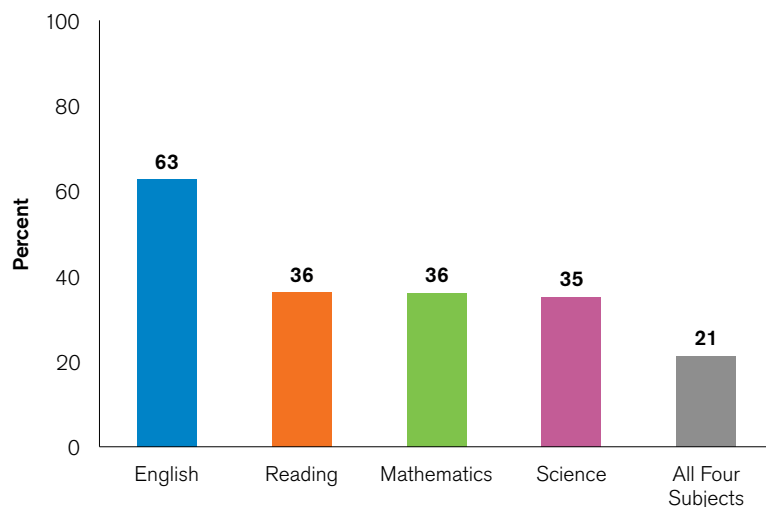
Progress toward College Readiness

ACT Explore Benchmarks by Subject

The relative percentages of students meeting the ACT Explore Benchmarks in 2014 were similar to the percentages of students meeting the ACT Benchmarks, with the English Benchmark being the most commonly met. Smaller percentages of students met the Benchmarks in reading, mathematics, and science.

In 2014, 63% of all ACT Explore-tested 8th graders met the English Benchmark, while only 21% met the Benchmarks in all four subjects.

Percent of ACT Explore-Tested 8th Graders Meeting ACT Explore Benchmarks by Subject, 2014

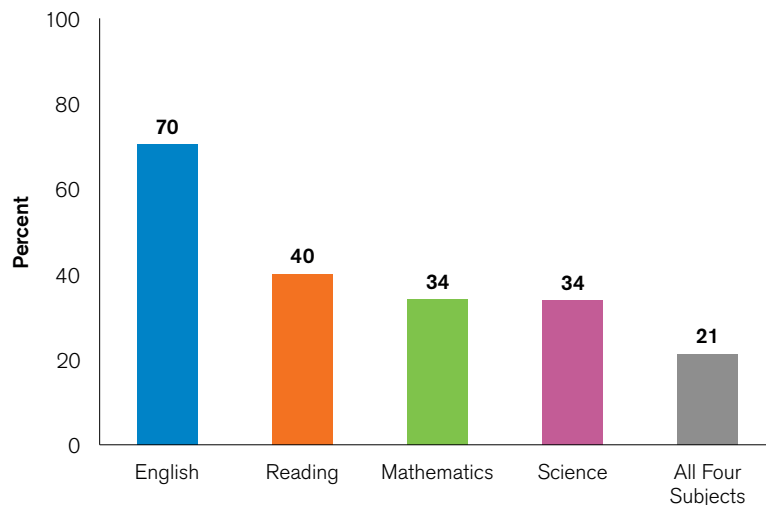


ACT Plan Benchmarks by Subject

The relative percentages of students meeting the ACT Plan Benchmarks in 2014 were similar to the percentages of students meeting the ACT Explore Benchmarks, with the English Benchmark being the most commonly met.

In 2014, 70% of all ACT Plan-tested 10th graders met the English Benchmark, while only 21% met the Benchmarks in all four subjects.

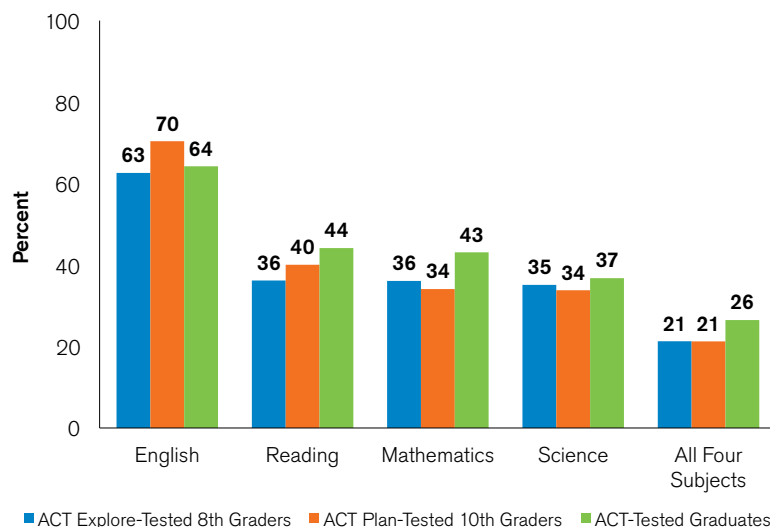
Percent of ACT Plan-Tested 10th Graders Meeting ACT Plan Benchmarks by Subject, 2014



Progress toward College Readiness

ACT College Readiness Benchmarks—On Target and Attained

Percent of 2013–2014 ACT Explore-Tested 8th Graders, 2013–2014 ACT Plan-Tested 10th Graders, and 2014 ACT-Tested Graduates Meeting ACT College Readiness Benchmarks, 2014



With the exception of the mathematics and science Benchmarks, the percentages of 10th graders meeting the ACT College Readiness Benchmarks were higher than the corresponding percentages of 8th graders. With the exception of English, the percentages of high school graduates meeting the Benchmarks were equal to or higher than the corresponding percentages of 10th graders.

More than a quarter (26%) of 2014 ACT-tested graduates met all four ACT College Readiness Benchmarks, while only 21% of 2013–2014 ACT Plan-tested 10th graders and 21% of 2013–2014 ACT Explore-tested 8th graders did so. Across grade levels, only the English Benchmark was met by more than half of all tested students regardless of grade.

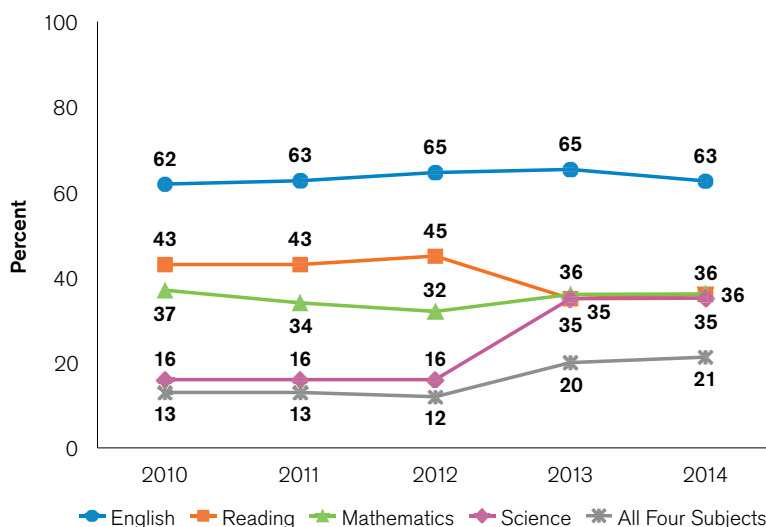
Note: Data represented in the above figure are cross-sectional and not longitudinal, reflecting three different groups of students.

Progress toward College Readiness

ACT Explore Benchmarks Over Time

Between 2010 and 2014, ACT Explore Benchmark attainment percentages increased slightly in English, from 62% to 65%, then dropped back down to 63% in 2014, and decreased slightly in mathematics, from 37% to 36%. Benchmark attainment for reading increased steadily from 2010 (43%) to 2012 (45%), and dropped in 2013 and 2014, due primarily to the update to the reading Benchmark. The percentage of students meeting the science Benchmark was relatively stable from 2010 (16%) to 2012 (16%), with a large increase in 2013 (35%), due primarily to the update to the science Benchmark. The percentage of students meeting all four Benchmarks dropped slightly from 2010 (13%) to 2012 (12%), with a large increase in 2013 (20%), due primarily to the update to the Benchmarks.

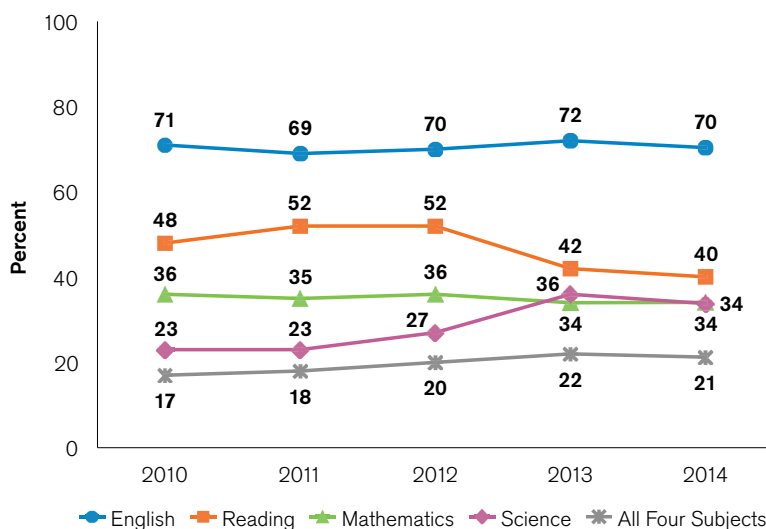
Percent of ACT Explore-Tested 8th Graders Meeting ACT Explore Benchmarks, 2010–2014



ACT Plan Benchmarks Over Time

Between 2010 and 2014, ACT Plan Benchmark attainment percentages remained relatively stable, except for a decrease in Benchmark attainment in reading and an increase in Benchmark attainment for science, primarily due to the update of the Benchmarks in 2013.

Percent of ACT Plan-Tested 10th Graders Meeting ACT Plan Benchmarks, 2010–2014

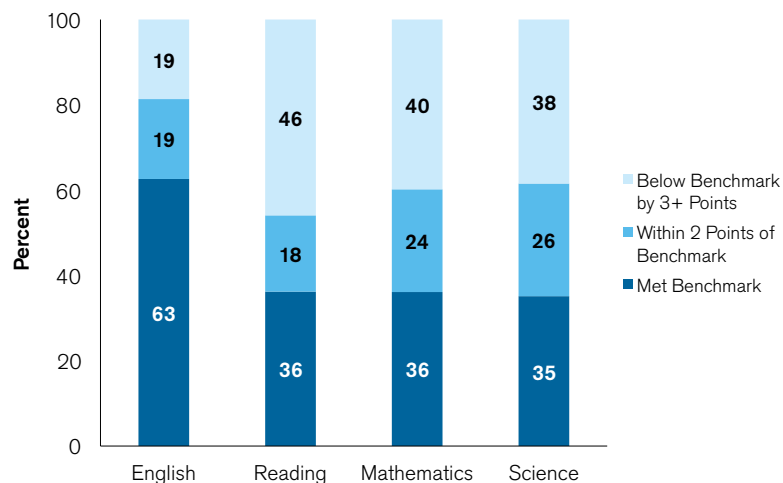


Note: Reading and science Benchmarks were updated in 2013.

Progress toward College Readiness

ACT Explore Benchmarks—Attainment and Near Attainment

Percent of ACT Explore-Tested 8th Graders by Benchmark Attainment and Subject, 2014

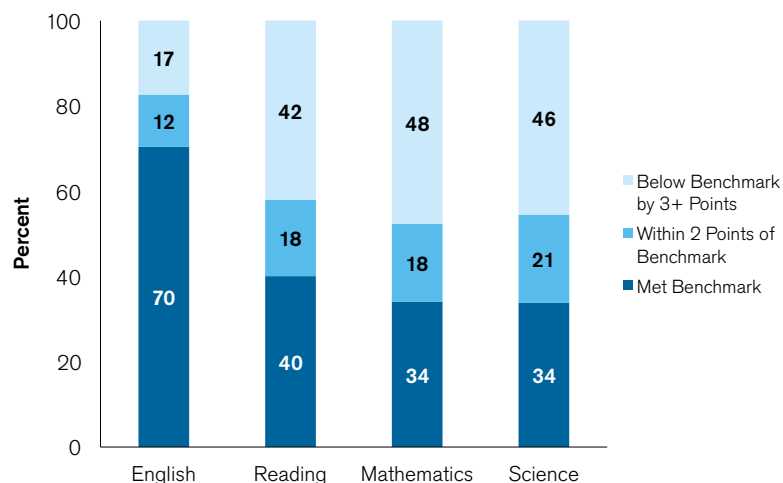


About 18% to 26% of ACT Explore-tested 8th graders were within two scale points of meeting an ACT Explore Benchmark in 2014, depending on subject area. This represents approximately 190,000 to 281,500 additional students who were close to being on track to college readiness within a subject area.

In 2014, 63% of ACT Explore-tested 8th graders met the English Benchmark, while another 19% were within two scale points of doing so. The percentages of students within two scale points of the ACT Explore Benchmarks varied in reading (18%), mathematics (24%), and science (26%).

ACT Plan Benchmarks—Attainment and Near Attainment

Percent of ACT Plan-Tested 10th Graders by Benchmark Attainment and Subject, 2014



About 12% to 21% of ACT Plan-tested 10th graders were within two scale points of meeting an ACT Plan Benchmark in 2014, depending on subject area. This represents approximately 164,000 to 276,000 additional students who were close to being on track to college readiness within a subject area.

In 2014, 70% of ACT Plan-tested 10th graders met the English Benchmark, while another 12% were within two scale points of doing so. The percentages of students within two scale points of the respective Benchmark in the other subject areas were greater, including 18% in reading, 18% in mathematics, and 21% in science.

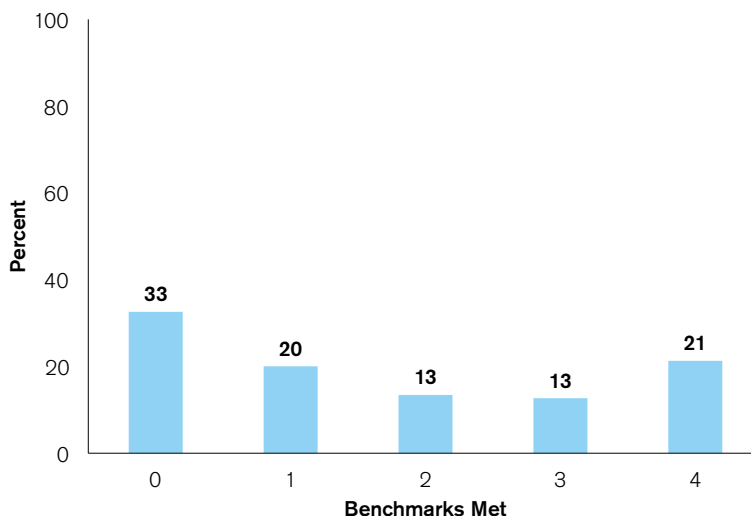
Note: Percents in this report may not sum to 100% due to rounding.

Progress toward College Readiness

Number of ACT Explore Benchmarks Attained

About 67% of ACT Explore-tested 8th graders met at least one of the four ACT Explore Benchmarks in English, reading, mathematics, or science. Thirty-three percent of the students did not meet any of the Benchmarks, and about 46% of the students met between one and three Benchmarks. Only 21% met all four of the Benchmarks, meaning that only about one in five ACT Explore-tested 8th graders were academically on track for college readiness in all four subject areas.

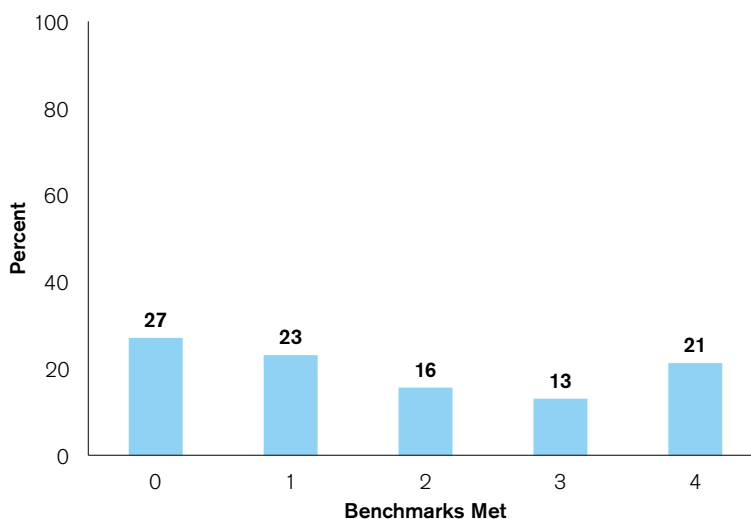
Percent of ACT Explore-Tested 8th Graders by Number of Benchmarks Attained, 2014



Number of ACT Plan Benchmarks Attained

About 73% of ACT Plan-tested 10th graders met at least one of the four ACT Plan Benchmarks in English, reading, mathematics, or science. Twenty-seven percent of the students did not meet any of the Benchmarks, and about 52% of the students met between one and three Benchmarks. Only 21% met all four of the Benchmarks, meaning that just over one in five ACT Plan-tested 10th graders were academically on track for college readiness.

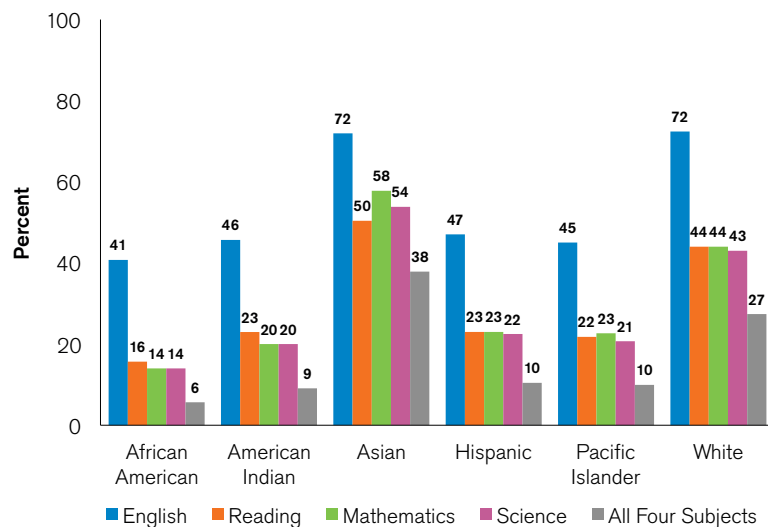
Percent of ACT Plan-Tested 10th Graders by Number of Benchmarks Attained, 2014



Progress toward College Readiness

ACT Explore Benchmarks by Race/Ethnicity

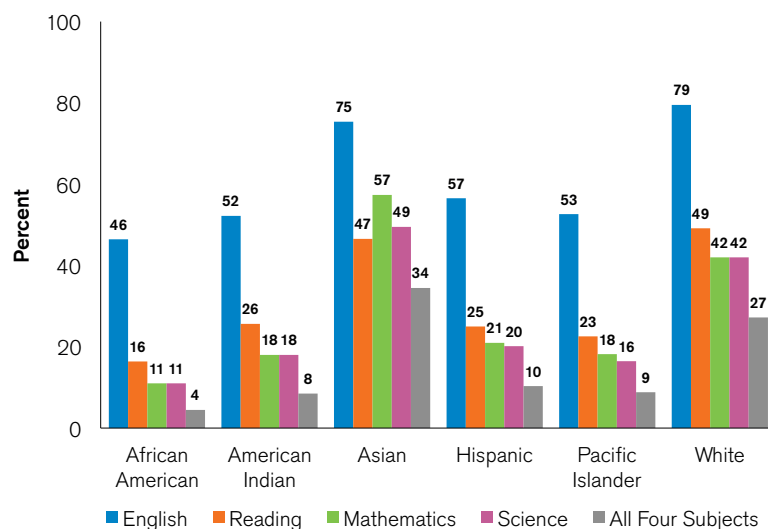
Percent of ACT Explore-Tested 8th Graders Meeting Benchmarks by Race/Ethnicity, 2014



More than one in three (38%) of ACT Explore-tested Asian 8th graders met all four ACT Explore Benchmarks in 2014, more than students from all other racial/ethnic groups. African American students were least likely to meet the Benchmarks; only 6% met all four. Across all racial/ethnic groups, more students met the English Benchmark than any other subject area.

ACT Plan Benchmarks by Race/Ethnicity

Percent of ACT Plan-Tested 10th Graders Meeting Benchmarks by Race/Ethnicity, 2014



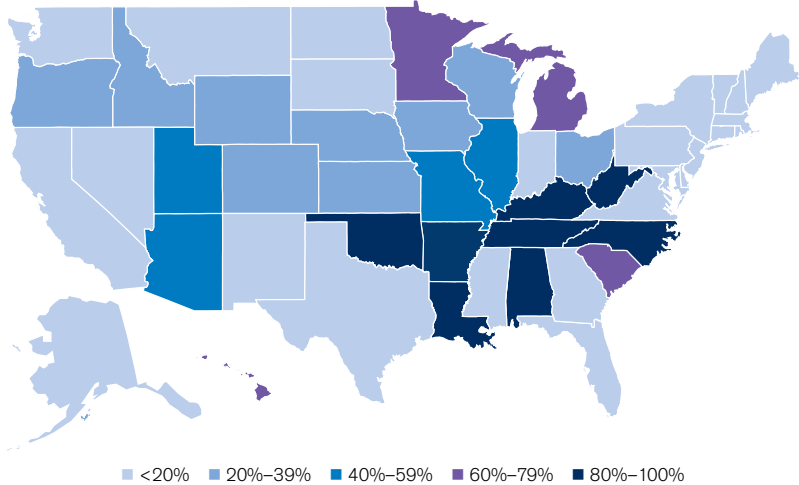
More than one in three (34%) of ACT Plan-tested Asian 10th graders met all four ACT Plan Benchmarks in 2014, more than students from all other racial/ethnic groups. African American students were least likely to meet the Benchmarks; only 4% met all four. Across all racial/ethnic groups, more students met the English Benchmark than any other subject area.

Access

Percent of 8th Graders Who Took ACT Explore by State

In twelve states, at least 60% of all 8th graders took ACT Explore in 2014. In eight states, at least 80% of 8th-grade students took ACT Explore. In four states, between 40% and 59% of 8th graders took ACT Explore in 2014, while another nine states saw between 20% and 39% of their 8th graders take ACT Explore. Fewer than 20% of 8th graders took ACT Explore in twenty-five states and Washington, DC.

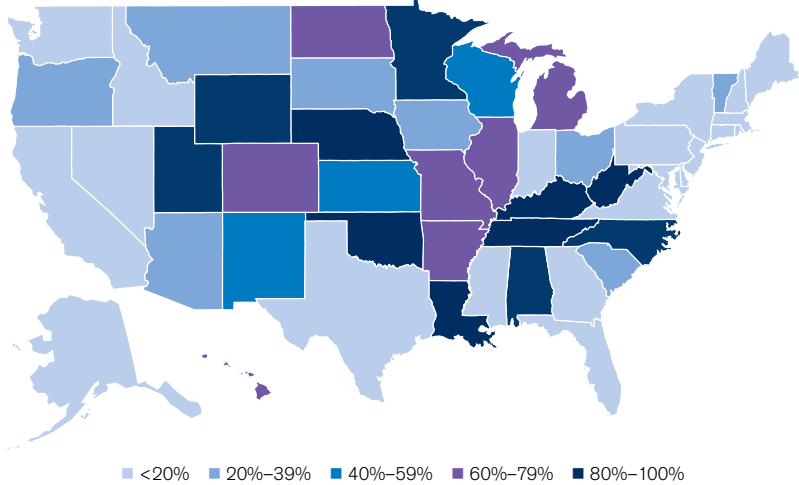
Percent of ACT Explore-Tested 8th Graders by State, 2014



Percent of 10th Graders Who Took ACT Plan by State

In eighteen states, at least 60% of all 10th graders took ACT Plan in 2014. In eleven states, at least 80% of 10th-grade students took ACT Plan. In three states, between 40% and 59% of 10th graders took ACT Plan in 2014, while another eight states saw between 20% and 39% of their 10th graders take ACT Plan. Fewer than 20% of 10th graders took ACT Plan in twenty-one states and Washington, DC.

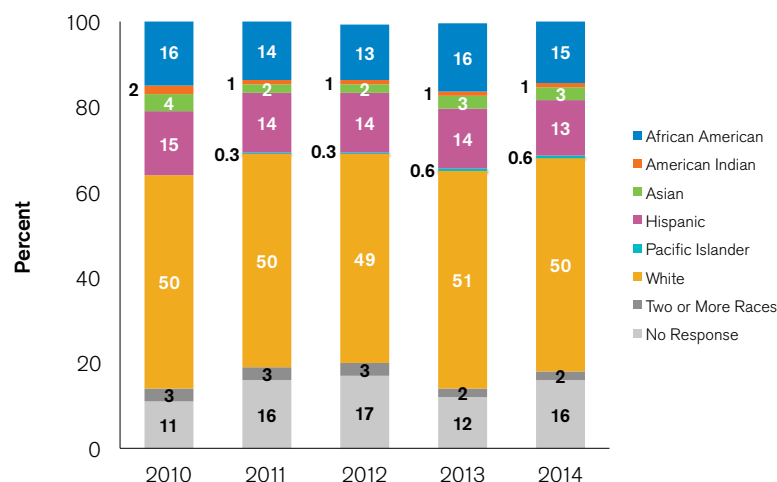
Percent of ACT Plan-Tested 10th Graders by State, 2014



Access

Number of 8th Graders Who Took ACT Explore by Race/Ethnicity

Percent of ACT Explore-Tested 8th Graders by Race/Ethnicity, 2010–2014



The number of 8th-grade students taking ACT Explore increased by 36% between 2010 and 2014.

During that time, the demographic makeup of the students changed; in 2010 and 2014, White students made up half (50%) of the tested students. Proportionally, the largest increases were in students of Two or More Races (27% increase) and White students (37% increase). The number of Asian students taking ACT Explore declined by 1%.

Percent of ACT Explore-Tested 8th Graders by Race/Ethnicity, 2010–2014

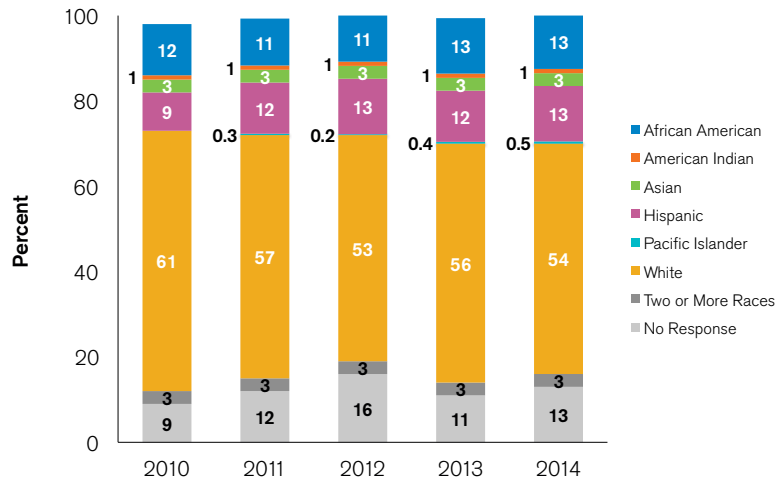
ACT Explore	2010	2011	2012	2013	2014	% Change
African American	127,683	122,103	122,710	176,631	158,085	24%
American Indian	12,148	9,544	10,184	13,142	12,893	6%
Asian	30,751	18,983	20,406	29,914	30,363	-1%
Hispanic	119,491	122,776	130,123	157,327	133,449	12%
Pacific Islander		2,336	2,343	6,554	6,272	
White	388,816	425,618	453,307	576,484	531,517	37%
Two or More Races	19,734	22,537	25,861	27,068	25,109	27%
No Response	85,293	133,747	160,196	133,465	167,644	97%
Total	783,916	857,644	925,130	1,120,585	1,065,332	36%

Access

Number of 10th Graders Who Took ACT Plan by Race/Ethnicity

The number of 10th-grade students taking ACT Plan increased by 30% between 2010 and 2014. During that time, there were some changes to the demographic makeup of students tested. Proportionally, the largest increases were in Hispanic students (82% increase) and African American students (32% increase). The number of American Indian students taking ACT Plan declined by 12%.

Percent of ACT Plan-Tested 10th Graders by Race/Ethnicity, 2010–2014



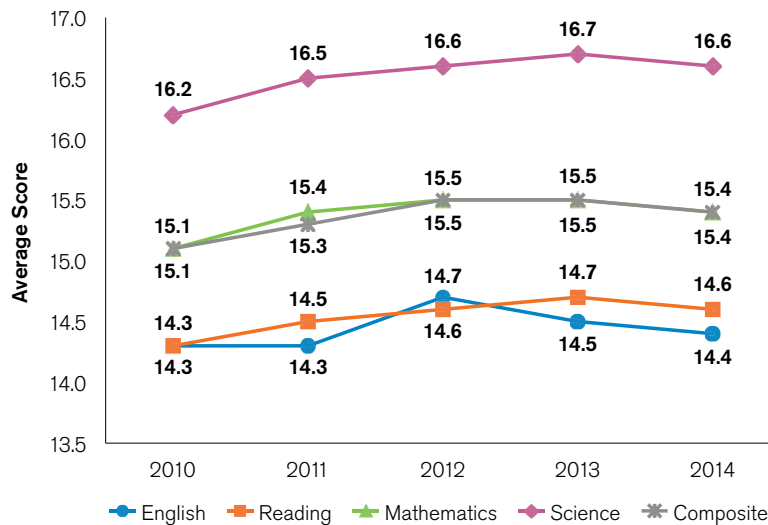
Number of ACT Plan-Tested 10th Graders by Race/Ethnicity, 2010–2014

ACT Plan	2010	2011	2012	2013	2014	% Change
African American	128,360	129,026	137,669	171,159	169,966	32%
American Indian	14,945	10,714	11,074	12,427	13,198	-12%
Asian	36,022	30,996	35,780	42,081	44,208	23%
Hispanic	95,982	137,410	158,919	158,430	174,839	82%
Pacific Islander		3,373	2,866	5,611	6,103	
White	632,821	645,694	666,219	738,508	724,770	15%
Two or More Races	27,384	33,922	39,092	35,587	35,386	29%
No Response	94,404	136,740	197,585	143,386	167,040	77%
Total	1,029,918	1,127,875	1,249,204	1,307,189	1,335,510	30%

Academic Performance and Preparation

ACT Explore Scores Over Time

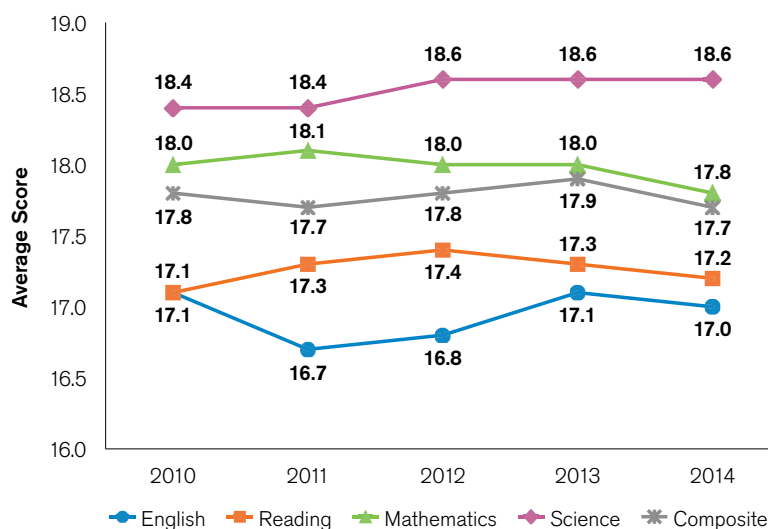
Average ACT Explore Scores, 2010–2014



ACT Explore scores increased slightly between 2010 and 2014 by about 0.1 points in English, and 0.3 points in reading, mathematics, and science. The average Composite score increased from 15.1 to 15.4.

ACT Plan Scores Over Time

Average ACT Plan Scores, 2010–2014



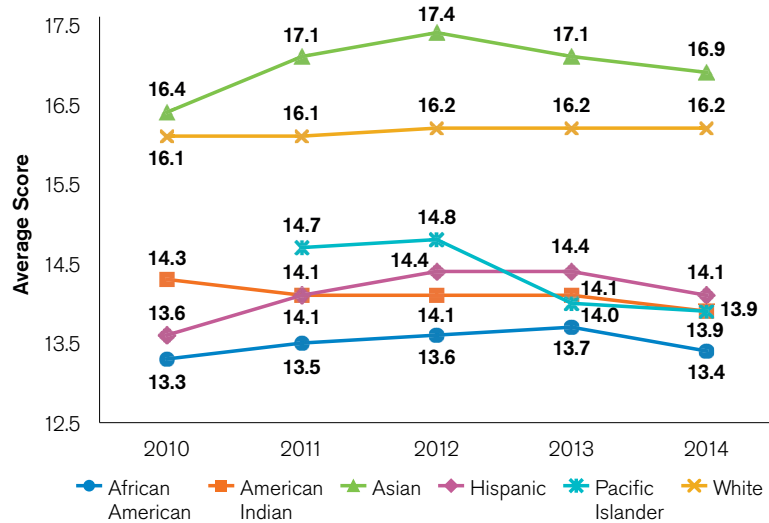
ACT Plan scores remained essentially the same between 2010 and 2014. A slight increase was seen in reading scores from 17.1 in 2010 to 17.2 in 2014 and science scores from 18.4 in 2010 to 18.6 in 2014, while the Composite score decreased from 17.8 in 2010 to 17.7 in 2014.

Academic Performance and Preparation

ACT Explore Scores Over Time by Race/Ethnicity

Average ACT Explore Composite scores of Asian and Hispanic students increased by half a score point or more between 2010 and 2014, while scores of African American and White students increased by 0.1 points. Scores of American Indian students decreased by roughly 0.3 points between 2010 and 2014.

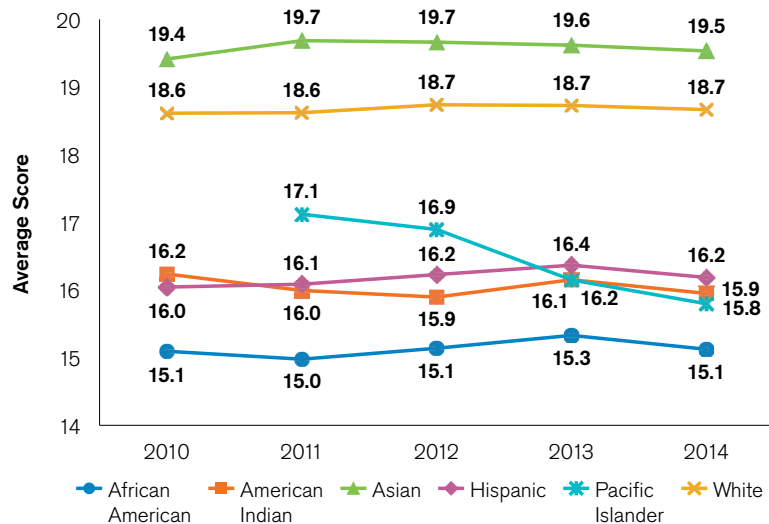
Average ACT Explore Composite Test Scores by Race/Ethnicity, 2010–2014



ACT Plan Scores Over Time by Race/Ethnicity

Average ACT Plan Composite scores increased slightly (0.1 points) for Asian and White students. Scores of Hispanic students increased between 2010 and 2013 but decreased in 2014. Scores of African American students remained essentially the same, while ACT Plan scores of American Indian students peaked at 16.2 points in 2010 and 2013, and decreased by 0.3 points in 2014.

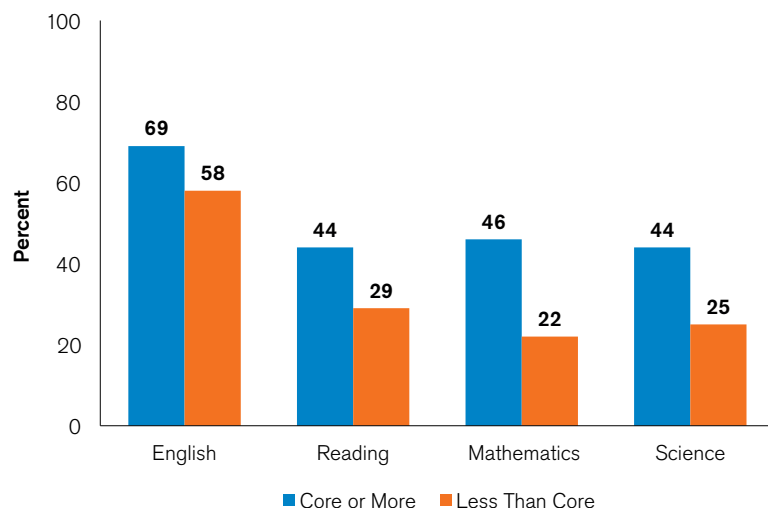
Average ACT Plan Composite Test Scores by Race/Ethnicity, 2010–2014



Academic Performance and Preparation

ACT Explore Benchmarks by Planned High School Coursework

Percent of ACT Explore-Tested 8th Graders Meeting the ACT Explore Benchmarks by Grade 8 High School Coursework Plans, within Subject, 2014

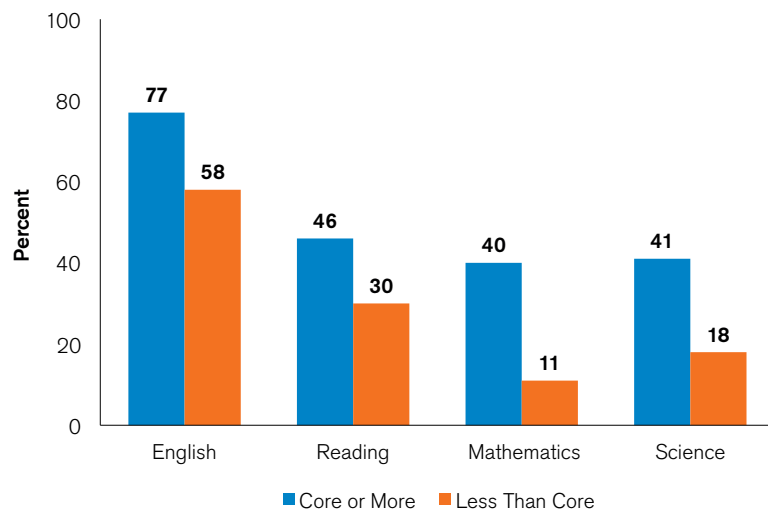


Within each subject area, students who plan to take a core curriculum or more (defined as four years of English and three years each of social studies, mathematics, and science) are more likely to meet the corresponding ACT Explore Benchmark than students who plan to take less than a core curriculum in each subject area.

The largest curriculum-based difference in Benchmark attainment rates was in mathematics. Students who planned to complete three or more years of mathematics were more likely to meet the mathematics Benchmark—by 24 points—than were students who planned to take fewer than three years of mathematics. The smallest difference was in English (11 points).

ACT Plan Benchmarks by Planned and Taken High School Coursework

Percent of ACT Plan-Tested 10th Graders Meeting the ACT Plan Benchmarks by Grade 10 High School Coursework Completed or Planned, within Subject, 2014



Within each subject area, students who planned to take a core curriculum or more (defined as four years of English and three years each of social studies, mathematics, and science) were more likely to meet the corresponding ACT Plan Benchmark than students who planned to take less than a core curriculum in each subject area.

The largest curriculum-based difference in Benchmark attainment rates was in mathematics. Students who planned to complete three or more years of mathematics were more likely to meet the mathematics Benchmark—by 29 points—than were students who planned to take fewer than three years of mathematics. The smallest difference was in English (19 points).³

Note: Data reflect subject-specific curriculum. For example, English “Core or More” results pertain to students who took at least four years of English, regardless of courses taken in other subject areas.

³ The curriculum-based differences in Benchmark attainment rates were higher for ACT Plan than ACT Explore across all four subject areas. In 8th grade, students reported only planned high school coursework, whereas in 10th grade, students reported both planned high school coursework and courses already taken.

Longitudinal Analyses: Students Who Took ACT Explore, ACT Plan, and the ACT and Graduated in 2014⁴

The following analyses are based on a sample of 264,760 students who completed all three of the ACT college and career readiness assessments, including ACT Explore in 8th grade, ACT Plan in 10th grade, and the ACT test in 11th or 12th grade. The majority of these students took ACT Explore during the 2009–2010 school year, ACT Plan during the 2011–2012 school year, and the ACT during the 2012–2013 or 2013–2014 school year.

Because the same students were tested at each time point, we can make direct comparisons between student performance on ACT Explore, ACT Plan, and the ACT and assess growth over time. However, keep

in mind that these analyses are based on a subset of the total tested populations reported in *The Condition of College & Career Readiness (2014)* report. To the extent that the students who completed all three assessments differ systematically from the total tested populations, then the results presented here might not be generalizable to the entire populations of ACT Explore-, ACT Plan-, or ACT-tested students. Where relevant, these differences will be highlighted in this report.

Any analyses of ACT Benchmarks presented in this report are based on the ACT Benchmarks updated in 2013.⁵

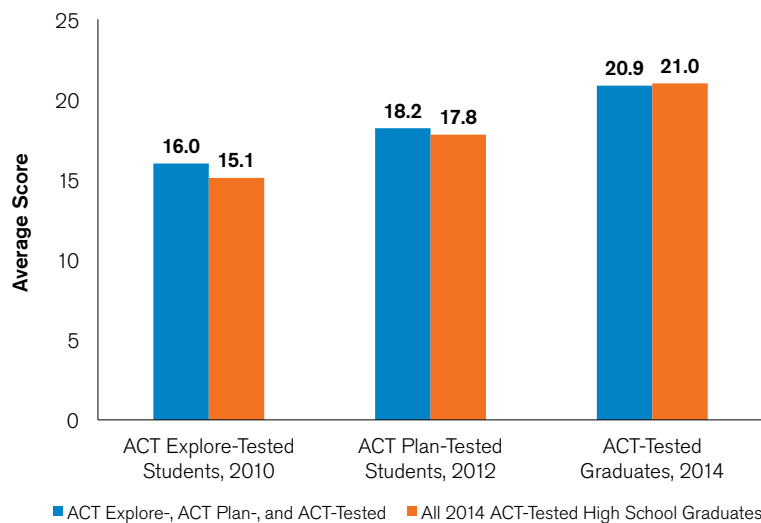
⁴It should also be noted that because the ACT Explore and ACT Plan results presented here are largely students who took ACT Explore in 2009–2010 and ACT Plan in 2011–2012, these results should not be confused with the 2014 ACT Explore and ACT Plan results presented earlier in this report. The most appropriate comparison groups for the analyses presented here would be to the 2010 ACT Explore-tested students and 2012 ACT Plan-tested students presented earlier in this report, and the ACT-tested high school graduates from *The Condition of College & Career Readiness (2014)*, keeping in mind the differences between the groups of students.

⁵ACT College Readiness Benchmarks (2013) can be found in the Notes section of this report.

Comparability of Scores of Longitudinal and Cohort Data

ACT Explore, ACT Plan, and ACT Composite Scores, Longitudinal and Cohort Data

Average ACT Explore, ACT Plan, and ACT Composite Scores, Longitudinal and Cohort Data



The students who took all three of the ACT college and career readiness assessments are a subset of all 2014 ACT-tested high school graduates. To further understand how representative the longitudinal data are of the entire populations of students who took ACT Explore in the 8th grade during the 2009–2010 school year, ACT Plan in the 10th grade during the 2011–2012 school year, and the ACT in 11th or 12th grade during the 2012–2013 or 2013–2014 school year, the chart to the left compares the average ACT Explore, ACT Plan, and ACT Composite scores for each group.

As the chart shows, students who took all three assessments tended to have higher ACT Explore scores (16.0) than the 2010 ACT Explore-tested population (15.1), and higher ACT Plan scores (18.2) than the entire 2012 ACT Plan-tested population (17.8), although there was a smaller difference by the 10th grade. ACT Composite scores were nearly the same between the two groups, but the entire ACT-tested population had a slightly higher score (21.0) than the group of students who took all three assessments (20.9). The reasons for the score differences in the earlier grades are unknown, but could be due to one or both of the following factors:

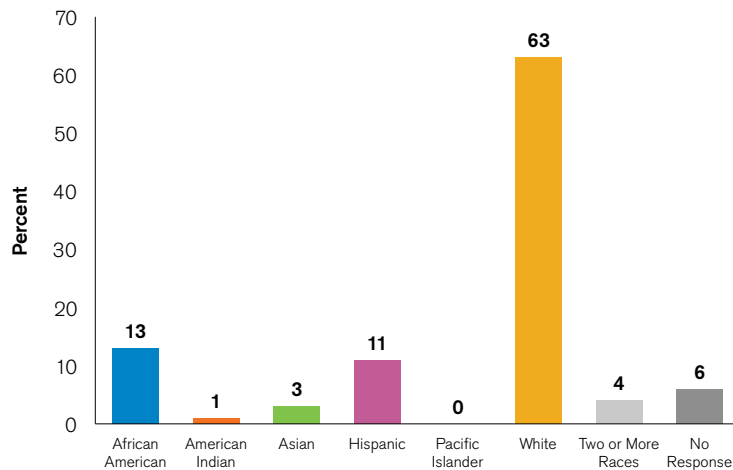
- In states that do not administer the ACT statewide, the ACT is more likely to be taken by college-bound students who may have higher achievement levels than students who do not intend to enroll in postsecondary education after high school, whereas ACT Explore and ACT Plan tend to be administered to entire cohorts of students within a state or school district. Therefore, students who take the ACT may be a higher-achieving subset of students, whereas students who take ACT Explore or ACT Plan may be more representative of all students, including those who are not college-bound.
- The longitudinal data represent students who were still enrolled in high school in 11th or 12th grade and took the ACT. It is possible that some of the lower-achieving students who took ACT Explore and/or ACT Plan left the education system before taking the ACT. Therefore, they were not included in the sample of students who took all three assessments.

Access

ACT Explore-, ACT Plan-, and ACT-Tested 2014 High School Graduates by Race/Ethnicity

The race/ethnicity of ACT Explore-, ACT Plan-, and ACT-tested students was based on students' self-reported race/ethnicity at the time they took the ACT.⁶

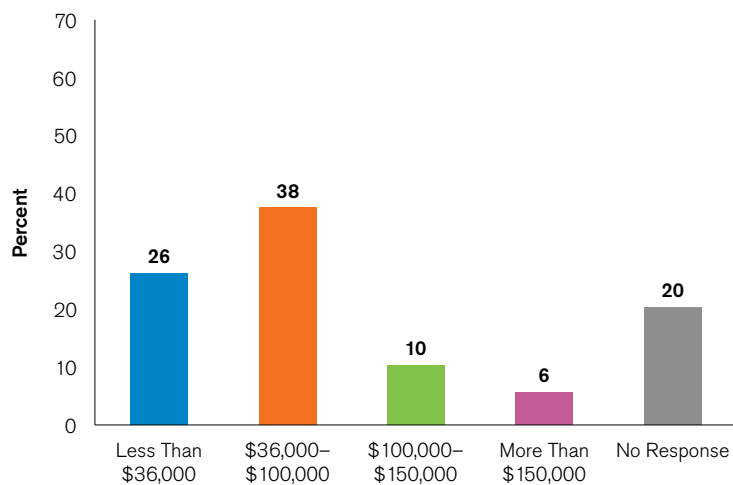
Percent of ACT Explore-, ACT Plan-, and ACT-Tested 2014 High School Graduates by Race/Ethnicity⁷



ACT Explore, ACT Plan, and ACT-Tested 2014 High School Graduates by Parental Income

Parental income is based on student responses at the time the student took the ACT.⁸ More than one-quarter of students reported parental income at less than \$36,000 per year, and only 6% reported parental income at more than \$150,000 per year. About one in five students did not report parental income level.⁹

Percent of ACT Explore-, ACT Plan-, and ACT-Tested 2014 High School Graduates by Parental Income Level



⁶ Counts for each race/ethnicity category: African American, 34,199; American Indian, 2,417; Asian, 6,837; Hispanic, 29,166; Pacific Islander, 328; White, 167,250; Two or More Races, 9,809; No Response, 14,754.

⁷ Students who took all three assessments were slightly more likely to be African American or White than the entire ACT-tested population, and were slightly less likely to be Asian or Hispanic. Overall, the demographic breakdown of the 2014 high school graduates who took ACT Explore in eighth grade, ACT Plan in 10th grade, and the ACT in eleventh or twelfth grade was similar to the 2014 ACT-tested high school graduating class.

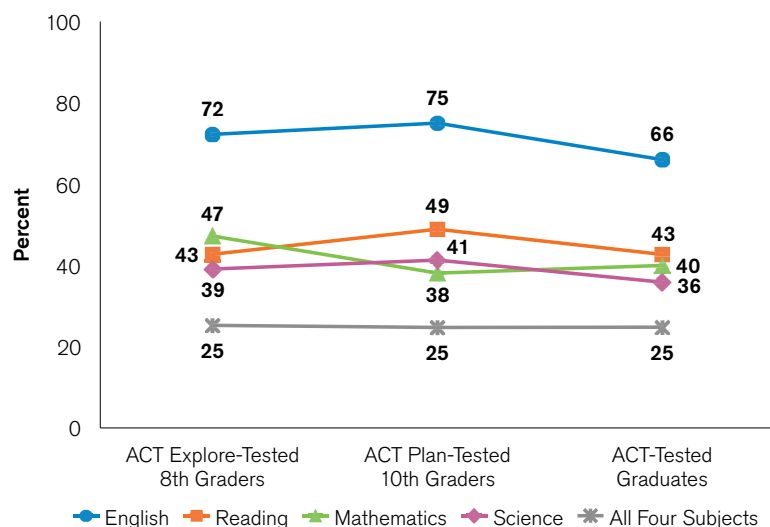
⁸ ACT Explore and ACT Plan do not ask for information regarding parental income of test takers. Family income designations are based on student responses to the ACT.

⁹ Counts for parental income level: Less than \$36,000, 69,452; \$36,000-\$100,000, 99,311; \$100,000-\$150,000, 27,373; More than \$150,000, 14,940; No Response, 53,984.

Progress toward College Readiness

College Readiness Benchmarks

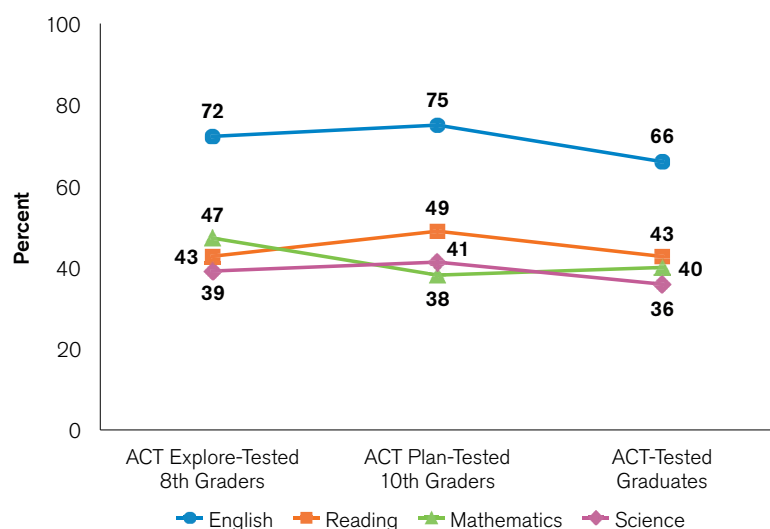
Percent of ACT Explore-, ACT Plan-, and ACT-Tested 2014 Graduates Meeting the ACT College Readiness Benchmarks



The patterns of Benchmark attainment across ACT Explore, ACT Plan, and the ACT are similar to what we saw when considering non-longitudinal Benchmark attainment across the three assessments.

Benchmark Attainment and Near Attainment

Percent of ACT Explore-, ACT Plan-, and ACT-Tested 2014 High School Graduates Meeting Benchmark, by Subject and Test



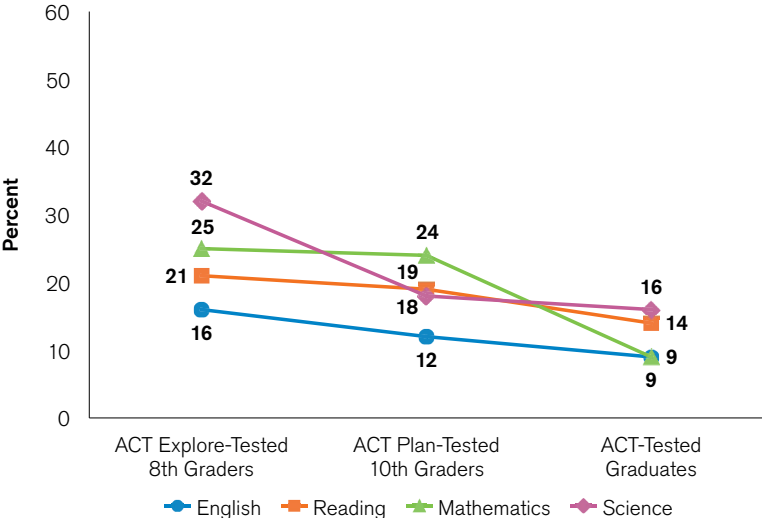
The figures to left and on page 22 show the percentages of students who met each Benchmark, were within two scale points of meeting each of the Benchmarks, or three or more scale points below each of the Benchmarks. The patterns of attainment and near-attainment are similar to what we saw earlier in this report and in *The Condition of College & Career Readiness* (2014). The main finding of interest for this section is that there are large percentages of students who are within two points of meeting the Benchmarks in the 8th grade, but as they progress through high school, fewer students are within two points of meeting the Benchmarks. This pattern holds across subject areas.

With the exception of reading, the percentages of students who were three or more points below the Benchmark steadily increased from ACT Explore to ACT Plan to the ACT. The percentage of students who were three or more points from the reading Benchmark decreased from ACT Explore to ACT Plan, but increased from ACT Plan to the ACT; overall, the percentage of students who were three or more points from the reading Benchmark increased between ACT Explore and the ACT.

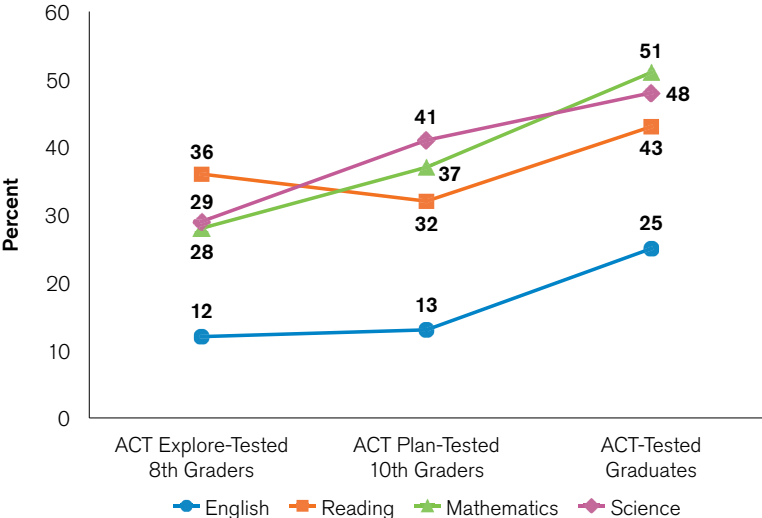
Progress toward College Readiness

Benchmark Attainment and Near Attainment (continued)

Percent of ACT Explore-, ACT Plan-, and ACT-Tested 2014 High School Graduates within Two Points of Meeting Benchmark, by Subject and Test



Percent of ACT Explore-, ACT Plan-, and ACT-Tested 2014 High School Graduates Below Benchmark by Three or More Score Points, by Subject and Test



Progress toward College Readiness

Changes in Benchmark Attainment and Near Attainment from ACT Explore to the ACT

The previous section illustrated that, as students progress from ACT Explore to ACT Plan to the ACT, they are less likely to have scores within two points of the ACT College Readiness Benchmarks. What happens to these students? Are they able to catch up or do they fall further behind?

The following table shows the percentages of students who met, were within two points of, or were three or more points below each of the ACT Benchmarks, conditioned on ACT Explore Benchmark attainment level. ACT Plan Benchmark attainment level is not considered in this analysis.

As the table shows, for each subject area, the largest percentages of students were those who met the

Benchmark on both ACT Explore and the ACT. Students who were three or more points below the ACT Explore Benchmark tended to remain three or more points below the ACT Benchmark. Students who were within two points of meeting the ACT Explore Benchmark were more likely to decline to three or more points below the Benchmark than to improve and meet the ACT Benchmark; however, they were more likely to meet the ACT Benchmark than to remain within two points of it. Students who met the ACT Explore Benchmark were more likely to meet the ACT Benchmark and less likely to fall below the ACT Benchmark.

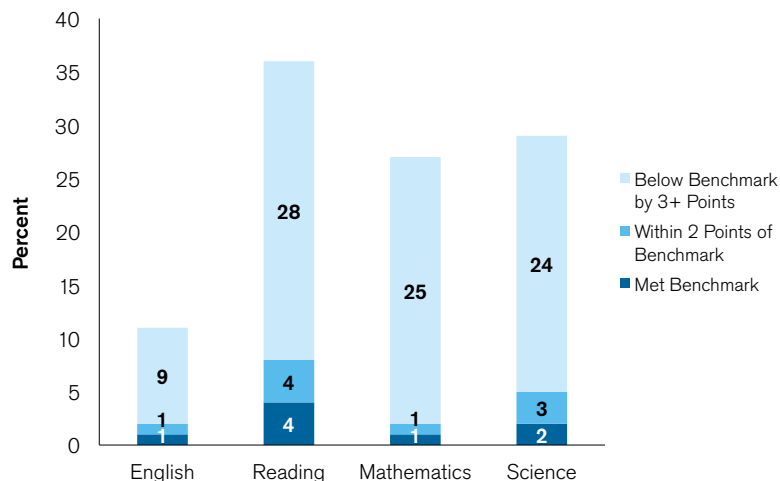
Changes in Benchmark Status from ACT Explore to the ACT

ACT Explore Status	ACT Test Status	English	Reading	Mathematics	Science
Below by 3+	Below by 3+	9	28	25	24
	Within 2 Points	1	4	1	3
	Met Benchmark	1	4	1	2
Within 2 Points	Below by 3+	9	10	16	17
	Within 2 Points	3	4	3	7
	Met Benchmark	5	7	6	8
Met Benchmark	Below by 3+	7	6	10	7
	Within 2 Points	5	5	5	6
	Met Benchmark	60	31	33	26

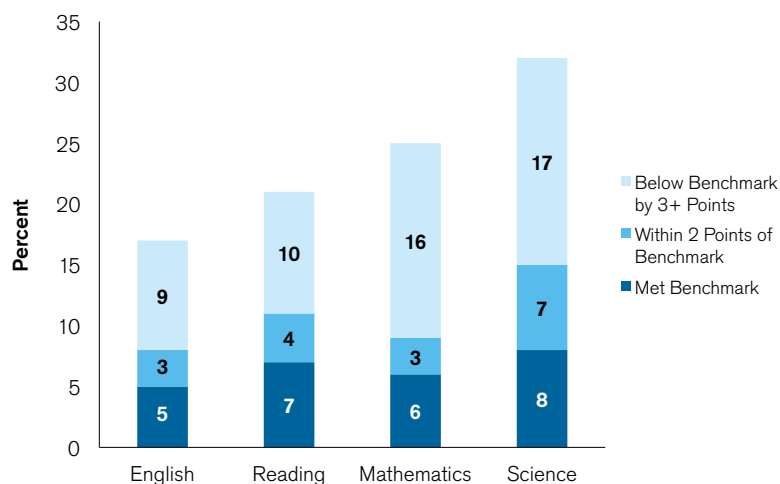
Progress toward College Readiness

Changes in Benchmark Attainment and Near Attainment from ACT Explore to the ACT (continued)

Changes in Benchmark Status from ACT Explore to the ACT, Students Below ACT Explore Benchmark by Three or More Points by Subject



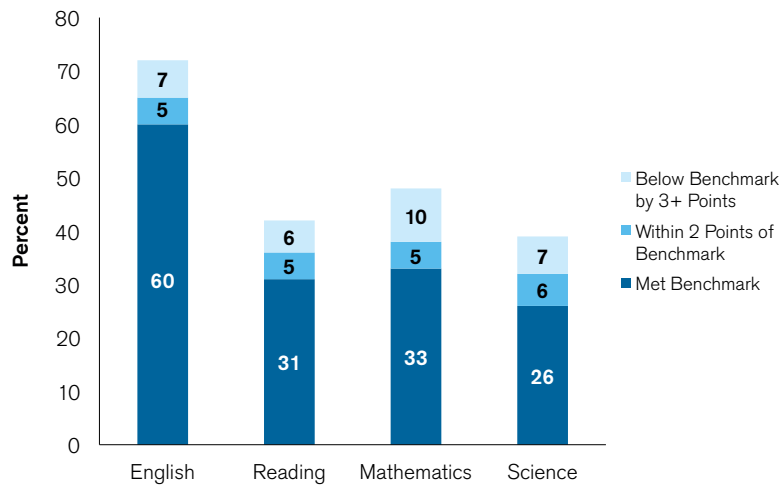
Changes in Benchmark Status from ACT Explore to the ACT, Students within Two Points of ACT Explore Benchmark by Subject



Progress toward College Readiness

Changes in Benchmark Attainment and Near Attainment from ACT Explore to the ACT (continued)

Changes in Benchmark Status from ACT Explore to the ACT, Students Meeting ACT Explore Benchmark by Subject

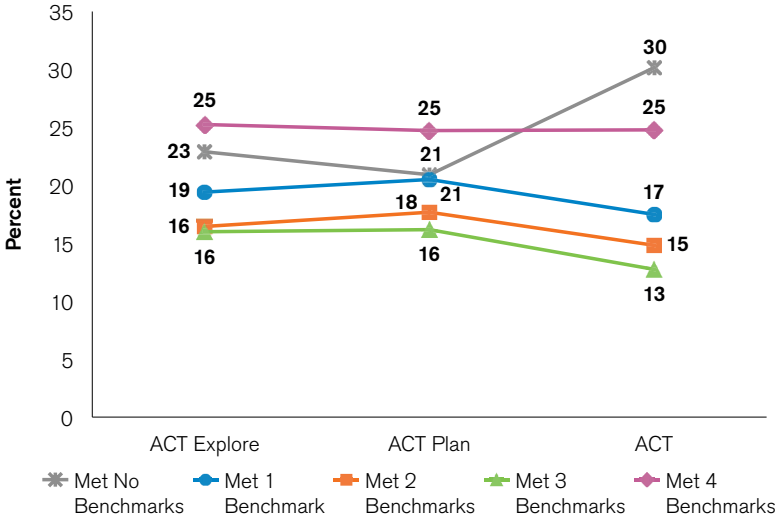


Progress toward College Readiness

Number of Benchmarks Attained

The numbers of Benchmarks attained across ACT Explore, ACT Plan, and the ACT are similar to what we saw when considering non-longitudinal samples.

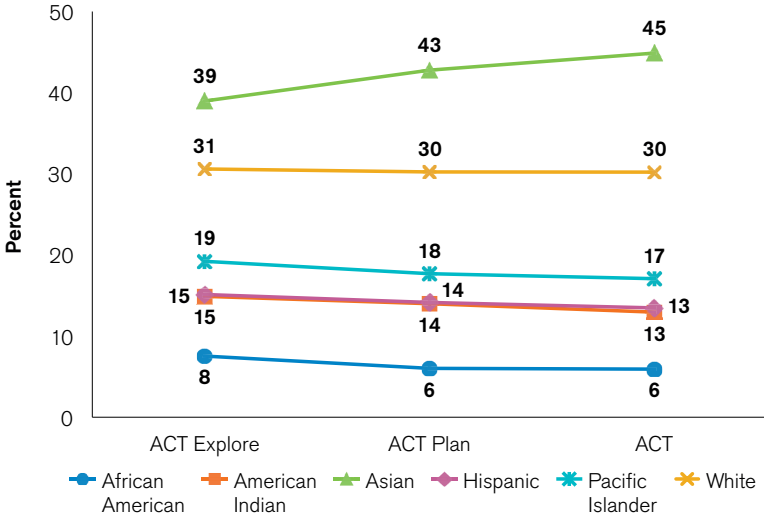
Percent of ACT Explore-, ACT Plan-, and ACT-Tested 2014 High School Graduates by Number of Benchmarks Attained and Test



Benchmark Attainment by Race/Ethnicity

The percentages of students meeting the ACT Explore, ACT Plan, and ACT Benchmarks by race/ethnicity are similar to what we saw when considering non-longitudinal samples.

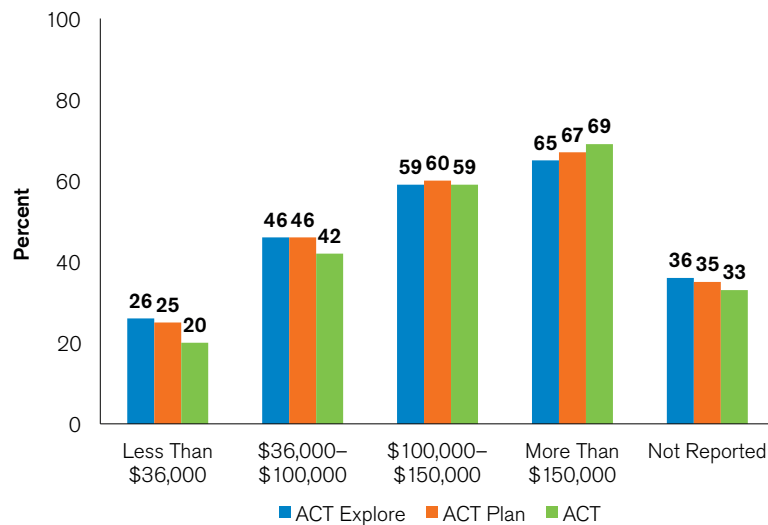
Percent of ACT Explore-, ACT Plan-, and ACT-Tested 2014 High School Graduates Meeting Benchmarks for All Four Subjects by Race/Ethnicity and Test



Progress toward College Readiness

Benchmark Attainment by Parental Income

Percent of ACT Explore-, ACT Plan-, and ACT-Tested 2014 High School Graduates Meeting Three or Four Benchmarks, by Test and Parental Income



Across all three assessments, the percentages of students meeting all four of the Benchmarks increase as parental income level increases. This pattern holds across all four subject areas.

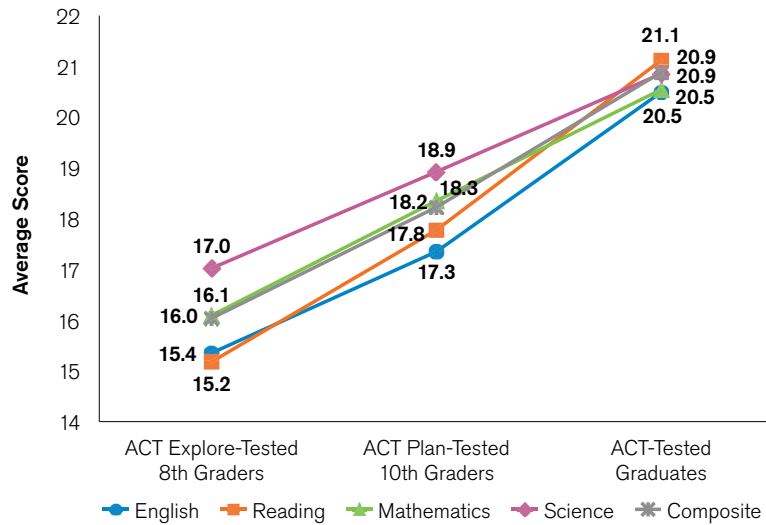
For students in families making less than \$36,000 per year, the percentages of students meeting three or four of the ACT Explore, ACT Plan, and ACT Benchmarks decrease as students progress. Meanwhile, for students in families making more than \$150,000 per year, the percentage of students meeting all four Benchmarks increases from ACT Explore to ACT Plan to the ACT. Because each income level corresponds to the same group of students across the three assessments, this suggests that students with higher family incomes show higher score gains over time than students with lower family incomes, which is further explored in the next section.

Academic Performance and Preparation

Average Scores by Subject

Comparing average scores from ACT Explore to ACT Plan to the ACT, students made the most growth in reading, gaining 5.9 score points between ACT Explore and the ACT, and the least growth in science, gaining 3.8 points between ACT Explore and the ACT. Overall, students' Composite scores grew by an average of 4.8 points between ACT Explore and the ACT, including 2.2 points from ACT Explore to ACT Plan and 2.7 points from ACT Plan to the ACT. The spread of scores across subject areas decreased between ACT Explore and the ACT, with a spread of 1.8 points between the lowest- and highest-scored subject areas for ACT Explore, to 1.6 points for ACT Plan, and 0.6 points for the ACT.

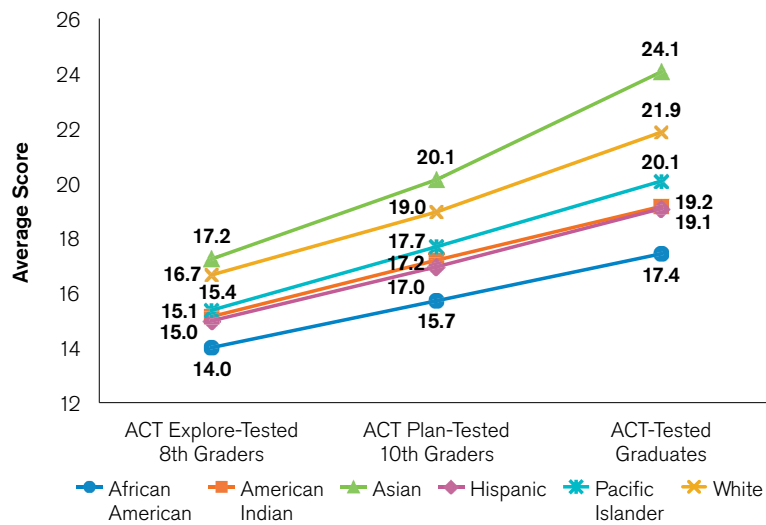
Average ACT Explore, ACT Plan, and ACT Scores, by Subject



Average Scores by Race/Ethnicity

There was a large amount of variation in growth between ACT Explore and the ACT by race/ethnicity, such that groups that started lower grew at slower rates and groups that started higher grew at faster rates. African American students had the lowest average ACT Explore Composite scores, and they gained the fewest number of points (3.4). Asian students had the highest average ACT Explore Composite scores, and they gained the largest number of points (6.8). As a result, the spread of Composite scores by race/ethnicity increased between ACT Explore and the ACT, with a spread of 3.2 points between the lowest- and highest-scoring groups for ACT Explore, to 4.4 points for ACT Plan, and 6.6 points for the ACT.

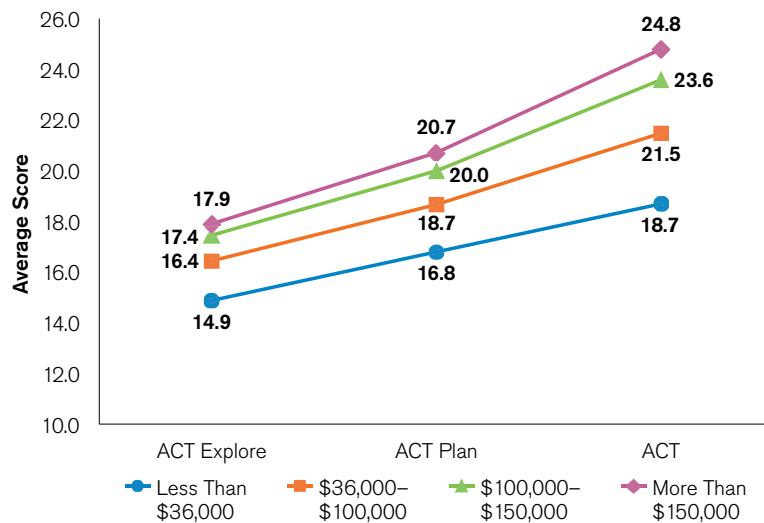
Average ACT Explore, ACT Plan, and ACT Scores, by Race/Ethnicity



Academic Performance and Preparation

Average Scores by Parental Income

Average ACT Explore, ACT Plan, and ACT Composite Scores by Parental Income

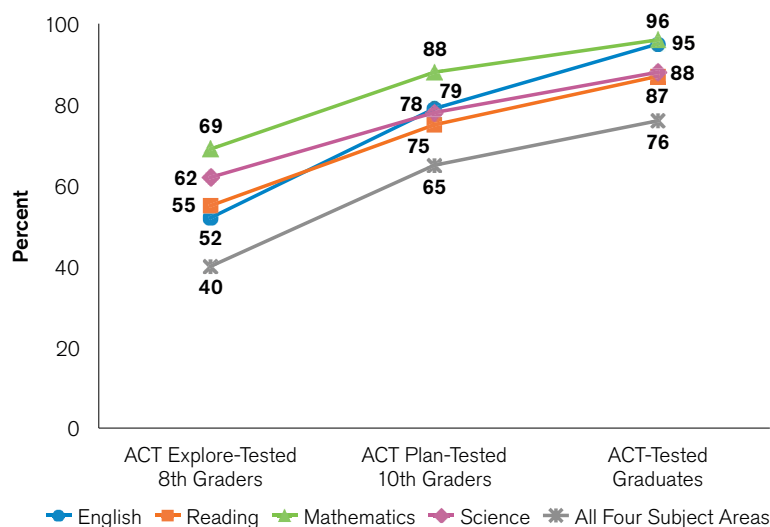


Across all three assessments, average Composite scores increase as parental income level increases. This pattern holds across all four subject areas.

Of students who reported parental income at less than \$36,000 per year, average growth from ACT Explore to the ACT was 3.8 points, whereas students in the highest income category gained 6.9 points from ACT Explore to the ACT. This mirrors the findings in the longitudinal results showing that students who start lower grow slower and those who start with higher scores show higher gains.

Academic Preparation—Planned or Taken Core Curriculum

Percent of ACT Explore-, ACT Plan-, and ACT-Tested 2014 High School Graduates Indicating Core Curriculum Planned or Taken at Time of Testing, by Subject



When students take ACT Explore, they indicate their high school coursework plans with respect to the number of years they plan to study in each subject area. When students take ACT Plan and the ACT, they indicate which courses they have taken and plan to take, which can be used to determine the number of years they have studied or plan to study in each subject area.¹⁰

In 8th grade, 40% of ACT Explore-, ACT Plan-, and ACT-tested 2014 high school graduates indicated that they planned to take a core curriculum in all four subject areas, and the percentages increased over time such that by the time they took the ACT, more than three-quarters of students indicated that they had or were planning to take a core curriculum. Students were most likely to indicate planning or taking a core curriculum in mathematics, across all three assessments.

¹⁰ A core curriculum is defined as four years of English and three years each of social studies, mathematics, and science.

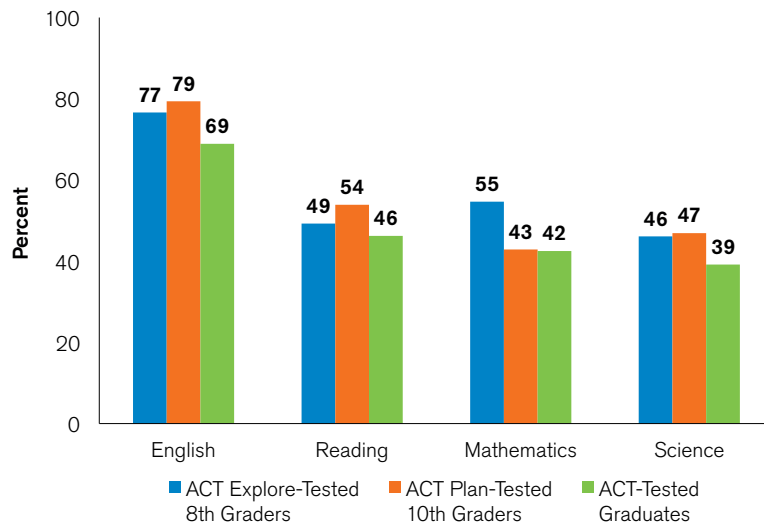
Academic Performance and Preparation

ACT College Readiness Benchmarks by Planned and Taken High School Coursework

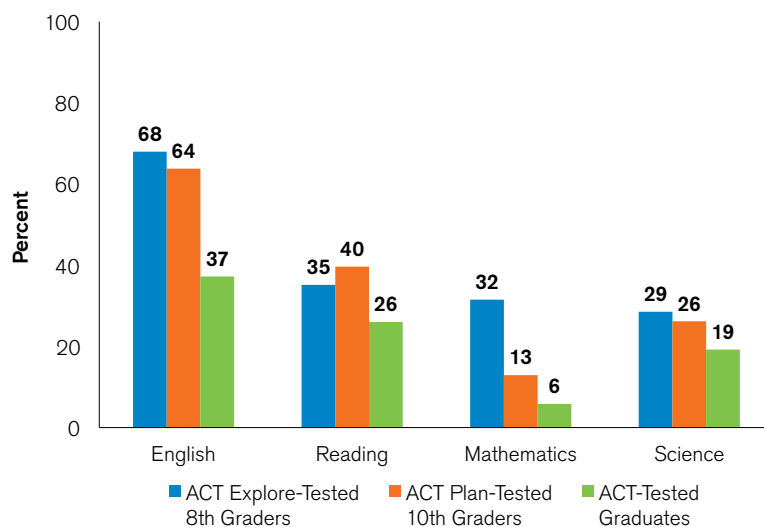
Within each subject area, students who plan to take or take a core curriculum or more (defined as four years of English and three years each of social studies, mathematics, and science) are more likely to meet the corresponding ACT College Readiness Benchmarks than students who plan to take less than a core curriculum in each subject area.

The curriculum-based differences in Benchmark attainment rates were higher for ACT Plan than ACT Explore across English, mathematics, and science, and were approximately the same for reading. Additionally, the curriculum-based differences in Benchmark attainment rates were higher for the ACT than ACT Plan across all subject areas except for science. Students who took ACT Explore in 8th grade reported only planned high school coursework, whereas students who took ACT Plan in 10th grade reported both planned high school coursework and courses already taken. High school coursework for the ACT was based on courses planned and courses already taken at the time students registered for the ACT, typically in 11th or 12th grade.

Percent of ACT Explore-, ACT Plan-, and ACT-Tested 2014 High School Graduates Meeting the ACT College Readiness Benchmarks by Planned/Completed “Core or More” High School Coursework, within Subject



Percent of ACT Explore-, ACT Plan-, and ACT-Tested 2014 High School Graduates Meeting the ACT College Readiness Benchmarks by Planned/Completed “Less Than Core” High School Coursework, within Subject



Note: Data reflect subject-specific curriculum. For example, English “Core or More” results pertain to students who took at least four years of English, regardless of courses taken in other subject areas.

Policy and Practice Recommendations for Increasing Readiness

In *The Forgotten Middle*¹¹, ACT reported that the level of academic achievement attained by the 8th grade, as measured by ACT Explore scores, influences eventual college and career readiness more than any academic factors during the high school years. If students are not on target for college and career readiness before high school, it will be very difficult, if not impossible, for them to catch up and become college ready by the end of high school. This is why it is imperative to look at academic readiness early, long before students get to high school.

Only 21% of 8th graders who took ACT Explore during the 2013–2014 school year met all four of the ACT College Readiness Benchmarks, and 33% met no Benchmarks. Students who took ACT Plan showed slightly better progress toward college readiness by 10th grade, with 21% meeting or exceeding all four Benchmarks on ACT Plan. However, over a quarter (27%) of 10th graders who took ACT Plan in 2013–2014 met no Benchmarks, leaving little time before graduation to prepare for rigorous college-level work. In order to increase the number of students on track for college readiness, states and districts should consider implementing the following policies and practices, with an emphasis on instilling a culture of college readiness throughout the K–12 system:

High Academic Expectations for All Students

ACT has long advocated for the adoption of rigorous academic standards designed to prepare all students for the challenges of a variety of postsecondary education settings. While the majority of states have taken this step by adopting challenging academic standards, all states should ensure that their college and career readiness standards are aligned to a rigorous curriculum in not only the high school grades, but also during middle school and earlier. Curriculum

in the upper elementary grades and middle school should focus on preparing students for rigorous high school expectations and teaching them the foundational skills necessary to progress toward college and career readiness. These skills should be taught to *all* students, not just those perceived as having a better chance of attaining college readiness before high school graduation.

Rigorous Course Content Aligned to Readiness

The *ACT National Curriculum Survey 2012* reported a large gap between high school teachers' perceptions of their graduating students' college readiness and college instructors' perceptions of the readiness of their first-year students.¹² The report states that this may be “due at least in part to a lack of alignment between K–12 and postsecondary curricula” (ACT, 2013), which could be affecting students' ability to become prepared for college-level work. Implementing more rigorous academic standards in the middle and high school grades and aligning curricula to college readiness are critical to closing this perceived readiness “gap” in college-bound students, but schools and districts must also do more to prepare teachers to teach rigorous course content. Not all schools and teachers are prepared to teach the content associated with new, more rigorous college- and career-readiness standards, and school and district administrators must support teachers by providing the training and materials necessary to ensure that teachers are well equipped to implement the improved standards as intended. Development of K–12 instructional practice, particularly in the middle and high school grades, is critical to support teachers and elevate course content and teaching to the levels that will prepare students for postsecondary-level coursework.

¹¹ ACT, *The Forgotten Middle: Ensuring that All Students are on Target for College and Career Readiness Before High School* (Iowa City, IA: ACT, 2008).

¹² ACT, *ACT National Curriculum Survey 2012: Policy Implications on Preparing for Higher Standards* (Iowa City, IA: ACT, 2013), 12.

Early, Consistent Monitoring of Progress Toward Readiness

College and career readiness does not happen overnight during the high school years. In fact, past research has shown that students who are off-track academically in middle school have a limited chance of becoming college ready before graduation.¹³ Because of this, it is critical to begin monitoring development of foundational skills beginning in the elementary grades. Longitudinal data systems enable identification of deficiencies that are occurring during the early years, and they will allow teachers and administrators to monitor a student's progress toward college and career readiness as he or she progresses through the K–12 system to high school graduation.

Early Implementation of Interventions

As previously noted, early identification of deficiencies in foundational skills is a key step in improving college readiness rates. It is just as important to implement high-quality academic interventions as soon as a deficiency is identified to give a student the best chance of catching up. These interventions should be demonstrated to be effective by rigorous scientific research, and any interventions used should be monitored to ensure that they are having positive effects for each individual student. Intervention alone will not solve the problem of being off track for college readiness, but it is a critical part of ensuring that students will have the knowledge and skills they need to be ready for college-level work before they graduate from high school.

Use of Data-Based Decision Making

States should continue to develop the capacity among teachers and administrators to effectively use and act on information generated by their statewide longitudinal P–16 data systems. All states currently have “robust statewide longitudinal data systems”, according to the Data Quality Campaign.¹⁴ Use of these longitudinal data systems will allow schools and districts to monitor student performance, and eventually, readiness for postsecondary education

and career, throughout a child's P–12 school years and beyond. The data collected through such systems enable administrators and educators to identify students in need of academic interventions at the earliest age possible. This early identification of academic needs and subsequent monitoring of progress through data will give students a better chance of improving achievement and skills before high school graduation. States and districts should also provide adequate preparation and professional development for teachers and administrators in the appropriate use of longitudinal data for planning instruction and interventions.

Improve Access to High-Quality Early Education

States should work to improve access for pre-K and kindergarten for all children, as learning during this period of time of a student's development is so important to future progress as a learner. According to a 2014 report, research has shown that children benefit from a full day of kindergarten, but full-day kindergarten is only required in eleven states.¹⁵ Improving access to early education and getting students off to a good start at an early age is critical for several reasons. First, learning takes time. A student who begins his or her journey as a learner at a later age may be at a disadvantage compared to peers who have access to early education opportunities. Second, learning is cumulative. We build upon concepts and knowledge we have learned previously, and a student who does not have access to early education may miss vital opportunities to learn important concepts and knowledge. Finally, early learning facilitates later learning. Students who already know about a certain topic or concept have an easier time learning additional information about the same topic or concept.¹⁶ The federal government took a positive step toward improved access to early education in fiscal year 2014 by increasing Head Start funding by \$612 million, but more needs to be done to ensure that all children have access to critically important early education opportunities.

¹³ ACT, *College and Career Readiness: The Importance of Early Learning* (Iowa City, IA: ACT, 2013).

¹⁴ Data Quality Campaign, *Data for Action 2012: Focus on People to Change Data Culture* (Washington, DC: Data Quality Campaign, November 2012), www.dataqualitycampaign.org/your-states-progress/executive-summary/.

¹⁵ Lisa Guernsey, Laura Bornfreund, Clare McCann, and Conor Williams, *Subprime Learning: Early Education in America since the Great Recession* (Washington, DC: New America, 2014), www.newamerica.org.

¹⁶ ACT (2013). *The Importance of Early Learning*.

Notes

ACT College Readiness Benchmarks

The ACT College Readiness Benchmarks are the minimum ACT scores required for students to have a high probability of success in credit-bearing college courses—English Composition, social sciences courses, College Algebra, or Biology. In addition to the Benchmarks for the ACT, there are corresponding Benchmarks for ACT Explore, taken in 8th and/or 9th grades, and ACT Plan, taken in 10th grade, to gauge student progress in becoming ready for college.

The College Readiness Benchmarks for ACT Explore and ACT Plan were developed in 2005 using about 150,000 records of students who had taken ACT Explore, ACT Plan, and the ACT. First, we estimated the probabilities at each ACT Explore and ACT Plan test score point associated with meeting the appropriate Benchmark for the ACT. We then identified the ACT Explore and ACT Plan test scores

in English, reading, mathematics, and science that corresponded most closely to a 50% probability of success at meeting each of the four Benchmarks established for the ACT.

ACT introduced updated College Readiness Benchmarks in August 2013. The updated Benchmarks for ACT Explore were based on large samples of students who had taken ACT Explore, ACT Plan, and the ACT. The sample sizes were approximately 425,000 for the ACT Explore grade 8 Benchmarks, 210,000 for the ACT Explore grade 9 Benchmarks, and 1,513,000 for the ACT Plan Benchmarks.

Any results presented in this report prior to 2013 use the old Benchmarks, and any results based on 2013 data use the new Benchmarks.

ACT College Readiness Benchmarks (2005–2012)

College Course or Course Area	ACT Subject-Area Test	ACT Explore Benchmark Grade 8	ACT Explore Benchmark Grade 9	ACT Plan Benchmark	ACT Benchmark
English Composition	English	13	14	15	18
Social Sciences	Reading	15	16	17	21
College Algebra	Mathematics	17	18	19	22
Biology	Science	20	20	21	24

ACT College Readiness Benchmarks—Updated 2013

College Course or Course Area	ACT Subject-Area Test	ACT Explore Benchmark Grade 8	ACT Explore Benchmark Grade 9	ACT Plan Benchmark	ACT Benchmark
English Composition	English	13	14	15	18
Social Sciences	Reading	16	17	18	22
College Algebra	Mathematics	17	18	19	22
Biology	Science	18	19	20	23

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