

The Condition of College & Career Readiness 2013

National

ACT[®]



Improving College & Career Readiness

For nearly a decade, ACT has measured student progress in the context of college readiness. *The Condition of College & Career Readiness* is ACT's annual report on the college readiness of the most recent high school graduating class. The data herein provide insights to catalyze and guide efforts to improve college and career readiness for the next generation of young people now making their way through the US education system.

As more students take the ACT® college readiness assessment—54% of all 2013 high school graduates—ACT's college readiness data better reflect the entire US graduating class, providing a glimpse of the emerging educational pipeline.

A Holistic View of College Readiness

ACT research illustrates the criticality of academic readiness for student success. Our research also underscores the importance of additional complementary factors for college readiness and success, including student academic behaviors and the level of

students' interest in their chosen major or career. Together, these factors provide a more meaningful picture of readiness. To best prepare students for success, the educational system must monitor student progress and intervene using this holistic view of college readiness.

Evidence, Validity Monitoring, and Reviews of Reporting Practices Led to Minor but Important Changes in College Readiness Measures

Our commitment to continuous improvement, efforts to improve student achievement at all levels, ongoing research, user requests, and results of the 2012 ACT National Curriculum Survey® recently led ACT to make progressive modifications that are reflected in the 2013 *Condition* report.

1. **Reformatting the ACT College Readiness Standards.**

ACT recognized that tighter alignment of our ACT College Readiness Standards and the Common Core State Standards



Improving College & Career Readiness *continued*

could provide a more transparent connection between them. The ACT College Readiness Standards have not changed and continue as the backbone of our assessment systems. We simply reformatted their language to better facilitate comparison between the two related sets of college-ready standards.

2. **Updating the ACT College Readiness Benchmarks.**

The empirically derived ACT College Readiness Benchmarks predict the likelihood of student success in credit-bearing first-year college courses corresponding to each tested subject area. Routine monitoring of their predictive validity indicated a need to update the Reading and Science Benchmarks. The 2013 *Condition* report inaugurates the use of these updated Benchmarks. Note that in our trend reporting, ACT College Readiness Benchmark attainment rates for years prior to 2013 will still be based on previous iterations of the Benchmarks.

3. **Changing ACT aggregate reporting practices to now include college-reportable scores for accommodated students.** Beginning with the *ACT Profile Report: Graduating Class 2013* and *The Condition of College & Career Readiness 2013*, ACT summary reports will include results from all ACT-approved accommodated administrations that result in college-reportable ACT scores. In prior years, summary reporting excluded scores for time-extended accommodated students. This change does not impact the eligibility rules for receiving accommodations nor the accommodations provided. It simply means that results for such students are now included in our summary reports.

As a trusted, nonprofit leader on college and career readiness, ACT provides data, analyses, and insights to meet the readiness and success challenges facing our nation, and more importantly, facing students. These changes, and other new efforts, strengthen our ability to meet our mission: Helping people achieve education and workplace success.

About *The Condition of College & Career Readiness*

Since 1959, ACT has collected and reported data on students' academic readiness for college. This report provides a college and career readiness snapshot of the ACT-tested high school class of 2013.¹

What does ACT mean by “college and career readiness”?

ACT has long defined college and career readiness as the acquisition of the knowledge and skills a student needs to enroll and succeed in credit-bearing first-year courses at a postsecondary institution (such as a 2- or 4-year college, trade school, or technical school) without the need for remediation.

How does ACT determine if students are college ready?

Empirically derived, the ACT College Readiness Benchmarks are

the minimum scores needed on the ACT subject area tests to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in corresponding credit-bearing first-year college courses. (See Notes for more information.)

Measuring academic performance in the context of college and career readiness—focusing on the number and percentages of students meeting or exceeding the ACT College Readiness Benchmarks—provides meaningful and compelling information about the academic readiness of students. *The Condition of College & Career Readiness* highlights that information.

¹The data in this report are based on the *ACT Profile Report—National: Graduating Class 2013*, available at www.act.org/readiness/2013. Except for the graphs on pages 9 and 14, data related to students who did not provide information or responded “Other” to questions about gender, race/ethnicity, high school curriculum, etc., are not presented explicitly. Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements; trends to previous reports may not be available for all race/ethnicity categories. Reading and Science ACT College Readiness Benchmarks changed in 2013; trend data prior to 2013 uses previous Benchmarks.

Contents

The Condition of College & Career Readiness is organized into eight sections:

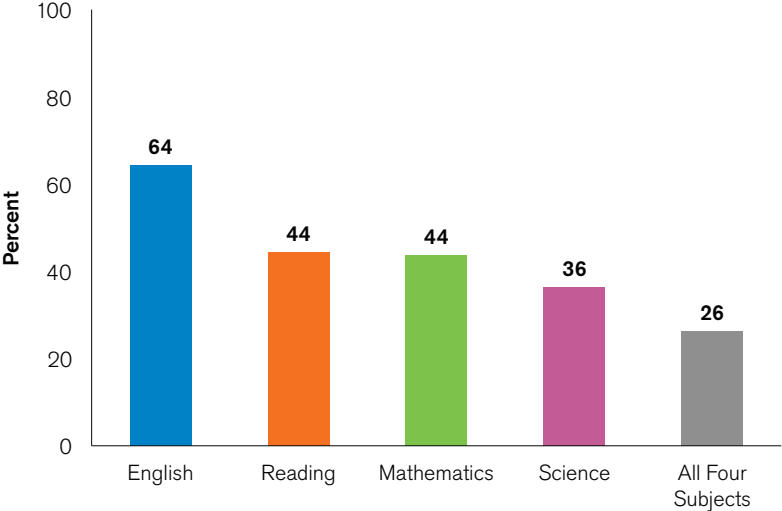
- College Readiness**—the percent of students meeting the ACT College Readiness Benchmarks in each subject area 1
- Educational/Career Aspirations & Economic Development**—the extent to which student aspirations match workforce demands. 9
- Access & Preparation**—the number of graduates exposed to college entrance testing and the percent of students pursuing a core curriculum12
- Academic Performance**—student test performance and the impact of rigorous coursework on achievement16
- A First Look at STEM**—college readiness and interest in STEM majors19
- Looking Back at the Class of 2012**—college readiness and the enrollment patterns of ACT-tested 2012 high school graduates.20
- Academic Achievement & Academic Behaviors: Both Matter**—the impact of academic behaviors on high school performance.22
- Policies & Practices to Increase Readiness**—policies and practices states and schools can implement to improve the college readiness of students.24

ACT encourages educators to focus on trends (e.g., 3, 5, 10 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.

College Readiness

ACT College Readiness Benchmarks by Subject

Percent of ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject, 2013



In 2013, 64% of all ACT-tested high school graduates met the English ACT College Readiness Benchmark, while 26% met the ACT College Readiness Benchmarks in all four subjects. Forty-four percent of graduates met the Reading Benchmark, and 44% met the Mathematics Benchmark. Just over 1 in 3 (36%) met the ACT College Readiness Benchmark in Science.

Graph reads: In 2013, 64% of ACT-tested high school graduates met the ACT College Readiness Benchmark in English.



College Readiness

ACT College Readiness Benchmarks Over Time

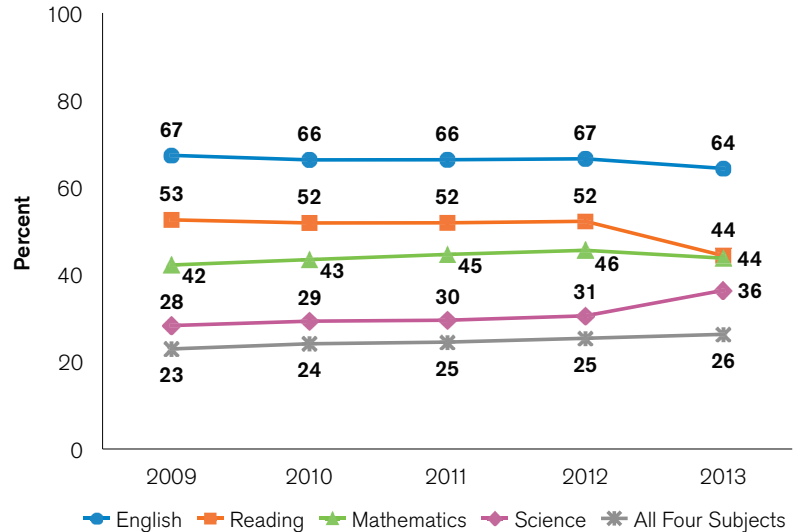
Between 2009 and 2013, Benchmark attainment percentages in English dropped slightly; 67% to 64% of ACT-tested graduates met the English Benchmark over this period. Benchmark attainment for Reading also dropped, though this was due primarily to the update to the Reading Benchmark. Higher Mathematics Benchmark rates were seen between 2009 and 2012, with a slight dip in 2013. The Science Benchmark rate rose steadily over this period, with a large increase seen in 2013, due primarily to the update to this Benchmark in 2013.

The percent of students meeting all four Benchmarks increased slightly between 2009 and 2013. Just over 1 in 4 (26%) ACT-tested high school graduates met all four ACT College Readiness Benchmarks in 2013, compared to 23% doing so in 2009.

Graph reads: Between 2009 and 2013, the percentage of ACT-tested high school graduates who met the ACT College Readiness Benchmark in English decreased from 67% to 64%.

Note: Reading and Science Benchmarks were updated in 2013.

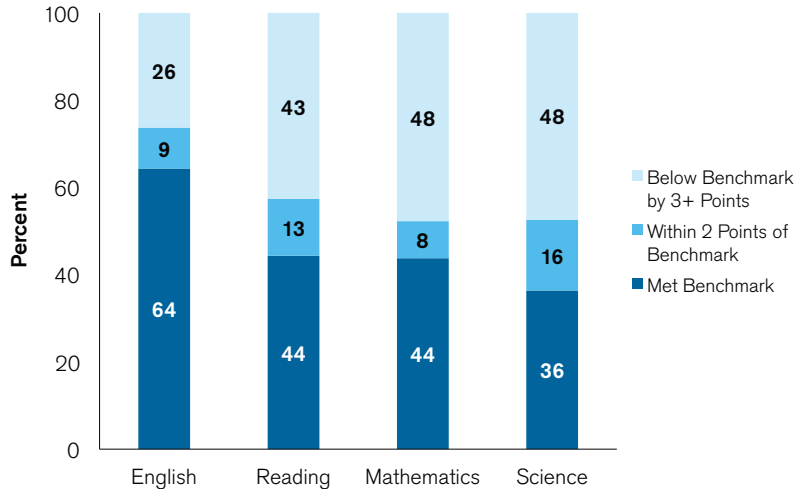
Percent of ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks, 2009–2013



College Readiness

ACT College Readiness Benchmarks—Attainment and Near Attainment

Percent of ACT-Tested High School Graduates by Benchmark Attainment and Subject, 2013



About 8% to 16% of graduates were within 2 scale points of meeting an ACT College Readiness Benchmark in 2013, depending on subject area. This represents approximately 150,000 to 290,000 additional students who were close to being college ready within a subject area.

In 2013, 44% of graduates met the Mathematics Benchmark, while another 8% were within 2 scale points of doing so. The percentages of students within 2 scale points of the respective ACT College Readiness Benchmark in the other subject areas were greater, including 9% of graduates in English, 13% in Reading, and 16% in Science.

Graph reads: In 2013, 64% of ACT-tested high school graduates met the ACT College Readiness Benchmark in English, while 9% scored 1 or 2 points below the Benchmark, and 26% scored 3 points or more below the Benchmark.

Note: Columns may not sum to 100% due to rounding.

College Readiness

Number of ACT College Readiness Benchmarks Attained

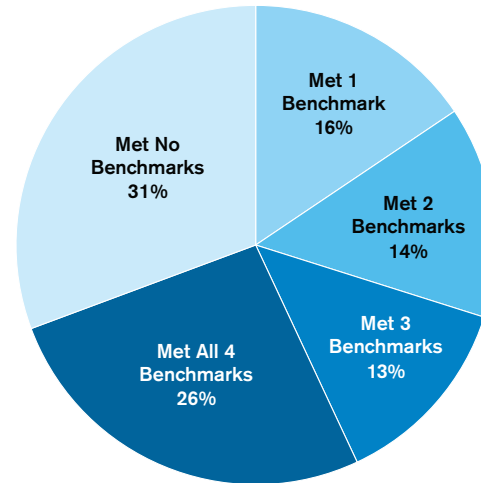
About 69% of all 2013 ACT-tested high school graduates met at least one of the four ACT College Readiness Benchmarks in English, Reading, Mathematics, or Science.

Fully 31% of all graduates did not meet any of the ACT College Readiness Benchmarks, while 43% met between 1 and 3 Benchmarks. Twenty-six percent of all 2013 ACT-tested high school graduates met all four ACT College Readiness Benchmarks, meaning that just over 1 in 4 were academically ready for college coursework in all four subject areas.

Graph reads: In 2013, 26% of ACT-tested high school graduates met all four ACT College Readiness Benchmarks, 13% met 3 Benchmarks, 14% met 2 Benchmarks, 16% met 1 Benchmark, and 31% met none of the Benchmarks.

Note: Percentages may not sum to 100% due to rounding.

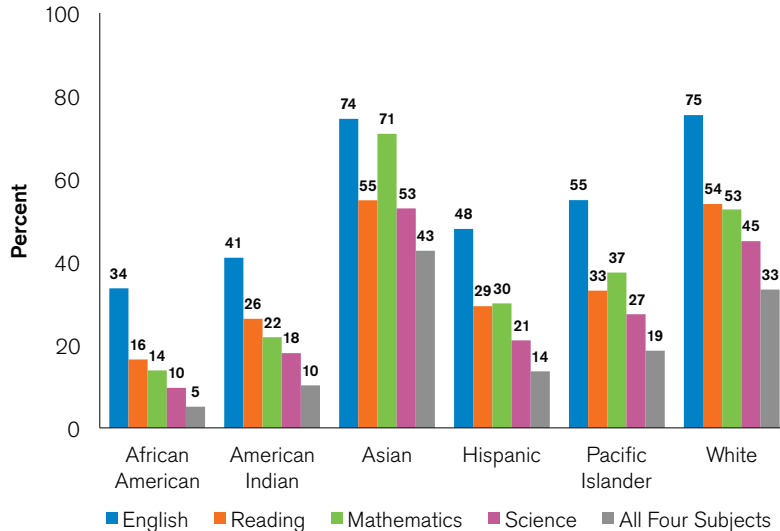
Percent of ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks Attained, 2013



College Readiness

ACT College Readiness Benchmarks by Race/Ethnicity

Percent of ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Race/Ethnicity, 2013



Just over 4 in 10 (43%) Asian graduates met all four ACT College Readiness Benchmarks in 2013, a higher rate than that of graduates from all other racial/ethnic groups. African American graduates were least likely to meet the Benchmarks—5% met all four.

Students from most racial/ethnic groups were most likely to meet the English Benchmark and least likely to meet the Science Benchmarks. In three of the four subject areas, Benchmarks were met by 50% or more of Asian and White students, while one was met by 50% or more of Pacific Islander students. None of the Benchmarks were met by 50% or more of African American, American Indian, or Hispanic students.

Graph reads: In 2013, 34% of ACT-tested African American high school graduates met the ACT College Readiness Benchmark in English, while 16% did so in Reading.

Note: Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.

College Readiness

ACT College Readiness Benchmarks by Level of High School Preparation

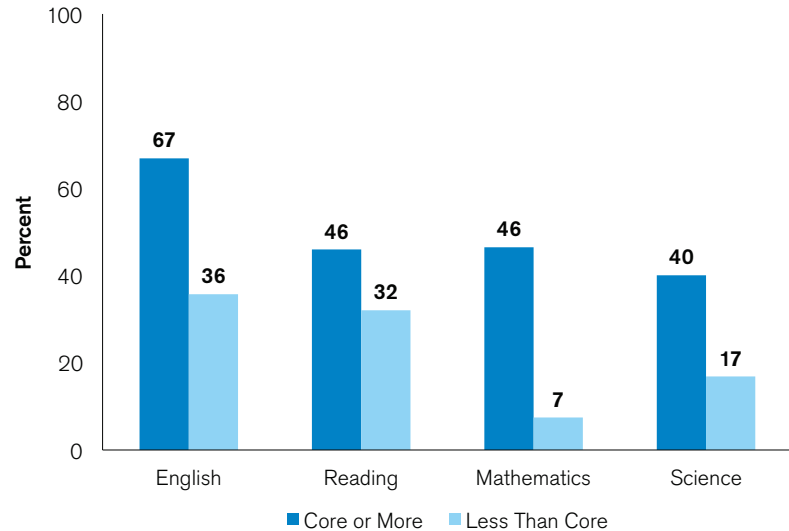
Within a subject area, graduates who took a core curriculum or more in high school were more likely to meet the corresponding ACT College Readiness Benchmark in 2013 than graduates who took less than a core curriculum (defined as 4 years of English and 3 years each of mathematics, science, and social studies).

The largest curriculum-based difference in Benchmark attainment rates was in Mathematics. Graduates who completed 3 or more years of mathematics were more likely to meet the Mathematics Benchmark—by 39 percentage points—than were graduates who took less than 3 years of mathematics.

Graph reads: In 2013, 67% of ACT-tested high school graduates who took at least a core high school curriculum in English met the ACT College Readiness Benchmark in English, whereas 36% of graduates who took less than a core curriculum in English did so.

Note: Data reflect subject-specific curriculum. For example, English “Core or More” results pertain to students who took at least 4 years of English, regardless of courses taken in other subject areas.

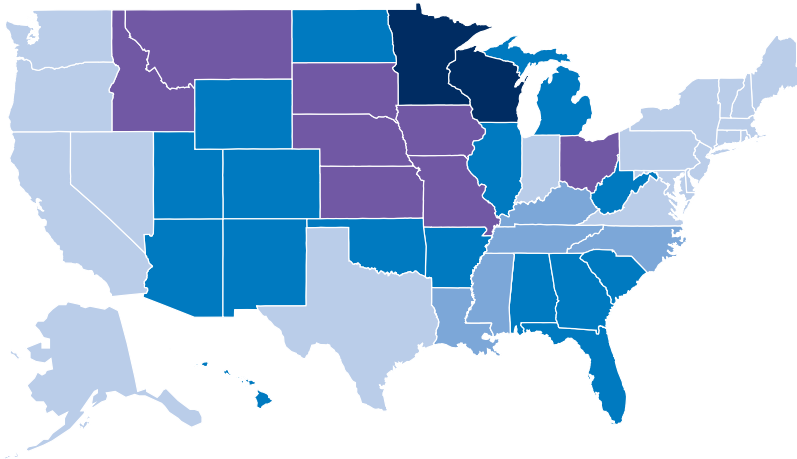
Percent of ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Number of Years of Courses Taken Within Subject, 2013



College Readiness

ACT College Readiness Benchmarks by State

Percent of ACT-Tested High School Graduates Meeting Three or Four ACT College Readiness Benchmarks by State, 2013



- Low % ACT-tested; less than 40% of graduates took the ACT to allow for a fair comparison
- <30%
- 30%–39%
- 40%–49%
- 50%–56%

Of the 31 states where 40% or more of their 2013 high school graduates took the ACT, in only 2 states did more than half of the graduates meet three or more ACT College Readiness Benchmarks. In another 8 states, 40%–49% of graduates met three or four Benchmarks.

In 16 states, 30%–39% of graduates met three or more ACT College Readiness Benchmarks in 2013, while less than 30% of graduates did so in 5 states. In no state did more than 56% of ACT-tested graduates meet three or four Benchmarks.

Map reads: In 2013, less than 30% of ACT-tested high school graduates in 5 states (e.g., Louisiana) met three or four ACT College Readiness Benchmarks. Results are not shown for 20 states (e.g., California) within which less than 40% of graduates took the ACT.

College Readiness

ACT College Readiness Benchmarks—On Target and Attained

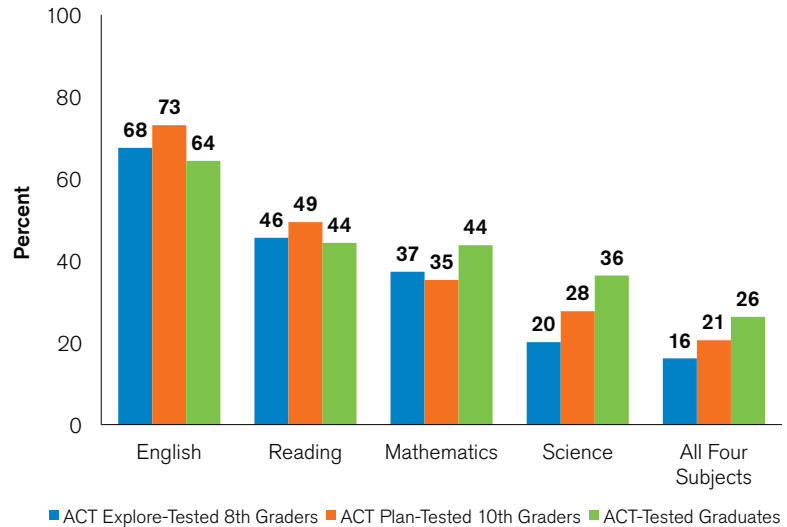
Except in Mathematics, the percentages of 10th graders meeting the Benchmarks were higher than the corresponding percentages of 8th graders. In Mathematics and Science, the percentages of high school graduates meeting the Benchmarks were higher than the corresponding percentages of 10th graders.

Twenty-six percent of 2013 ACT-tested graduates met all four ACT College Readiness Benchmarks, while only 21% of 2012–13 ACT Plan®-tested 10th graders and 16% of 2012–13 ACT Explore®-tested students did so. Across the grade levels, only the English Benchmark was met by more than 50% of all tested students.

Graph reads: In 2013, 68% of 2012–13 ACT Explore–tested students met the ACT College Readiness Benchmark in English, while 73% of 2012–13 ACT Plan–tested students and 64% of 2013 ACT-tested graduates did so.

Note: Data here are cross sectional and not longitudinal, reflecting three different groups of students.

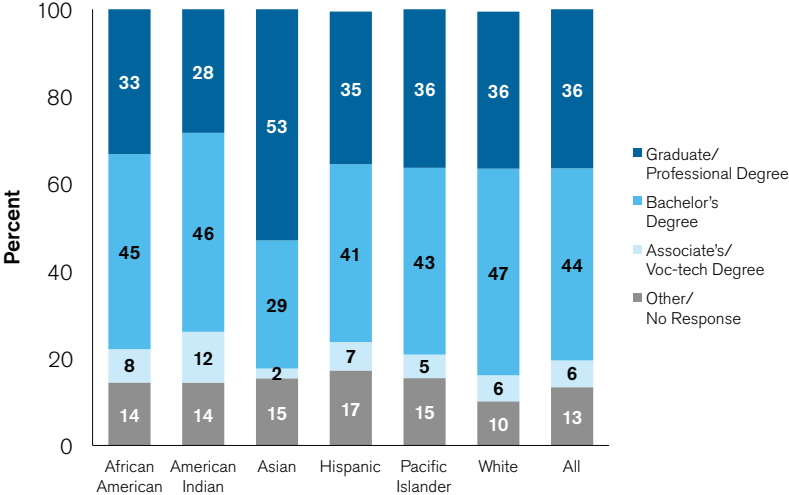
Percent of 2012–13 ACT Explore–Tested 8th Graders, 2012–13 ACT Plan–Tested 10th Graders, and 2013 ACT-Tested Graduates Meeting ACT College Readiness Benchmarks, 2013



Educational/Career Aspirations & Economic Development

Educational Aspirations by Race/Ethnicity

Percent of ACT-Tested High School Graduates by Race/Ethnicity and Educational Aspirations, 2013



About 87% of all 2013 ACT-tested high school graduates aspired to attain at least a 2-year postsecondary degree, regardless of race/ethnicity.

About 82% of Asian graduates aspired to earn at least a bachelor's degree, with 53% aspiring to continue their formal education beyond a 4-year degree. American Indian graduates (28%) were the least likely to aspire to a graduate or professional degree; 33%–36% of African American, Hispanic, Pacific Islander, or White graduates aspired to a graduate or professional degree.

Graph reads: In 2013, 33% of ACT-tested African American high school graduates aspired to a graduate or professional degree, 45% to a bachelor's degree, 8% to an associate's or voc-tech degree, and 14% to another degree type (or provided no response).

Note: Columns may not sum to 100% due to rounding. Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.



Educational/Career Aspirations & Economic Development

Career Interests & Projected Job Openings

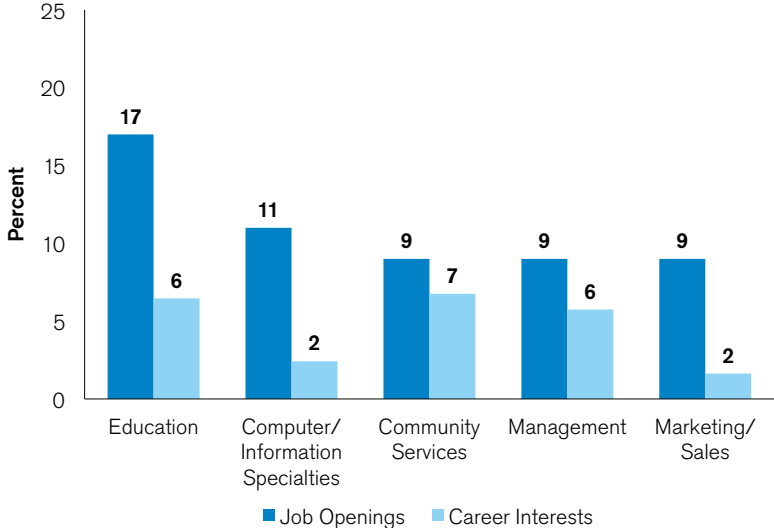
The five fastest-growing career fields based on 2010–2020 annual projected job openings account for 55% of the demand for jobs calling for at least a 2-year degree. The percentage of 2013 ACT-tested high school graduates interested in careers in these fields was less than the projected demand.

In three fields—Education, Computer/Information Specialties, and Marketing/Sales—the projected demand was more than twice the potential supply.

Graph reads: In 2013, Education was projected to be one of the five fastest-growing career fields, accounting for 17% of all job openings in 2020. About 6% of all 2013 ACT-tested high school graduates indicated a career interest in Education.

Note: 2010–20 projected job openings data are from the US Department of Labor, Bureau of Labor Statistics.

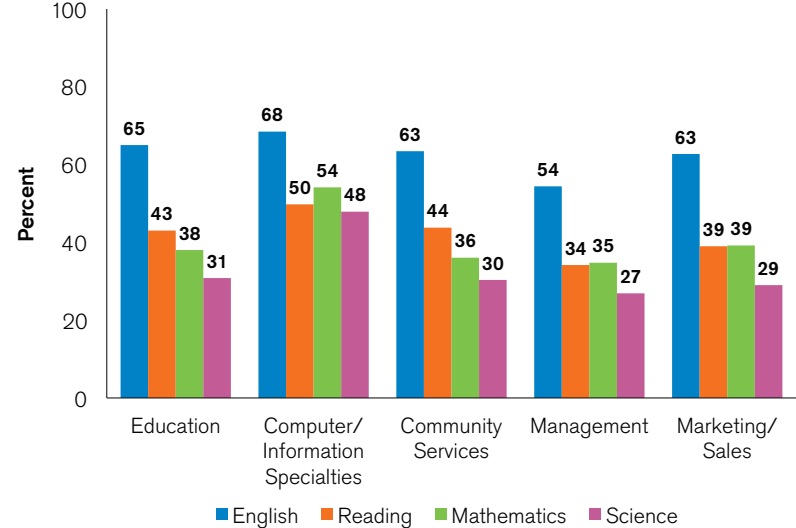
Percent of 2013 ACT-Tested High School Graduates with Career Interests and Projected 2020 Annual Job Openings by Career Field



Educational/Career Aspirations & Economic Development

ACT College Readiness Benchmarks by Career Field

Percent of ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Career Field, 2013



For each of the 2020 projected five fastest-growing career fields, less than half of the 2013 high school graduates interested in careers in these fields met the ACT College Readiness Benchmark in Science, and in only one field, Computer/Information Specialties, did 50% or more meet the Mathematics Benchmark. Within each of the five career fields, fewer than 50% of the 2013 graduates met all four Benchmarks; though graduates interested in Computer/Information Specialties field were close to doing so.

Across all five career fields, graduates were most likely to meet the English Benchmark and least likely to meet the Science Benchmark.

Graph reads: In 2013, 65% of all ACT-tested high school graduates who indicated a career interest in Education met the ACT College Readiness Benchmark in English.



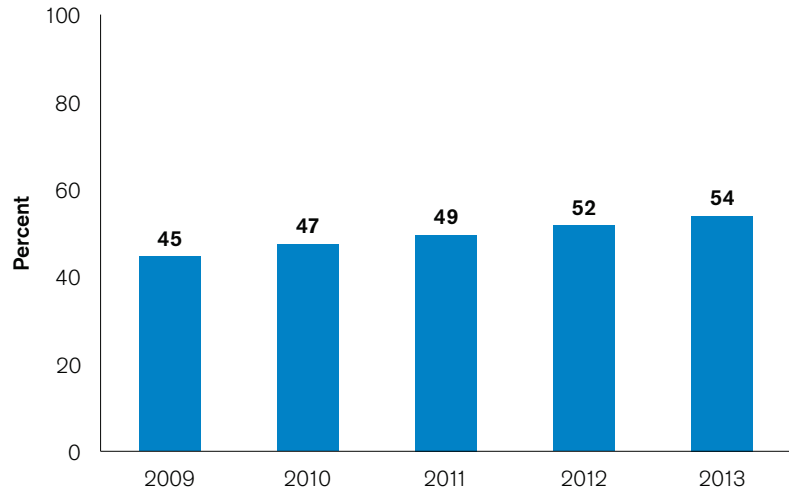
Access & Preparation

Percent of US Graduates Who Took the ACT

About 54% of all 2013 high school graduates in the United States took the ACT during high school, or about 1.8 million graduates.

From 2009 to 2013, the number of high school graduates who took the ACT increased by approximately 22%. This represents a 9 percentage point increase in the number of all US high school graduates who took the ACT.

Percent of US High School Graduates Who Took the ACT, 2009–2013

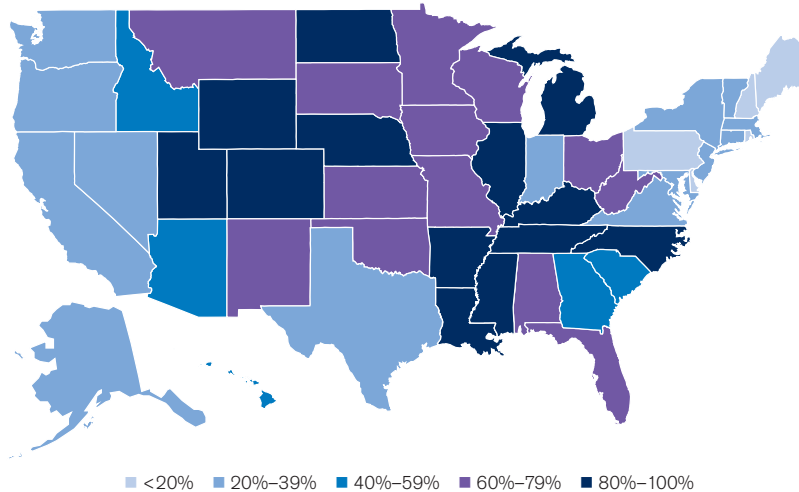


Graph reads: In 2009, 45% of all US high school graduates took the ACT at least once during their sophomore, junior, or senior year.

Access & Preparation

Percent of Graduates Who Took the ACT by State

Percent of ACT-Tested High School Graduates by State, 2013



At least 60% of all 2013 high school graduates took the ACT in 26 states. In 13 states, at least 80% of their high school graduates took the ACT.

In 5 states, between 40% and 59% of their 2013 high school graduates took the ACT during high school, while another 15 states saw between 20% and 39% of their high school graduates take the ACT. Less than 20% of 2013 graduates took the ACT in 5 states.

Map reads: In 2013, less than 20% of the high school graduates in 5 states (e.g., Pennsylvania) took the ACT at least once during their sophomore, junior, or senior year.

Access & Preparation

Number of Graduates Who Took the ACT by Race/Ethnicity

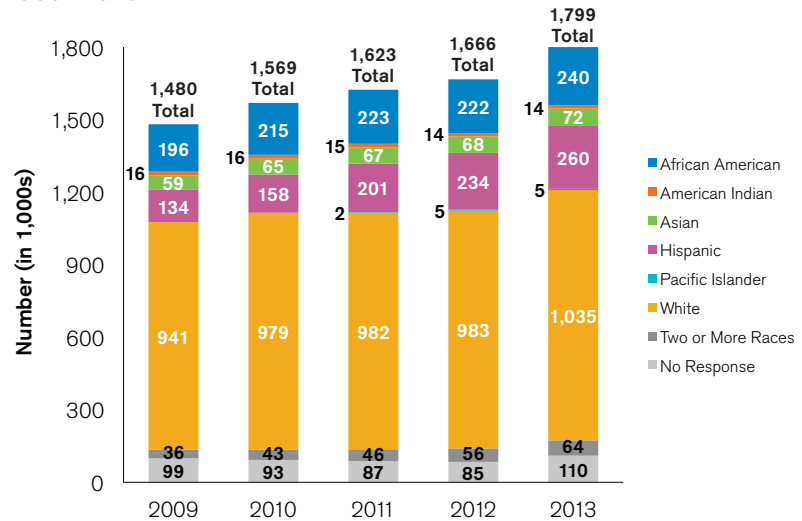
About 319,000 more high school graduates completed the ACT in 2013 than in 2009, an increase of about 22%.

In 2013, about 58% of all ACT-tested graduates were White, 13% were African American, 14% were Hispanic, 4% were Asian, 4% were of Two or More Races, 1% were American Indian, less than 1% were Pacific Islander (about 5,000), and 6% were No Response. From 2009 to 2013, the number of ACT-tested high school graduates increased from 1.480 million to 1.799 million students. Substantial numerical increases occurred for Hispanic students (increase of about 126,000), White students (94,000), African American students (43,000), and students of Two or More Races (29,000). Proportionally, the largest increases were by Hispanic students (about 94%) and students of Two or More Races (80%).

Graph reads: In 2009, about 1,480,000 US high school graduates had taken the ACT at least once during their sophomore, junior, or senior year. Of that group, about 196,000 were African American students and 16,000 were American Indian students.

Note: Counts by race/ethnicity might not sum to total counts due to rounding. Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.

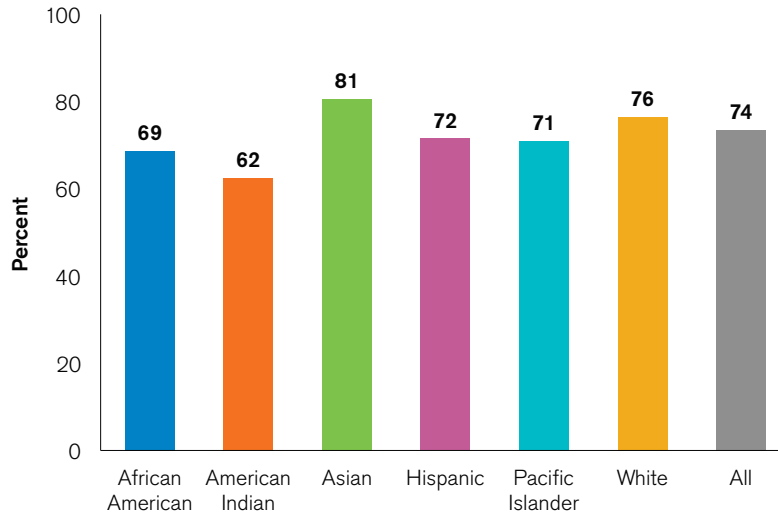
Number of ACT-Tested High School Graduates by Race/Ethnicity, 2009–2013



Access & Preparation

Percent of Graduates Who Took a Core Curriculum by Race/Ethnicity

Percent of ACT-Tested High School Graduates Who Completed a Core Curriculum by Race/Ethnicity, 2013



Seventy-four percent of all 2013 ACT-tested high school graduates took at least a minimum core high school curriculum to prepare them for college.

Asian students (81%) were most likely to complete a core curriculum, while 76% of White and 72% of Hispanic students did so. Smaller percentages of Pacific Islander (71%), African American (69%), and American Indian (62%) students completed a core curriculum.

Graph reads: In 2013, 69% of all African American high school graduates who had taken the ACT had completed, or had planned to complete, at least a core curriculum.

Note: Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.

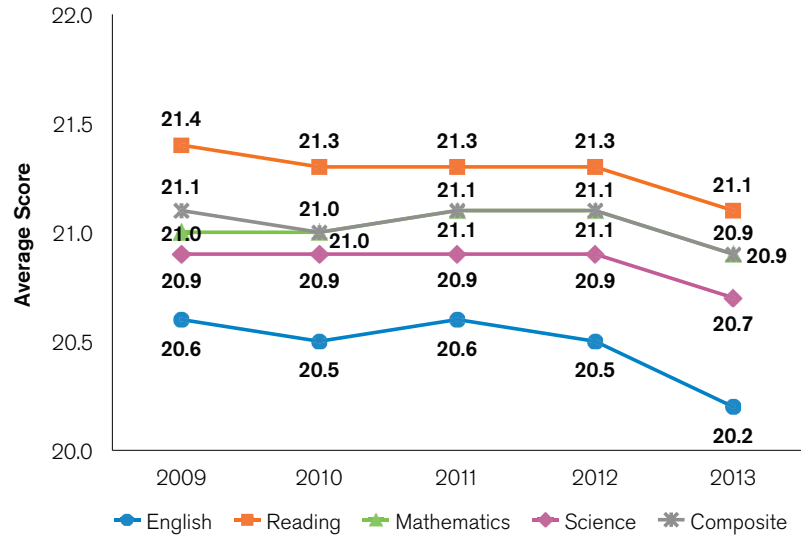
Academic Performance

ACT Scores Over Time

Test scores dropped slightly between 2009 and 2013, with most of the decrease seen in 2013. About 22% more high school students took the ACT over this period, and the tested population of students became more diverse.

ACT Composite score averages ranged between 21.1 and 20.9 points during this time. The four subject score averages (English, Reading, Mathematics, and Science) showed similar changes in absolute value.

Average ACT Scores, 2009–2013

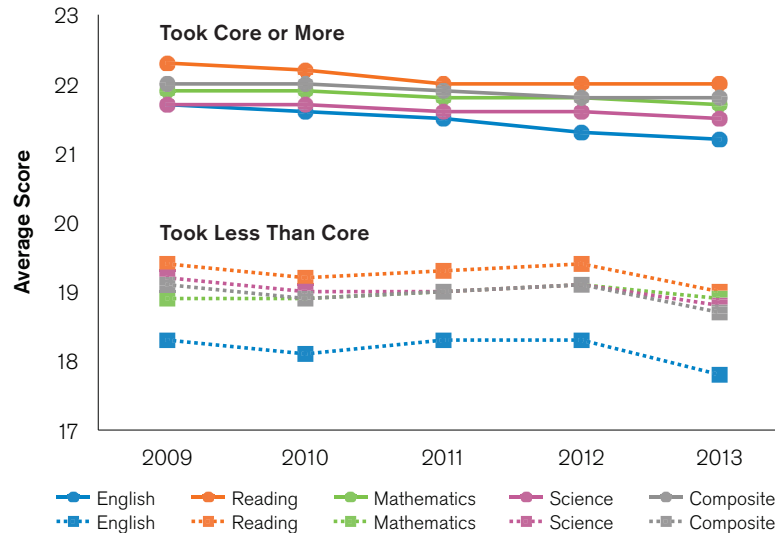


Graph reads: Between 2009 and 2013, the average ACT Reading score for all high school graduates decreased slightly from 21.4 to 21.1.

Academic Performance

ACT Scores Over Time by Level of High School Preparation

Average ACT Scores by Core Curriculum Completion Status, 2009–2013



For each year from 2009 to 2013, ACT Composite and subject scores were higher for students who took a core curriculum or more in high school than for students who did not.

On average, high school graduates who completed at least a core curriculum earned ACT Composite test scores 2.7 to 3.1 points higher than the scores of students who did not take a core curriculum. Similar ranges of higher scores for core or more curriculum completers are noted for each subject test: English (3.0 to 3.5 points), Reading (2.6 to 3.0), Mathematics (2.7 to 3.0), and Science (2.5 to 2.7).

Graph reads: Between 2009 and 2013, the average ACT Reading score for high school graduates who had completed or had planned to complete at least a core curriculum dipped slightly but was higher and dipped less than that of graduates who had not completed or had not planned to complete a core curriculum.

Academic Performance

ACT Scores Over Time by Race/Ethnicity

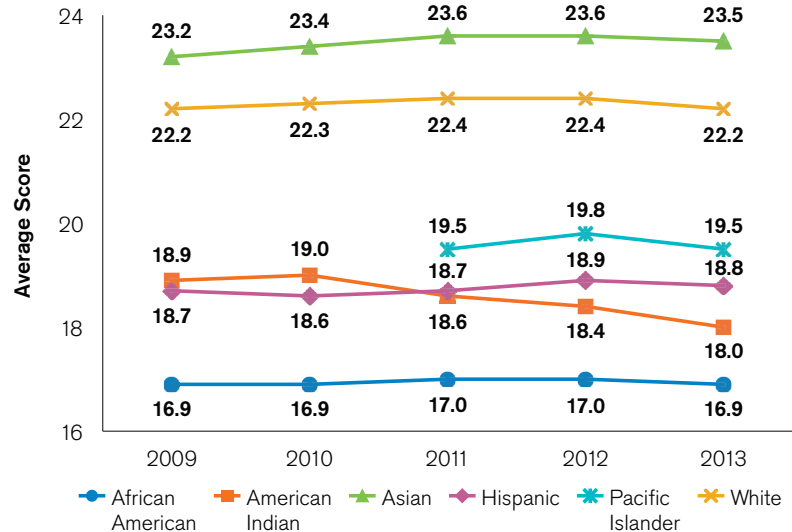
Average ACT Composite scores for Asian and Hispanic graduates increased between 2009 and 2013, while those of most other groups remained level over that period. ACT Composite scores of American Indian graduates declined by 0.9 scale point.

Asian graduates had the highest average ACT Composite scores and the largest score increase (+0.3 scale point). These score changes have occurred as more students from each racial/ethnic group have taken the ACT.

Graph reads: Between 2009 and 2013, the average ACT Composite score for Asian high school graduates increased from 23.2 to 23.5.

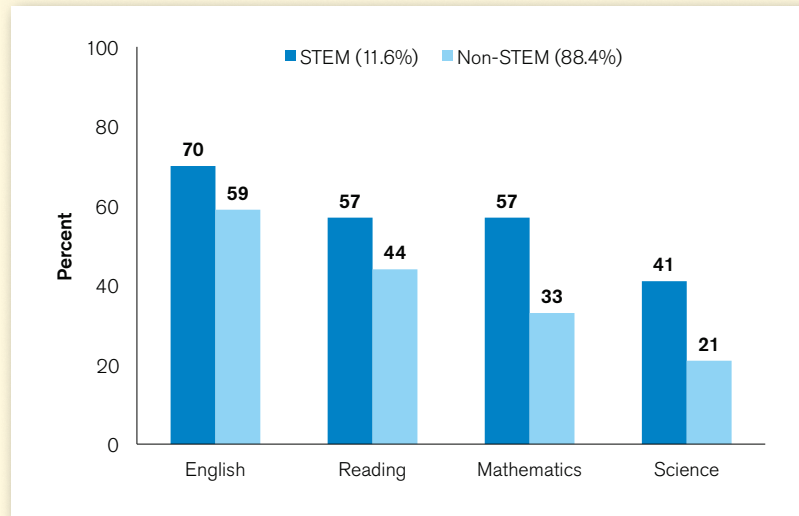
Note: Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.

Average ACT Composite Test Scores by Race/Ethnicity, 2009–2013



A First Look at STEM

Percent Meeting ACT College Readiness Benchmarks by National Science Foundation STEM Interest



This chart depicts ACT College Readiness Benchmark attainment by student interest in STEM majors/occupations, as defined by the National Science Foundation, from the 2010–2012 national ACT-tested graduating classes (N = 1,167,221). Just over 1 in 10 graduates indicated interest in a STEM major or occupation. In each subject area, greater percentages of STEM-interested graduates met the ACT College Readiness Benchmarks than did their peers. The largest differences in Benchmark attainment rates were in Mathematics (24 percentage points) and Science (20 percentage points).

ACT plans to release a report on the condition of the STEM pipeline in 2013.

Note: STEM majors/occupations classification is from the National Science Foundation's STEM Classification of Instructional Programs Crosswalk.

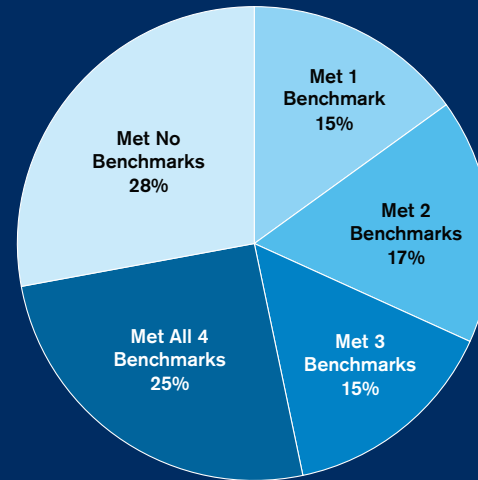
Looking Back at the Class of 2012

Number of ACT College Readiness Benchmarks Attained

About 72% of all 2012 ACT-tested high school graduates met at least one of the four ACT College Readiness Benchmarks in English, Reading, Mathematics, or Science.

Fully 28% of all graduates did not meet any of the ACT College Readiness Benchmarks, while 47% met between 1 and 3 Benchmarks. Twenty-five percent of all 2012 ACT-tested high school graduates met all four ACT College Readiness Benchmarks, meaning that 1 in 4 were academically ready for college coursework in all four subject areas.

Percent of 2012 ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks Attained



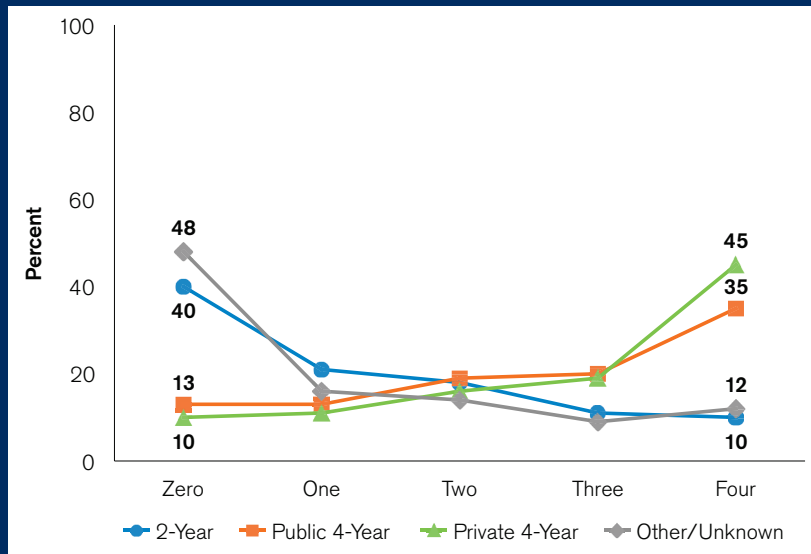
Graph reads: In 2012, 25% of ACT-tested high school graduates met all four ACT College Readiness Benchmarks, 15% met 3 Benchmarks, 17% met 2 Benchmarks, 15% met 1 Benchmark, and 28% met none of the Benchmarks.

Note: Percentages may not sum to 100% due to rounding.

Looking Back at the Class of 2012

Fall 2012 College Enrollment Status

Percent of 2012 ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks Attained and Fall 2012 College Enrollment Status



More than half of the 2012 ACT-tested high school graduates who enrolled in a 4-year college met three or more of the ACT College Readiness Benchmarks (about 55% of public college enrollees; about 64% of private college enrollees).

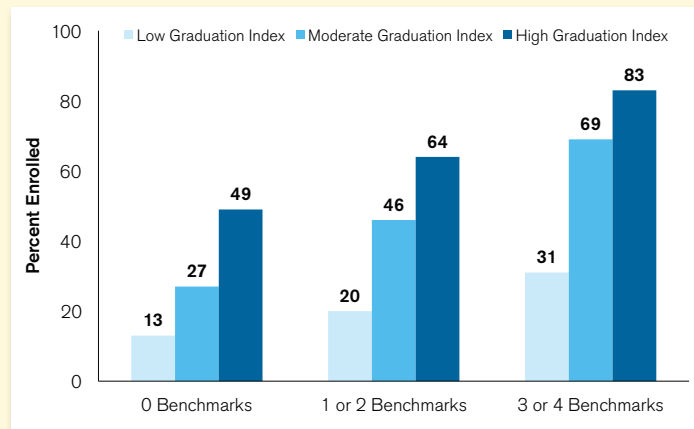
About 21% of the graduates who enrolled in a 2-year college met at least three of the ACT College Readiness Benchmarks; 40% of 2-year enrollees met none of the Benchmarks. At least 10% of the 4-year college enrollees met none of the Benchmarks.

Graph reads: In fall 2012, 48% of the 2012 ACT-tested high school graduates whose status was Other/Unknown met none of the ACT College Readiness Benchmarks; 12% of this group met 4 Benchmarks.

Note: Percentages may not sum to 100% due to rounding.

Academic Achievement & Academic Behaviors: Both Matter

First-Year College Enrollment Rates by 8th Grade ACT Explore Benchmarks and ACT Engage® Graduation Index Level*



* Based on N = 3,356 8th graders in 24 middle schools across the country who took ACT Explore and ACT Engage Grades 6–9. These data do not reflect the 2013 ACT-tested high school graduate cohort.

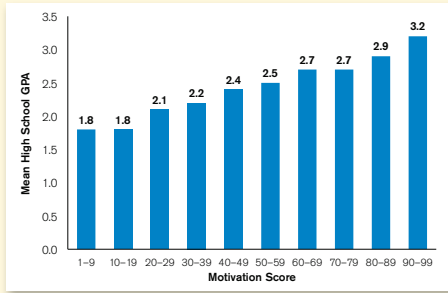
Academic achievement is an essential factor in college and career readiness, but it's not the only one. Over the past 10 years, ACT research on student success has advanced to include motivation, social engagement, and self-regulation—the behavioral domains essential for success across the school and work continuum.

Combining measures of academic achievement and behavior provides a more holistic picture of students, including their likelihood of enrolling in college following high school graduation. This information, available in middle school, allows for early identification of and intervention with students who may be less likely to complete high school and go to college.

Across all ACT Explore Benchmark attainment levels, students with higher ACT Engage Graduation Index scores (which are based on a combination of ACT Engage scale scores and other self-reported student information) enrolled in a postsecondary institution after high school at substantially higher rates than students with lower ACT Engage Graduation Index scores.

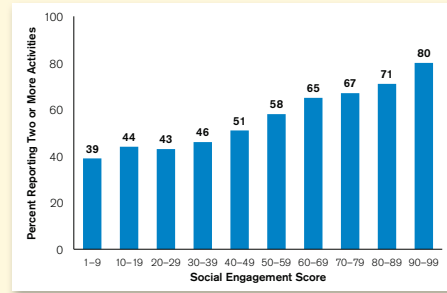
Academic Achievement & Academic Behaviors: Both Matter

Mean High School GPA by Motivation Score*



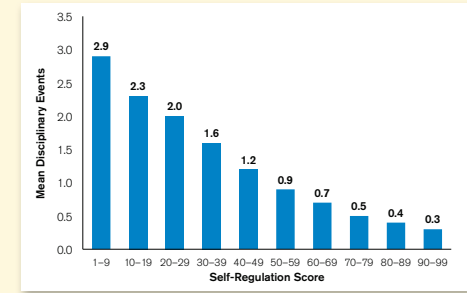
Motivation: Personal characteristics that help students to succeed academically by focusing and maintaining energies on goal-directed activities. Behaviors in this domain are important for maintaining the level of effort required to achieve good grades.

Students Reporting Two or More Extracurricular Activities in High School by Social Engagement Score**



Social Engagement: Interpersonal factors that influence students' successful integration into their environment. Behaviors in this domain are related to participation and engagement in social and community activities, such as extracurricular activities.

Average Number of Disciplinary Events by Self-Regulation Score***



Self-Regulation: The thinking processes and emotional responses of students that govern how well they monitor, regulate, and control their behavior related to school and learning. Behaviors in this domain are important for following rules and maintaining good conduct.

ACT Engage Grades 6–9 is a self-report assessment used to measure the academic behaviors noted above and determine students' personal strengths and weaknesses. For more information about ACT Engage, see www.act.org/engage/pdf/ENGAGE_Issue_Brief.pdf.

* Based on N = 3,949 students who took ACT Engage Grades 6–9.

** Based on N = 1,635 students who took ACT Engage Grades 6–9.

*** Based on N = 16,234 students who took ACT Engage Grades 6–9.

These data do not reflect the 2013 ACT-tested high school graduate cohort.

Policies & Practices to Increase Readiness

How to Increase Readiness

Approximately 31% of all 2013 ACT-tested high school graduates met none of the ACT College Readiness Benchmarks, meaning they were not prepared academically for first-year college courses in English Composition, College Algebra, Biology, and social sciences. Based on decades of ACT research, the following recommendations include steps that states, districts, schools, and classrooms can take to increase student readiness for college-level work.

State Policy Recommendations

Implementing College and Career Readiness Standards. With the adoption of the Common Core State Standards by 45 states and the District of Columbia, most states have taken a first step in ensuring all students pursue real-world benchmarks for their college or career success. Implementing the standards must now be a catalyst for aligning all aspects of state and local systems to college and career readiness. Promising practice research shows that systemic alignment of key policies and school activities empowers educators to make notable gains in student achievement. An integrated, systemic approach to education delivery is essential for every state and would include the actions outlined on the following pages.

Policies & Practices to Increase Readiness

Infusing a Culture of Postsecondary Success. An educator's vision, attitudes, and motivation have a lasting impact on student achievement. States should support teachers in exposing all high school students, whether they are bound for college or work, to a rigorous core curriculum aligned with college and career readiness standards. The levels of expectation for college readiness and workforce training should be comparable in rigor and clarity of purpose because high-quality education or training after high school is increasingly vital to the success of all students in a rapidly changing world.

Ensuring Access to Rigorous High School Courses. Having rigorous and aligned standards, coupled with a core curriculum, will adequately prepare students only if the courses are truly challenging. It is more important for students to take the right kinds of courses rather than merely the right number of courses. High school students who take four years of rigorous English courses and three years each of rigorous mathematics, science, and social studies are more likely to graduate ready for credit-bearing first-year college courses without remediation.

Supporting Early Monitoring and Intervention. Longitudinal data systems enable educators to identify students in need of academic intervention at an early stage, when problems are still solvable, giving teachers and students more time to strengthen these skills before graduation. In order for students to plan their high school coursework, age-appropriate career assessment, exploration, and planning activities that encourage them to consider personally relevant career options should be used regularly. Empowering teachers and administrators with currently available tools is essential for modern instructional practice to monitor student achievement against appropriate benchmarks in core academic subjects throughout elementary, middle, and secondary school.

Policies & Practices to Increase Readiness

Setting Clear Performance Standards. In addition to a consistent, rigorous set of essential K–12 content standards, states must define performance standards so that everyone knows “how good is good enough” for students to have a reasonable chance of success at college or on the job. Based on decades of student performance data, ACT defines “college readiness” as students having a 50% chance of earning a B or higher or about a 75% chance of earning a C or higher in first-year college English Composition, College Algebra, Biology, and an introductory social science course. Longitudinal, real-world data and research on what constitutes student success are now available to virtually every state and district, as are standards and benchmarks against which the performance of students and schools can be measured and state progress marked.

Implementing Policies and Practices for Data-Driven Decision Making. Teachers must have access to high-quality, actionable data that can be used to improve instruction. Absent such data, opinion can overly influence key decisions. To address this challenge, states have been hard at work developing longitudinal P–16 data systems—this work should continue, but more must be done. To ensure their students are prepared for the 21st century, states must have systems that allow schools and districts to closely monitor student performance at every stage of the learning pipeline, from preschool through college. Policies governing teacher and administrator preparation and professional development must include an emphasis on developing skills to use data appropriately to improve the practices of teaching and learning for all students, from preschool through college.

District, School, & Classroom Practices

The Path to Readiness: It Takes a System

Research by ACT shows that no single program or isolated reform can be a substitute for a coherent, long-term, systemwide approach to improving teaching and learning. We all want our students to graduate prepared to take on future opportunities with success.

Policies & Practices to Increase Readiness

So, what are consistently higher performing schools doing to place more students on the path to college and career readiness?

The **ACT Core Practice™ Framework**, built upon the study of more than 550 schools across 20 states, identifies the core practices that distinguish a higher performing school from its average performing counterparts. ACT studies the practices of those schools and school systems that have more success in preparing their students for college and careers than their peers who serve similar student populations. Our ongoing research supports the Framework and adds content and information to each of the core practices below.

The 15 Practices of Higher Performing School Systems

The ACT Core Practice Framework outlines the evidence-based educator practices at each level of a school system—district, school, and classroom—that will help all students master high standards. The Framework focuses on five themes:

Theme 1: Curriculum and Academic Goals

District Practice: Provide clear, prioritized learning objectives by grade and subject that all students are expected to master.

School Practice: Set expectations and goals for teaching and learning based on the district's written curriculum.

Classroom Practice: Study and use the district's written curriculum to plan all instruction.

Theme 2: Staff Selection, Leadership, and Capacity Building

District Practice: Provide strong principals, a talented teacher pool, and layered professional development.

School Practice: Select and develop teachers to ensure high-quality instruction.

Classroom Practice: Collaborate as a primary means for improving instruction.

Policies & Practices to Increase Readiness

Theme 3: Instructional Tools—Programs and Strategies

District Practice: Provide evidence- and standards-based instructional tools that support academic rigor for all students.

School Practice: Promote strategies and build structures and schedules to support academic rigor.

Classroom Practice: Use proven instructional tools to support rigorous learning for students.

Theme 4: Monitoring Performance and Progress

District Practice: Develop and use student assessment and data management systems to monitor student learning.

School Practice: Monitor teacher performance and student learning.

Classroom Practice: Analyze and discuss student performance data.

Theme 5: Intervention and Adjustment

District Practice: Respond to data through targeted interventions or curricular/instructional adjustments.

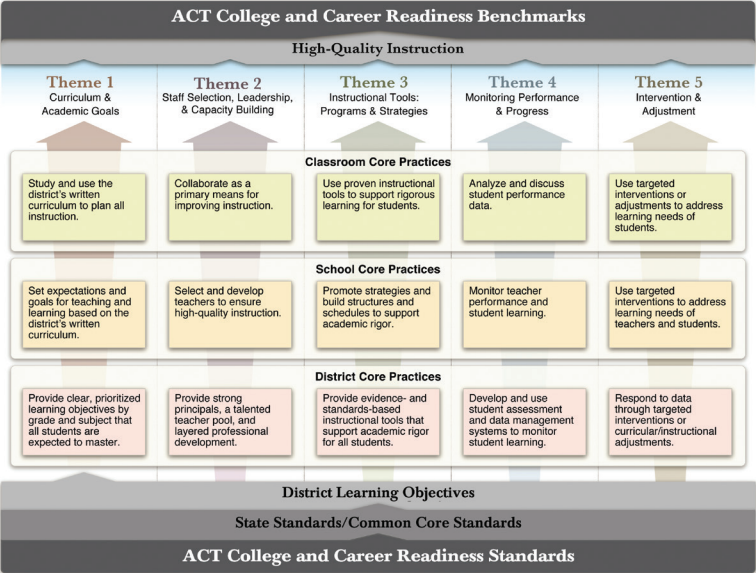
School Practice: Use targeted interventions to address learning needs of teachers and students.

Classroom Practice: Use targeted interventions or adjustments to address learning needs of students.

Another layer behind the Framework, the Critical Actions, provides additional support for educators by outlining how to successfully implement the key components of each core practice.

Policies & Practices to Increase Readiness

The ACT Core Practice Framework



© 2012 by ACT, Inc. All rights reserved.

Reading from bottom to top, the path to readiness begins with the ACT College Readiness Standards, Common Core State Standards, and district learning objectives. Applying the 15 core practices of teaching and learning leads to high-quality instruction, which in turn creates the opportunity for all students to reach the ACT College Readiness Benchmarks and to be ready for college.



Notes

The **ACT® college readiness assessment**, a component of ACT's college and career readiness solutions that also include **ACT Explore®** and **ACT Plan®**, measures students' academic readiness to make successful transitions to college and work after high school. Like ACT Explore (typically taken in 8th and 9th grades) and ACT Plan (typically taken in 10th grade), the ACT is first and foremost an achievement test. It is a measure whose tasks correspond to recognized high school learning experiences, measuring what students are able to do with what they have learned in school. The ACT is the most widely accepted and used test by postsecondary institutions across the United States for college admission and course placement.

ACT National Curriculum Survey®. Every three to four years, ACT conducts its ACT National Curriculum Survey, in which we ask more than 20,000 educators nationwide across grades 7–14 to identify the knowledge and skills that are important for students to know to be ready for college-level work. We also examine the standards for instruction in grades 7–12 for all states. We then analyze the information to refine the scope and sequence for each section of the ACT. In this way, rather than imposing a test construct without empirical support, the ACT is able to represent a consensus among educators and curriculum experts about what is important for students to know and be able to do. ACT also uses these data to identify and define for educators and policymakers the content and skill alignment gaps that currently exist in the important transition from high school to college. For example, the 2012 ACT National Curriculum Survey revealed that what postsecondary instructors expect entering college students to know is far more targeted and specific than what high school teachers view as important.

Notes

ACT College Readiness Benchmarks. Benchmarks are scores on the ACT subject area tests that represent the level of achievement required for students to have a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in corresponding credit-bearing first-year college courses. These college courses include English Composition, College Algebra, Biology, and an introductory social science course. Based on a nationally representative sample, the Benchmarks are median course placement values for these institutions and as such represent a *typical* set of expectations. The ACT College Readiness Benchmarks are:

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

Notes

ACT College Readiness Standards are precise descriptions of the essential skills and knowledge that students need to become ready for college and career, beginning in grade 8 and continuing through grade 12. Informed by the ACT National Curriculum Survey, the ACT College Readiness Standards are validated by actual student academic performance data through their alignment with the ACT College Readiness Benchmarks. With the Benchmarks, the ACT College Readiness Standards represent a single academic expectation for all students, regardless of whether they go on to college or career after high school.

Career Fields and Projected Job Openings. Data on the 2010–2020 projected job openings come from the US Department of Labor, Bureau of Labor Statistics. The following are example occupations for the five highest-growth career fields, nationally:

Education—secondary school teachers, secondary school administrators

Computer/Information Specialties—computer programmers, database administrators

Community Services—social workers, school counselors

Management—hotel/restaurant managers, convention planners

Marketing/Sales—insurance agents, buyers

For more information on interpreting data in this report, or to learn how ACT can help your students increase their readiness for college and the workplace, go to **www.act.org/readiness/2013**.

ACT is an independent, nonprofit organization that provides assessment, research, information, and program management services in the broad areas of education and workforce development. Each year, we serve millions of people in high schools, colleges, professional associations, businesses, and government agencies, nationally and internationally. Though designed to meet a wide array of needs, all ACT programs and services have one guiding purpose—helping people achieve education and workplace success.

A copy of this report can be found at
www.act.org/readiness/2013

