



# **Improving College & Career Readiness**

This report focuses on the college and career readiness levels of the ACT®-tested US high school graduating class of 2012. The report represents 52 percent of all 2012 graduates in the United States.

Findings in the report suggest that for this cohort of tested students, the condition of college and career readiness has slightly improved over the past several years, specifically in the subject areas of math and science.

While encouraging, far too many students are graduating from high school ill-prepared for the academic rigors of college and career. The results again indicate that the US education system must do better at helping our young people to compete with their peers in other nations for meaningful jobs and careers in the 21st century global economy.

As a trusted, not-for-profit leader in research on college and career readiness, ACT is committed to continuing our efforts to provide data and information to help solve the daunting problems faced by our nation. In future years, ACT research and data will be designed to provide insights not only on academic achievement but on student behavior and goals, which when combined will help individuals better prepare for success throughout their lives, from kindergarten through career. These new efforts will broaden and extend our core mission: Helping people achieve education and career success.

The data in this report provide continued insights that will help inform and guide our collective efforts to improve college and career readiness for the next generation of young people now making their way through the US education system.

### **Improving College & Career Readiness** (continued)

ACT research gives some insight into how to improve college and career readiness. Three key suggestions are provided below.

**Early Student Monitoring and Intervention.** ACT research continues to show the importance of early monitoring of student achievement and appropriate interventions. ACT research also supports the use of integrated, longitudinal, data-driven systems to inform and encourage coherence in school, district, and state efforts to prepare all high school graduates for college and career. Schools must provide rigorous courses aligned with college and career readiness standards. Students must be prepared for and have the opportunity to take these core courses. Educators must provide systematic guidance and feedback early and often to students about their progress.

**Use of Student Growth Models in Early Monitoring.** As states and districts implement college and career readiness standards, metrics aligned to those standards are needed to gauge individual and school progress toward this goal. Using these metrics, growth modeling has strong potential to help stakeholders measure progress—for individual students and for school systems. Growth model results can serve a variety of purposes.

A Comprehensive Framework of Best Practices. Key practices for increasing readiness can be implemented as part of a comprehensive framework of best practices. Empirically developed and validated, the Core Practice™ Framework outlines the evidence-based educator practices at each level of a school system—district, school, and classroom—that help all students master high standards. The Framework focuses on five themes: 1) Curriculum and Academic Goals, 2) Staff Selection, Leadership, and Capacity Building, 3) Instructional Tools: Programs and Strategies, 4) Monitoring Performance and Progress, and 5) Intervention and Adjustment. Included in the Framework are critical actions—steps on how to implement the 15 core practices.

# 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 2012.1

#### 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, ACT's 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.

'The data in this report are based on the ACT Profile Report—National: Graduating Class 2012, available at www.act.org/readiness/2012. 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.

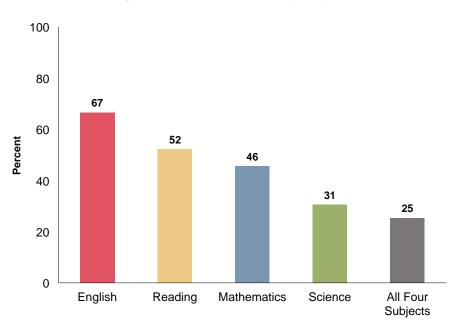
## **Contents**

The Condition of College & Career Readiness is organized into seven sections:
College Readiness—the percentage of students meeting the ACT College Readiness Benchmarks in each subject area
Educational/Career Aspirations & Economic Development— The extent to which student aspirations match workforce demands
Access & Preparation—the number of graduates exposed to college entrance testing and the percent of students pursuing a core curriculum
Academic Performance—student test performance and the mpact of rigorous coursework on achievement
Academic Achievement & Academic Behaviors—the impact of academic behaviors on high school performance
Looking Back at the Class of 2011—college readiness and enrollment patterns of ACT-tested 2011 high school graduates
Policies & Practices to Increase Readiness— policies and practices states and schools can implement to improve the college readiness of students

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**

#### Percent of ACT-Tested High School Graduates Meeting College Readiness Benchmarks by Subject, 2012



## College Readiness Benchmarks by Subject

In 2012, 67% of all ACT-tested high school graduates met the English College Readiness Benchmark, while 25% met the College Readiness Benchmarks in all four subjects. Fifty-two percent of graduates met the Reading Benchmark and 46% met the Mathematics Benchmark. Just under 1 in 3 (31%) met the College Readiness Benchmark in Science.

Graph reads: In 2012, 67% of ACT-tested high school graduates met the ACT College Readiness Benchmark in English.

### College Readiness Benchmarks Over Time

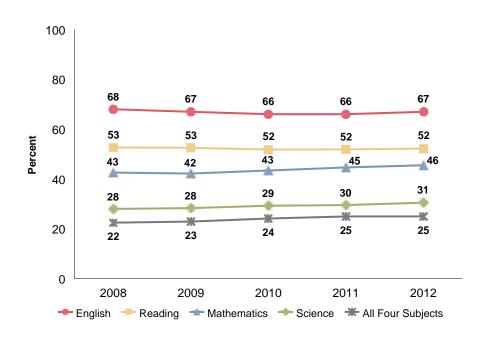
Between 2008 and 2012, Benchmark attainment percentages remained relatively stable in English: 68% to 67% of ACT-tested graduates met the English Benchmark over this period. Benchmark attainment for Reading also was relatively stable, from 53% to 52%. Slightly higher percentages of students met the Mathematics or Science Benchmark in 2012 than in 2008.

The percent of students meeting all four Benchmarks increased slightly between 2008 and 2012. About 1 in 4 ACT-tested high school graduates met all four ACT College Readiness Benchmarks in 2012, compared to 22% doing so in 2008.

Graph reads: Between 2008 and 2012, the percentage of ACT-tested high school graduates who met the College Readiness Benchmark in English decreased from 68% to 67%.

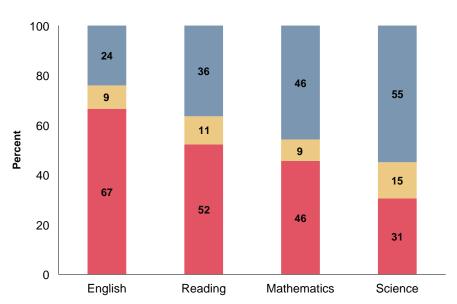
# **College Readiness**

Percent of ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks, 2008–2012



# **College Readiness**

#### Percent of ACT-Tested High School Graduates by Benchmark Attainment and Subject, 2012



Met Benchmark Within 2 Points of Benchmark Below Benchmark by 3+ Points

### College Readiness Benchmarks— Attainment and Near Attainment

About 9% to 15% of graduates were within 2 scale points of meeting an ACT College Readiness Benchmark in 2012, depending on subject area. This represents approximately 150,000 to 250,000 additional students who were close to being college ready within a subject area.

In 2012, 46% of graduates met the Mathematics Benchmark, while another 9% were within 2 scale points of doing so. The percentages of students within 2 scale points of the respective College Readiness Benchmark in the other subject areas were the same or greater, including 9% of graduates in English, 11% in Reading, and 15% in Science.

Graph reads: In 2012, 67% of ACT-tested high school graduates met the College Readiness Benchmark in English, while 9% scored 1 or 2 points below the Benchmark, and 24% scored 3 points or more below the Benchmark.

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

### Number of College Readiness Benchmarks Attained

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

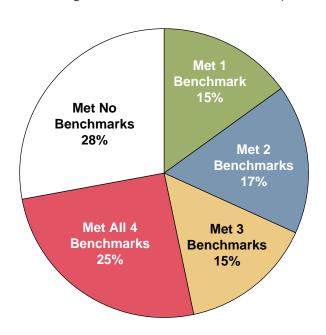
Fully 28% of all graduates did not meet any of the College Readiness Benchmarks, while 47% met between 1 and 3 Benchmarks. Twenty-five percent of all 2012 ACT-tested high school graduates met all four College Readiness Benchmarks, meaning that 1 in 4 were academically ready for college coursework in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

Graph reads: In 2012, 25% of ACT-tested high school graduates met all four 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.

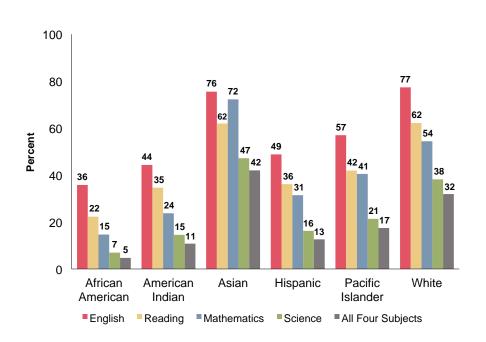
# **College Readiness**

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



# **College Readiness**

## Percent of ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Race/Ethnicity, 2012



## College Readiness Benchmarks by Race/Ethnicity

Just over 4 in 10 (42%) Asian graduates met all four College Readiness Benchmarks in 2012, more than 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, followed in order by the Reading, Mathematics, and Science Benchmarks. In three of the four subject areas, Benchmarks were met by at least 50% of Asian and White students, while one was met by at least 50% of Pacific Islander students. None of the Benchmarks were met by at least 50% of African American, American Indian, or Hispanic students.

Graph reads: In 2012, 36% of ACT-tested African American high school graduates met the College Readiness Benchmark in English, while 22% did so in Reading.

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

### College Readiness Benchmarks by Level of High School Preparation

Within a subject area, graduates who took at least a core curriculum in high school were more likely to meet the corresponding ACT College Readiness Benchmark in 2012 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).

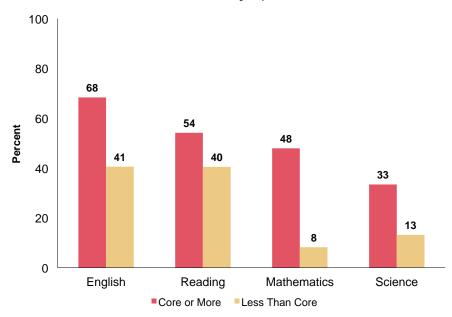
The largest curriculum-based difference in Benchmark attainment rates was in Mathematics. Graduates who completed 3 or more years of mathematics were more likely to meet the Mathematics Benchmark than graduates who took less than 3 years of mathematics, by 40 percentage points.

Graph reads: In 2012, 68% of ACT-tested high school graduates who took at least a core high school curriculum in English met the College Readiness Benchmark in English, whereas 41% 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.

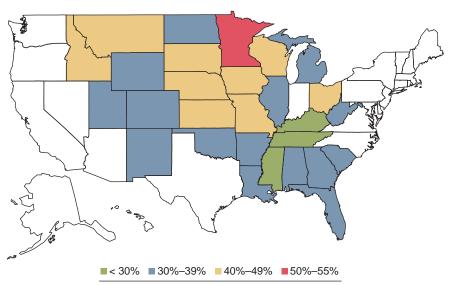
# **College Readiness**

Percent of ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Number of Years of Courses Taken Within Subject, 2012



# **College Readiness**

#### Percent of ACT-Tested High School Graduates Meeting Three or Four College Readiness Benchmarks by State, 2012



□ Low % ACT-tested; less than 40% of graduates took the ACT to allow for a fair comparison

### **College Readiness Benchmarks by State**

Of the 28 states where at least 40% of all 2012 high school graduates took the ACT, in only 1 state did more than half of the graduates meet at least three of the four College Readiness Benchmarks. In another 9 states, 40%–49% of graduates met three or four Benchmarks.

In 15 of the 28 states, 30%–39% of graduates met at least three of the four College Readiness Benchmarks in 2012, while less than 30% of graduates did so in 3 states. In no state did more than 55% of ACT-tested graduates meet three or four Benchmarks.

Graph reads: In 2012, less than 30% of ACT-tested high school graduates in 3 states (e.g., Kentucky) met three or four College Readiness Benchmarks. Results are not shown for 22 states (e.g., California) within which less than 40% of graduates took the ACT.

### College Readiness Benchmarks—On Target and Attained

For all subjects, the percentages of 10th graders meeting the 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.

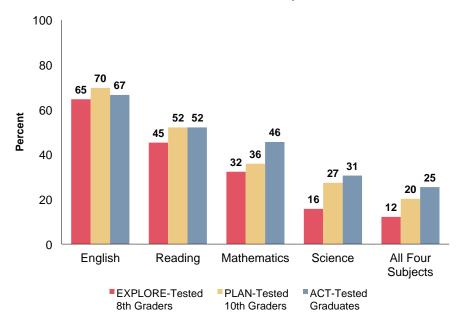
A quarter (25%) of 2012 ACT-tested graduates met all four College Readiness Benchmarks, while only 20% of 2011–12 PLAN®-tested 10th graders and 12% of 2011–12 EXPLORE®-tested students did so. Across the grade levels, only the English Benchmark was met by more than 50% of all tested students.

Graph reads: In 2012, 65% of 2011–12 EXPLOREtested students met the College Readiness Benchmark in English, while 70% of 2011–12 PLAN-tested students and 67% of 2012 ACTtested graduates did so.

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

# **College Readiness**

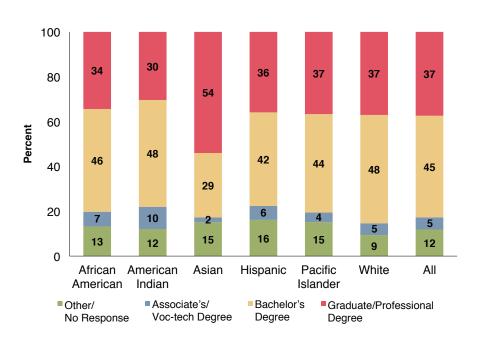
Percent of 2011–12 EXPLORE-Tested 8th Graders, 2011–12 PLAN-Tested 10th Graders, and 2012 ACT-Tested Graduates Meeting ACT College Readiness Benchmarks, 2012



# **Educational/Career Aspirations**

& Economic Development

Percent of ACT-Tested High School Graduates by Race/Ethnicity and Educational Aspirations, 2012



# **Educational Aspirations by Race/Ethnicity**

About 87% of all 2012 ACT-tested high school graduates aspired to attain at least a 2-year postsecondary degree, regardless of race/ethnicity.

About 83% of Asian graduates aspired to earn at least a bachelor's degree, with 54% aspiring to continue their formal education beyond a 4-year degree. American Indian graduates (30%) were the least likely to aspire to a graduate or professional degree; 34%–37% of African American, Hispanic, Pacific Islander, or White graduates aspired to a graduate or professional degree.

Graph reads: In 2012, 34% of ACT-tested African American high school graduates aspired to a graduate or professional degree, 46% to a bachelor's degree, 7% to an associate's or voc-tech degree, and 13% 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.

# Career Interests & Projected Job Openings

The five fastest-growing career fields based on 2010–20 annual projected job openings account for 55% of the demand for jobs calling for at least a 2-year degree. The percentage of 2012 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.

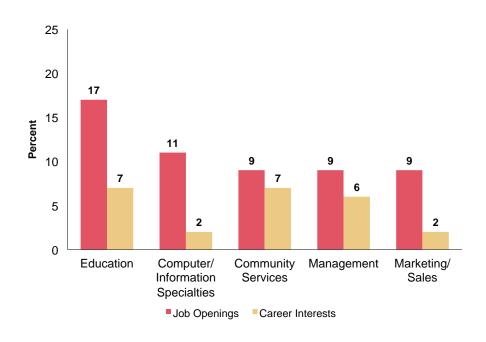
Graph reads: In 2012, Education was projected to be one of the five fastest-growing career fields, accounting for 17% of all job openings in 2020. About 7% of all 2012 ACT-tested high school graduates indicated a career interest in Education.

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

# **Educational/Career Aspirations**

& Economic Development

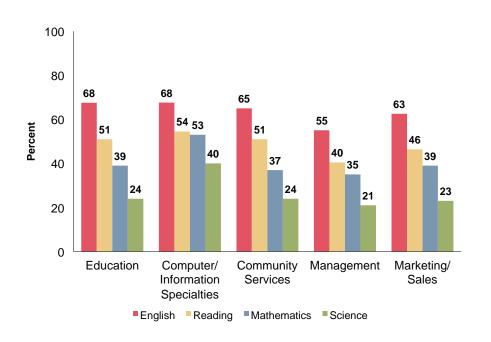
Percent of 2012 ACT-Tested High School Graduates with Career Interests and Projected 2020 Annual Job Openings by Career Field



# **Educational/Career Aspirations**

& Economic Development

Percent of ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Career Field, 2012



## **College Readiness Benchmarks** by Career Field

For each of the 2020 projected five fastest-growing career fields, less than half of the 2012 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. For none of the five career fields did at least 50% of the 2012 graduates meet all four Benchmarks.

Across all five career fields, graduates were most likely to meet the English Benchmark, followed by meeting the Reading and Mathematics Benchmarks, respectively. Graduates were least likely to meet the Science Benchmark in all five career fields.

Graph reads: In 2012, 68% of all ACT-tested high school graduates who indicated a career interest in Education met the College Readiness Benchmark in English.

## Percent of US Graduates Who Took the ACT

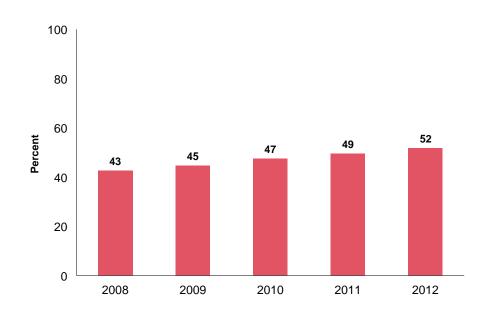
About 52% of all 2012 high school graduates in the United States took the ACT during high school, or about 1.66 million graduates.

From 2008 to 2012, the number of high school graduates who took the ACT increased by approximately 17%. This represents a 9 percentage point increase in the percent of all US high school graduates who took the ACT.

## Graph reads: In 2008, 43% of all US high school graduates took the ACT test at least once during their sophomore, junior, or senior year.

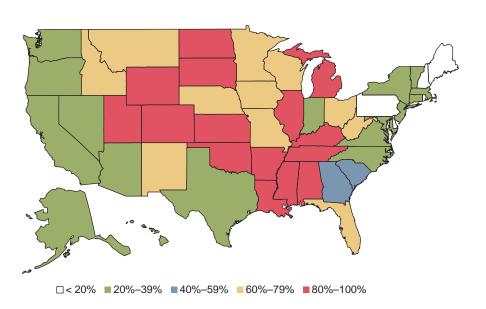
# **Access & Preparation**

Percent of US High School Graduates Who Took the ACT, 2008–2012



# **Access & Preparation**

#### Percent of ACT-Tested High School Graduates by State, 2012



# Percent of Graduates Who Took the ACT by State

At least 60% of all 2012 high school graduates took the ACT in 26 states. In 15 states, at least 80% of their high school graduates took the ACT.

In 2 states, between 40% and 59% of their 2012 high school graduates took the ACT during high school, while another 17 states saw between 20% and 39% of their high school graduates take the ACT. Less than 20% of 2012 graduates took the ACT in 5 states.

Graph reads: In 2012, less than 20% of the high school graduates in 5 states (e.g., Pennsylvania) took the ACT test at least once during their sophomore, junior, or senior year.

### Number of Graduates Who Took the ACT by Race/Ethnicity

About 244,000 more high school graduates completed the ACT in 2012 than in 2008, an increase of about 17%.

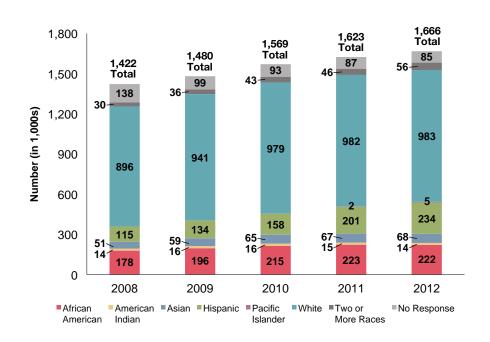
In 2012, about 59% of all ACT-tested graduates were White. 13% were African American. 14% were Hispanic, 4% were Asian, 3% were of Two or More Races, 1% were American Indian, less than 1% were Pacific Islander (about 5,000), and 5% were No Response. From 2008 to 2012, the number of ACT-tested high school graduates increased from 1.422 million to 1.666 million students. Substantial numerical increases occurred for Hispanic students (increase of about 120,000). White students (88,000), African American students (44,000), and students of Two or More Races (26,000). Proportionally, the largest increases were by Hispanic students (about 104%) and students of Two or More Races (86%).

Graph reads: In 2008, about 1,422,000 US high school graduates had taken the ACT test at least once during their sophomore, junior, or senior year; of which, about 178,000 were African American students and 14,000 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.

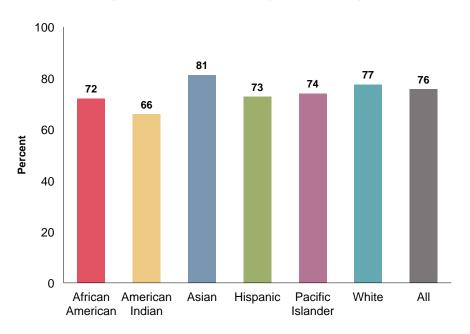
# **Access & Preparation**

#### Number of ACT-Tested High School Graduates by Race/Ethnicity, 2008–2012



# **Access & Preparation**

## Percent of ACT-Tested High School Graduates Who Completed a Core Curriculum by Race/Ethnicity, 2012



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

Seventy-six percent of all 2012 ACTtested 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 74% of Pacific Islander and 77% of White students did so. Smaller percentages of African American (72%), American Indian (66%), and Hispanic (73%) students completed a core curriculum.

Graph reads: In 2012, 72% of all African American high school graduates who had taken the ACT test 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.

### **ACT Scores Over Time**

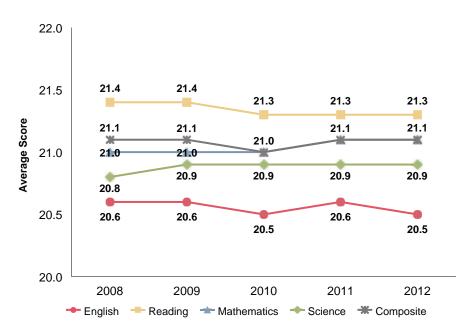
Test scores remained essentially the same between 2008 and 2012 even though about 17% more high school students took the ACT over this period and the tested population of students became more diverse.

Composite score averages ranged between 21.0 and 21.1 points during this time. The four subject score averages (English, Reading, Mathematics, and Science) showed similar changes in absolute value.

## Graph reads: Between 2008 and 2012, the average ACT Reading score for all high school graduates decreased slightly from 21.4 to 21.3.

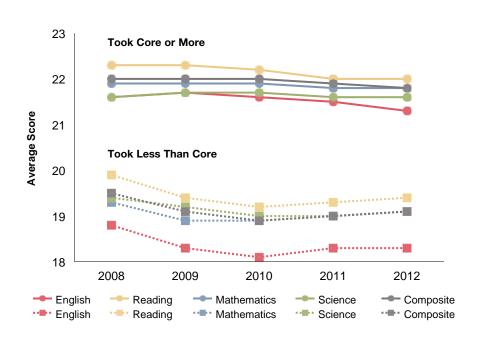
## **Academic Performance**





## **Academic Performance**

## Average ACT Scores by Core Curriculum Completion Status, 2008–2012



# ACT Scores Over Time by Level of High School Preparation

For each year from 2008 to 2012, 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 Composite test scores 2.5 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 (2.8 to 3.5 points), Reading (2.4 to 3.0), Mathematics (2.6 to 3.0), and Science (2.2 to 2.7).

Graph reads: Between 2008 and 2012, the average ACT Reading score for high school graduates who had completed or had planned to complete at least a core curriculum remained about the same and was higher than that of graduates who had not completed or had not planned to complete a core curriculum.

# ACT Scores Over Time by Race/Ethnicity

Average ACT Composite scores for African American, Asian, Hispanic, and White graduates increased between 2008 and 2012. That of American Indian graduates declined by 0.6 scale point.

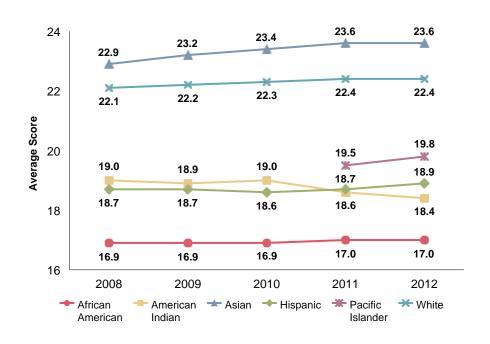
Asian graduates had the highest average ACT Composite scores and the largest score increase (+0.7 scale point). Average ACT Composite scores for White graduates increased by 0.3 point. These score changes have occurred as more students from each racial/ethnic group have taken the ACT.

Graph reads: Between 2008 and 2012, the average ACT Composite score for Asian high school graduates increased from 22.9 to 23.6.

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

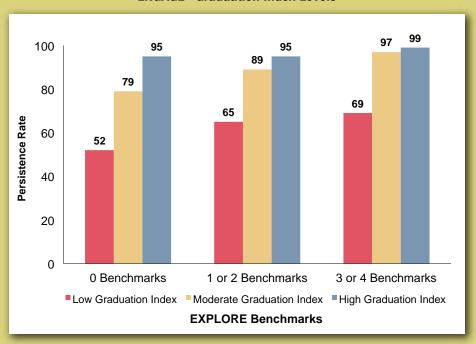
## **Academic Performance**

## Average ACT Composite Test Scores by Race/Ethnicity, 2008–2012



## **Academic Achievement & Academic Behaviors**

### High School Persistence Rates by 8th-Grade EXPLORE Benchmarks and ENGAGE™ Graduation Index Levels



### Impact of Academic Behaviors on High School Persistence

ACT research illustrates how the combination of academic achievement and behavior yields more information than either measure alone when differentiating students for high school persistence. Most importantly, this information is available in 8th grade—allowing for early identification of students at risk of not completing high school.

Across all EXPLORE Benchmark attainment levels, students with higher ENGAGE Graduation Index scores, which are based on a combination of ENGAGE scale scores and other self-reported student information, had higher high school persistence rates than students with lower Graduation Index scores.

Note: Data are based on 2,986 8th graders in 24 middle schools across the country who took EXPLORE and ENGAGE Grades 6–9, an assessment of academic behavior. High school persistence is defined as having graduated high school or being on track to graduate within four years of starting 9th grade. These data do not reflect the entire 2012 ACT-tested high school graduate cohort.

# Looking Back at the Class of 2011

### Number of College Readiness Benchmarks Attained

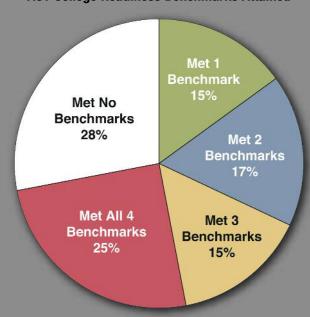
About 72% of all 2011 ACT-tested high school graduates met at least one of the four College Readiness Benchmarks in English, Reading, Mathematics, or Science.

Fully 28% of all graduates did not meet any of the College Readiness Benchmarks, while 47% met between 1 and 3 Benchmarks. Twenty-five percent of all 2011 ACT-tested high school graduates met all four College Readiness Benchmarks, meaning that 1 in 4 were academically ready for college coursework in all four subject areas.

Graph reads: In 2011, 25% of ACT-tested high school graduates met all four College Readiness Benchmarks, 15% met 3 Benchmarks, 17% met 2 Benchmarks, 15% met 1 Benchmark, and 28% met none of the Benchmarks.

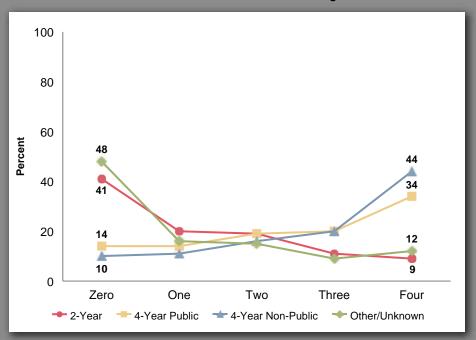
Note: Percentages may not sum to 100% due to rounding.

### Percent of 2011 ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks Attained



# Looking Back at the Class of 2011

## Percent of 2011 ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks Attained and Fall 2011 College Enrollment Status



## Fall 2011 College Enrollment Status

More than half of the 2011 ACT-tested high school graduates who enrolled in a 4-year college met three or more of the College Readiness Benchmarks (about 54% of public college enrollees; about 64% of non-public college enrollees).

About 20% of the graduates who enrolled in a 2-year college met at least three of the College Readiness Benchmarks; 41% 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 2011, 48% of the 2011 ACT-tested high school graduates whose status was Other/Unknown met none of the College Readiness Benchmarks; 12% of this group met 4 Benchmarks.

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

#### **How to Increase Readiness**

Approximately 28% of all 2012 ACT-tested high school graduates did not meet any 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. There are 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. Since ACT released its policy report *Making the Dream a Reality* in 2008, we have called for states to adopt education standards that prepare all students for college or career training programs. 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.

**Infusing a Culture of Postsecondary Success.** All states—especially those that have adopted the Common Core State Standards—should align college and career readiness standards to a rigorous core curriculum for *all* high school students whether they are bound for college or work. The levels of expectation for college readiness and workforce training should be comparable in rigor, clarity of purpose, and completion. An educator's vision, attitudes, and motivation have lasting impact on student achievement. Securing a high-quality education is vital to the success of all students in a rapidly changing world.

**Expanding Rigorous High School Courses.** Appropriate and aligned standards, coupled with a core curriculum, can prepare students only if the courses are truly challenging. It is more important for students to take the right kinds of courses rather than the right number of courses. ACT supports a high school core curriculum consisting of at least four years of English and three years each of mathematics, science, and social studies. Students who take a rigorous core curriculum are much more likely to graduate high school ready for credit-bearing first-year college courses without remediation.

Ensuring Early Monitoring and Intervention. Our data show that students who take challenging curricula are more likely to graduate high school ready for college or career training opportunities. 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.

**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. States have been hard at work developing longitudinal P–16 data systems—this work must continue. 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. Teacher and administrator preparation and professional development must include developing skills to use data appropriately to improve the practices of teaching and learning. Absent good data, opinion can overly influence key decisions.

#### **District, School, & Classroom Practices**

#### The Path to Readiness: It Takes a System

Research by the National Center for Educational Achievement (NCEA)—a department of 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. So, what are consistently higher performing schools doing to place more students on the path to college and career readiness?

The **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. NCEA 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 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.

#### 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**

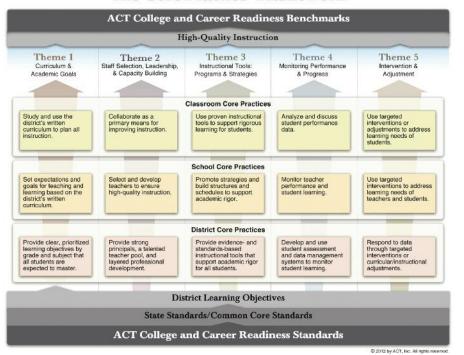
**District Practice:** Respond to data through targeted interventions or curricular/instructional adjustments.

**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.

#### The Core Practice<sup>™</sup> Framework



#### **The Core Practice Framework**

Reading from bottom to top, the path to readiness begins with ACT's College and Career 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 ACT's College Readiness Benchmarks and to be ready for college.

To learn more, please visit **www.nc4ea.org**.

## **Notes**

**The ACT® test**, one component of ACT's College and Career Readiness System that also includes **EXPLORE®** and **PLAN®**, measures students' academic readiness to make successful transitions to college and work after high school. Like EXPLORE (typically taken in 8th and 9th grades) and 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 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 most recent 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's 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	EXPLORE Benchmark	PLAN Benchmark	ACT Benchmark
English Composition	English	13	15	18
Social Sciences	Reading	15	17	21
College Algebra	Mathematics	17	19	22
Biology	Science	20	21	24

### **Notes**

ACT's 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 College Readiness Standards are validated by actual student academic performance data through their alignment with the College Readiness Benchmarks. With the Benchmarks, the 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

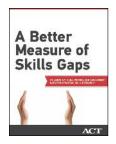
Management—hotel/restaurant managers, convention planners

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/2012**.

### Resources







#### **ACT Research**

As a not-for-profit educational research organization, ACT is committed to producing research that focuses on key issues in education and workforce development. Our goal is to serve as an information resource. We strive to provide policymakers with the insight they need to inform education and workforce development policy and to give educators the tools they need to lead more students toward college and career success. What follows are some of ACT's recent and most groundbreaking research studies. To review these studies, go to **www.act.org/research/summary**.

The 20 Non-Negotiable Characteristics of Higher Performing School Systems
Discover the 20 hard-hitting characteristics that make school systems successful at preparing students for college and careers.

#### A Better Measure of Skills Gaps

This report proposes a simple definition to describe the increasing mismatch between labor market supply and demand in America and sets forth detailed and specific measures to analyze skills gaps in four major industry sectors.

#### The Core Practice Framework: A Guide to Sustained School Improvement

This report provides an overview of the Core Practice Framework, an evidence-based approach schools or districts can use to develop a long-term and systemic strategy for improving student performance.

## Resources

#### A First Look at the Common Core and College and Career Readiness

Forty-five states have adopted the Common Core State Standards. Now, efforts to implement the standards take on primary importance. ACT provides this first look at student performance relative to the Common Core State Standards and college and career readiness.

#### The Forgotten Middle

This report examines the factors that influence college and career readiness. The percentage of 8th graders on target to be ready for college-level work by the time they graduate from high school is so small that it raises questions not just about the prospect that these students can eventually be ready for college and career but also about whether they are even ready for high school.

## Implementing the Common Core State Standards: Progress at Higher-Performing High Schools

This one-page information brief provides results of a fall 2011 study that surveyed teachers and administrators from higher performing high schools and assessed the timeline for key implementation tasks for the Common Core State Standards.









ACT is an independent, not-for-profit 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/2012** 

