

The Condition of College & Career Readiness 2013

Asian Students

Asian Students

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ACT has been measuring college readiness trends for several years. *The Condition of College & Career Readiness* is ACT's annual report on the progress of the graduating class relative to college readiness. This year, 54.3% of the graduating class took the ACT® college readiness assessment. The increased number of test takers enhances the breadth and depth of the data pool, providing a comprehensive picture of the current graduating class in the context of readiness levels as well as offering a glimpse of the emerging educational pipeline.

A Holistic View of College Readiness

Recent ACT research (*The Reality of College Readiness*, 2013; *Readiness Matters*, 2013) demonstrates that academically prepared students, as measured by the ACT College Readiness Benchmarks, have greater chances for success in their future educational endeavors. However, academic readiness is just one of several factors that contributes to educational success. The academic behaviors of students and the interest levels in their specific major or career are other key factors. Together, these elements define a clear picture of student readiness for postsecondary education. To encourage progress, the educational system needs to monitor and sustain all key factors of success.

The Science of ACT Assessments

In 2012, ACT conducted the ACT National Curriculum Survey®. Completed every three to five years, the survey is used to build and update a valid suite of ACT assessments, empirically aligned to college readiness standards. The survey informs the test blueprint for the assessments. Results from the assessments validate the ACT College Readiness Standards as well as the ACT College Readiness Benchmarks.

ACT is committed to validity research, the first type of which is research into content validity. This step involves the validation of the ACT College Readiness Standards, built upon a foundation of empirical data and validated through the ACT National Curriculum Survey, plus frequent external standards reviews.

Predictive validity is equally important. Using actual student course performance, we validate that the test correctly predicts performance.

Our evidence-based assessments and ongoing research are critical components to answering the key question of what matters most with college and career readiness. This evidence and the validity cycle drive the development and

continuous improvement of ACT's current and future solutions, as well as the associated research agenda. Research is one of the many ways that ACT fulfills its mission of helping all individuals achieve success.

Evidence and Validity Monitoring and a Review of Reporting Practices Led to Minor but Important Changes at ACT

As part of ACT's commitment to continuous improvement and our efforts toward improving student achievement at all levels and based on results of the 2012 ACT National Curriculum Survey, ongoing research, and user requests, ACT will make several progressive modifications, which are described below. (For more information about these modifications, go to www.act.org/announce/improvements.)

- 1. Minor reformatting of the ACT College Readiness Standards.** As part of our ongoing content validity process, ACT recognized that tighter alignment was needed between the ACT College Readiness Standards and the Common Core State Standards. Our goal was simple—eliminate confusion by providing a more transparent connection. It is important to realize that the ACT College Readiness Standards have not changed. Where practical and feasible, we reformatted the language to align with the Common Core State Standards to facilitate comparison by users. The ACT College Readiness Standards will continue to represent the backbone of our assessment systems.
- 2. Updating of the ACT College Readiness Benchmarks.** The empirically derived ACT College Readiness Benchmarks predict the likelihood of success in corresponding credit-bearing first-year college courses in each specific subject area. During the routine practice of monitoring predictive validity, ACT analyzes the performance of students in college, looking at what is happening to students in the credit-bearing first-year college course in each specific content area. The data gathered through this routine review indicated a need to make adjustments to current ACT College Readiness Benchmarks in Science and Reading. Refer to the table on page 3 for more detail about the Benchmarks.
- 3. Changes to the ACT aggregate reporting practices regarding the inclusion of college-reportable scores for accommodated students.** Starting with the graduating class of 2013, results from all ACT-approved accommodated administrations that result

in college-reportable ACT scores will be included as part of the ACT summary reports. Prior to this year, scores for these time-extended accommodated students were excluded from our summary reporting. Two well-known summary reports are affected by these changes: the *ACT Profile Report—State: Graduating Class 2013* and *The Condition of College & Career Readiness*. This does not impact the rules concerning who is eligible for accommodations or the actual accommodations that are made. It simply means that we are including the results for these students in our summary reports.

4. **Future modifications to the ACT.** We are committed to a research-based sustainability model that:

- ensures validity
- reviews test blueprints regularly
- employs a robust research and support agenda
- features validated college readiness benchmark scores

ACT makes changes only after a thorough analysis of user need, coupled with our commitment to the highest-quality test development. It is with this in mind that ACT is pleased to announce the development of an online administration of the ACT as well as optional constructed-response questions for the ACT. We have already started development, including item testing, in preparation for a spring 2015 launch of in-school testing at the state, district, and school levels. We are pleased to lead with the cutting-edge changes that will serve to redefine the assessment industry.

Early Student Monitoring and Intervention

ACT research shows the importance of early monitoring of student achievement and appropriate interventions. *Staying on Target* (ACT, 2012) found that students who are monitored early before taking the ACT are more likely to be college and career ready than those not monitored early (i.e., students who take the ACT only), regardless of the high school they attend and their level of prior achievement.

In fact, students who are monitored early are more likely to meet three or all four of the ACT College Readiness Benchmarks than students who are not monitored early, regardless of gender, race, or annual family income. The research clearly shows that these problems can be overcome by creating an integrated, longitudinal, data-driven system to inform and encourage coherence in school, district, and state efforts to prepare all high school graduates for college and career. All students must also have systematic guidance and feedback about their progress and get that feedback early and often.

An Aligned, Coherent System

Starting in spring 2014 with the launch of ACT Aspire™, ACT will provide an aligned, coherent system that will span grades 3–12, giving states, districts, and schools a suite of opportunities. This new system aligns to the ACT College Readiness Standards, allowing monitoring and intervening to take place much earlier and helping prepare students to succeed at college-level work. Ultimately, this system will provide educators with assessment tools to intervene and get more students on the right track to college and career success.

Using This Report¹

This report is designed to help inform the following questions driving national efforts to strengthen P–16 education.

- Are Asian students prepared for college and career?
- Are enough Asian students taking core courses?
- Are core courses rigorous enough?
- Are younger Asian students on target for college and career?
- What other dimensions of college and career readiness should we track?
- Are Asian students who are ready for college and career actually succeeding?

How Does ACT Determine if Students Are College Ready?

The ACT College Readiness 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. Based on a nationally stratified sample, the Benchmarks are median course placement values for these institutions and 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

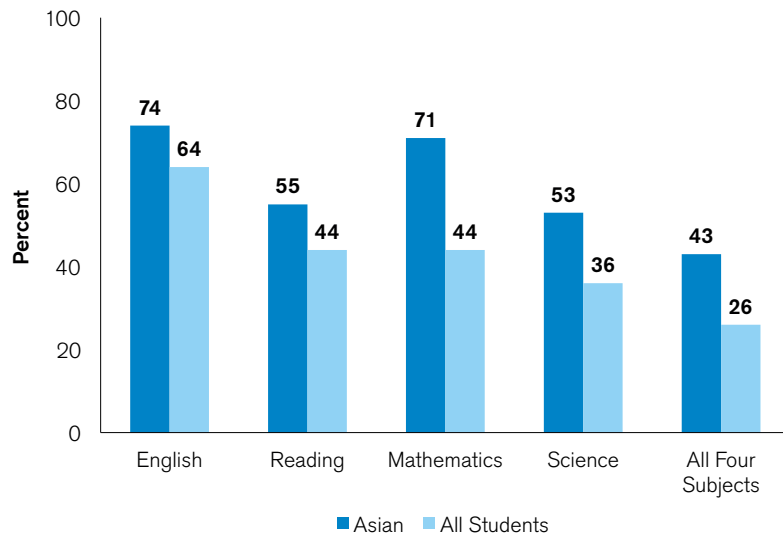
Note: Reading and Science ACT Explore, ACT Plan, and ACT Benchmarks changed in 2013; trend data prior to 2013 uses previous ACT Benchmarks.

Asian Students

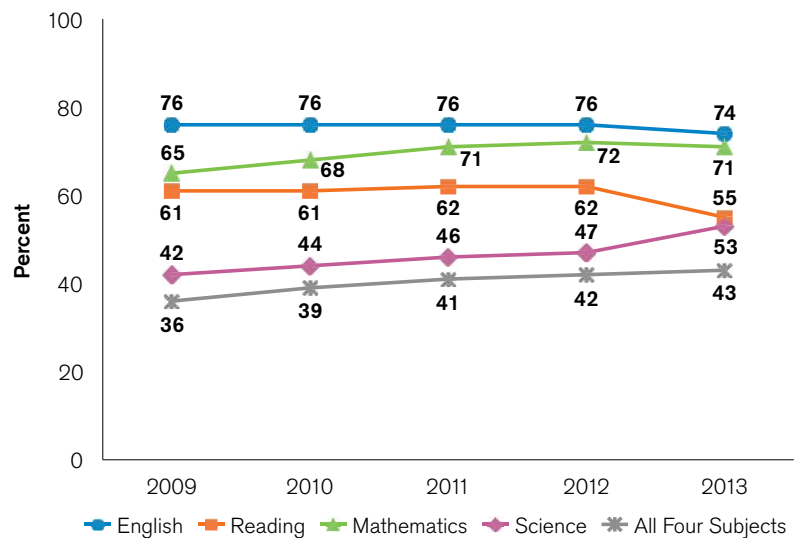
Attainment of College and Career Readiness

- 71,677 Asian high school 2013 graduates took the ACT.

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



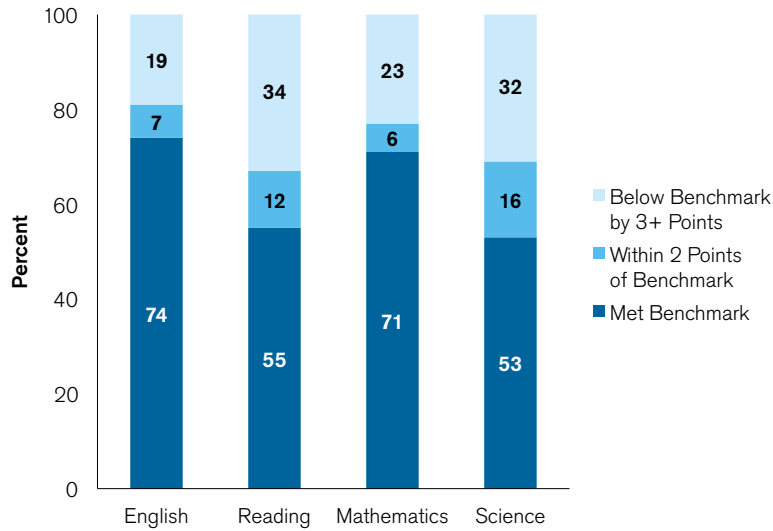
Percent of 2009–2013 ACT-Tested Asian High School Graduates Meeting ACT College Readiness Benchmarks



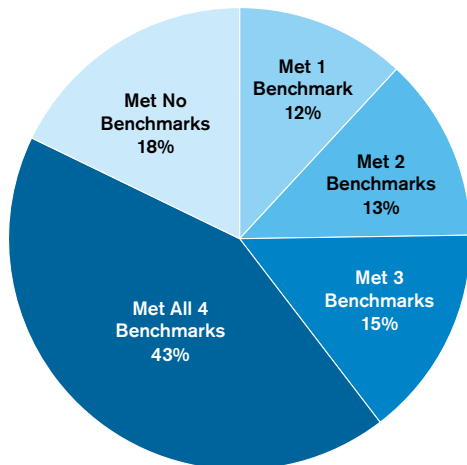
Note: Percents in this report may not sum to 100% due to rounding.

Near Attainment of College and Career Readiness

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



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

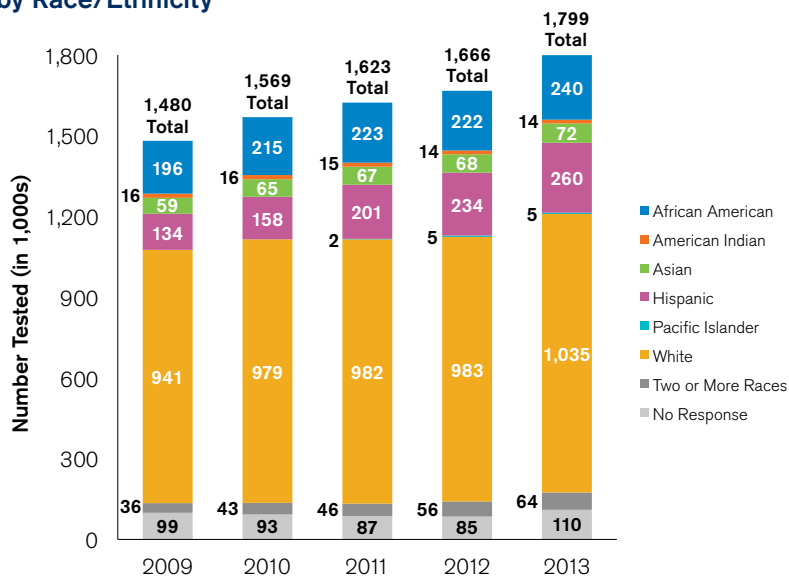


Asian Students

Participation and Opportunity

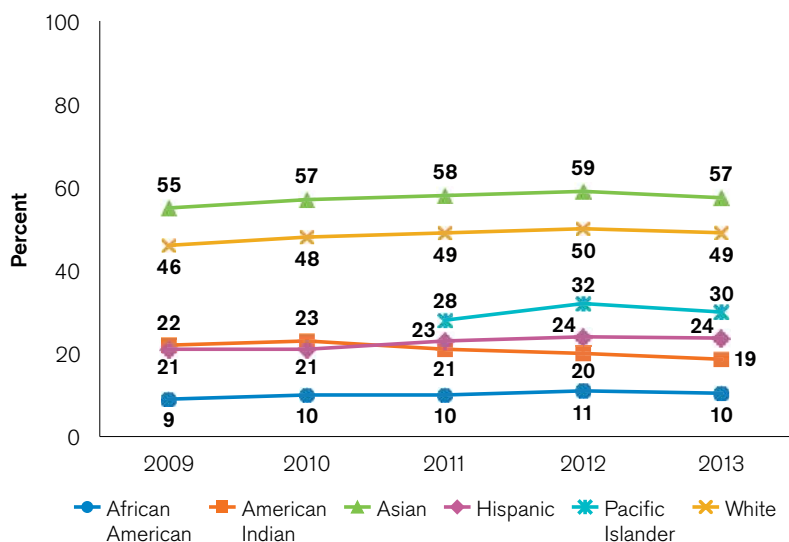
Over the past decade, ACT has experienced unprecedented growth in the number of students tested, as well as statewide partnerships in 13 different states and in many districts across the country. As a result, the 2013 *Condition of College & Career Readiness* report provides a much deeper and more representative sample in comparison to a purely self-selected college-going population.

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



Note: Less than 0.5% will not appear.

Percent of 2009–2013 ACT-Tested High School Graduates Meeting Three or More Benchmarks by Race/Ethnicity*

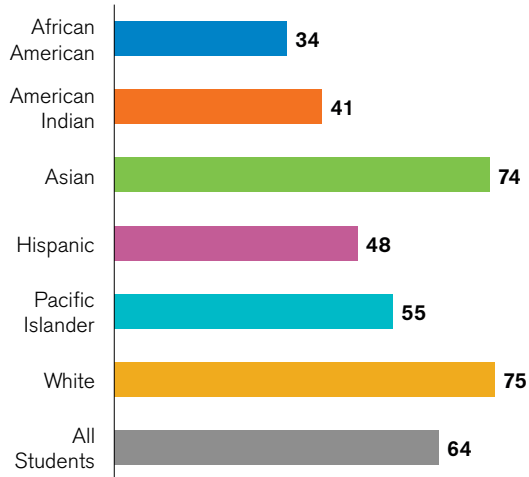


* Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.²

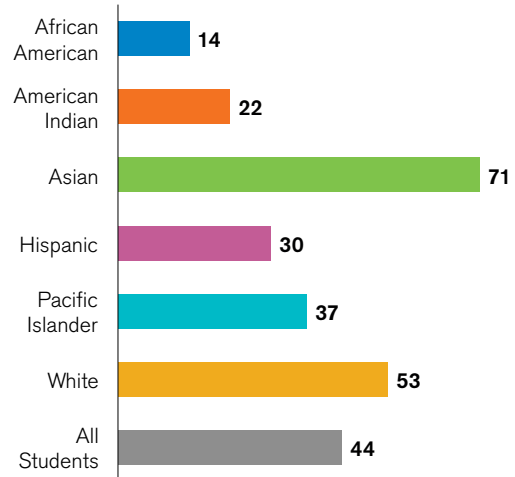
Participation and Opportunity by Subject

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

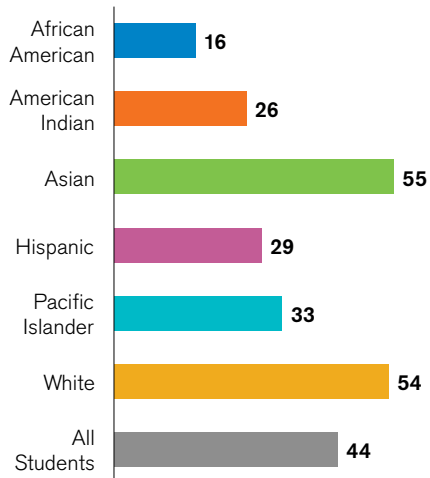
English



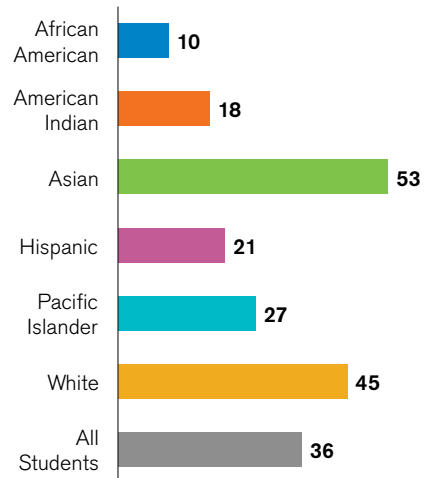
Mathematics



Reading



Science



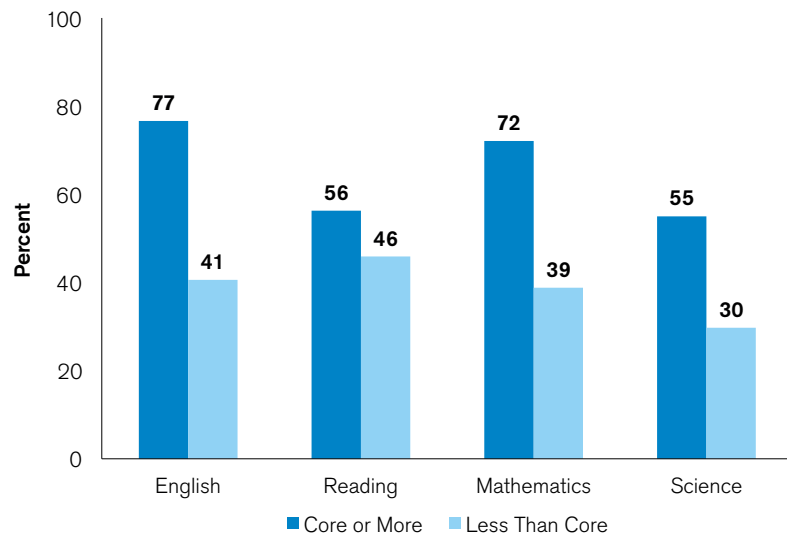
* Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.²

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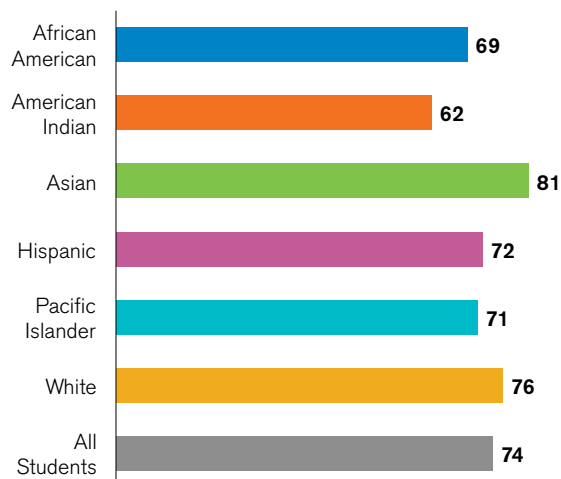
Course-Taking Patterns and Benchmark Performance

Within subjects, ACT has consistently found that students who take the recommended core curriculum are more likely to be ready for college or career than those who do not. A core curriculum is defined as four years of English and three years each of mathematics, social studies, and science.³

Percent of 2013 ACT-Tested Asian High School Graduates in Core or More vs. Less Than Core Courses Meeting ACT College Readiness Benchmarks by Subject



Percent of 2013 ACT-Tested High School Graduates Taking a Core Curriculum by Race/Ethnicity*

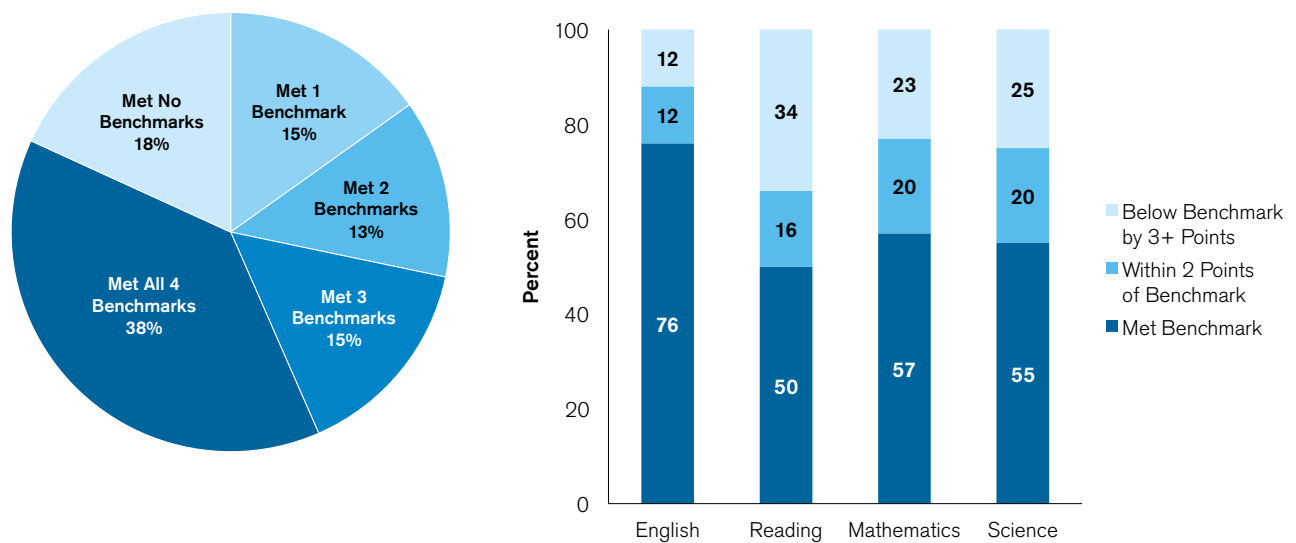


* Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.²

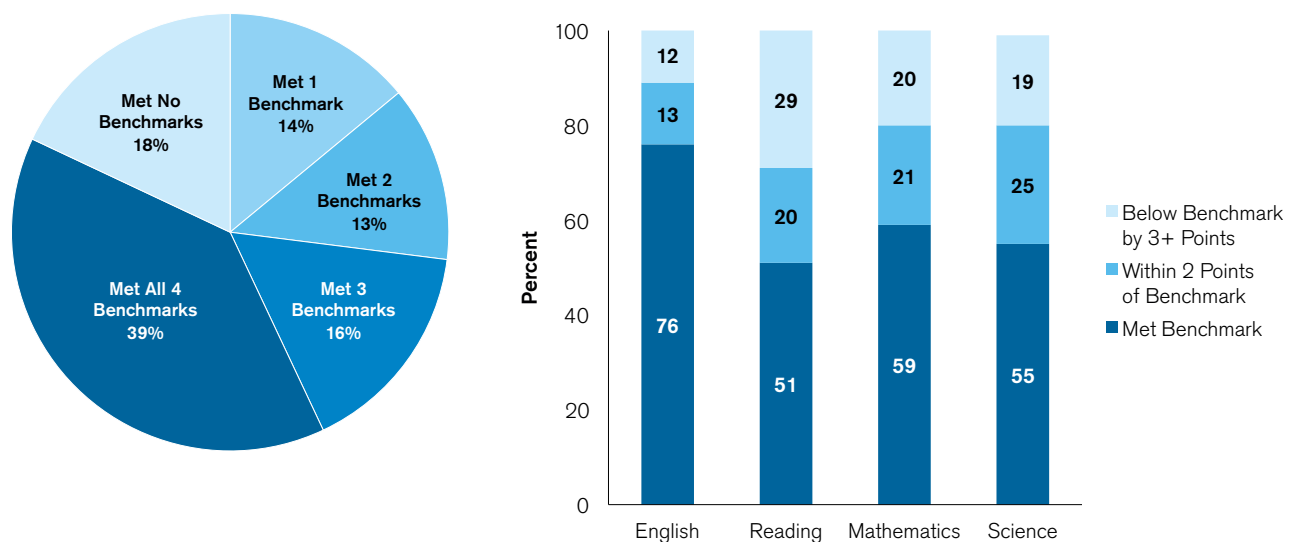
Early Preparation

ACT research shows that younger students who take rigorous curricula are more prepared to graduate from high school ready for college or career. Moreover, our research (*The Forgotten Middle*, 2008) found that “the level of academic achievement that students attain by 8th grade has a larger impact on their college and career readiness by the time they graduate from high school than anything that happens academically in high school.”

Percent of 2012–2013 ACT Plan–Tested Asian 10th Graders Meeting ACT College Readiness Benchmarks (N = 41,249)



Percent of 2012–2013 ACT Explore–Tested Asian 8th Graders Meeting ACT College Readiness Benchmarks (N = 29,002)

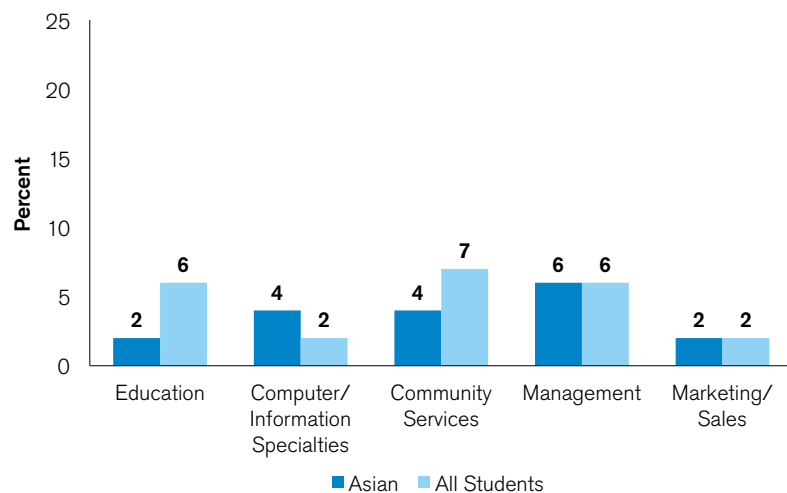


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Other College and Career Readiness Factors

ACT has found several other substantial factors that impact college and career readiness for students. They include career and educational planning and the academic behaviors of students.

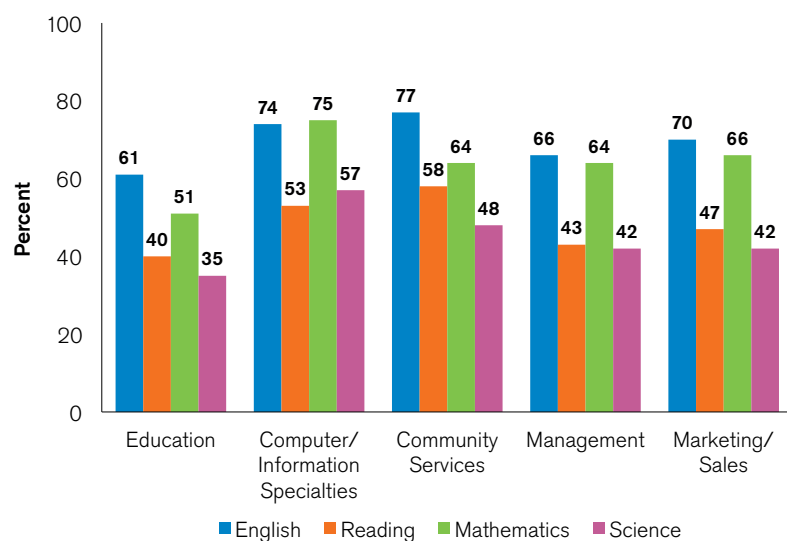
Percent of 2013 ACT-Tested High School Graduates with Career Interests in Jobs Calling for a Two-Year Degree or More in the Five Fastest-Growing Career Fields⁴



Preparation for Careers in High-Growth Fields

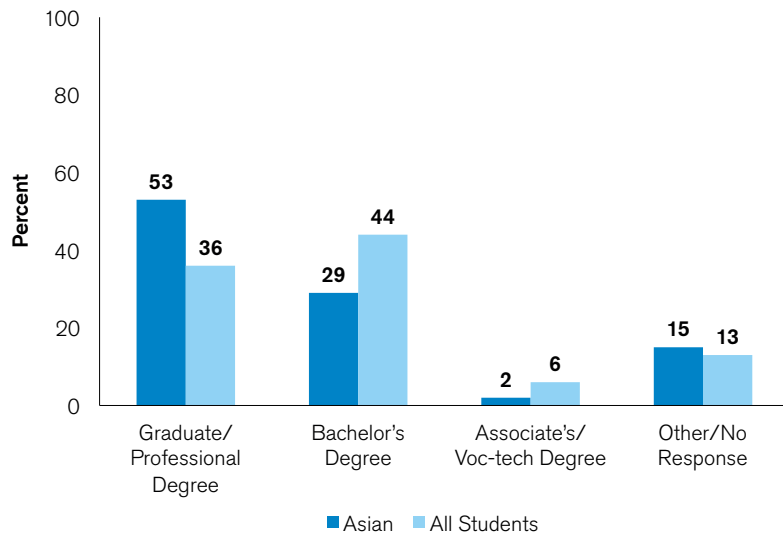
Many students who are interested in these career areas fall short of meeting ACT College Readiness Benchmarks, suggesting that they are not on the right path to take advantage of career opportunities in these high-growth fields.

Percent of 2013 ACT-Tested Asian High School Graduates Interested in High-Growth Careers Meeting ACT College Readiness Benchmarks by Subject



Other College and Career Readiness Factors

Percent of 2013 ACT-Tested High School Graduates by Educational Aspirations

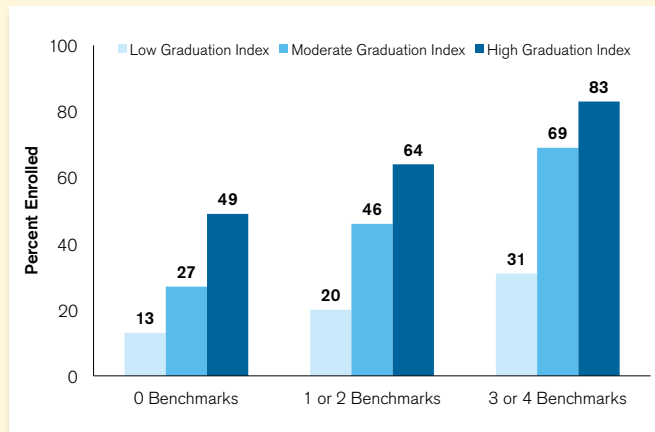


Aligning Student Behaviors, Planning, and Aspirations

Most students aspire to a post-high school credential. To help them meet those aspirations, educational planning, monitoring, and interventions must be aligned to their aspirations, begin early, and continue throughout their educational careers.

Academic Achievement and Academic Behaviors: Both Matter

First-Year College Enrollment Rates by 8th Grade ACT Explore Benchmark 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.

ACT research illustrates the importance of combining measures of academic achievement and behavior to obtain a more holistic picture of students, including their likelihood of enrolling in college following high school graduation. Since this information can be available in middle school, it allows for early identification of students who may be less likely to complete high school and go to college. These students can be engaged in interventions that can assist them to prepare for the transition to postsecondary education or work after high school.

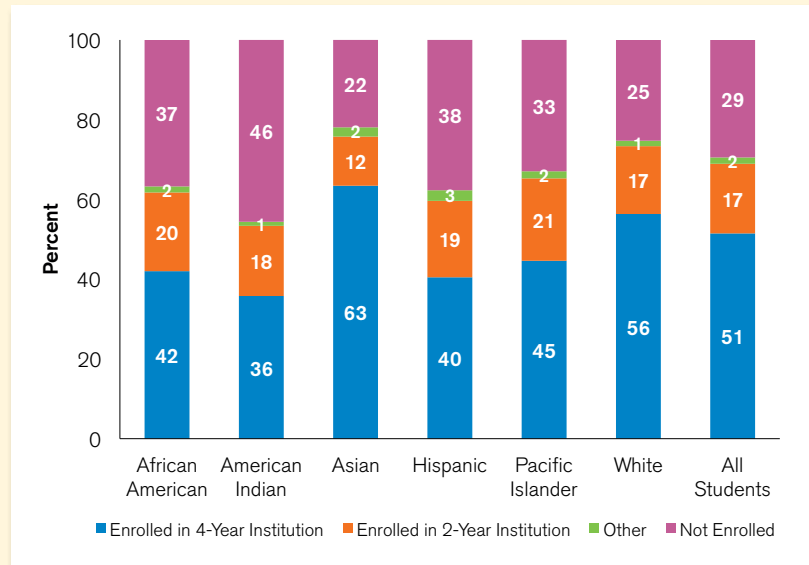
Across all ACT Explore Benchmark attainment levels, students with higher ACT Engage Graduation Index scores (which are based on a combination of ACT Engage scale scores and other self-reported student information) enrolled in a postsecondary institution after high school at substantially higher rates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

2011 ACT-Tested Graduates

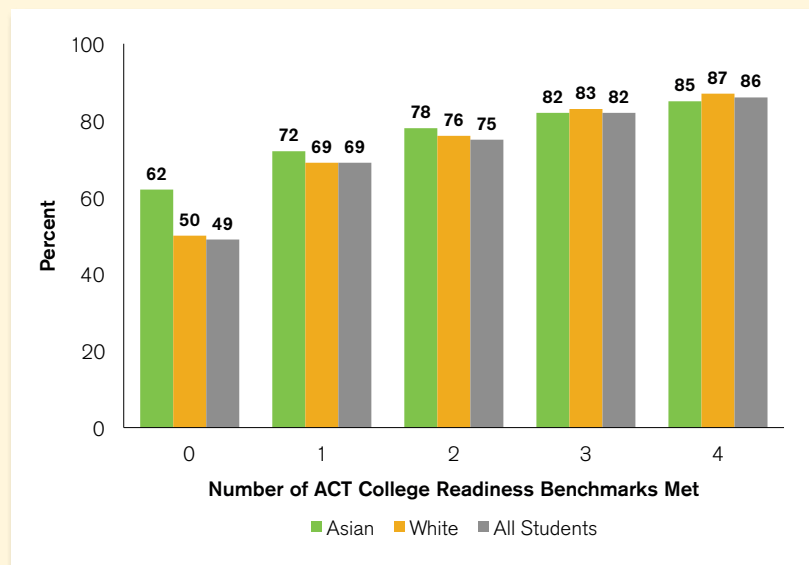
College Readiness and Enrollment

As is the case for all 2011 ACT-tested high school graduates, Asian graduates who met more of the ACT College Readiness Benchmarks were more likely to immediately enroll into college. This demonstrates that college readiness helps reduce racial/ethnic gaps in college enrollment.

Percent of 2011 ACT-Tested High School Graduates Immediately Enrolling into College the Fall Following High School Graduation by Race/Ethnicity and Type of Institution



Percent of 2011 ACT-Tested High School Graduates Immediately Enrolling into College the Fall Following High School Graduation by Number of ACT College Readiness Benchmarks Attained and Race/Ethnicity

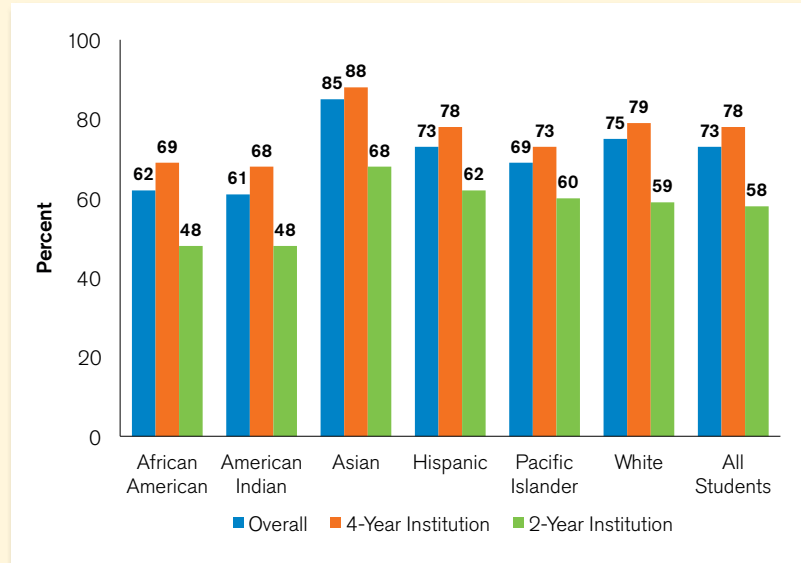


Note: College enrollment rates are based on National Student Clearinghouse (NSC) data for fall 2011 enrollments. Colleges include two- and four-year postsecondary institutions and a small number of institutions for which the type of institution could not be determined. The category "Other" includes students simultaneously enrolled in both two- and four-year institutions, as well as students enrolled in an unknown institution type.

2011 ACT-Tested Graduates

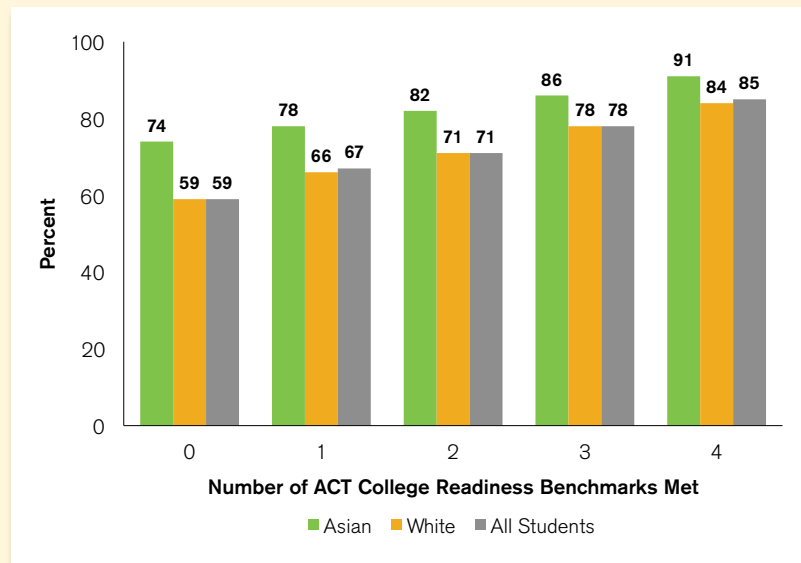
College Readiness and Retention

Percent of 2011 ACT-Tested College Enrolled Freshmen Returning to the Same Institution in Year 2 by Race/Ethnicity and Type of Institution



College retention rates were higher for Asian students than for all students, regardless of the number of ACT Benchmarks met or type of college in which they were enrolled.

Percent of 2011 ACT-Tested College Enrolled Freshmen Returning to the Same Institution in Year 2 by Number of ACT College Readiness Benchmarks Attained and Race/Ethnicity



Note: College retention rates are based on NSC data for fall 2011 and fall 2012 enrollments. The 2011 ACT-tested college-enrolled freshmen include 2011 ACT-tested high school graduates who immediately enrolled into college the fall following high school graduation (i.e., in fall 2011). Students who simultaneously enrolled in two- and four-year institutions are included in the calculations of retention rates for both types of institutions.

Policies and Practices

How to Increase College Readiness

Approximately 31% of all 2013 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.

Essential Standards. Since ACT first released *Making the Dream a Reality* in 2008, we have called for states to adopt education standards that prepare all students for the rigors of 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 that first step on the road to ensuring all students are ready for college or career. It is imperative now that policymakers and practitioners continue this process by aligning all aspects of their systems to college and career readiness.

Common Expectations. All states—especially those that have adopted the Common Core State Standards—should be aligning 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 readiness should be comparable. To ensure students master the knowledge and skills to succeed after high school, ACT supports the core curriculum recommendations of *A Nation at Risk: The Imperative for Educational Reform*—specifically that students take a core curriculum consisting of at least four years of English and three years each of mathematics, science, and social studies.

Clear Performance Standards. States must define “how good is good enough” for college and career readiness. In addition to a consistent, rigorous set of essential K–12 content standards, states must define performance standards so that students, parents, and teachers know how well students must perform academically 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 grade of B or higher or about a 75% chance of earning a grade of C or higher in first-year college English Composition; College Algebra; Biology; or History, Psychology, Sociology, Political Science, or Economics.

Rigorous High School Courses. Having appropriate and aligned standards, coupled with a core curriculum, will adequately prepare high school students only if the courses are truly challenging. That is, taking the right kinds of courses matters more than taking the right number of courses. Students who take a rigorous core curriculum should be ready for credit-bearing first-year college courses without remediation.

Early Monitoring and Intervention. We know from our empirical data that students who take challenging curricula are much better prepared to graduate high school ready for college or career training opportunities. If students are to be ready for college or career when they graduate, their progress must be monitored closely so that deficiencies in foundational skills can be identified and remediated early, in upper elementary and middle school. In addition, age-appropriate career assessment, exploration, and planning activities that encourage students to consider and focus on personally relevant career options should be a part of this process so that students can plan their high school coursework accordingly.

Data-Driven Decisions. States have been hard at work developing longitudinal P–16 data systems—this work must continue and accelerate. If states are serious about ensuring more of their students are prepared for college and work in the 21st century, they must develop systems that allow schools and districts to closely monitor student performance at every stage of the learning pipeline, from preschool through the elementary, middle, and high school grades, all the way through college. Use of a longitudinal data system enables educators to identify students who are in need of academic interventions at an early stage, thus giving teachers and students more time to strengthen these skills before graduation. Longitudinal data systems provide a tool to schools to ensure all their students take and complete the right number and kinds of courses before graduation. Using a longitudinal assessment system also permits schools to determine the value added by each core course in helping students to become ready for college and career. Such systems allow colleges to offer feedback reports to high schools that examine how well prepared each high school’s graduates are for college. These reports can be used to strengthen high school curricula.

Policies and Practices

District, School, and Classroom Practices

The Path to Readiness: It Takes a System

ACT research 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 **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.

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.

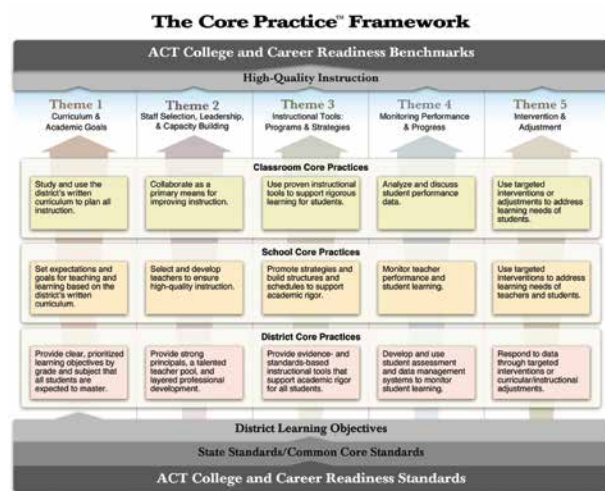
Classroom Practice: Use targeted interventions or adjustments to address learning needs of students.

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 ACT Core Practice Framework

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.

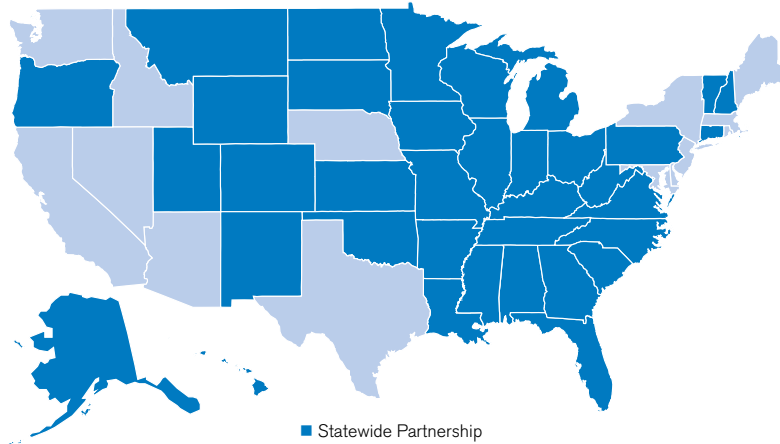
To learn more, visit www.act.org.



Resources









Statewide Partnerships in College and Career Readiness

States that incorporate ACT's college and career readiness solutions as part of their statewide assessments provide greater access to higher education and increase the likelihood of student success in postsecondary education. Educators also have the ability to establish a longitudinal plan using ACT's assessments, which provide high schools, districts, and states with unique student-level data that can be used for effective student intervention plans.



State administration of ACT's programs and services:

- Increases opportunities for minority and middle- to low-income students.
- Promotes student educational and career planning.
- Reduces the need for remediation.
- Correlates with increases in college enrollment, persistence, and student success.
- Aligns with state standards.

 ACT[®] Aspire[™]	 ACT[®] Explore[™]	 ACT[®] Plan[™]	 The ACT[®]	 ACT[®] QualityCore[™]	 ACT[®] WorkKeys[™]	 ACT National Career Readiness Certificate[™]	 ACT WorkKeys[®]-based certificates
3rd- through 8th-grade students	8th- and 9th-grade students	10th-grade students	11th- and 12th-grade students	8th- through 12th-grade students	11th- and 12th-grade students		
Alabama	Alabama	Alabama	Arkansas	Alabama	Alaska	Alaska	Alabama
	Arkansas	Arkansas	Colorado	Kentucky	Illinois	Connecticut	Arkansas
	Hawaii	Florida	Hawaii		Hawaii	Indiana	Colorado
	Illinois	Hawaii	Illinois		Michigan	Iowa	Florida
	Kentucky	Illinois	Kentucky		North Carolina	Kentucky	Georgia
	Louisiana	Kentucky	Louisiana		North Carolina	Louisiana	Indiana
	Michigan	Louisiana	Michigan		North Dakota	Michigan	Kansas
	Minnesota	Michigan	Montana		Wyoming	Minnesota	Mississippi
	North Carolina	Minnesota	North Carolina			Missouri	North Carolina
	Oklahoma	New	North Dakota			Montana	Oklahoma
	South Carolina	Mexico	Tennessee			New Hampshire	South Carolina
	Tennessee	North Carolina	Utah			New Mexico	Virginia
	Utah	Oklahoma	Wyoming			North Dakota	West Virginia
	West Virginia	Tennessee				Ohio	Virginia
	Wyoming	Utah				Oregon	Wyoming
		West Virginia				Pennsylvania	
		Wyoming				South Dakota	
						Tennessee	
						Vermont	
						Wisconsin	

Endnotes

1. The data presented herein are based on the *ACT Profile Report—State: Graduating Class 2013 for Asian Students*, accessible at www.act.org/readiness/2013. With the exception of the top graph on page 6, data related to students who did not provide information or who responded “Other” to questions about gender, race/ethnicity, high school curriculum, etc., are not presented explicitly.
2. The 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.
3. Data reflect subject-specific curriculum. For example, English “Core or More” results pertain to students who took at least four years of English, regardless of courses taken in other subject areas.
4. Five highest-growth fields were identified by using the 2010–2020 projected job openings from the US Department of Labor, Bureau of Labor Statistics. Example occupations for the five highest-growth career fields nationally are: 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); and Marketing/Sales (insurance agents, buyers).

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

