

The Condition of College & Career Readiness 2013

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

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, which allows monitoring and intervening to take place much earlier and helps 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.

A Commitment to STEM

ACT is uniquely positioned to report on STEM (Science, Technology, Engineering, and Math) progress in the United States in several valuable ways. The first is by assessing and reporting both Mathematics and Science ability. The second is our ability through the ACT Interest Inventory on ACT Explore®, ACT Plan®, and the ACT to determine those students who have either an expressed or measured interest in STEM-related majors or occupations. The chart on page 8 is ACT's first attempt to show academic ability related to interest in STEM fields. We are currently planning to release national- and state-level reports on STEM later this year.

Using This Report¹

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

- Are your students prepared for college and career?
- Are enough of your students taking core courses?
- Are your core courses rigorous enough?
- Are your younger students on target for college and career?
- · What other dimensions of college and career readiness, like academic behaviors, should educators track?
- How are educators tracking progress on STEM initiatives?

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:

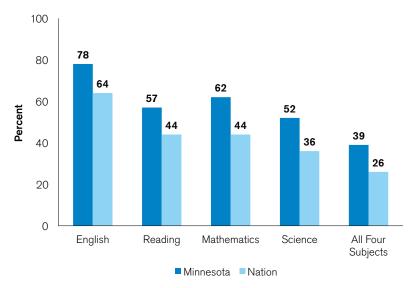
College Course	Subject Area Test	Original ACT College Readiness Benchmark	Revised ACT College Readiness Benchmark
English Composition	English	18	18
Social Sciences	Reading	21	22
College Algebra	Mathematics	22	22
Biology	Science	24	23



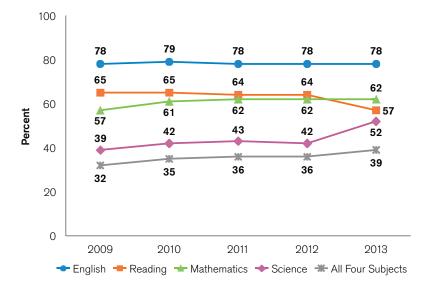
Attainment of College and Career Readiness

- 44,676 of your graduates, which is an estimated 74% of your graduating class, took the ACT.*
- From 2009–2013, the number of ACT test-taking graduates has increased by 2.4%, while the number of graduates in your state has decreased by 5.8%.

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



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

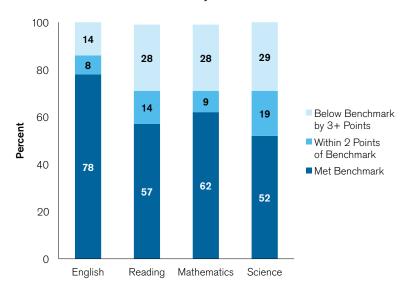


^{*} Totals for graduating seniors were obtained from *Knocking at the College Door: Projections of High School Graduates*, 8th edition.
© December 2012 by the Western Interstate Commission for Higher Education.

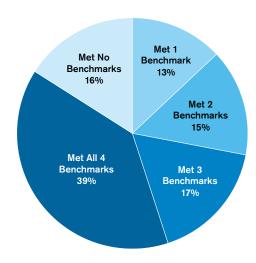
Note: Percents in this report may not sum to 100% due to rounding.

Near Attainment of College and Career Readiness

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



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

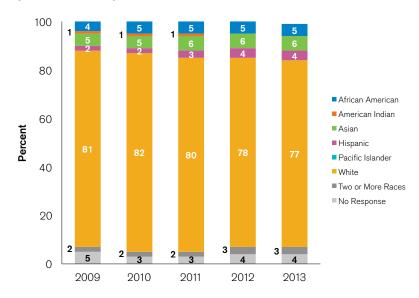




Participation and Opportunity

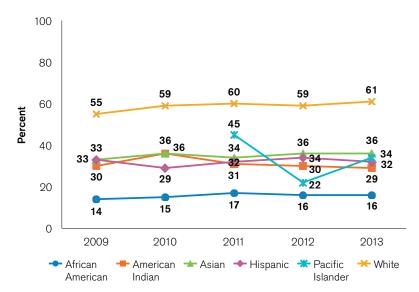
Over the past decade, ACT has experienced unprecedented growth in the number of students tested, as well as statewide partnerships in 13 different states and in many districts across the country. As a result, the 2013 Condition of College & Career Readiness report provides a much deeper and more representative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

Percent 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*

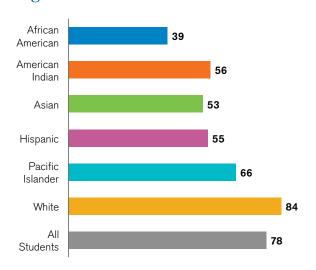


^{*} Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.²

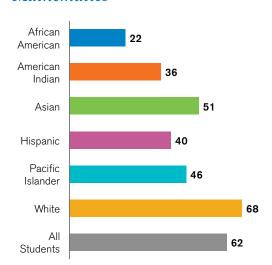
Participation and Opportunity by Subject

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

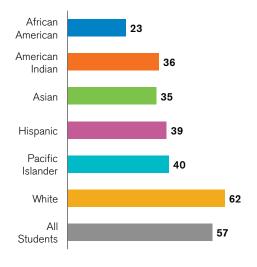
English



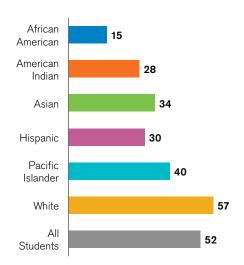
Mathematics



Reading



Science



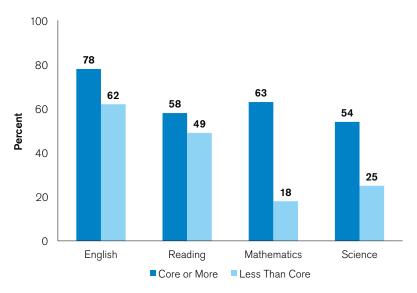
^{*} Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.2



Course-Taking Patterns and Benchmark Performance

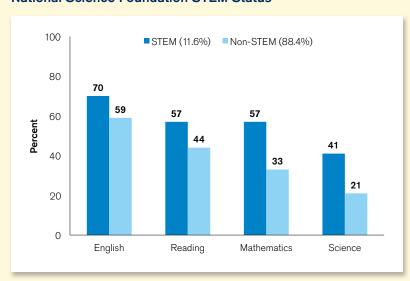
Within subjects, ACT has consistently found that students who take the recommended core curriculum are more likely to be ready for college or career than those who do not. A core curriculum is defined as four years of English and three years each of mathematics, social studies, and science.³

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



A First Look at STEM

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

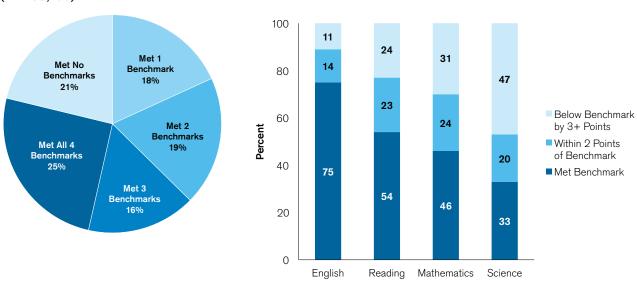


This chart depicts ACT College Readiness Benchmark attainment by student interest in STEM majors/occupations, as defined by the National Science Foundation, from the 2010–2012 national ACT-tested graduating classes (N = 1,167,221). ACT plans to release a report on the condition of the STEM pipeline in 2013.

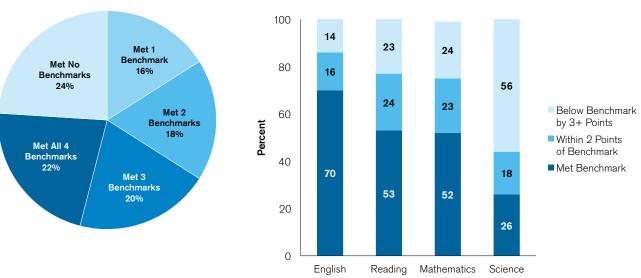
Early Preparation

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 10th Graders Meeting ACT College Readiness Benchmarks (N = 55,138)



Percent of 2012-2013 ACT Explore®-Tested 8th Graders Meeting ACT College Readiness Benchmarks (N = 43,186)

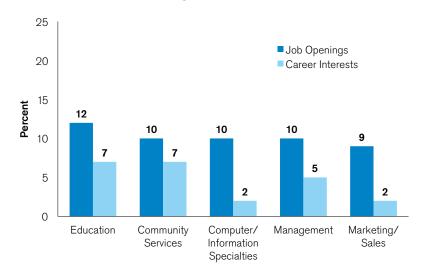




Other College and Career Readiness Factors

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.

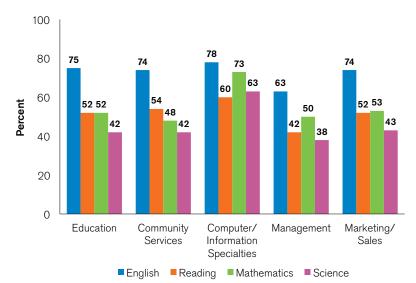
Percent of 2013 ACT-Tested High School Graduates with Career Interests in Jobs Calling for a Two-Year Degree or More in the State's Five Fastest-Growing Career Fields4



Preparation for Careers in High-Growth Fields

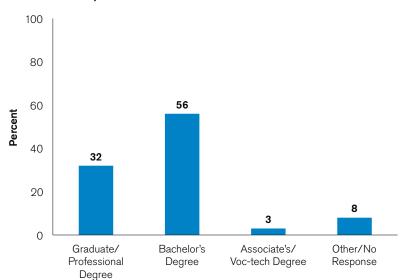
Many students who are interested in these career areas fall short of meeting **ACT College Readiness** Benchmarks, suggesting that they are not on the right path to take advantage of career opportunities in these high-growth fields.

Percent of 2013 ACT-Tested 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

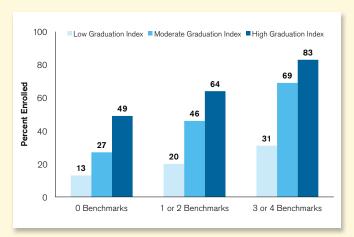


Aligning Student Behaviors, Planning, and Aspirations

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 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 from your state.

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.



Academic Achievement and Academic Behaviors: Both Matter

Academic achievement is essential but not the only factor in determining college and career readiness. Students also need to have the behavioral skills (e.g., goal setting, working with others, following rules) to succeed beyond high school or postsecondary education. Over the past 10 years, ACT research has focused on the behavior domains that are essential for success across a variety of settings, including school and work. These domains include motivation, social engagement, and self-regulation.

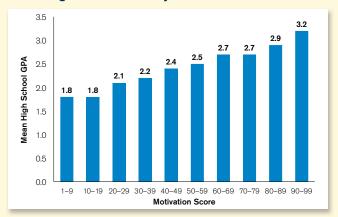
Motivation: Personal characteristics that help students to succeed academically by focusing and maintaining energies on goal-directed activities. Behaviors in this domain are important for maintaining the level of effort required to achieve good grades.

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.

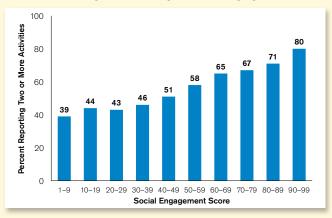
Self-Regulation: The thinking processes and emotional responses of students that govern how well they monitor, regulate, and control their behavior related to school and learning. Behaviors in this domain are important for following rules and maintaining good conduct.

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.

Mean High School GPA by Motivation Score*



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



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



^{*} Based on N = 3,949 students who took ACT Engage Grades 6-9.

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

^{**} 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.

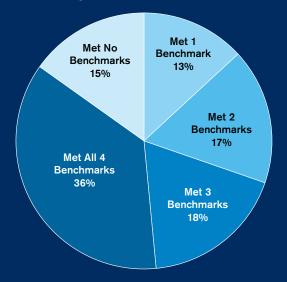
Looking Back at the Class of 2012

Minnesota

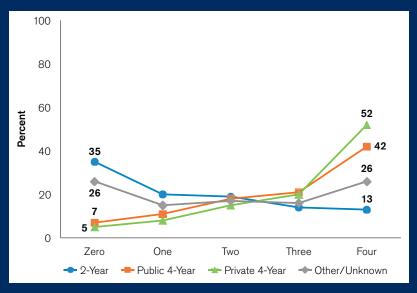
ACT College Readiness Benchmarks and Fall 2012 College **Enrollment**

Academic achievement, as measured by ACT College Readiness Benchmark attainment, has a clear and distinctive relationship with the path taken by high school graduates. Those who were more academically ready were more likely to enroll in 4-year institutions. Graduates who enrolled in 2-year colleges or pursued other options after high school were more likely to have met fewer Benchmarks. For the sizeable number of 2012 graduates who did not meet any Benchmarks, their post-high school opportunities appear to have been limited compared to their collegeready peers.

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



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





2013 State Percent of High School Graduates Tested, Average Composite Score, and Percent Meeting Benchmarks by Subject

Alabama 78 20.4 66 41 31 30 Alaska 37 21.1 65 48 48 38 Arizona 50 19.6 53 37 38 28 Arkansas 90 20.2 63 39 35 29 California 26 22.2 72 51 58 41 Colorado 100 20.4 62 42 39 36 Connecticut 27 24.0 86 66 68 56 Delaware 15 22.9 77 59 59 49 District of Columbia 38 20.4 54 43 39 33 Florida 74 19.6 54 38 35 26 Georgia 51 20.7 64 43 38 33 Hawaii 40 20.1 56 37 43 30 Idaho <th>State</th> <th>Percent of Graduates Tested*</th> <th>Average Composite Score</th> <th>Percent Meeting English Benchmark</th> <th>Percent Meeting Reading Benchmark</th> <th>Percent Meeting Math Benchmark</th> <th>Percent Meeting Science Benchmark</th>	State	Percent of Graduates Tested*	Average Composite Score	Percent Meeting English Benchmark	Percent Meeting Reading Benchmark	Percent Meeting Math Benchmark	Percent Meeting Science Benchmark
Arizona 50 19.6 53 37 38 28 Arkansas 90 20.2 63 39 35 29 California 26 22.2 72 51 58 41 Colorado 100 20.4 62 42 39 36 Connecticut 27 24.0 86 66 68 56 Delaware 15 22.9 77 59 59 49 Usatrict of Columbia 38 20.4 54 43 39 33 Florida 74 19.6 54 38 35 26 Georgia 51 20.7 64 43 38 33 Hawaii 40 20.1 56 37 43 30 Idaho 49 22.1 74 54 52 43 Illinois 100 20.6 63 41 42 35 Illinois	Alabama	78	20.4	66	41	31	30
Arkansas 90 20.2 63 39 35 29 California 26 22.2 72 51 58 41 Colorado 100 20.4 62 42 39 36 Connecticut 27 24.0 86 66 68 56 Delaware 15 22.9 77 59 59 49 District of Columbia 38 20.4 54 43 39 33 Florida 74 19.6 54 38 35 26 Georgia 51 20.7 64 43 38 33 Hawaii 40 20.1 56 37 43 30 Idaho 49 22.1 74 54 52 43 Illinois 100 20.6 63 41 42 35 Indiana 38 21.7 70 51 53 41 Iowa <td>Alaska</td> <td>37</td> <td>21.1</td> <td>65</td> <td>48</td> <td>48</td> <td>38</td>	Alaska	37	21.1	65	48	48	38
California 26 22.2 72 51 58 41 Colorado 100 20.4 62 42 39 36 Connecticut 27 24.0 86 66 68 56 Delaware 15 22.9 77 59 59 49 District of Columbia 38 20.4 54 43 39 33 Florida 74 19.6 54 43 38 35 26 Georgia 51 20.7 64 43 38 33 Hawaii 40 20.1 56 37 43 30 Idaho 49 22.1 74 54 52 43 Illinois 100 20.6 63 41 42 35 Indiana 38 21.7 70 51 53 41 42 35 Indiana 38 21.7 70 51 53 41 42 35 Indiana <t< th=""><td>Arizona</td><td>50</td><td>19.6</td><td>53</td><td>37</td><td>38</td><td>28</td></t<>	Arizona	50	19.6	53	37	38	28
Colorado 100 20.4 62 42 39 36 Connecticut 27 24.0 86 66 68 56 Delaware 15 22.9 77 59 59 49 District of Columbia 38 20.4 54 43 39 33 Florida 74 19.6 54 38 35 26 Georgia 51 20.7 64 43 38 33 Hawaii 40 20.1 56 37 43 30 Idaho 49 22.1 74 54 52 43 Illinois 100 20.6 63 41 42 35 Illinois 130 20.6 63 41 42 35 Illinois 130 20.6 63 41 42 35 Illinois 16 20.1 76 54 50 46 Kansas<	Arkansas	90	20.2	63	39	35	29
Connecticut 27 24.0 86 66 68 56 Delaware 15 22.9 77 59 59 49 District of Columbia 38 20.4 54 43 39 33 Florida 74 19.6 54 38 35 26 Georgia 51 20.7 64 43 38 33 Hawaii 40 20.1 56 37 43 30 Idaho 49 22.1 74 54 52 43 Illinois 100 20.6 63 41 42 35 Indiana 38 21.7 70 51 53 41 Iowa 66 22.1 76 54 50 46 Kansas 75 21.8 72 51 51 42 Kentucky 100 19.6 57 36 30 28 Louisiana	California	26	22.2	72	51	58	41
Delaware 15 22.9 77 59 59 49 District of Columbia 38 20.4 54 43 39 33 Florida 74 19.6 54 38 35 26 Georgia 51 20.7 64 43 38 33 Hawaii 40 20.1 56 37 43 30 Idaho 49 22.1 74 54 52 43 Illinois 100 20.6 63 41 42 35 Indiana 38 21.7 70 51 53 41 Iowa 66 22.1 76 54 50 46 Kansas 75 21.8 72 51 51 42 Kentucky 100 19.6 57 36 30 28 Louisiana 100 19.5 60 33 29 25 Maryland	Colorado	100	20.4	62	42	39	36
District of Columbia 38 20.4 54 43 39 33 Florida 74 19.6 54 38 35 26 Georgia 51 20.7 64 43 38 33 Hawaii 40 20.1 56 37 43 30 Idaho 49 22.1 74 54 52 43 Illinois 100 20.6 63 41 42 35 Indiana 38 21.7 70 51 53 41 Iowa 66 22.1 76 54 50 46 Kansas 75 21.8 72 51 51 42 Kentucky 100 19.6 57 36 30 28 Louisiana 100 19.5 60 33 29 25 Maine 8 23.5 83 62 64 53 Maryland 21 22.3 73 54 54 45 Massachusetts 22 24.1 84 66 72 55 Michigan 100 19.9 57 37 35 33 Minnesota 74 23.0 78 57 62 52 Missispipi 95 18.9 54 29 21 20 Missouri 74 21.6 72 49 45 41 Montana 72 21.3 66 50 49 39 Nebraska 84 21.5 71 48 46 41 Nevada 32 21.3 66 48 47 37 New Hampshire 19 23.8 84 64 66 54 New Jersey 23 23.0 77 58 64 48 New Mexico 70 19.9 56 38 33 29	Connecticut	27	24.0	86	66	68	56
Florida	Delaware	15	22.9	77	59	59	49
Georgia 51 20.7 64 43 38 33 Hawaii 40 20.1 56 37 43 30 Idaho 49 22.1 74 54 52 43 Illinois 100 20.6 63 41 42 35 Indiana 38 21.7 70 51 53 41 Iowa 66 22.1 76 54 50 46 Kansas 75 21.8 72 51 51 42 Kentucky 100 19.6 57 36 30 28 Louisiana 100 19.5 60 33 29 25 Maine 8 23.5 83 62 64 53 Maryland 21 22.3 73 54 54 45 Massachusetts 22 24.1 84 66 72 55 Michigan 1	District of Columbia	38	20.4	54	43	39	33
Hawaii 40 20.1 56 37 43 30 Idaho 49 22.1 74 54 52 43 Illinois 100 20.6 63 41 42 35 Indiana 38 21.7 70 51 53 41 Iowa 66 22.1 76 54 50 46 Kansas 75 21.8 72 51 51 42 Kentucky 100 19.6 57 36 30 28 Louisiana 100 19.5 60 33 29 25 Maine 8 23.5 83 62 64 53 Maryland 21 22.3 73 54 54 45 Massachusetts 22 24.1 84 66 72 55 Michigan 100 19.9 57 37 35 33 Minnesota <t< th=""><td>Florida</td><td>74</td><td>19.6</td><td>54</td><td>38</td><td>35</td><td>26</td></t<>	Florida	74	19.6	54	38	35	26
Idaho 49 22.1 74 54 52 43 Illinois 100 20.6 63 41 42 35 Indiana 38 21.7 70 51 53 41 Iowa 66 22.1 76 54 50 46 Kansas 75 21.8 72 51 51 42 Kentucky 100 19.6 57 36 30 28 Louisiana 100 19.5 60 33 29 25 Maine 8 23.5 83 62 64 53 Maryland 21 22.3 73 54 54 45 Massachusetts 22 24.1 84 66 72 55 Michigan 100 19.9 57 37 35 33 Minnesota 74 23.0 78 57 62 52 Missouri	Georgia	51	20.7	64	43	38	33
Illinois 100 20.6 63 41 42 35 Indiana 38 21.7 70 51 53 41 Iowa 66 22.1 76 54 50 46 Kansas 75 21.8 72 51 51 42 Kentucky 100 19.6 57 36 30 28 Louisiana 100 19.5 60 33 29 25 Maine 8 23.5 83 62 64 53 Maryland 21 22.3 73 54 54 45 Massachusetts 22 24.1 84 66 72 55 Michigan 100 19.9 57 37 35 33 Minnesota 74 23.0 78 57 62 52 Mississippi 95 18.9 54 29 21 20 Missouri	Hawaii	40	20.1	56	37	43	30
Indiana 38 21.7 70 51 53 41 Iowa 66 22.1 76 54 50 46 Kansas 75 21.8 72 51 51 42 Kentucky 100 19.6 57 36 30 28 Louisiana 100 19.5 60 33 29 25 Maine 8 23.5 83 62 64 53 Maryland 21 22.3 73 54 54 45 Massachusetts 22 24.1 84 66 72 55 Michigan 100 19.9 57 37 35 33 Minnesota 74 23.0 78 57 62 52 Mississippi 95 18.9 54 29 21 20 Missouri 74 21.6 72 49 45 41 Montana	Idaho	49	22.1	74	54	52	43
Iowa 66 22.1 76 54 50 46 Kansas 75 21.8 72 51 51 42 Kentucky 100 19.6 57 36 30 28 Louisiana 100 19.5 60 33 29 25 Maine 8 23.5 83 62 64 53 Maryland 21 22.3 73 54 54 45 Massachusetts 22 24.1 84 66 72 55 Michigan 100 19.9 57 37 35 33 Minnesota 74 23.0 78 57 62 52 Mississippi 95 18.9 54 29 21 20 Missouri 74 21.6 72 49 45 41 Montana 72 21.3 66 50 49 39 Nebraska	Illinois	100	20.6	63	41	42	35
Kansas 75 21.8 72 51 51 42 Kentucky 100 19.6 57 36 30 28 Louisiana 100 19.5 60 33 29 25 Maine 8 23.5 83 62 64 53 Maryland 21 22.3 73 54 54 45 Massachusetts 22 24.1 84 66 72 55 Michigan 100 19.9 57 37 35 33 Minnesota 74 23.0 78 57 62 52 Mississippi 95 18.9 54 29 21 20 Missouri 74 21.6 72 49 45 41 Montana 72 21.3 66 50 49 39 Nebraska 84 21.5 71 48 46 41 New Hampshire	Indiana	38	21.7	70	51	53	41
Kentucky 100 19.6 57 36 30 28 Louisiana 100 19.5 60 33 29 25 Maine 8 23.5 83 62 64 53 Maryland 21 22.3 73 54 54 45 Massachusetts 22 24.1 84 66 72 55 Michigan 100 19.9 57 37 35 33 Minnesota 74 23.0 78 57 62 52 Mississippi 95 18.9 54 29 21 20 Missouri 74 21.6 72 49 45 41 Montana 72 21.3 66 50 49 39 Nebraska 84 21.5 71 48 46 41 New Hampshire 19 23.8 84 64 66 54 New Me	lowa	66	22.1	76	54	50	46
Louisiana 100 19.5 60 33 29 25 Maine 8 23.5 83 62 64 53 Maryland 21 22.3 73 54 54 45 Massachusetts 22 24.1 84 66 72 55 Michigan 100 19.9 57 37 35 33 Minnesota 74 23.0 78 57 62 52 Mississippi 95 18.9 54 29 21 20 Missouri 74 21.6 72 49 45 41 Montana 72 21.3 66 50 49 39 Nebraska 84 21.5 71 48 46 41 Nevada 32 21.3 66 48 47 37 New Hampshire 19 23.8 84 64 66 54 New Mexic	Kansas	75	21.8	72	51	51	42
Maine 8 23.5 83 62 64 53 Maryland 21 22.3 73 54 54 45 Massachusetts 22 24.1 84 66 72 55 Michigan 100 19.9 57 37 35 33 Minnesota 74 23.0 78 57 62 52 Mississippi 95 18.9 54 29 21 20 Missouri 74 21.6 72 49 45 41 Montana 72 21.3 66 50 49 39 Nebraska 84 21.5 71 48 46 41 Nevada 32 21.3 66 48 47 37 New Hampshire 19 23.8 84 64 66 54 New Mexico 70 19.9 56 38 33 29	Kentucky	100	19.6	57	36	30	28
Maryland 21 22.3 73 54 54 45 Massachusetts 22 24.1 84 66 72 55 Michigan 100 19.9 57 37 35 33 Minnesota 74 23.0 78 57 62 52 Mississippi 95 18.9 54 29 21 20 Missouri 74 21.6 72 49 45 41 Montana 72 21.3 66 50 49 39 Nebraska 84 21.5 71 48 46 41 Nevada 32 21.3 66 48 47 37 New Hampshire 19 23.8 84 64 66 54 New Jersey 23 23.0 77 58 64 48 New Mexico 70 19.9 56 38 33 29	Louisiana	100	19.5	60	33	29	25
Massachusetts 22 24.1 84 66 72 55 Michigan 100 19.9 57 37 35 33 Minnesota 74 23.0 78 57 62 52 Mississippi 95 18.9 54 29 21 20 Missouri 74 21.6 72 49 45 41 Montana 72 21.3 66 50 49 39 Nebraska 84 21.5 71 48 46 41 Nevada 32 21.3 66 48 47 37 New Hampshire 19 23.8 84 64 66 54 New Jersey 23 23.0 77 58 64 48 New Mexico 70 19.9 56 38 33 29	Maine	8	23.5	83	62	64	53
Michigan 100 19.9 57 37 35 33 Minnesota 74 23.0 78 57 62 52 Mississippi 95 18.9 54 29 21 20 Missouri 74 21.6 72 49 45 41 Montana 72 21.3 66 50 49 39 Nebraska 84 21.5 71 48 46 41 Nevada 32 21.3 66 48 47 37 New Hampshire 19 23.8 84 64 66 54 New Jersey 23 23.0 77 58 64 48 New Mexico 70 19.9 56 38 33 29	Maryland	21	22.3	73	54	54	45
Minnesota 74 23.0 78 57 62 52 Mississippi 95 18.9 54 29 21 20 Missouri 74 21.6 72 49 45 41 Montana 72 21.3 66 50 49 39 Nebraska 84 21.5 71 48 46 41 Nevada 32 21.3 66 48 47 37 New Hampshire 19 23.8 84 64 66 54 New Jersey 23 23.0 77 58 64 48 New Mexico 70 19.9 56 38 33 29	Massachusetts	22	24.1	84	66	72	55
Mississippi 95 18.9 54 29 21 20 Missouri 74 21.6 72 49 45 41 Montana 72 21.3 66 50 49 39 Nebraska 84 21.5 71 48 46 41 Nevada 32 21.3 66 48 47 37 New Hampshire 19 23.8 84 64 66 54 New Jersey 23 23.0 77 58 64 48 New Mexico 70 19.9 56 38 33 29	Michigan	100	19.9	57	37	35	33
Missouri 74 21.6 72 49 45 41 Montana 72 21.3 66 50 49 39 Nebraska 84 21.5 71 48 46 41 Nevada 32 21.3 66 48 47 37 New Hampshire 19 23.8 84 64 66 54 New Jersey 23 23.0 77 58 64 48 New Mexico 70 19.9 56 38 33 29	Minnesota	74	23.0	78	57	62	52
Montana 72 21.3 66 50 49 39 Nebraska 84 21.5 71 48 46 41 Nevada 32 21.3 66 48 47 37 New Hampshire 19 23.8 84 64 66 54 New Jersey 23 23.0 77 58 64 48 New Mexico 70 19.9 56 38 33 29	Mississippi	95	18.9	54	29	21	20
Nebraska 84 21.5 71 48 46 41 Nevada 32 21.3 66 48 47 37 New Hampshire 19 23.8 84 64 66 54 New Jersey 23 23.0 77 58 64 48 New Mexico 70 19.9 56 38 33 29	Missouri	74	21.6	72	49	45	41
Nevada 32 21.3 66 48 47 37 New Hampshire 19 23.8 84 64 66 54 New Jersey 23 23.0 77 58 64 48 New Mexico 70 19.9 56 38 33 29	Montana	72	21.3	66	50	49	39
New Hampshire 19 23.8 84 64 66 54 New Jersey 23 23.0 77 58 64 48 New Mexico 70 19.9 56 38 33 29	Nebraska	84	21.5	71	48	46	41
New Jersey 23 23.0 77 58 64 48 New Mexico 70 19.9 56 38 33 29	Nevada	32	21.3	66	48	47	37
New Mexico 70 19.9 56 38 33 29	New Hampshire	19	23.8	84	64	66	54
	New Jersey	23	23.0	77	58	64	48
New York 26 23.4 80 61 68 54	New Mexico	70	19.9	56	38	33	29
	New York	26	23.4	80	61	68	54

2013 State Percent of High School Graduates Tested, Average Composite Score, and Percent Meeting Benchmarks by Subject

State	Percent of Graduates Tested*	Average Composite Score	Percent Meeting English Benchmark	Percent Meeting Reading Benchmark	Percent Meeting Math Benchmark	Percent Meeting Science Benchmark
North Carolina	100	18.7	43	31	33	25
North Dakota	98	20.5	61	41	43	35
Ohio	72	21.8	71	51	49	44
Oklahoma	75	20.8	66	45	37	35
Oregon	34	21.5	66	50	50	42
Pennsylvania	18	22.7	77	57	61	47
Rhode Island	14	22.7	78	60	58	48
South Carolina	51	20.4	62	41	39	32
South Dakota	78	21.9	72	52	53	46
Tennessee	100	19.5	58	36	29	27
Texas	37	20.9	61	43	48	36
Utah	100	20.7	63	45	38	36
Vermont	26	23.0	79	59	61	50
Virginia	26	22.6	76	57	57	47
Washington	21	22.8	75	58	60	49
West Virginia	63	20.6	69	45	33	34
Wisconsin	71	22.1	75	53	54	47
Wyoming	100	19.8	55	39	33	30
National	54	20.9	64	44	44	36

^{*} Totals for graduating seniors were obtained from *Knocking at the College Door: Projections of High School Graduates*, 8th edition. © December 2012 by the Western Interstate Commission for Higher Education.



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

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 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.nc4ea.org.

The Core Practice® Framework ACT College and Career Readiness Benchmarks High-Quality Instruction Theme 1 Commonant & Comm





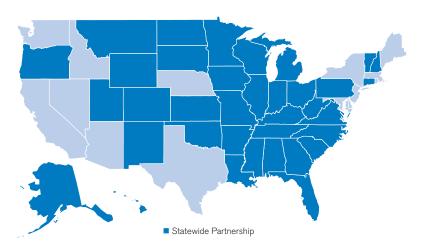
Resources

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	*	*
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	ACT National Career Readiness Certificate™	ACT WorkKeys®- based certificates
Alabama	Alabama Arkansas Hawaii Illinois Kentucky Louisiana Michigan Minnesota North Carolina Oklahoma South Carolina Tennessee Utah West Virginia Wyoming	Alabama Arkansas Florida Hawaii Illinois Kentucky Louisiana Michigan Minnesota New Mexico North Carolina Oklahoma Tennessee Utah West Virginia Wyoming	Arkansas Colorado Hawaii Illinois Kentucky Louisiana Michigan Montana North Carolina North Dakota Tennessee Utah Wyoming	Alabama Kentucky	Alaska Illinois Hawaii Michigan North Carolina North Dakota Wyoming	Alaska Connecticut Indiana Iowa Kentucky Louisiana Michigan Minnesota Missouri Montana New Hampshire New Mexico North Dakota Ohio Oregon Pennsylvania South Dakota Tennessee Vermont Wisconsin	Alabama Arkansas Colorado Florida Georgia Indiana Kansas Mississippi North Carolina Oklahoma South Carolina Virginia West Virginia Wyoming

Endnotes

- 1. The data presented herein are based on the ACT Profile Report—State: Graduating Class 2013 for each respective state, and 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.
- 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. State long-term occupational projections for 2009–2019 (based on job growth and job replacement data provided by Minnesota Department of Employment and Economic Development). The occupations that are used to calculate the projected high-growth career fields are based on a combination of the following: the occupational criteria used by the US Bureau of Labor Statistics to obtain state-level occupation data, occupational shifts that reflect a state's economic situation, and the ACT Career Classification System that organizes occupations into career fields. Career interests and achievement results based on 2013 ACT-tested Minnesota students (N = 27,794) with valid career information and subject scores. Sample occupations within state high-growth career fields are Education (secondary teachers, administrators, etc.); Community Services (social workers, school counselors, etc.); Computer/Information Specialties (computer programmers, database administrators, etc.); Management (convention planners, hotel/restaurant managers, etc.); Marketing/Sales (insurance agents, buyers, etc.).



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**

