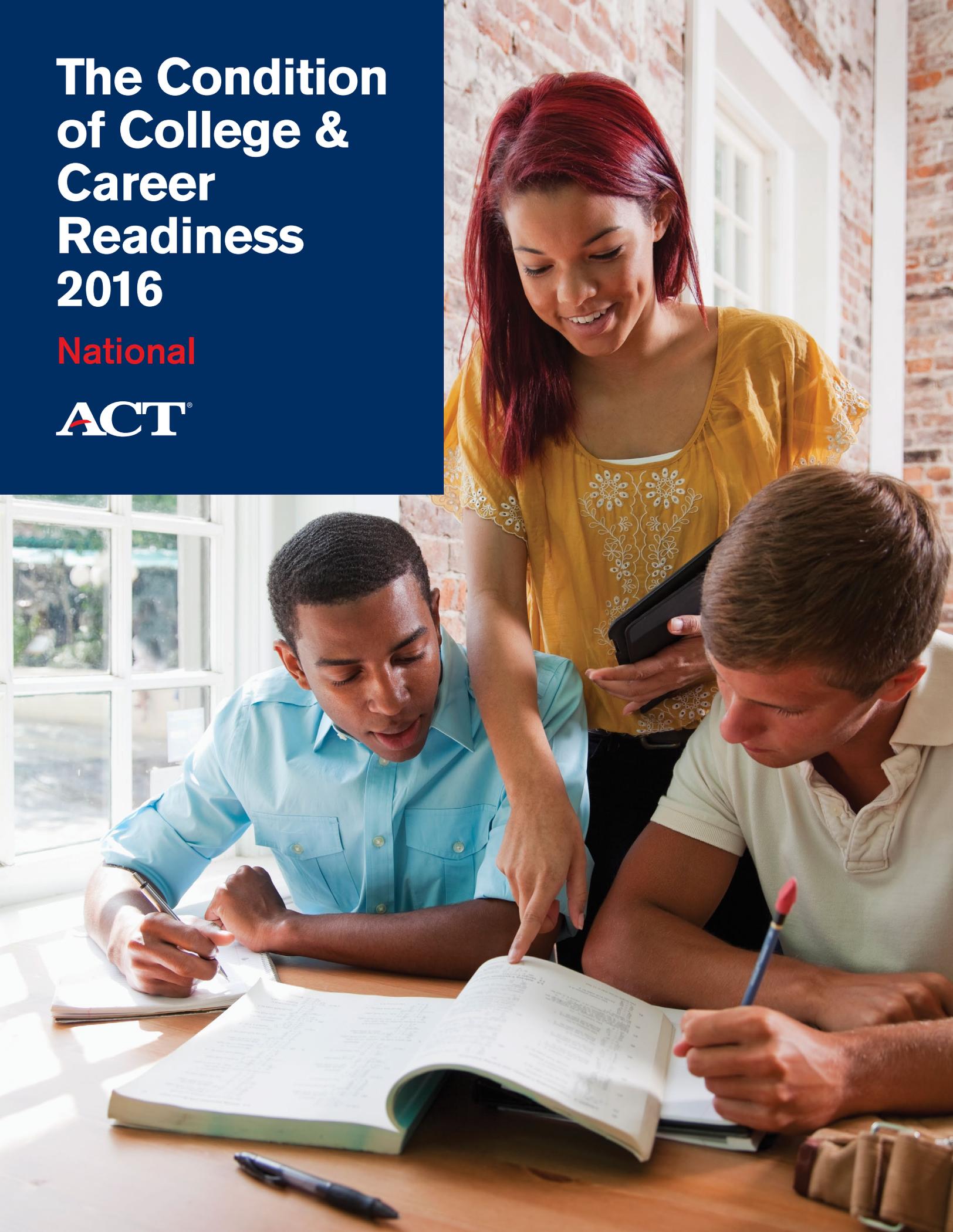


# The Condition of College & Career Readiness 2016

National

ACT<sup>®</sup>



# National

## The Condition of College & Career Readiness 2016

This report looks at the progress of the 2016 ACT®-tested graduating class relative to college and career readiness. This year's report shows that 64% of students in the 2016 US graduating class took the ACT test, up from 59% in 2015 and 49% in 2011. The increased number of test takers over the past several years enhances the breadth and depth of the data pool, providing a comprehensive picture of the current graduating class in the context of college readiness, as well as offering a glimpse at the emerging educational pipeline.

As a research-based nonprofit organization, ACT is committed to providing more meaningful data for individuals and institutions to make better decisions. The focus is on providing better and more relevant data to students, parents, schools, districts, and states so that all can make more informed decisions to improve outcomes. We accomplish this goal by taking a holistic view and using consistent and reliable historical information so that individuals and institutions have a better context to make critical decisions about the journey they have undertaken.

## Key Findings

### Performance

- The number of ACT-tested graduates increased by 8.6% compared to last year, rising from 1,924,436 graduates in 2015 to 2,090,342 graduates in 2016. Nearly two-thirds (64%) of all 2016 US high school graduates took the ACT, up from 59% last year and from 40% in 2006. As a result, this year's data are based on a more representative sample of the nation's graduating class than ever before.
- Overall achievement levels—both the average ACT Composite score and the percentages of students meeting the ACT College Readiness Benchmarks—dropped this year compared to last year, likely due to the significant increase in the percentage of students tested. The addition of seven more states that required all students to take the ACT in the 2016 data set means students from a broader range of academic preparation were tested, including many students who may not have been preparing to attend college.<sup>1</sup> This decline in scores nationally does not necessarily represent an actual change in national performance or achievement, but rather reflects the changes in the makeup of the testing population.
- While the average ACT Composite score declined significantly in the seven states that began statewide testing of 11th graders last year (as expected), it increased in 22 other states this year compared to 2015. Another eight states saw no change in average Composite score.
- The number of underserved students taking the ACT test has increased significantly since 2012, most dramatically among Hispanic students (up by 44%) and African American students (up by 23%). Despite these increases, the average ACT Composite score for African American students remained steady, and the average score for Hispanic students dropped by just 0.2 points. Given that expansion of the testing pool often leads to substantial drops in scores, these trends represent distinct success

stories. Nationally, the 2016 ACT data have identified 4,781 more Hispanic students who are ready for success in college-level coursework by meeting three or four ACT College Readiness Benchmarks than in 2015. Some states have seen substantial gains in this number as well, such as Florida (573 more students).

### STEM

- Since 2012, students meeting the new ACT College Readiness Benchmark in STEM, which is a combined measure of math and science readiness, have earned consistently higher average ACT science scores. In contrast, ACT mathematics scores for those students have remained flat during that time. This raises the question of whether STEM initiatives undertaken by many states are placing more emphasis on the science side of high school curricula and less emphasis on the mathematics side.

### Career Readiness

- This year, for the first time, ACT has provided an indicator of career readiness based on ACT Composite scores. Table 3.4 in the ACT Profile Report details how ACT-tested graduates are progressing toward the ACT National Career Readiness Certificate™ (ACT NCRC®).
- Progress toward career readiness is based on research linking ACT Composite scores to ACT NCRC levels. The ACT Composite cut score for each ACT NCRC level corresponds to a 50% chance of obtaining that level. If a student's ACT Composite score surpassed the cut score for an ACT NCRC level, they are categorized as making progress towards the next higher ACT NCRC level. Attainment of ACT NCRC levels indicates workplace employability skills that are critical to job success.
- 68% of ACT-tested graduates are considered making progress towards at least a Gold ACT NCRC level.

## Impact

- Between 2013 and 2016, average ACT Composite scores for students with a family income of \$80,000 or higher tended to increase, while average scores for students in families earning below that income level—an ever-increasing number of students—dropped. This finding suggests there is work to be done to reverse declining readiness levels for students from low-income families.
- Even though the proportion of graduates meeting three or four ACT College Readiness Benchmarks dropped nearly 2% compared to last year, the increase in the total number of graduates tested means almost 27,000 additional students were identified as college-ready through their ACT scores. Likewise, more than 33,000 additional students were identified as college-ready for study in STEM majors.

## Behaviors that Impact Access and Opportunity

- Testing Patterns
  - ~ As the number of states and districts that administer the ACT to all 11th-grade students has increased, the percentage of African American and Hispanic students who wait until their senior year to take the ACT for the first time has declined. Earlier access to the ACT can benefit all students, but particularly underrepresented students, by giving them more time to address and improve their readiness and by exposing them to more postsecondary opportunities from colleges and scholarship agencies.
  - ~ The majority—57%—of 2016 ACT-tested graduates took the test only once, an increase of more than 125,000 students compared to 2015. This change may be due to the increase in the number of states and districts testing all students.
  - ~ On average, students who tested more than once increased their Composite score, regardless of racial/ethnic background.
- Between 2012 and 2016, the proportion of students aspiring to vocational/technical and two-year degrees increased by 2%, while the proportion of students aspiring to higher levels of education dropped by 6%. These findings suggest that the push towards advanced manufacturing and high-skill trades may be having an impact on student aspirations, with more students realizing that they can be successful without a four-year degree.

- Nationally, 73.1% of students opted to participate in the Educational Opportunity Service (EOS), thus allowing them to receive information about opportunities and programs available from colleges across the country.
- A total of 391,644 2016 graduates with family incomes below \$36,000 opted into EOS. Low-income seniors who elected to participate in EOS benefited from ACT's "Get Your Name in the Game" program, which allows colleges to receive the names of those students during their senior year at no cost.
- A total of 617,022 fee waivers were awarded to low-income test takers in the 2015–16 testing year. However, more than one-fourth (26%) did not show up to test. While the reasons for not using the fee waiver may vary (e.g., student illness, etc.), encouragement from schools, family, and the community at large can help reduce the number of students missing out on this opportunity.

## Pipeline

- During the ACT registration process, students may request that scores be sent for free to up to four colleges. One out of every three ACT-tested graduates did not take advantage of this offer, representing another missed opportunity for many students.
- Four of the six fastest-growing occupations in the country are healthcare-related.
- The most popular choice of college major/career among 2016 ACT-tested graduates was Health Sciences/Technologies.
- In contrast, only 4% of 2016 graduates—88,324 students—expressed an interest in pursuing a career in education, suggesting that many states may be in danger of continuing teacher shortages.
- A sizable 13% of graduates—over a quarter-million students—listed "undecided" as their planned educational major. ACT offers its free ACT Interest Inventory to students as part of the ACT registration process, as well as through the free ACT Profile<sup>®</sup> and the new PreACT<sup>™</sup>, to enable students to make connections between their personal interests and potential majors/careers.

## College and Career Readiness Workshops

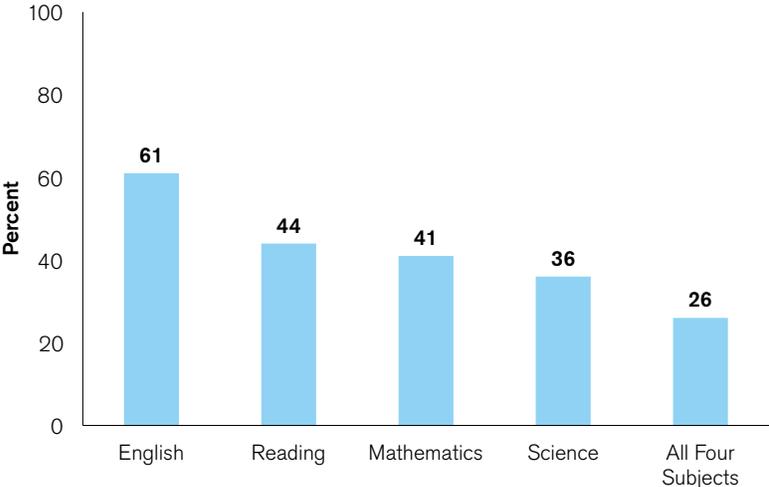
- During the 2015–16 school year, ACT conducted 241 free College and Career Readiness Workshops for 12,484 educators across the country.
  - ~ [www.act.org/content/act/en/act-events/college-and-career-readiness-workshops.html](http://www.act.org/content/act/en/act-events/college-and-career-readiness-workshops.html)

# National

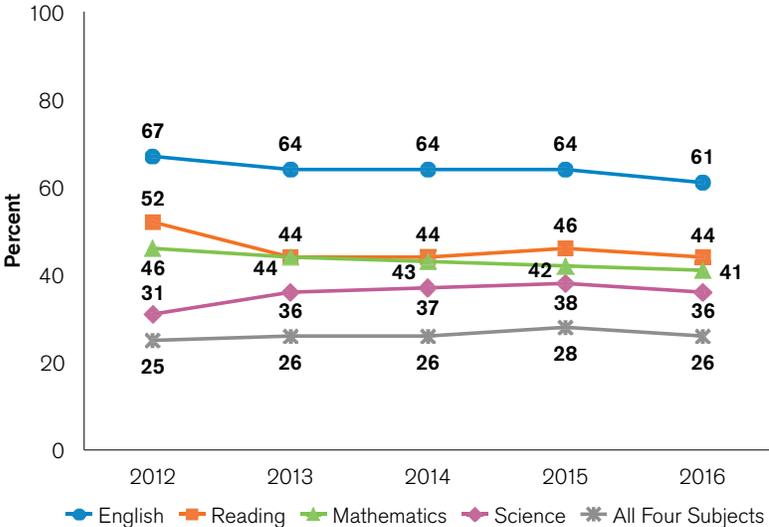
## Attainment of College and Career Readiness

- 2,090,342 of high school graduates, or an estimated 64% of the graduating class, took the ACT\*.
- From 2012–2016, the number of ACT test-taking graduates has increased by 25.5%, while the estimated number of graduates has increased by 1.3%.

**Percent of 2016 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject**



**Percent of 2012–2016 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks\*\***



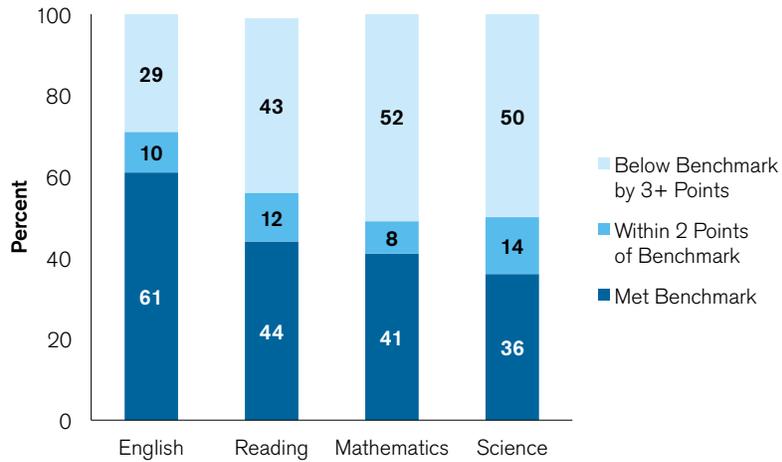
\* Totals for graduating seniors were obtained from *Knocking at the College Door: Projections of High School Graduates*, 8th edition. © December 2012 by the Western Interstate Commission for Higher Education.

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

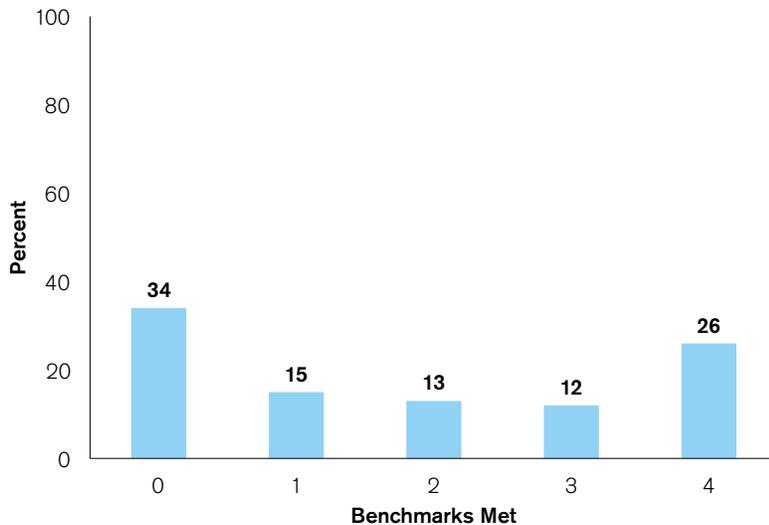
\*\*ACT College Readiness Benchmarks in reading and science were revised in 2013. See page 19 for details.

## Near Attainment of College and Career Readiness

Percent of 2016 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject



Percent of 2016 ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks Attained

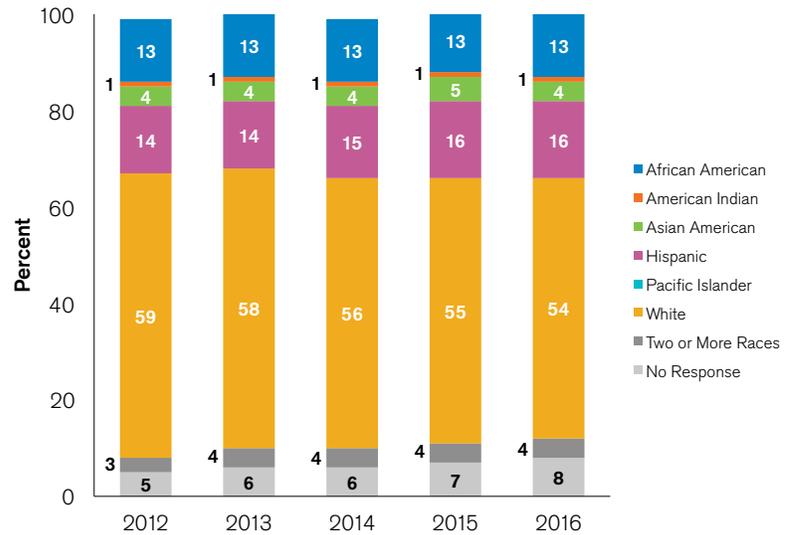


# National

## Participation and Opportunity

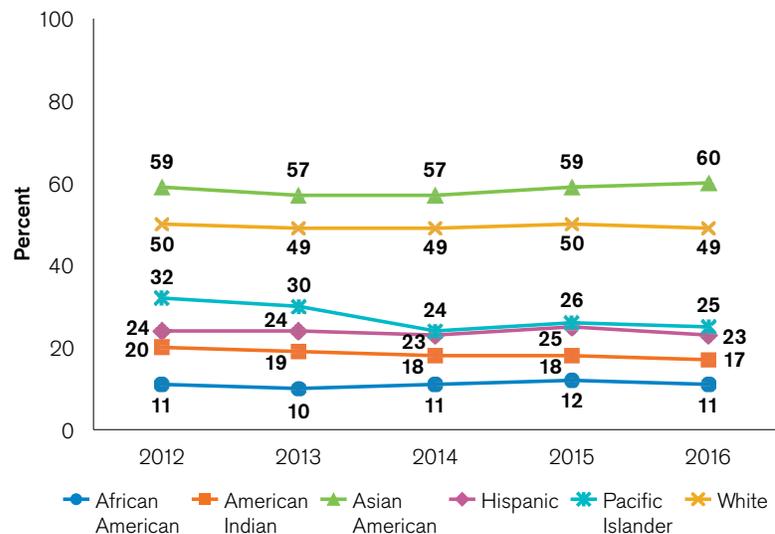
Over the past decade, ACT has experienced unprecedented growth in the number of students tested, as well as statewide partnerships in 28 states and in many districts across the country. As a result, the 2016 *Condition of College & Career Readiness* report provides a much deeper and more representative sample in comparison to a purely self-selected college-going population.

**Percent of 2012–2016 ACT-Tested High School Graduates by Race/Ethnicity**



Note: Values less than 0.5% will not appear.

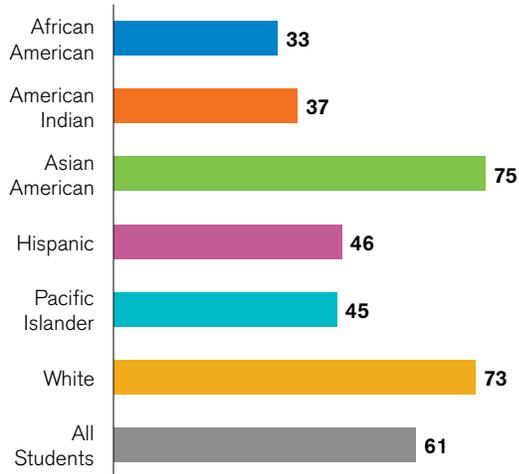
**Percent of 2012–2016 ACT-Tested High School Graduates Meeting Three or More Benchmarks by Race/Ethnicity**



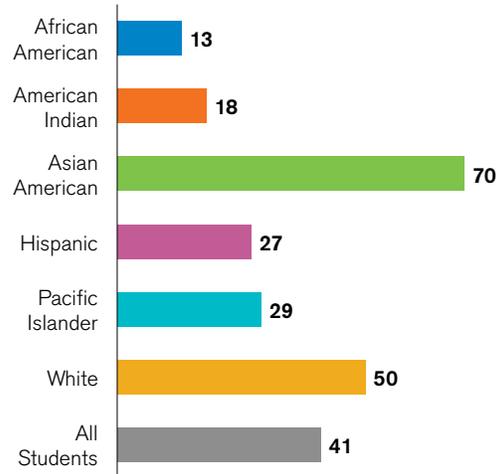
# Participation and Opportunity by Subject

Percent of 2016 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Race/Ethnicity and Subject

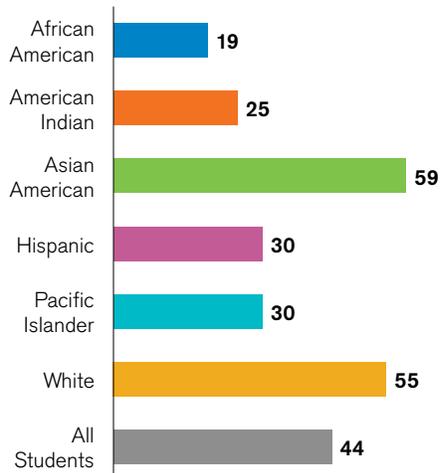
## English



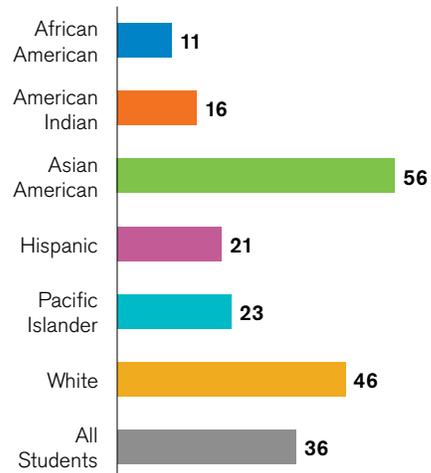
## Mathematics



## Reading



## Science



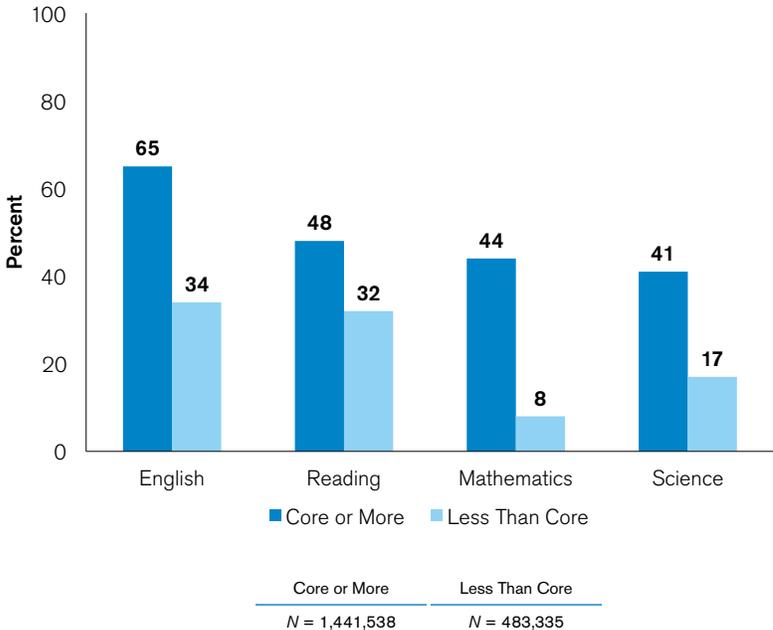
African American	American Indian	Asian American	Hispanic	Pacific Islander	White	All Students
N = 272,363	N = 16,183	N = 93,493	N = 337,280	N = 6,797	N = 1,119,398	N = 2,090,342

# National

## Course-Taking Patterns and Benchmark Performance

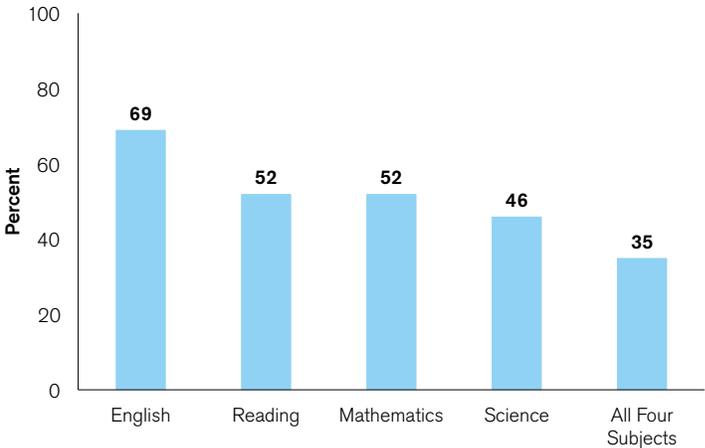
Within subjects, ACT has consistently found that students who take the recommended core curriculum are more likely to be ready for college or career than those who do not. A core curriculum is defined as four years of English and three years each of mathematics, social studies, and science.<sup>2</sup>

**Percent of 2016 ACT-Tested High School Graduates in Core or More vs. Less Than Core Courses Meeting ACT College Readiness Benchmarks by Subject**



## A Look at STEM

**Percent of 2016 ACT-Tested High School Graduates with an Interest in STEM Meeting ACT College Readiness Benchmarks by Subject (*N* = 749,661)**

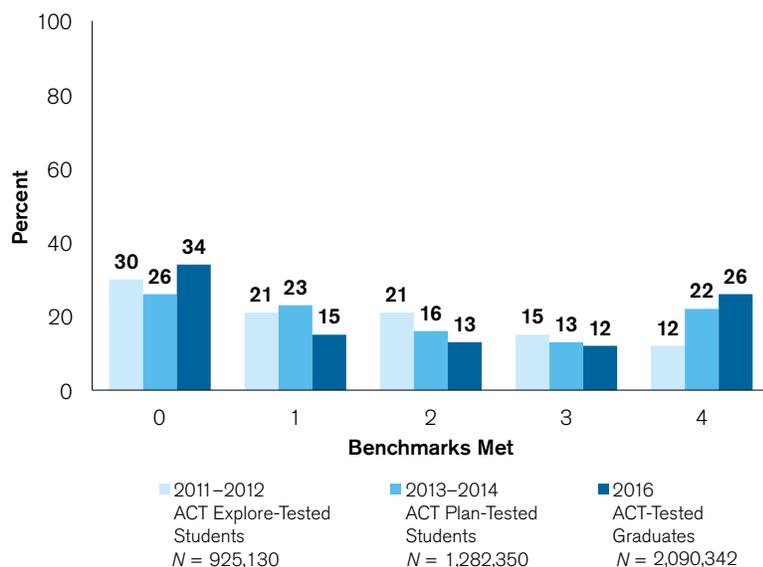


This chart describes ACT College Readiness Benchmark attainment for 2016 high school graduates nationwide who have an interest in STEM majors or occupations. Characteristics of students with an interest in STEM will be addressed in greater depth in the *Condition of STEM 2016* report, to be released in November 2016.

## Early Preparation

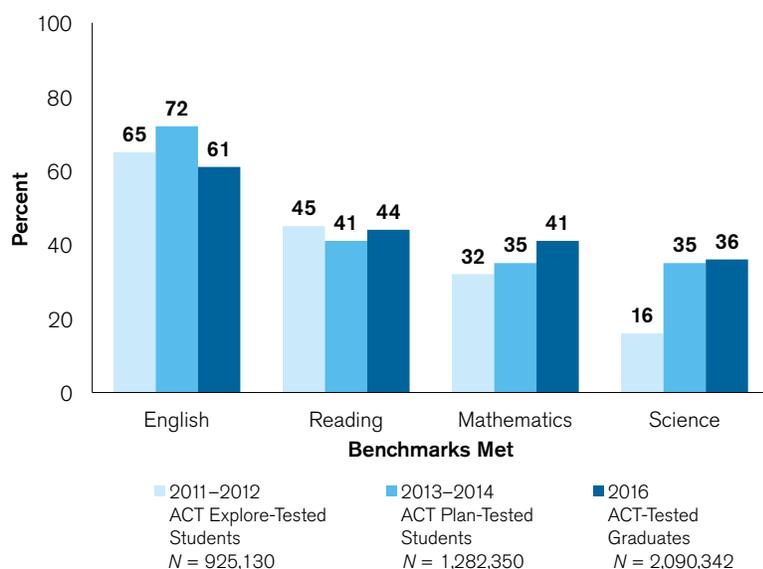
ACT research shows that younger students who take rigorous curricula are more prepared to graduate from high school ready for college or career. Moreover, our research (*The Forgotten Middle*, 2008) found that “the level of academic achievement that students attain by 8th grade has a larger impact on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

**Percent of Students Meeting ACT College Readiness Benchmarks at Three Stages of Academic Development**



In past *Condition* reports, ACT Explore®, ACT Plan®, and ACT results all reflected data from students testing or graduating in the current year. This year, ACT Explore and ACT Plan results reflect 2016 graduating class examinees (both tested and not tested with the ACT) when they were assessed in 8th and 10th grades. The goal of this change is to describe the condition of college and career readiness for this year's graduates and their counterparts as they progressed from 8th grade to 10th grade and through graduation.

**Percent of Students Meeting ACT College Readiness Benchmarks by Content Area at Three Stages of Academic Development**



# National

## ACT College Readiness Benchmark Attainment for Top Planned College Majors: 2016 Graduates

When students register for the ACT, they can select a college major—from a list of 294 majors—that they plan to pursue in college. Among recent ACT-tested high school graduates nationwide, about 76% selected a specific planned major, whereas about 24% indicated that they were undecided or did not select a major.

This table ranks the state's top (most frequently selected) majors among 2016 graduates. The percentages of students meeting the ACT College Readiness Benchmarks are shown for each major. Across these planned majors, there are considerable differences in the percentage of students who are ready to succeed in college.

Major Name	N	English	Reading	Math	Science	All Four
<b>Undecided</b>	274,037	67	51	47	41	32
<b>No Major Indicated</b>	227,181	34	22	17	16	9
<b>Nursing, Registered (BS/RN)</b>	86,684	56	36	28	25	15
<b>Medicine (Pre-Medicine)</b>	70,222	82	67	64	59	48
<b>Business Administration and Management, General</b>	59,148	63	45	44	37	26
<b>Mechanical Engineering</b>	39,724	67	50	60	51	40
<b>Biology, General</b>	37,255	81	64	62	57	45
<b>Computer Science and Programming</b>	31,772	79	64	67	60	48
<b>Criminology</b>	31,412	52	35	26	23	14
<b>Engineering (Pre-Engineering), General</b>	27,873	75	59	69	60	48
<b>Law (Pre-Law)</b>	26,814	62	48	38	35	26
<b>Physical Therapy (Pre-Physical Therapy)</b>	25,852	66	44	42	37	25
<b>Accounting</b>	25,586	67	47	56	43	31
<b>Psychology, Clinical and Counseling</b>	23,829	70	51	35	33	22
<b>Athletic Training</b>	20,019	53	34	30	27	15
<b>Biochemistry and Biophysics</b>	19,121	84	71	72	65	55
<b>Psychology, General</b>	18,988	76	58	46	43	31
<b>Elementary Education</b>	17,323	66	44	36	30	20
<b>Marketing Management and Research</b>	17,008	71	52	49	40	29
<b>Pharmacy (Pre-Pharmacy)</b>	16,219	74	54	55	48	35
<b>Aerospace/Aeronautical Engineering</b>	16,064	82	67	75	66	55
<b>Veterinary Medicine (Pre-Veterinarian)</b>	15,894	65	46	37	37	24
<b>Computer Engineering</b>	15,574	71	56	63	55	43
<b>Graphic Design</b>	15,361	58	39	30	28	17
<b>Medical Assisting</b>	14,671	40	25	19	16	9
<b>Chemical Engineering</b>	14,088	86	73	81	73	63
<b>Health-Related Professions and Services, General</b>	13,810	68	47	42	38	25
<b>Music, General</b>	13,659	60	40	32	29	20
<b>Therapy and Rehabilitation, General</b>	13,586	65	42	38	33	21
<b>Music, Performance</b>	13,336	62	42	34	30	23

Note: *Undecided* and/or *No Major Indicated* are included in the table, if applicable. The former refers to students who selected the option *Undecided* from the list of majors. The latter refers to students who did not respond to the question.

## ACT College Readiness Benchmark Attainment for the Top Planned College Majors with Good Fit: 2016 Graduates

Many students gravitate toward majors that align with their preferred activities and values. ACT research has shown that greater *interest-major fit* is related to important student outcomes such as persistence in a major or college. This table shows, for each planned major, the numbers and percentages of students displaying good interest-major fit<sup>3</sup>, as well as the percentages of students meeting the ACT College Readiness Benchmarks. Since only students who completed the ACT Interest Inventory during ACT registration are included here, this table shows results for a subset of the students in the prior table. These planned majors vary considerably in the percentage of students displaying good interest-major fit and meeting the ACT College Readiness Benchmarks. The results highlight the importance of examining multiple predictors of college success and affirm the value of a holistic view of college readiness.

Major Name	N Fit	% Fit	English	Reading	Math	Science	All Four
<b>Undecided</b>			No profile available				
<b>No Major Indicated</b>			No profile available				
<b>Nursing, Registered (BS/RN)</b>	26,934	31	65	43	33	31	19
<b>Medicine (Pre-Medicine)</b>	32,799	47	86	71	68	63	52
<b>Business Administration and Management, General</b>	19,750	33	67	48	48	40	28
<b>Mechanical Engineering</b>	12,664	32	69	52	62	53	41
<b>Biology, General</b>	18,134	49	85	68	64	60	48
<b>Computer Science and Programming</b>	8,498	27	80	64	66	62	49
<b>Criminology</b>	4,171	13	62	45	30	28	18
<b>Engineering (Pre-Engineering), General</b>	8,910	32	76	60	69	61	49
<b>Law (Pre-Law)</b>	8,847	33	73	58	45	42	32
<b>Physical Therapy (Pre-Physical Therapy)</b>	6,856	27	74	52	50	46	31
<b>Accounting</b>	13,348	52	70	48	59	46	32
<b>Psychology, Clinical and Counseling</b>	4,201	18	82	64	43	43	30
<b>Athletic Training</b>	3,543	18	63	43	36	34	20
<b>Biochemistry and Biophysics</b>	10,093	53	87	74	74	68	58
<b>Psychology, General</b>	4,283	23	86	70	52	51	39
<b>Elementary Education</b>	4,168	24	71	49	37	32	21
<b>Marketing Management and Research</b>	4,814	28	78	58	52	42	32
<b>Pharmacy (Pre-Pharmacy)</b>	6,509	40	80	60	63	56	41
<b>Aerospace/Aeronautical Engineering</b>	5,645	35	86	72	79	72	60
<b>Veterinary Medicine (Pre-Veterinarian)</b>	6,158	39	72	53	43	44	29
<b>Computer Engineering</b>	4,363	28	75	59	67	60	47
<b>Graphic Design</b>	6,643	43	64	43	30	29	18
<b>Medical Assisting</b>	3,634	25	47	29	24	20	12
<b>Chemical Engineering</b>	5,801	41	90	77	84	78	67
<b>Health-Related Professions and Services, General</b>	4,065	29	74	53	47	43	29
<b>Music, General</b>	5,661	41	68	46	34	31	22
<b>Therapy and Rehabilitation, General</b>	2,968	22	73	49	44	40	25
<b>Music, Performance</b>	5,537	42	68	47	34	31	22

Note: *Undecided* and/or *No Major Indicated* are included in the table, if applicable. The former refers to students who selected the option *Undecided* from the list of majors. The latter refers to students who did not respond to the question.

# National

## Other College and Career Readiness Factors

### *Aligning Student Behaviors, Planning, and Aspirations*

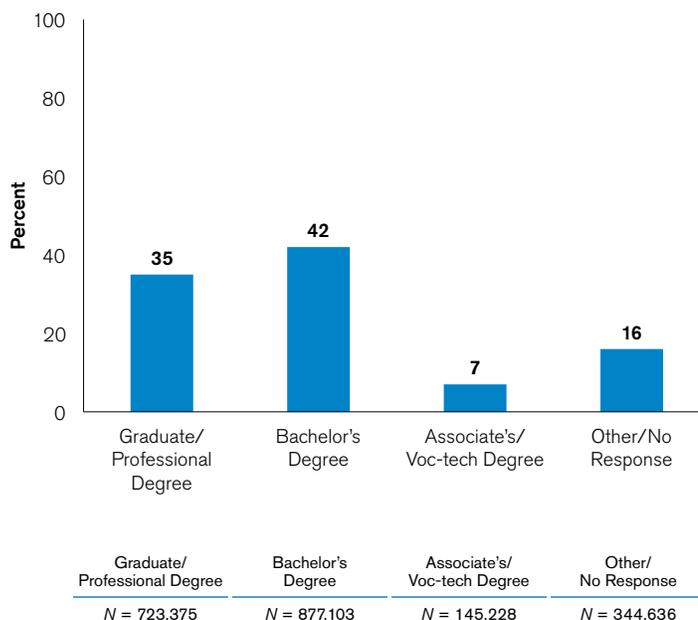
Most students aspire to a post-high school credential. To help them meet those aspirations, educational planning, monitoring, and interventions must be aligned to their aspirations, begin early, and continue throughout their educational careers.

There is good news in that 84% of 2016 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 86% of the national 2015 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 67% who actually did enroll. If we fully closed the aspirational gap, an additional 367,069 of the nation's 2015 ACT-tested graduates would have enrolled in postsecondary education.

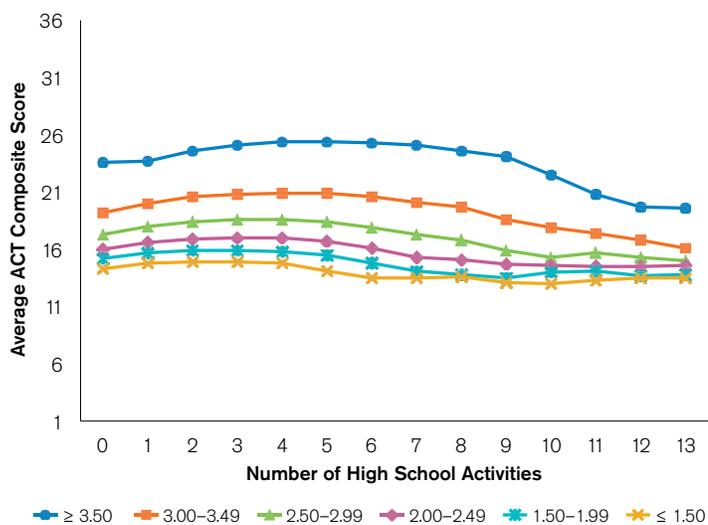
### *Activity and Achievement: What's the Connection?*

There are wide-ranging benefits to student participation in high school activities. Students can develop new skills, broaden their experiences, practice social skills, and increase their appeal to college admissions personnel. In addition, ACT data indicate that, regardless of a student's high school GPA, involvement in high school activities is often associated with higher ACT Composite scores. At the same time, results typically identify a point of diminishing returns, one where many activities are associated with a drop in ACT scores. The adjacent graph depicts the relationship between ACT scores and the number of high school activities for 2016 graduates.

**Percent of 2016 ACT-Tested High School Graduates by Educational Aspirations**



**Average ACT Composite Score by Number of Activities within High School GPA Ranges for 2016 Graduates**

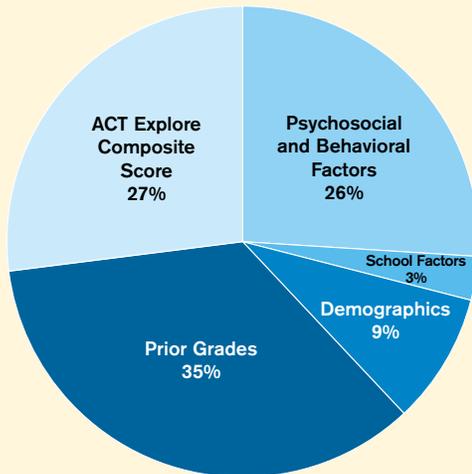


Note: In some cases, high activity counts may represent low numbers of students, giving rise to missing and outlying data points.

# Other College and Career Readiness Factors

## Early Prediction of High School Outcomes

**Relative Importance of Predictors of 12th-Grade Cumulative High School Grade Point Average**

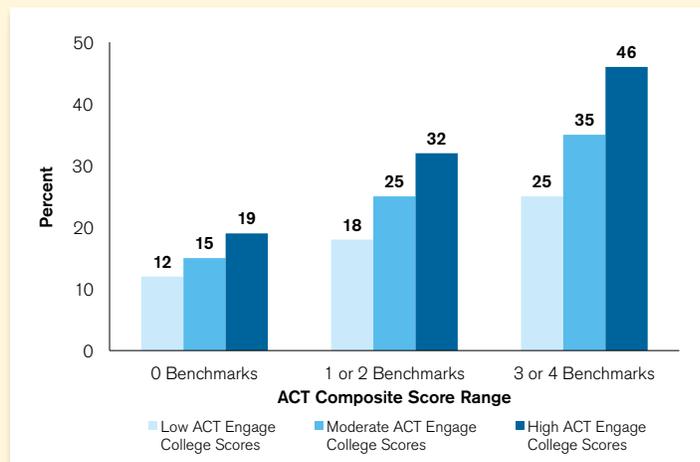


Note: The data used for this analysis came from a longitudinal sample of 3,768 students from 21 schools who took both ACT Explore and ACT Engage Grades 6–9 in 2006, when most students were in 8th grade. Additional waves of data were collected each fall, ending in 2011, when most students should have graduated from high school. The total variance explained in the model was  $R^2 = 0.51$ .

Understanding which student characteristics can predict future performance is essential to early identification and support for students at risk for later academic difficulties. A longitudinal research study found that, in 8th grade, the most important predictor of 12th-grade GPA was student grades, followed by academic achievement (measured by ACT Explore) and psychosocial and behavioral factors (measured by ACT Engage® Grades 6–9). Demographics (gender, race/ethnicity, and parent education) and school factors (percent eligible for free/reduced lunch eligible and percent minority) were less important predictors. These findings underscore the value of using multiple measures, including academic achievement and behaviors, to provide a more holistic approach to assessment that can better assist students in developing the knowledge and skills needed for success.

## Academic Achievement, Behaviors, and College Completion

**Percentage Attaining a Postsecondary Degree by ACT and ACT Engage College Scores**



Academic behaviors also matter for college outcomes. Across all ACT College Readiness Benchmark levels, students with higher ACT Engage College scores (based on the mean percentile scores of ACT Engage scales Academic Discipline, Commitment to College, and Social Connection) attained a postsecondary degree within four years of college at higher rates than students with lower ACT Engage College scores. For students meeting three or four Benchmarks, those with high ACT Engage College scores attained a timely postsecondary degree at nearly twice the rate as those with low ACT Engage College scores.

Note: Based on a longitudinal sample of 9,446 ACT-tested students from 48 postsecondary institutions who took ACT Engage College during their first semester of college in 2003. Additional waves of data were collected each semester through 2008. Students with a mean percentile score of less than 25 were classified as low, those with scores between 25 and 75 were classified as moderate, and those with scores greater than 75 were classified as high.

# National

## 2016 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
Alabama	100	19.1	51	34	23	24
Colorado	100	20.6	61	42	39	36
Illinois	100	20.8	64	42	41	36
Kentucky	100	20.0	59	40	31	30
Louisiana	100	19.5	58	35	26	27
Michigan	100	20.3	60	40	36	35
Minnesota	100	21.1	61	45	46	40
Mississippi	100	18.4	46	27	20	19
Missouri	100	20.2	59	40	35	32
Montana	100	20.3	56	41	38	32
Nevada	100	17.7	37	26	21	18
North Carolina	100	19.1	47	34	32	26
North Dakota	100	20.3	58	41	38	33
South Carolina	100	18.5	44	30	25	21
Tennessee	100	19.9	58	38	30	30
Utah	100	20.2	59	42	35	33
Wisconsin	100	20.5	60	41	41	37
Wyoming	100	20.0	58	38	33	31
Arkansas	96	20.2	60	40	32	30
Hawaii	94	18.7	46	30	30	23
Nebraska	88	21.4	68	48	43	40
Oklahoma	82	20.4	61	45	32	32
Florida	81	19.9	53	42	33	29
South Dakota	76	21.9	70	53	51	46
Kansas	74	21.9	70	53	48	43
Ohio	73	22.0	69	53	49	45
New Mexico	70	19.9	53	39	31	28
Iowa	68	22.1	73	55	48	46
West Virginia	67	20.7	67	46	32	33
Georgia	60	21.1	65	47	40	36
Arizona	58	20.1	55	39	38	31
Alaska	53	20.0	55	42	37	31
Texas	46	20.6	57	43	42	35

## 2016 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
District of Columbia	44	22.2	61	52	47	45
Indiana	41	22.3	72	56	53	46
Idaho	39	22.7	77	60	54	46
Oregon	39	21.7	67	51	49	42
Connecticut	34	24.5	85	68	68	61
California	33	22.6	72	55	56	45
New Jersey	32	23.1	75	59	61	50
Virginia	31	23.3	78	63	59	53
New York	29	23.9	79	65	67	58
Vermont	29	23.4	80	62	62	54
Massachusetts	28	24.8	85	71	74	61
Maryland	27	23.0	74	59	57	51
Washington	25	23.1	73	60	61	52
New Hampshire	23	24.5	86	69	70	61
Pennsylvania	23	23.1	77	61	61	52
Delaware	21	23.6	80	65	61	52
Rhode Island	20	23.3	79	62	60	52
Maine	10	23.6	81	63	66	54
<b>National</b>	64	20.8	61	44	41	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.

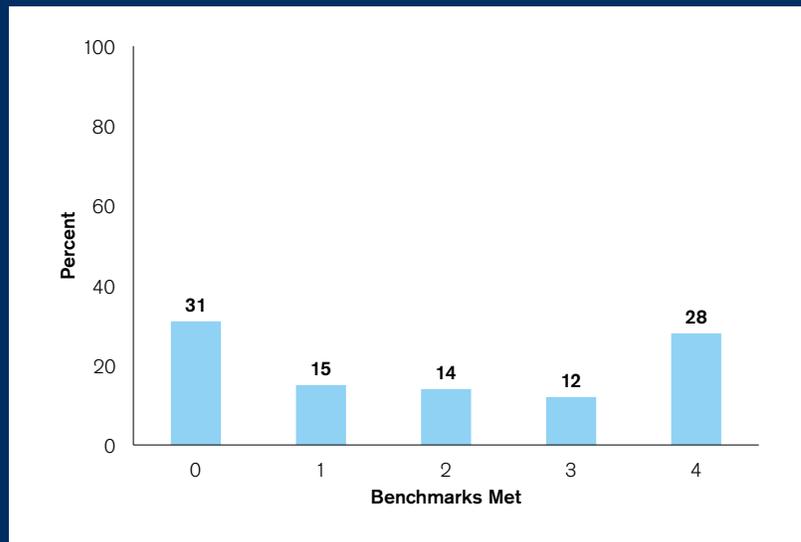
# Looking Back at the Class of 2015

## National

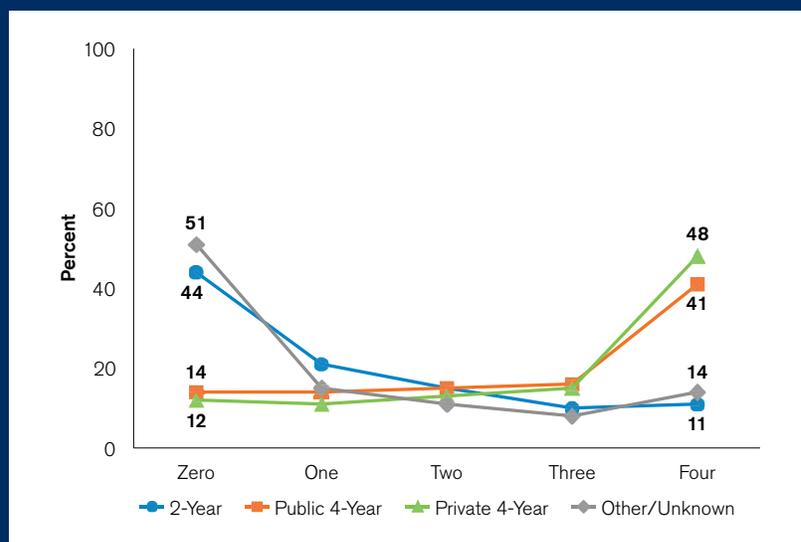
### *ACT College Readiness Benchmarks and Fall 2015 College Enrollment*

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 four-year institutions. Graduates who enrolled in two-year colleges or pursued other options after high school were more likely to have met fewer Benchmarks. For the sizable number of 2015 graduates who did not meet any Benchmarks, their post-high school opportunities appear to have been limited compared to their college-ready peers.

Percent of 2015 ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks Attained



Percent of 2015 ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks Attained and Fall 2015 College Enrollment Status



## Recommendations

### 1. **Create an assessment model that measures a variety of skill domains and competencies required for college and career success.**

Historically, college and career readiness assessments have focused only on academic skills. ACT research has clearly established areas of competency important for college and career readiness success. While our research shows that ACT solutions independently measure key components of college AND career readiness, we and others have begun to realize that no single solution can measure the full breadth of this readiness, nor should it. Simply put, the ACT alone is not enough to measure the full breadth of career readiness. A more holistic assessment model, incorporating multiple domains and specific skills associated with career clusters or occupations, will typically be most appropriate for describing and evaluating student readiness for college and career.

### 2. **Optimize opportunities to influence awareness and engagement of underserved learners.**

Initiatives designed to aid underserved learners are only as effective as they are visible. We must inform advocates and ALL underserved learners about the available and effective programs designed for this purpose. For example, in the 2015–2016 academic year, approximately 730,000 students registered to take the ACT using fee waivers valued at more than \$36 million. Yet, not all eligible students took advantage of this offer. Similarly, institutions must use data to inform intervention strategies if they are going to help underserved students be prepared for postsecondary success.

### 3. **Take the guesswork out of STEM.**

It is critically important to align STEM initiatives to capitalize on performance, measured interest, and expressed interest. Essential to this effort is expanding and nurturing interest in STEM, which will impact the emerging pipeline of STEM majors, teachers, and workers. This requires capturing a wider range of students and employing concrete measures to inform intervention and programming. To do so, states and districts must look for partnering opportunities from K–12 to postsecondary education to the workplace.

### 4. **Focus on the implementation of fewer, higher, clearer, standards in K–12 classrooms to raise the bar for all students.**

No matter the adopted standards, proper implementation must focus on the most critical component for increasing readiness—effective, high-quality teaching. This requires investment in postsecondary teaching programs, professional development, and state-level collaboration among K–12 and higher education.

### 5. **Don't over test students.**

When states, schools, and districts build an assessment strategy that recognizes the limits and promise of test scores, they will reduce the likelihood of over testing. Used ethically and appropriately, assessments can inform decisions at individual and institutional levels. Misunderstood, misused, or abused, assessments cause confusion, can be perceived as punitive, or result in ill-conceived strategies. To quote ACT founder E.F. Lindquist, "Assessment is valuable to the extent it bridges teaching and learning."

## What You Need to Know

At ACT, we are inspired every day to make a positive difference. Here are a few ways we are making an impact each day in the lives of students, teachers, education, policy makers, and workforce leaders.

### The **ACT**<sup>®</sup>

- Enhancements to ACT Score Reports starting in September 2016
- Introduction of ACT Kaplan Online Prep Live in September 2016
- New Score Reports

### Pre **ACT**<sup>®</sup>

- Affordable cost—\$12 per student tested for schools, districts, and states
- Flexible administration—Schools, districts, and/or states may administer on any date between September 1, 2016 and June 1, 2017
- Structured test environment—Similar to what the student will experience when taking the ACT test

### Online Prep **Live**

#### **ACT** KAPLAN

- A virtual classroom experience that delivers all the benefits of ACT Online Prep, plus an interactive teaching experience
- Live learning experiences available at no cost to students who register for the ACT using a fee waiver
- Recorded sessions available on demand to provide maximum flexibility to students

### **ACT**<sup>®</sup> **Aspire**<sup>®</sup>

- New Performance Level Descriptors coming in August 2016
- More than 5 million ACT Aspire online assessments administered to US students since January 2016, a major milestone for the program and up by more than 130% compared to the previous year
- New Score Reports

### **ACT**<sup>®</sup> **Engage**<sup>®</sup>

- Helps schools face the challenge of preparing students for success after high school. Read the latest white paper, *Identifying Skills to Succeed in School, at Work, and in the "Real World."*
- New Score Reports

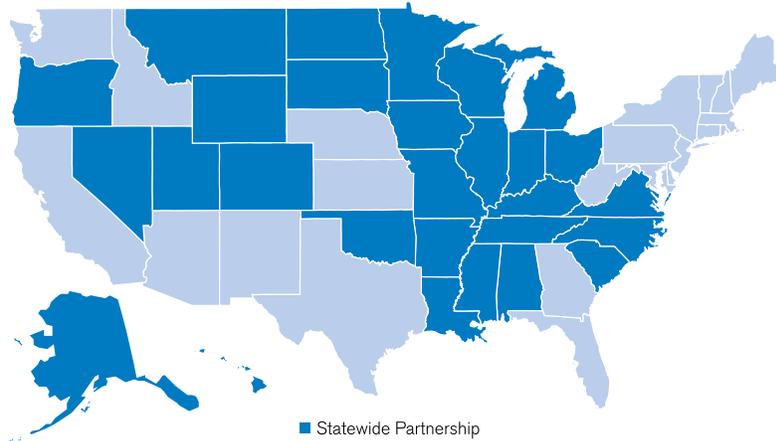
### **ACT**<sup>®</sup> **WorkKeys**<sup>®</sup>

- Updated versions of the ACT National Career Readiness Certificate (ACT NCRC) assessments and credential coming in summer 2017
- Fully updated ACT WorkKeys curriculum and test prep available in summer 2017 to support the updated ACT NCRC assessments
- Will include a new test delivery platform that will introduce features and functionality important to ACT WorkKeys customers

# Resources

## K–12 Statewide Partnerships in College and Career Readiness

States that incorporate ACT 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 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 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.

<b>ACT</b> Aspire <sup>®</sup>	<b>ACT</b> Online Prep	<b>The ACT</b>	<b>ACT</b> QualityCore <sup>®</sup>	<b>ACT</b> WorkKeys <sup>®</sup>	<b>ACT</b> National Career Readiness Certificate <sup>™</sup>
<b>3rd- through 8th-grade students</b>	<b>10th- and 11th-grade students</b>	<b>11th- and 12th-grade students</b>	<b>8th- through 12th-grade students</b>	<b>11th- and 12th-grade students</b>	<b>ACT National Career Readiness Certificate<sup>™</sup></b>
Alabama	Alabama	Alabama	Alabama	Alabama	Alabama
Arkansas	Montana	Alaska	Kentucky	Alaska	Alaska
Hawaii		Arkansas		Arkansas	Arkansas
		Colorado		Hawaii	Hawaii
		Hawaii		Illinois	Illinois
		Kentucky		Indiana	Indiana
		Louisiana		Iowa	Iowa
<b>8th- through 10th-grade students</b>		Minnesota		Kentucky	Kentucky
Alabama		Mississippi		Louisiana	Louisiana
Arkansas		Missouri		Michigan	Minnesota
Hawaii		Montana		Minnesota	Missouri
North Carolina		Nevada		Missouri	New Mexico
Wisconsin		North Carolina		New Mexico	North Carolina
Wyoming		North Dakota		North Carolina	
		Oklahoma			
		South Carolina			
		Tennessee			
		Utah			
		Wisconsin			
		Wyoming			

All listed partnerships are effective as of July 2016.

# ACT Research

The continued increase of test takers enhances the breadth and depth of the data pool, providing a comprehensive picture of the current college readiness levels of the graduating class as well as offering a glimpse of the emerging national educational pipeline. It also allows us to review various aspects of the ACT-tested graduating class, including the following reports:

## Releasing in the 2016–17 Academic Year

### *The Condition of STEM 2016*

- National report
- State reports

### *The Condition of College and Career Readiness 2016*

- National report
- State reports
- African American students
- American Indian students
- Asian American students

- Hispanic students
- Pacific Islander students
- First-generation students
- Linguistically diverse students
- Students from low-income families

## Other ACT Research Reports

### **College Choice Report (for the graduating class of 2014)**

- *Part 1: Expanding Opportunities: Preferences and Prospects*—November 2014
- *Part 2: Expanding Opportunities: Enrollment Patterns*—July 2015

### **College Choice Report 2015 (for the graduating class of 2015)**

To be notified of exact release dates, please go to: [www.act.org/research](http://www.act.org/research) and click on "Receive Updates."

## 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. ACT College Readiness Benchmarks were revised for 2013 graduating class reporting. 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

## Notes

1. States that expand college and career readiness testing to all students nearly always experience a decline in average scores in the first year due to the broadening of the testing base to include more than traditional self-selected, college-bound students. In states implementing the ACT as a statewide assessment, the actual number of students meeting the ACT College Readiness Benchmarks actually increases in many cases, even though the overall percentage may decline. This is due to more students participating while performance expectations are reframed by statewide initiatives. ACT research shows that this has occurred in at least half of the states where the ACT test has been utilized as a statewide exam; both average scores and percentages of students meeting Benchmark scores recovered in each of these states within a few years of initial adoption.
2. Data reflect subject-specific curriculum. For example, English "core or more" results pertain to students who took at least four years of English, regardless of courses taken in other subject areas.
3. The interest-major fit score measures the strength of the relationship between the student's profile of ACT Interest Inventory scores and the profile of students' interests in the major shown. Interest profiles for majors are based on a national sample of undergraduate students with a declared major and a GPA of at least 2.0. Major was determined in the third year for students in four-year colleges and in the second year for students in two-year colleges. Interest-major fit scores range from 0–99, with values of 80 and higher indicating good fit.

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/condition2016](http://www.act.org/condition2016)**

