

## The Condition of College and Career Readiness

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 information and solutions to support the following:

- **Holistic view of readiness.** The 2014 ACT report, *Broadening the Definition of College and Career Readiness: A Holistic Approach*, shows academic readiness is only one of four critical domains in determining an individual's readiness for success in college and career. Cross-cutting capabilities, behavioral skills, and the ability to navigate future pathways are also important factors to measure and address. Together, these elements define a clear picture of student readiness for postsecondary education.
- **Providing meaningful data for better decisions.** ACT is focused on providing better 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.

# The Condition of College & Career Readiness 2016

## Iowa Key Findings

### Performance

- The class of 2016 had 23,132 graduates taking the ACT (up 457 from 2015). The average ACT scale scores (reportable) in Iowa were unchanged in two subjects and dropped slightly in two areas from 2015 to 2016
  - ~ English decreased by 0.2 point from 21.6 to 21.4 (1.3 higher than US)
  - ~ Mathematics decreased by 0.1 point from 21.5 to 21.4 (0.8 higher than US)
  - ~ Reading remained at 22.7 (1.4 higher than US)
  - ~ Science stayed the same at 22.3 (1.5 higher than US)
  - ~ ACT Composite score decreased by 0.1 point from 22.2 to 22.1 (1.3 higher than US)
  - ~ All of the average national ACT scale scores decreased
    - English dropped 0.3
    - Mathematics and Composite dropped by 0.2
    - Reading and science dropped by 0.1
- The percent meeting the ACT College Readiness Benchmarks for Iowa compared to national results:
  - ~ English, 73%—12% over national performance
  - ~ Mathematics, 48%—7% over national performance
  - ~ Reading, 55%—11% over national performance
  - ~ Science, 46%—10% over national performance
  - ~ All four Benchmarks, 32%—6% over national performance

### STEM

- Iowa students who took advanced science and math courses show higher levels of achievement:
  - ~ Students who took physics earned significantly higher average ACT science scores and were more likely to meet or surpass the ACT College Readiness Benchmark in science than those who did not.
  - ~ Students who took a fourth year of math in high school, regardless of course, significantly outperformed those students who did not, in both ACT mathematics scores and in Benchmark attainment.
- ACT is now providing a STEM score based on the student performance on the ACT mathematics and science tests. The Iowa STEM score average was 22.1, compared to the national average of 20.9.
- 23% of the Iowa ACT-tested students met or exceeded the ACT STEM Benchmark of 26, compared to 20% nationally.

### 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 state ACT Profile Report details how ACT-tested Iowa 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.
- In Iowa, 82% of ACT tested graduates are considered making progress towards at least a gold ACT NCRC level. This compares to 68% nationally.



## Behaviors that Impact Access and Opportunity

- Testing patterns
  - ~ 46% of Iowa ACT-tested graduates took the exam only once, below the 57% of ACT-tested graduates nationwide who took the exam once.
  - ~ Of the class of 2016 who took the ACT during their 10th-, 11th-, or 12th-grade year:
    - 42.4% of White students, 51.8% of Hispanic students, and 53.8% of African American students took the exam only once.
    - 57.6% of White students, 48.2% of Hispanic students, and 46.2% of African American students tested more than once.
    - 17.3% of White students, 26.9% of Hispanic students, and 27.3% of African American students took their first and only test as a senior.
- Over the last five years, the racial/ethnic makeup of the ACT-tested population in Iowa has remained fairly stable.
  - ~ In 2012, White students made up 84% of the testing population. This decreased to 78% in 2016. The average ACT Composite score has fluctuated between 22.5 and 22.7.
  - ~ In 2012, Hispanic students made up 5% of the testing population. This increased to 6% in 2016. The average ACT Composite score has fluctuated between 19.3 and 19.8.
  - ~ In 2012, African American students made up 3% of the testing population. This remained at 3% through 2016. The average ACT Composite has fluctuated between 17.6 and 17.9.
- Below are the top five institutions to which Iowa students submitted their ACT scores:
  1. Iowa State University
  2. University of Iowa
  3. University of Northern Iowa
  4. Kirkwood Community College
  5. Des Moines Area Community College
- Four of the top 20 colleges where Iowa students submitted their ACT scores were out of state:
  - ~ Northwest Missouri State University
  - ~ University of South Dakota
  - ~ University of Minnesota—Twin Cities
  - ~ South Dakota State University
- The ACT Educational Opportunity Service (EOS) is an excellent way to get students in the postsecondary pipeline, allowing them to explore their interests and postsecondary options. It also enables institutions to seek out applicants that may be a good match. Nationally, 73.1% of ACT-tested students opt in to EOS. Below are opt-in rates by subgroups in Iowa:
  - ~ 84.3% of African American students
  - ~ 72.4% of White students
  - ~ 85.1% of Hispanic/Latino students
  - ~ 80.3% of students who reported more than one race or did not report a race/ethnicity.

- Fee Waiver Usage
  - ~ In Iowa, there were 3,192 fee waivers issued and 2,584 of those were used. This equates to a 81.0% usage rate. The national rate was 74.5%.
  - ~ ACT provides students fee waivers to provide more access and opportunity for students.

## Pipeline

- The top educational majors for Iowa students are:
  - ~ Health Science and Technologies
  - ~ Business
  - ~ Engineering
- Students planning two years of college or less (22% listed undecided or no response\*)
  - ~ Health Science and Technologies
  - ~ Repair, Production and Construction
  - ~ Business
- Students planning four years of college or more (21% undecided; > 1% no response\*)
  - ~ Health Science and Technologies
  - ~ Business
  - ~ Engineering

*\*Students reported "Undecided" or chose not to respond when asked about planned major. ACT Profile, if provided early in high school, can offer tools and resources that will assist students in creating a meaningful path toward life after high school.*

## ACT Footprint

ACT Aspire® Summative	ACT Aspire® Periodic	ACT Engage®	ACT QualityCore®	PreACT™	ACT WorkKeys®
6,659	5,132	1,196	4	1,071*	48,685

\* PreACT refers to preorders for FY17.

*These are the number of each of these assessments delivered in the state and not reflective of the 2016 ACT-tested graduating class.*

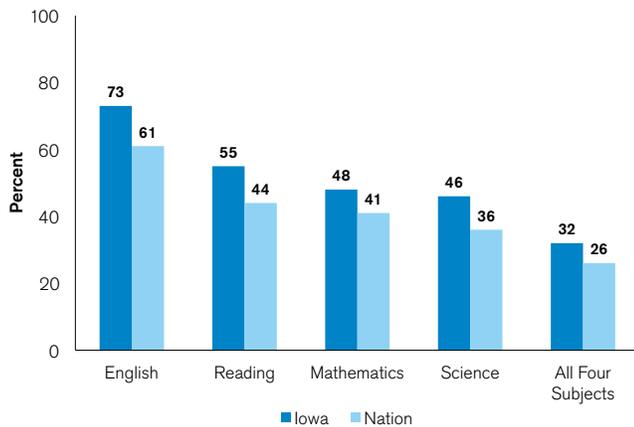
## Special State Talking Points

- In 2016, ACT honored exemplars in 41 states as part of our ACT College & Career Readiness Campaign. In Iowa, these honorees include:
  - ~ High School—George Washington High School
  - ~ Student—Nada Ibrahim, West High School
- In March 2016, 129 educators, organization representatives, and partners attended the Iowa ACT State Organization conference.

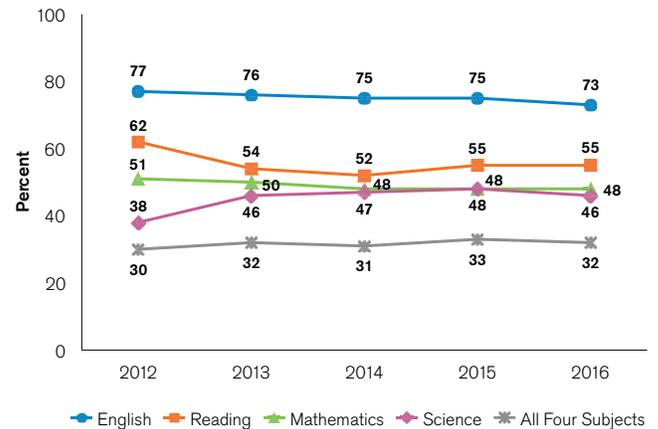
# Your State College and Career Readiness Attainment, Participation, and Opportunity

Iowa

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\*



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.

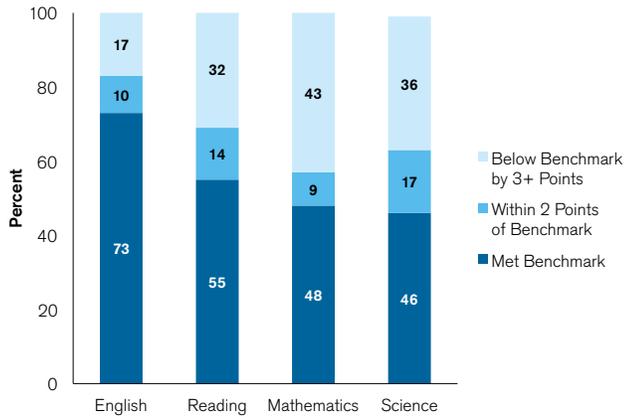
## Student Data Trends

- Between 2012 and 2016, the number of students taking the ACT in Iowa increased by 0.1%.

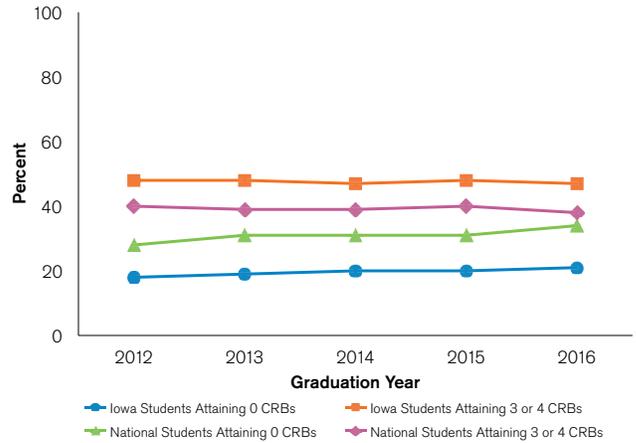
Student Condition Data Interest Trends: 2012–2016, State vs. Nation

Outcome	Cohort	2012	2013	2014	2015	2016
Percent Tested	Iowa	63%	66%	68%	67%	68%
	Nation	52%	54%	57%	59%	64%
N Tested	Iowa	23,119	22,526	22,931	22,675	23,132
	Nation	1,666,017	1,799,243	1,845,787	1,924,436	2,090,342
Average English Score	Iowa	21.6	21.5	21.5	21.6	21.4
	Nation	20.5	20.2	20.3	20.4	20.1
Average Reading Score	Iowa	22.5	22.5	22.5	22.7	22.7
	Nation	21.3	21.1	21.3	21.4	21.3
Average Mathematics Score	Iowa	21.7	21.6	21.4	21.5	21.4
	Nation	21.1	20.9	20.9	20.8	20.6
Average Science Score	Iowa	22.2	22.2	22.2	22.3	22.3
	Nation	20.9	20.7	20.8	20.9	20.8
Average Composite Score	Iowa	22.1	22.1	22	22.2	22.1
	Nation	21.1	20.9	21	21	20.8

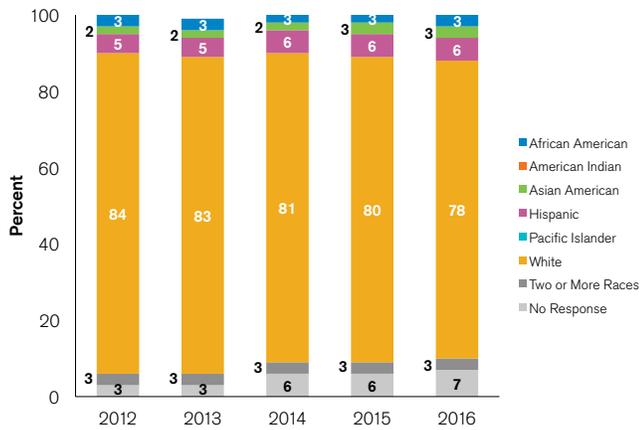
**Percent of 2016 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject**



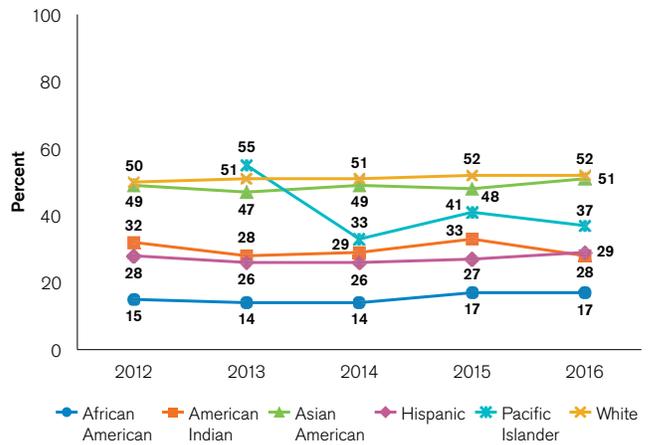
**Trends in Percent of ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks (CRBs) Attained**



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

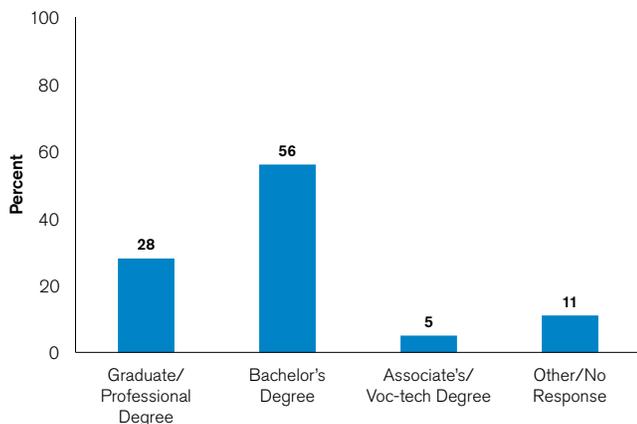


**Percent of 2012–2016 ACT-Tested High School Graduates Meeting Three or More Benchmarks by Race/Ethnicity**



Note: Values less than 0.5% will not appear.

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



There is good news in that 89% of Iowa's 2016 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 90% of Iowa's 2015 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 76% who actually did enroll. If we fully closed the aspirational gap, an additional 3,159 of the 2015 ACT-tested graduates from Iowa would have enrolled in postsecondary education.

## 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<sup>®</sup> 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

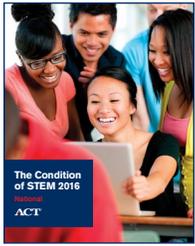
### ACT<sup>®</sup> Engage<sup>®</sup>

- 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

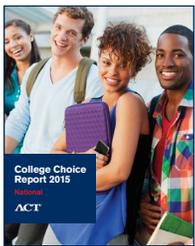
## Key ACT Research



### **The Condition of STEM 2016— Releasing November 2016**

This report provides national and state data about the 2016 graduating class in

the context of STEM-related fields (Science, Technology, Engineering, Mathematics) to determine student interest levels in specific STEM fields and, more importantly, readiness in math and science of those interested in STEM careers.



### **College Choice Report 2015**

This report follows the ACT-tested high school graduating class of 2015, focusing on specific testing behaviors that

may expand college opportunities available to students. This is an important topic for enrollment managers and admissions officers to consider, as students' participation in these testing behaviors have implications for colleges' chances to recruit, advise, and place these prospective students.

## 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."