The Condition of College & Career Readiness 2016

Alaska Key Findings

Performance

- In Alaska, 3,895 students in the 2016 graduating class took the ACT. This is an increase of 1,027 students from 2,868 in 2015.
- The 2016 results reflect a change in overall percentage of students meeting the ACT College Readiness Benchmarks across all content areas: English, mathematics, reading, and science. It is important to note that when a cohort grows this rapidly, it is common to see a decrease in performance. For Alaska, there were the following declines:
  - A 9% decrease in English
  - An 8% decrease in mathematics and reading
  - A 6% decrease in science
  - A 6% decrease in students meeting all four Benchmarks
- Relative to ACT Composite score and subject-level scores, Alaska 2016 ACT results include the following:
  - The average Composite score decreased by 1.1 from 2015.
  - While the number of students in most race/ethnicity brackets have shown a steady increase over the past five years, the proportion of White students in the testing pool has shown a steady decline, both in numbers of students and percentages, across years 2012 to 2016—from 54% to 46%.
  - The average state Composite score, 20.0, currently lags behind the national average of 20.8.
  - 47% of the Alaska 2016 graduating class reported taking "Core or More." This is a significant decline from 2015, where 60% of the graduating class reported taking "Core or More." Across all content areas, students who reported taking "Core or More" significantly outperformed those students who reported taking "Less than Core." Overall, students who took core coursework averaged a Composite score of 22.1 vs. non-core-taking students, who averaged 18.6.

STEM

- Alaska graduates who took advanced science and math courses show higher levels of achievement:
  - Students who reported taking biology, chemistry, and physics earned significantly higher average ACT science scores than students who reported taking general science, biology, and chemistry.
  - Students who reported taking algebra 1, algebra 2, geometry, trigonometry, and calculus scored significantly higher than those students who did not.
- STEM Benchmark
  - 16% of Alaska students met the STEM Benchmark in 2016.
  - The average Alaska ACT STEM score was 20.2, while the national average ACT STEM score was 20.9.
  - Of the Alaska students meeting the STEM Benchmarks:
    - The average Alaska ACT mathematics score was 28.3, while the national average ACT mathematics score was 28.7. (The math STEM Benchmark is 27.)
    - The average Alaska ACT science score was 28.1, while the national average ACT science score was 28.6. (The science STEM Benchmark is 25.)
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 Alaska 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 Alaska, 63% 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

The percent of Alaska ACT-tested graduates who took the exam only one time, 75%, is substantially higher than the national average of 57%.

- Testing only once could impact the number of students who meet the qualifying scores for the scholarship from Alaska’s Postsecondary Commission.

Below are the top four colleges and universities to which Alaska graduates sent their ACT scores:

- University of Alaska Anchorage
- University of Alaska Fairbanks
- University of Alaska Southeast
- Alaska Pacific University

University of Washington is the out-of-state school that receives the most scores from Alaska students.

64.9% of Alaska students who registered for the ACT opted to participate in the ACT Educational Opportunity Service (EOS) for recruitment and scholarship opportunities across the country. This is lower than the national average of 73.1%.

Fee Waiver Usage

- In Alaska, there were 482 fee waivers issued and 341 of those were used. This equates to a 70.8% usage rate. The national rate was 74.5%. ACT provides students fee waivers to provide more access and opportunity for students.
- 37.2%, or 45, of fee waivers issued to American Indian/Alaska Native students were not used.
- ACT offers fee waivers to provide more access and opportunity for students.

Pipeline

The top five educational majors reported by the 2016 Alaska graduating class are:

- Health Sciences and Technologies—554 students; average Composite score of 20.4
- Undecided—462 students; average Composite score of 20.6
- Engineering—331 students; average Composite score of 23.5
- Sciences: Biological and Physical—241 students; average Composite score of 23.6
- Business—234 students; average Composite score of 20.3

Only 172 students (4% of the graduating class) are interested in education as a career.

Aspirations count. In Alaska:

- 194 students aspiring to earn an associate’s degree had an average Composite score of 16.8.
- 1,505 students aspiring to earn a bachelor’s degree had an average Composite score of 20.1.
- 430 students aspiring to earn a graduate degree had an average Composite score of 23.5.

ACT Footprint

<table>
<thead>
<tr>
<th>ACT Aspire® Summative</th>
<th>ACT Aspire® Periodic</th>
<th>ACT Engage®</th>
<th>ACT QualityCore®</th>
<th>PreACT™</th>
<th>ACT WorkKeys®</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>35*</td>
<td>13,707</td>
</tr>
</tbody>
</table>

* PreACT refers to preorders for FY17.

Special State Talking Points

- 2016 College and Career Readiness Campaign award recipients:
  - Employer: Bullwinkle’s Pizza (national semi-finalist)
  - Community College: Alaska College of Science
  - High School: Ronald N. Davies High School
  - Student: Sarah LaVallie (Turtle Mountain Community High School)

- ACT conducted three ACT College and Career Readiness Workshops in Alaska—in Juneau, Fairbanks, and Anchorage.
### Percent of 2016 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject

<table>
<thead>
<tr>
<th>Subject</th>
<th>Alaska</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>55%</td>
<td>61%</td>
</tr>
<tr>
<td>Reading</td>
<td>42%</td>
<td>44%</td>
</tr>
<tr>
<td>Mathematics</td>
<td>37%</td>
<td>41%</td>
</tr>
<tr>
<td>Science</td>
<td>31%</td>
<td>36%</td>
</tr>
<tr>
<td>All Four Subjects</td>
<td>22%</td>
<td>26%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Year</th>
<th>English</th>
<th>Reading</th>
<th>Mathematics</th>
<th>Science</th>
<th>All Four Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>67%</td>
<td>56%</td>
<td>65%</td>
<td>63%</td>
<td>64%</td>
</tr>
<tr>
<td>2013</td>
<td>55%</td>
<td>48%</td>
<td>48%</td>
<td>45%</td>
<td>45%</td>
</tr>
<tr>
<td>2014</td>
<td>48%</td>
<td>38%</td>
<td>36%</td>
<td>37%</td>
<td>36%</td>
</tr>
<tr>
<td>2015</td>
<td>42%</td>
<td>37%</td>
<td>37%</td>
<td>31%</td>
<td>31%</td>
</tr>
<tr>
<td>2016</td>
<td>37%</td>
<td>31%</td>
<td>31%</td>
<td>22%</td>
<td>22%</td>
</tr>
</tbody>
</table>

* ACT College Readiness Benchmarks in reading and science were revised in 2013.

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

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### Student Data Trends

- Between 2012 and 2016, the number of students taking the ACT in Alaska increased by 49.9%.

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

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Tested</td>
<td>Alaska</td>
<td>35%</td>
<td>37%</td>
<td>37%</td>
<td>39%</td>
<td>53%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nation</td>
<td>52%</td>
<td>54%</td>
<td>57%</td>
<td>59%</td>
<td>64%</td>
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</tr>
<tr>
<td>N Tested</td>
<td>Alaska</td>
<td>2,598</td>
<td>2,724</td>
<td>2,659</td>
<td>2,868</td>
<td>3,895</td>
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<tr>
<td></td>
<td>Nation</td>
<td>1,666,017</td>
<td>1,799,243</td>
<td>1,845,787</td>
<td>1,924,436</td>
<td>2,090,342</td>
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<tr>
<td>Average English Score</td>
<td>Alaska</td>
<td>20.3</td>
<td>20.1</td>
<td>19.9</td>
<td>20.1</td>
<td>18.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nation</td>
<td>20.5</td>
<td>20.2</td>
<td>20.3</td>
<td>20.4</td>
<td>20.1</td>
<td></td>
</tr>
<tr>
<td>Average Reading Score</td>
<td>Alaska</td>
<td>21.8</td>
<td>21.7</td>
<td>21.6</td>
<td>21.9</td>
<td>20.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nation</td>
<td>21.3</td>
<td>21.1</td>
<td>21.3</td>
<td>21.4</td>
<td>21.3</td>
<td></td>
</tr>
<tr>
<td>Average Mathematics Score</td>
<td>Alaska</td>
<td>21.3</td>
<td>21.2</td>
<td>21.1</td>
<td>21.1</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nation</td>
<td>21.1</td>
<td>20.9</td>
<td>20.9</td>
<td>20.8</td>
<td>20.6</td>
<td></td>
</tr>
<tr>
<td>Average Science Score</td>
<td>Alaska</td>
<td>20.8</td>
<td>21</td>
<td>20.8</td>
<td>20.9</td>
<td>19.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nation</td>
<td>20.9</td>
<td>20.7</td>
<td>20.8</td>
<td>20.9</td>
<td>20.8</td>
<td></td>
</tr>
<tr>
<td>Average Composite Score</td>
<td>Alaska</td>
<td>21.2</td>
<td>21.1</td>
<td>21</td>
<td>21.1</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nation</td>
<td>21.1</td>
<td>20.9</td>
<td>21</td>
<td>21</td>
<td>20.8</td>
<td></td>
</tr>
</tbody>
</table>

Note: Percent Tested in the table above includes students who met one or more benchmarks.

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

Alaska
There is good news in that 71% of Alaska’s 2016 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 80% of Alaska’s 2015 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 65% who actually did enroll. If we fully closed the aspirational gap, an additional 446 of the 2015 ACT-tested graduates from Alaska 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.

<table>
<thead>
<tr>
<th>The ACT</th>
<th>ACT Aspire</th>
<th>The ACT</th>
<th>ACT WorkKeys</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Enhancements to ACT Score Reports starting in September 2016</td>
<td>• New Performance Level Descriptors coming in August 2016</td>
<td>• Affordable cost—$12 per student tested for schools, districts, and states</td>
<td>• Updated versions of the ACT National Career Readiness Certificate (ACT NCRC) assessments and credential coming in summer 2017</td>
</tr>
<tr>
<td>• Introduction of ACT Kaplan Online Prep Live in September 2016</td>
<td>• 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</td>
<td>• Flexible administration—Schools, districts, and/or states may administer on any date between September 1, 2016 and June 1, 2017</td>
<td>• Fully updated ACT WorkKeys curriculum and test prep available in summer 2017 to support the updated ACT NCRC assessments</td>
</tr>
<tr>
<td>• New Score Reports</td>
<td>• New Score Reports</td>
<td>• Structured test environment—Similar to what the student will experience when taking the ACT test</td>
<td>• Will include a new test delivery platform that will introduce features and functionality important to ACT WorkKeys customers</td>
</tr>
</tbody>
</table>

Pre ACT

• 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

• 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

www.act.org/condition2016
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.”