

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

Pennsylvania Key Findings

Performance

- A record number of Pennsylvania 2016 graduates—31,342—took the ACT, up from 25,426 in 2012.
- Pennsylvania students continue to outperform the nation in percent of students meeting the ACT College Readiness Benchmarks and in the category of meeting all four Benchmarks. Pennsylvania also showed an increase in the percent of students meeting all four Benchmarks.
- With the STEM initiatives under way by both the Secretary and the Governor, it is important to point out that the percent of students meeting the science Benchmark since 2013 has increased by 5%.
- In 2016, African American students showed an improvement in their composite score of 0.4 points over the previous year.
- 81% of the students reported taking “core or more,” and they outperformed those that reported taking “less than core.”

STEM

- Students who took at least four years of math were more likely to meet the mathematics Benchmark than those who did not.
- The majority of Pennsylvania students reported taking a course pattern other than the traditional (algebra 1, algebra 2, geometry, other math). This was a very high-performing group.
- On the ACT science test, Pennsylvania students who took physics outperformed the national average of students who also took physics. Furthermore, 75% of Pennsylvania students who took the ACT indicated they took physics, compared to 51% of students nationally.
 - ~ Students who took physics were much more likely to meet the science Benchmark than those who did not.
- STEM Benchmark
 - ~ 33% of Pennsylvania students met the STEM Benchmark. This is significantly higher than the national average of 20% and also represents an increase from 31% the prior year. The number of Pennsylvania students meeting the STEM Benchmark has steadily increased over the past five years.

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 Pennsylvania 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 Pennsylvania, 83% 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
 - ~ 29.7% of White students, 28.5% of Hispanic students, and 36.7% of African American students tested more than once.
 - ~ 87.4% of White students who tested at least twice and who first tested in their junior year increased their Composite score by 0.9 point and scored 1.5 points higher than 11th-grade White students who tested only once.
 - ~ 85.7% of Hispanic students who tested at least twice and who first tested in their junior year increased their score by 0.7 point and scored 1.4 points higher than 11th-grade Hispanic students who tested only once.
 - ~ 86.5% of African American students who tested at least twice and who first tested in their junior year increased their score by 0.4 point and scored 1.3 points higher than 11th-grade African American students who tested only once
- Fee Waiver Usage
 - ~ In Pennsylvania, there were 7,398 fee waivers issued and 5,001 of those were used. This equates to a 67.6% usage rate. The national rate was 74.5%.
 - ~ 51.0%, or 1,218, of all unused fee waivers were issued to African American students.
 - ~ ACT provides students fee waivers to provide more access and opportunity for students.
- ACT Educational Opportunity Service (EOS) Opt-In Rates
 - ~ EOS is a service that allows for students to receive free exposure, for recruiting purposes, to scholarship agencies and colleges and universities. 65.1% of the students tested in Pennsylvania opted in to EOS. This compares to 73.1% nationally.
- “Get Your Name In The Game”
 - ~ “Get Your Name In The Game” is an initiative that offers colleges, universities, and scholarship agencies unprecedented access to the names of underserved students participating in EOS. In Pennsylvania, there were a total of 85,579 names accessed by 23 schools. The two schools using this program the most were University of Pittsburgh (22,238 names) and Albright College (11,655 names).

Pipeline

- Aspirations matter. Students who have aspirations of higher educational levels achieve higher ACT scores:
 - ~ Students who aspire to a professional degree had an average Composite score of 25.1.
 - ~ Students who aspire to a graduate degree had an average Composite score of 24.7.
 - ~ Students who aspire to bachelor’s degree had an average Composite score of 21.7.
 - ~ Students who aspire to a two-year degree had an average Composite of 17.6.
- The top colleges and universities to which Pennsylvania graduates sent their ACT scores were Pennsylvania State University, University of Pittsburgh, Temple University, West Chester University, and Drexel University.
- The top out-of-state colleges, universities, and programs to which Pennsylvania graduates sent their ACT scores were, University of Delaware, Ohio State University, University of Maryland, and Kent State University.
- The chart below show students’ interests (majors indicated on the ACT).

	Student Interest
1	Health Science and Technologies
2	Business
3	Science – Biological and Physical
4	Engineering
5	Social Sciences and Law

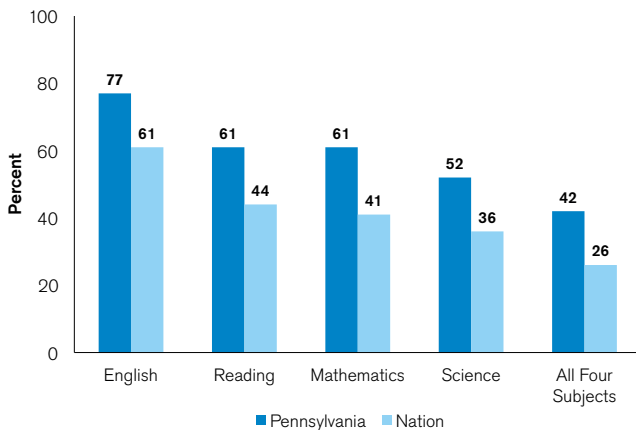
ACT College and Career Readiness Workshops

- Each year, ACT conducts College and Career Readiness Workshops in every state. This past year, 125 educators from across Pennsylvania attended one of these workshops.

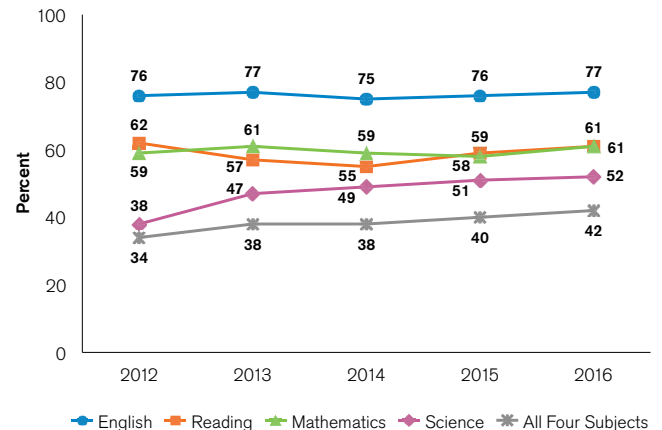
Your State College and Career Readiness Attainment, Participation, and Opportunity

Pennsylvania

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.

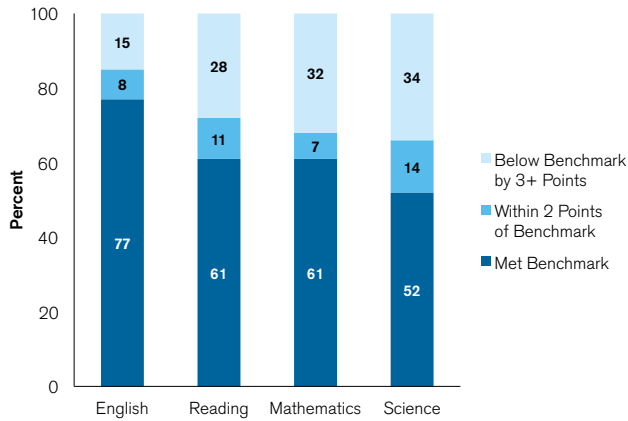
Student Data Trends

- Between 2012 and 2016, the number of students taking the ACT in Pennsylvania increased by 23.3%.

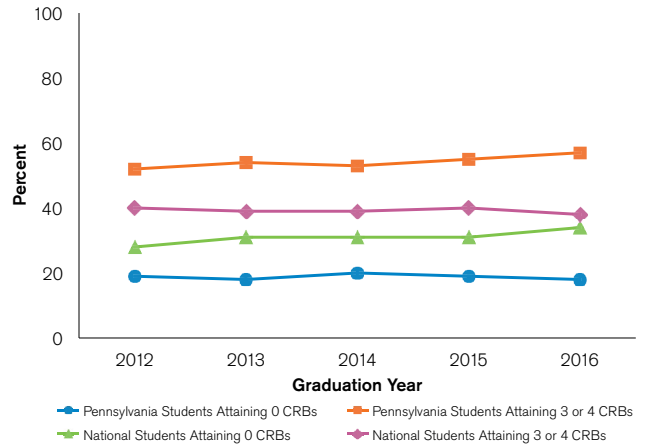
Student Condition Data Interest Trends: 2012–2016, State vs. Nation

Outcome	Cohort	2012	2013	2014	2015	2016
Percent Tested	Pennsylvania	18%	18%	19%	22%	23%
	Nation	52%	54%	57%	59%	64%
N Tested	Pennsylvania	25,426	26,171	27,136	29,776	31,342
	Nation	1,666,017	1,799,243	1,845,787	1,924,436	2,090,342
Average English Score	Pennsylvania	22	22.2	22.1	22.5	22.6
	Nation	20.5	20.2	20.3	20.4	20.1
Average Reading Score	Pennsylvania	22.7	23	23	23.2	23.6
	Nation	21.3	21.1	21.3	21.4	21.3
Average Mathematics Score	Pennsylvania	22.7	23	22.8	22.8	23
	Nation	21.1	20.9	20.9	20.8	20.6
Average Science Score	Pennsylvania	21.9	22.2	22.2	22.5	22.8
	Nation	20.9	20.7	20.8	20.9	20.8
Average Composite Score	Pennsylvania	22.4	22.7	22.7	22.9	23.1
	Nation	21.1	20.9	21	21	20.8

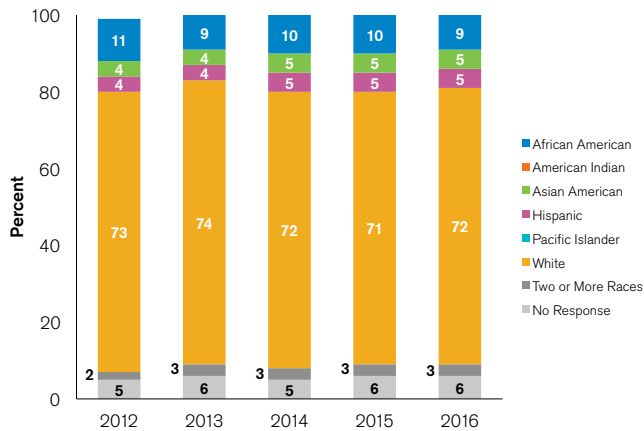
Percent of 2016 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject



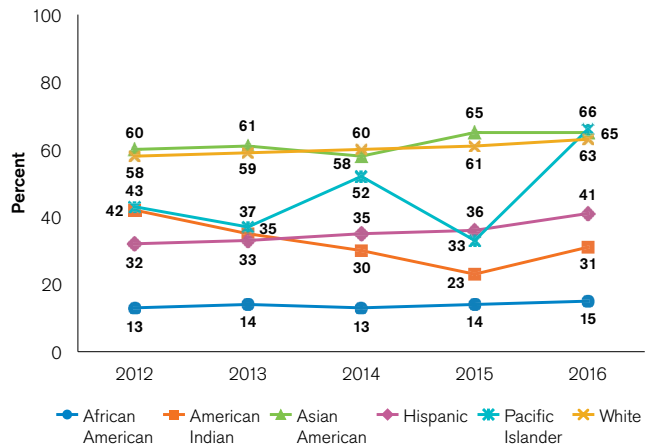
Trends in Percent of ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks (CRBs) Attained



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

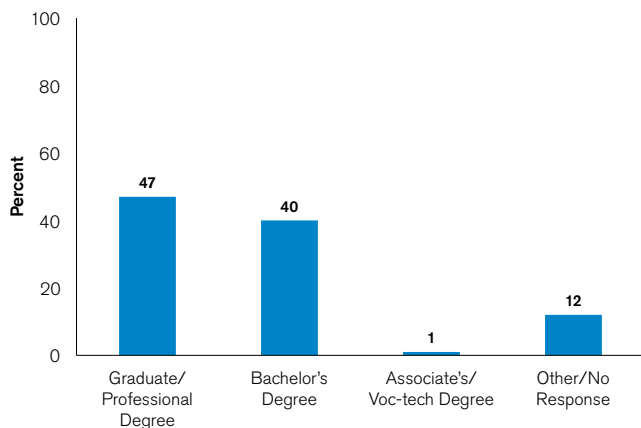


Percent of 2012–2016 ACT-Tested High School Graduates Meeting Three or More Benchmarks by Race/Ethnicity



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 88% of Pennsylvania's 2016 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 86% of Pennsylvania's 2015 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 84% who actually did enroll. If we fully closed the aspirational gap, an additional 592 of the 2015 ACT-tested graduates from Pennsylvania 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[®]

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

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

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[®] Aspire[®]

- 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

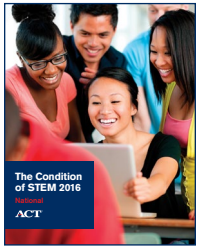
ACT[®] Engage[®]

- 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[®] WorkKeys[®]

- 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

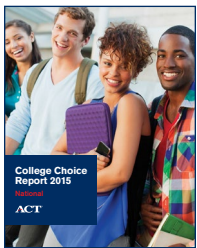
Key ACT Research



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."