

The Condition of College & Career Readiness

This report looks at the achievement of the ACT®-tested 2017 graduating class relative to college and career readiness. A total of 60% of students in the 2017 US graduating class took the ACT® test, compared to 64% last year, 54% in 2013, and 42% in 2007. The growing percentage of the nation's graduates taking the ACT over the past decade has enhanced the breadth and depth of the data pool, providing a comprehensive picture of the current graduating class in the context of college readiness.

As a research-based nonprofit organization, ACT is committed to providing information and solutions to support the following:

- **Holistic view of readiness.** The ACT report, *Broadening the Definition of College and Career Readiness: A Holistic Approach*, shows academic readiness is only one of multiple domains critical in determining an individual's readiness for success in college and career. Social and emotional learning skills (SEL) are also vital. Behavioral skills, cross-cutting capabilities, and navigational skills should be measured and addressed. Together, these elements provide a comprehensive picture of student readiness for success after high school.
- **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 educational 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 2017

Kentucky Key Findings

Performance

- In the Kentucky graduating class of 2017, 51,203 graduates took the ACT® test, compared to 49,551 in 2013.
- Kentucky graduates of 2017 had an average Composite score of 20.0, compared to the national average of 21.0.
 - ~ Kentucky African American 2017 graduates who took the ACT had an average Composite score of 17.0. This compares to average Composite scores of 16.9 and 16.4 for graduating classes from 2016 and 2013, respectively.
 - ~ Kentucky White 2017 graduates who took the ACT had an average Composite score of 20.7. This compares to average Composite scores of 20.7 and 20.2 for graduating classes from 2016 and 2013, respectively.
 - ~ Kentucky Hispanic 2017 graduates who took the ACT had an average Composite score of 18.9. This compares to average Composite scores of 18.6 and 18.4 for graduating classes from 2016 and 2013, respectively.
- Compared to the 2017 Kentucky graduating class Composite average of 20.0, Kentucky graduates in 2016 and 2013 had Composite averages of 20.0 and 19.6, respectively.
- In Kentucky, 100 percent of 2017 graduates took the ACT, compared to 60 percent nationally.
- In 2017, 20 percent of Kentucky graduates met all four ACT College Readiness Benchmarks. This compares to 20 and 18 percent of 2016 and 2013 graduates, respectively.
 - ~ In 2017, 31 percent of Kentucky graduates met the ACT Science College Readiness Benchmark. This compares to 30 and 28 percent of 2016 and 2013 graduates, respectively.
 - ~ 34 percent of Kentucky 2017 graduates taking three or more years of science met the ACT Science College Readiness Benchmark. This compares to 14 percent of students taking less than three years of science.

STEM

- In 2017, 24,571 Kentucky graduates (48 percent) indicated having an interest in STEM majors and/or careers.
- ACT Science College Readiness Benchmark attainment is associated with advanced and more rigorous coursework. As an example, 39 percent of Kentucky graduates taking physics met the benchmark, compared to 25 percent for those not taking physics.

Career Readiness

- In 2017, 10,182 Kentucky graduates (20 percent) were likely to attain the Gold ACT WorkKeys® National Career Readiness Certificate® or higher, based upon ACT Composite score, compared to 538,392 (27 percent) nationally.
 - ~ The ACT Composite scores associated with a 50% chance of earning each ACT WorkKeys NCRC® level or higher are: 13 for Bronze, 17 for Silver, 25 for Gold, and 35 for Platinum. Based on those cut scores, students who earned an ACT Composite score of less than 13 would be classified as "Needs Improvement," 13 to 16 as "Bronze," 17 to 24 as "Silver," and 25 or above as "Gold or Higher." For comparison, individual student score reports classify those who scored 12 to 13, 14 to 17, and 18 and higher as making progress toward Bronze, Silver, and Gold certificates.

Impact

- Based on the actual test volume and ACT score distributions of 2016 ACT-tested Kentucky high school graduates, ACT research estimates that an increase of 0.1 in state average ACT Composite score for the 2017 graduating class would result in:
 - ~ 107 more students enrolling in college.
 - ~ 128 more students persisting to year two.
 - ~ 104 fewer students needing remedial English.
 - ~ 206 fewer students needing remedial math.
 - ~ 145 more students persisting to year four.
 - ~ 157 more students earning a postsecondary degree within six years.

Behaviors that Impact Access and Opportunity

- In Kentucky, 2017 graduates taking the ACT two or more times had an average Composite score of 22.2, compared to 17.7 for single-time testers.
- For Kentucky's 2017 ACT-tested graduates, the top five schools to which scores were sent were University of Kentucky, Western Kentucky University, University of Louisville, Eastern Kentucky University, and Morehead State University.
 - ~ For Kentucky's 2017 ACT-tested graduates, the top three out-of-state schools to which scores were sent were University of Cincinnati, The Ohio State University, and Vanderbilt University.
- Compared to 73 percent of 2017 graduates nationally, 76 percent of Kentucky graduates opted into EOS.
 - ~ Compared to 85 percent of African American students nationally, 84 percent of Kentucky African American 2017 graduates opted into EOS.
 - ~ Compared to 76 percent of American Indian students nationally, 72 percent of Kentucky American Indian 2017 graduates opted into EOS.
 - ~ Compared to 69 percent of White students nationally, 77 percent of Kentucky White 2017 graduates opted into EOS.
 - ~ Compared to 83 percent of Hispanic students nationally, 83 percent of Kentucky Hispanic 2017 graduates opted into EOS.
 - ~ Compared to 76 percent of Asian students nationally, 85 percent of Kentucky Asian 2017 graduates opted into EOS.
 - ~ Compared to 77 percent of Pacific Islander students nationally, 84 percent of Kentucky Pacific Islander 2017 graduates opted into EOS.
- ACT issued 15,840 ACT fee waivers to Kentucky students who qualify. However, 4,669 students (29 percent) did not take advantage of this opportunity to test for free. This compares to 656,061 issued nationally, of which 181,092 (28 percent) did not take advantage. Fee waivers represent a great opportunity for students with socio-economic challenges to retest without incurring any fees.

Pipeline

- In the Kentucky graduating class of 2017, 12,950 (25 percent) had parents who did not attend college.
 - ~ This compares to 18% of ACT-tested students nationally.
- In the Kentucky graduating class of 2017, 9,698 (19 percent) aspired to attain a professional degree. They had an average Composite score of 22.9.
- In the Kentucky graduating class of 2017, 5,447 (11 percent) aspired to attain a graduate degree. They had an average Composite score of 23.3.
- In the Kentucky graduating class of 2017, 21,631 (42 percent) aspired to attain a bachelor's degree. They had an average Composite score of 20.0.
- In the Kentucky graduating class of 2017, 4,070 (8 percent) aspired to attain an associate's degree. They had an average Composite score of 16.6.
- In order of prevalence, the five most commonly indicated college majors of interest for 2017 Kentucky graduates were: Undecided; Nursing, Registered (BS/RN); Medicine (Pre-Medicine); Business Administration and Management, General; and Engineering (Pre-Engineering), General.
 - ~ In the Kentucky graduating class of 2017, 5,804 (11 percent) indicated being undecided about their college major. They had an average Composite score of 20.5.
 - ~ In the Kentucky graduating class of 2017, 2,578 (5 percent) indicated planning on majoring in education. They had an average Composite score of 20.5.

ACT Footprint

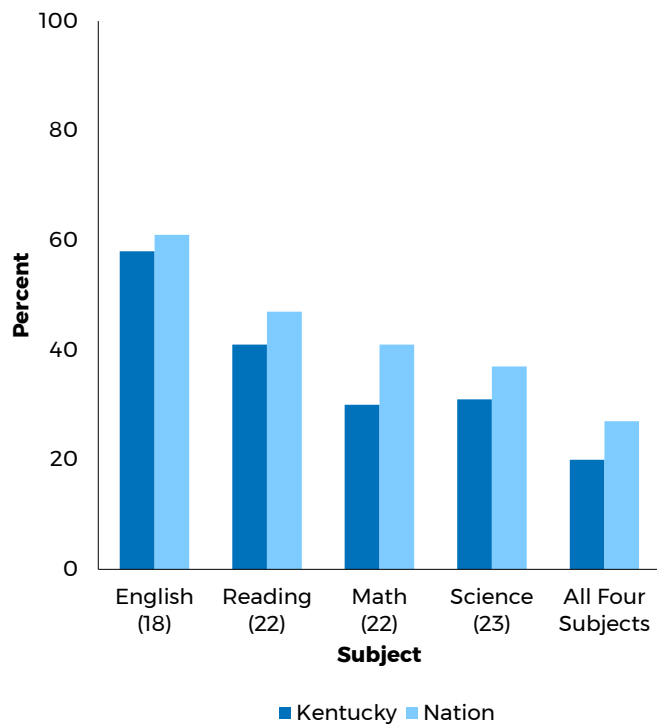
- Number of administrations:
 - ~ PreACT®: 4,954
 - ~ ACT WorkKeys: 68,866
 - ~ ACT Aspire® Summative: 9,746
 - ~ ACT Aspire Periodic: 5,282
 - ~ ACT Engage®: 558

Additional Points

- In 2017, 58 percent of Kentucky graduates met the Kentucky English College Readiness Benchmark.
- In 2017, 44 percent of Kentucky graduates met the Kentucky Math College Readiness Benchmark.
- In 2017, 53 percent of Kentucky graduates met the Kentucky Reading College Readiness Benchmark.
- 74% of Kentucky counties are ACT Certified Work Ready Communities or Certified Work Ready in Progress.

Kentucky College and Career Readiness Attainment, Participation, and Opportunity

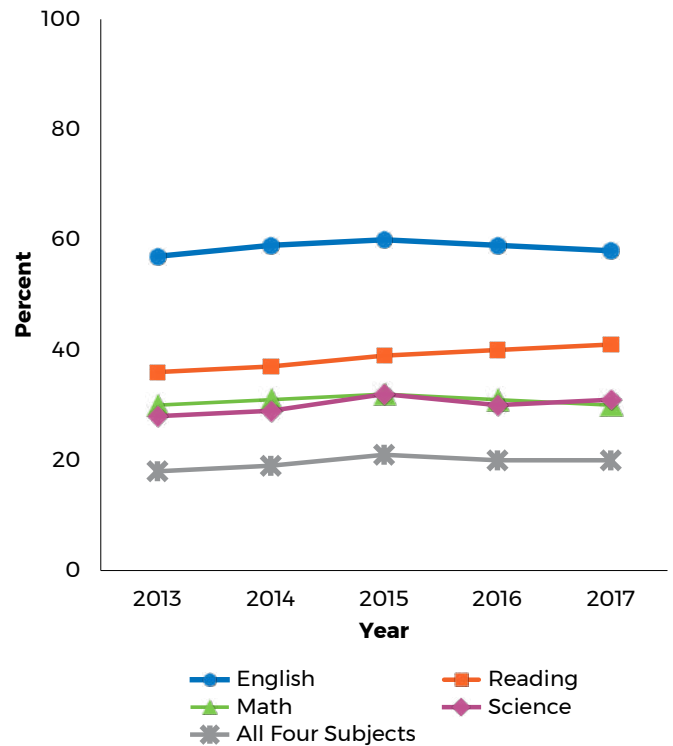
Percent of 2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks* by Subject



Data from graph above:

State / Nation	English (18)	Reading (22)	Math (22)	Science (23)	All Four
Kentucky	58	41	30	31	20
Nation	61	47	41	37	27

Percent of 2013–2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks

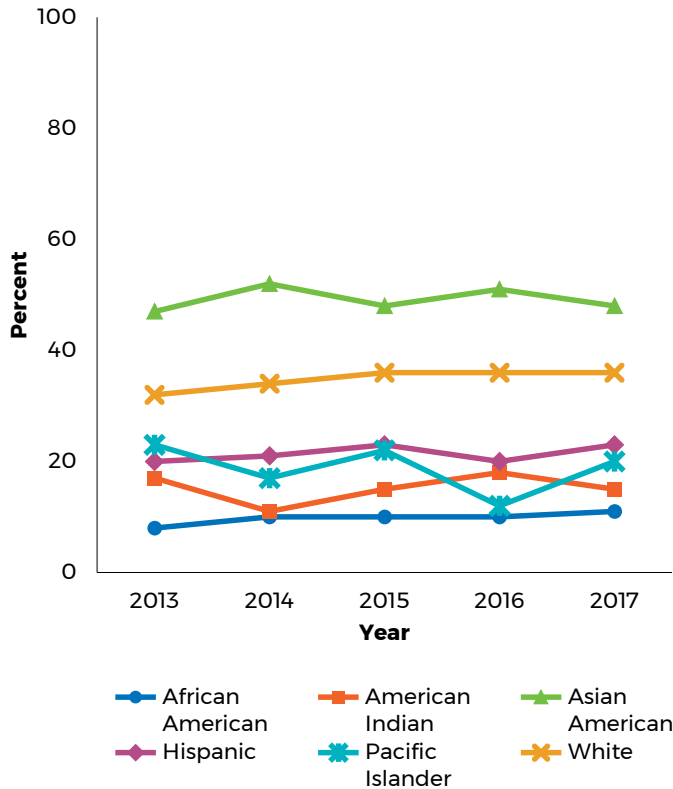


Data from graph above:

Subject	2013	2014	2015	2016	2017
English	57	59	60	59	58
Reading	36	37	39	40	41
Math	30	31	32	31	30
Science	28	29	32	30	31
All Four Subjects	18	19	21	20	20

* 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. Throughout this report, benchmark attainment corresponds with students meeting or exceeding score values in parentheses ().

Percent of 2013-2017 ACT-Tested High School Graduates Meeting Three or More ACT College Readiness Benchmarks by Race/Ethnicity*



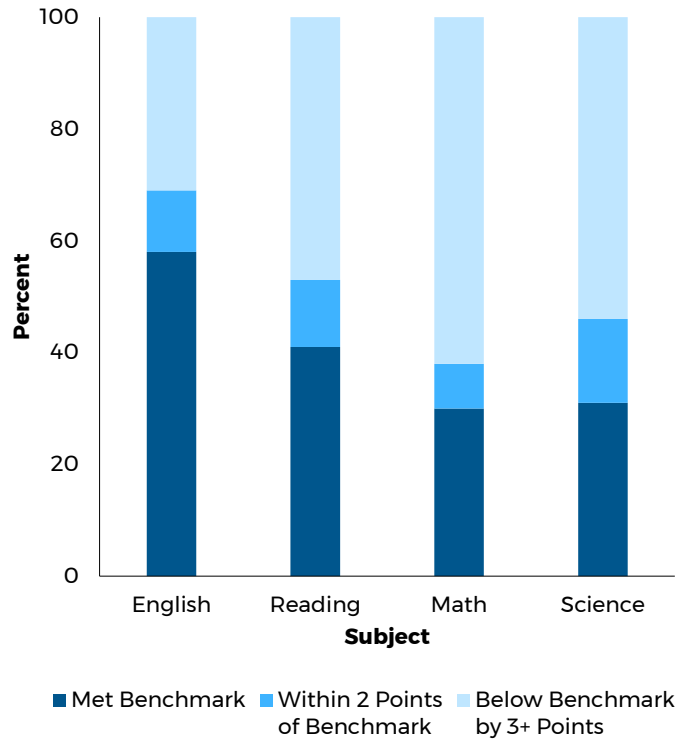
Data from graph above:

Race	2013	2014	2015	2016	2017
African American	8	10	10	10	11
American Indian	17	11	15	18	15
Asian American	47	52	48	51	48
Hispanic	20	21	23	20	23
Pacific Islander	23	17	22	12	20
White	32	34	36	36	36

* Percentages for groups with insufficient counts will be missing.

Percent of 2017 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject

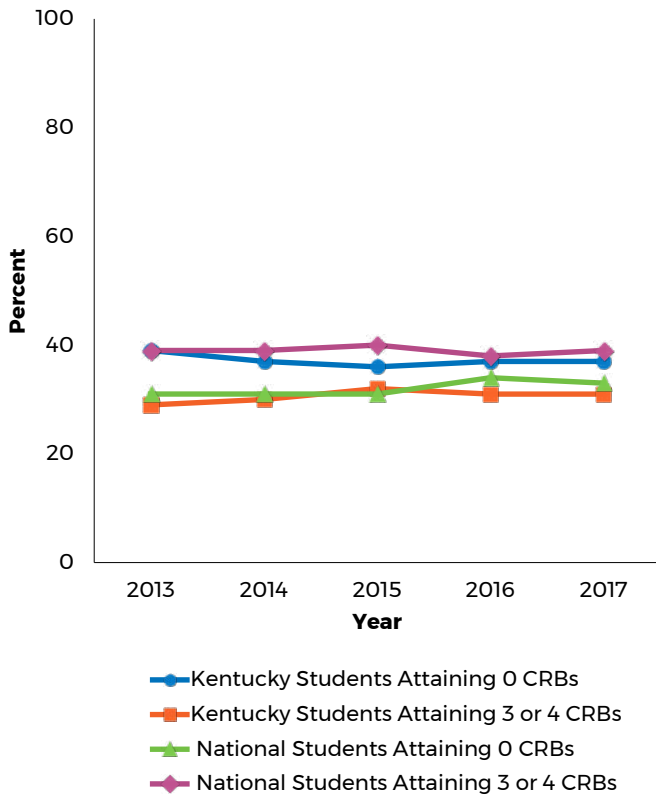
Note: Percents in this graph may not sum to 100% due to rounding. Values less than 0.5% will not appear.



Data from graph above:

Attainment	English	Reading	Math	Science
Met Benchmark	58	41	30	31
Within 2 Points of Benchmark	11	12	8	15
Below Benchmark by 3+ Points	31	47	62	55

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

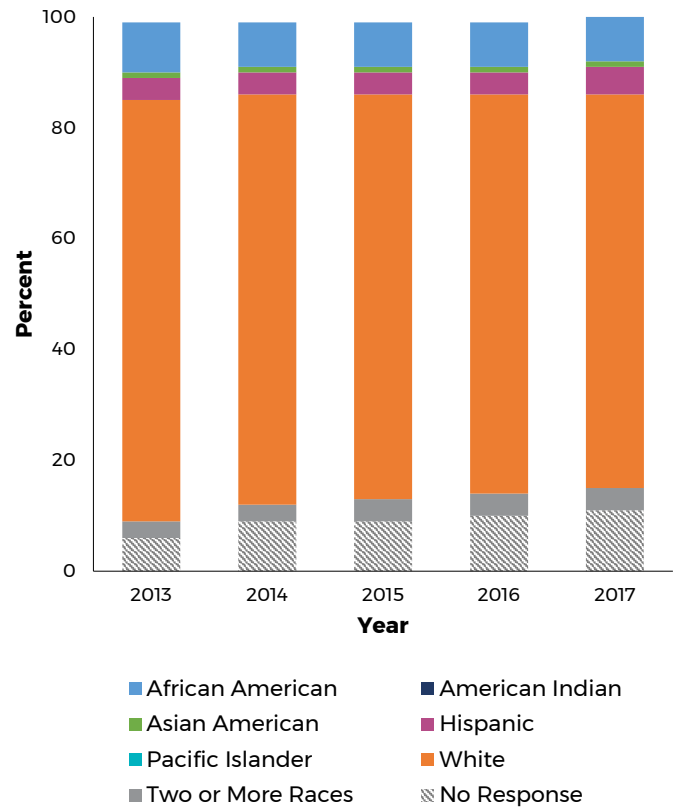


Data from graph above:

Attainment	2013	2014	2015	2016	2017
Kentucky Students Attaining 0 CRBs	39	37	36	37	37
Kentucky Students Attaining 3 or 4 CRBs	29	30	32	31	31
National Students Attaining 0 CRBs	31	31	31	34	33
National Students Attaining 3 or 4 CRBs	39	39	40	38	39

Percent of 2013–2017 ACT-Tested High School Graduates by Race/Ethnicity

Note: Percents in this graph may not sum to 100% due to rounding. Values less than 0.5% will not appear.



Data from graph above:

Race	2013	2014	2015	2016	2017
African American	9	8	8	8	8
American Indian	0	0	0	0	0
Asian American	1	1	1	1	1
Hispanic	4	4	4	4	5
Pacific Islander	0	0	0	0	0
White	76	74	73	72	71
Two or More Races	3	3	4	4	4
No Response	6	9	9	10	11

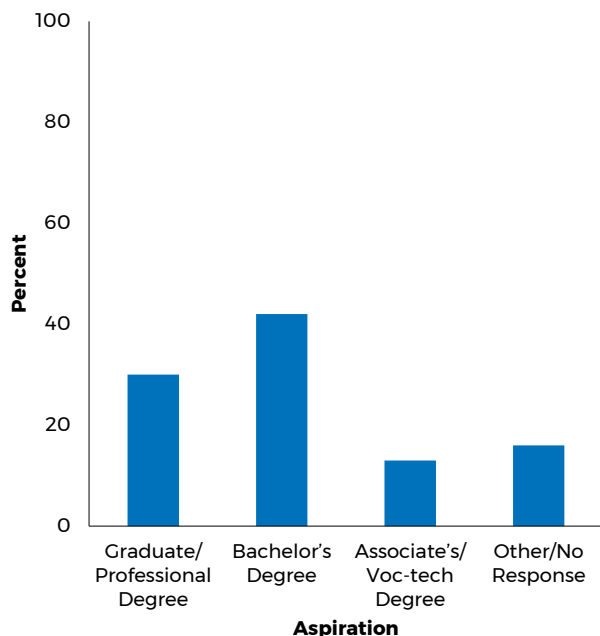
Kentucky: Between 2013 and 2017, the number of students taking the ACT in Kentucky increased by 1,652 students (3 percent).

Student Data Trends: 2013-2017, State vs. Nation

Outcome	Cohort	2013	2014	2015	2016	2017
Percent Tested	Kentucky	100	100	100	100	100
	Nation	54	57	59	64	60
N Tested	Kentucky	49,551	48,845	49,538	50,809	51,203
	Nation	1,799,243	1,845,787	1,924,436	2,090,342	2,030,038
Average English Score	Kentucky	19.2	19.4	19.5	19.7	19.6
	Nation	20.2	20.3	20.4	20.1	20.3
Average Reading Score	Kentucky	19.9	20.3	20.3	20.6	20.5
	Nation	21.1	21.3	21.4	21.3	21.4
Average Math Score	Kentucky	19.2	19.4	19.5	19.3	19.4
	Nation	20.9	20.9	20.8	20.6	20.7
Average Science Score	Kentucky	19.7	20.0	20.1	19.9	20.1
	Nation	20.7	20.8	20.9	20.8	21.0
Average Composite Score	Kentucky	19.6	19.9	20.0	20.0	20.0
	Nation	20.9	21.0	21.0	20.8	21.0

Percent of 2017 ACT-Tested High School Graduates by Educational Aspirations

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



There is good news in that 84% of Kentucky's 2017 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 86% of Kentucky's 2016 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 52% who actually did enroll. If we fully closed the aspirational gap, an additional 17,438 of the 2016 ACT-tested graduates from Kentucky would have enrolled in postsecondary education.

Data from graph

Aspiration	Percent
Graduate / Professional Degree	30
Bachelor's Degree	42
Associate's / Voc-tech Degree	13
Other / No Response	16



Kentucky State Exemplar 2017 ACT College and Career Readiness Campaign

William McBride

DuPont Manual High School, Jefferson County Public Schools

“I have been able to overcome my own obstacles and whatever other challenges life has thrown at me . . . through not only unending support from my family, but also my ability to never stop making goals for myself, and working as hard as I could to exceed them.”

William has not allowed his Asperger’s Syndrome to interfere with his pursuit of an education. In high school, he takes college-level classes, works part time, volunteers, and performs.

In college, William plans to major in vocal performance, theatre, or political science. Ultimately, he wants to become a performer or attend law school.

Information and products for further review

	Knowledge & Skills	Social & Emotional
Assessments	ACT Aspire®	ACT Tessera™
	PreACT®	ACT Engage®
	The ACT® Test	
	ACT WorkKeys®	
Research	Condition of College & Career Readiness	A Rosetta Stone for Noncognitive Skills
	ACT® National Curriculum Survey®	
	The Forgotten Middle	Tessera Comprehensive Theory of Action
	Rigor at Risk	
	ACT Holistic Framework™	
Resources	PLDs Learning Description Review	Tessera Teacher Playbook
	Curriculum Review Worksheets	
	OpenEd Learning Resources	
	Test Prep	
Training	Professional Learning Sessions	
	College & Career Readiness Workshops	
	Holistic Framework Webinars	

We are more than just the ACT test. ACT products and services encompass a variety of research- and assessment-based solutions.

As research leaders, we continue to innovate education and workforce solutions to help guide individuals to education and career success.

Find out more at www.act.org.

Key ACT Research

As students navigate their education and career journeys, it is critical for them to be ready for college and career success. College and career readiness is supported by the ACT Holistic Framework, a research-based, multidimensional model for understanding the essential knowledge and skills needed for success, and the solutions that can meet students' navigation needs. Visit act.org/condition2017 to access key reports listed below.

- Serving students' navigation needs from kindergarten to career requires a holistic approach:
 - ~ *Beyond Academics: A Holistic Framework for Enhancing Education and Workplace Success*
 - ~ *The Importance of Behavioral Skills and Navigation Factors for Education and Workforce Success*
- The ACT Holistic Framework is supported by prolific research:
 - ~ Core Academic Skills:
 - 2017 State and National Condition Reports
 - *Profiles of STEM Students: Persisters, Joiners, Changers, and Departers*
 - *ACT Composite Score by Parental Education Level, 2012-2016*
 - *Comparisons of Student Achievement Levels by District Performance and Poverty*
 - ~ Behavioral Skills (also called Social and Emotional Learning):
 - *The Development of Behavioral Performance Level Descriptors*
 - ~ Cross-Cutting Capabilities:
 - *ACT National Curriculum Survey 2016*
 - ~ Student journeys continue into postsecondary education and careers:
 - *Higher Education Research Digest*
 - *Predicted Attainment of ACT National Career Readiness Certificates for the 2016 ACT-tested High School Cohort*

Recommendations

- 1. Use a holistic assessment model for school accountability that measures student readiness for college and career across multiple domains.** While it is essential to measure students' academic achievement in assessing college and career readiness, it is not enough. Social and emotional learning skills are important and measurable, and they can be impacted. Assessment models should take into account core academic skills, behavioral skills, cross-cutting capabilities, and education and career navigation skills to provide an integrated picture of college and work readiness.
- 2. Make special efforts to ensure that underrepresented students have equal access and opportunity to pursue postsecondary education.** According to ACT research, most underrepresented students want to continue their education after high school, but they face many barriers. Ensuring they have access to the same rigorous core curriculum as others is just one step. Many also lack the resources, information, and familial and peer support they need to prepare for success after high school. Special efforts must be made to level the playing field for underrepresented students so they have equal opportunity to succeed.
- 3. Increase emphasis on STEM readiness initiatives, measures, and programs.** With technology advancing rapidly, the importance of STEM readiness is only increasing. The threat of robotic and computer-assisted technologies eliminating jobs is growing while the remaining and emerging jobs will likely require higher-level skills. ACT data continue to show that many graduates are not ready. Without improvement in STEM readiness, far too many will be ill-prepared for the future workforce.
- 4. Focus on fewer, higher, and clearer learning standards in K-12 schools.** Far too many students continue to graduate from high school without all of the core skills they will need to ably succeed at the next level. Many will struggle, and many will likely fail to realize their aspirations. The push toward raising the bar on learning standards and focusing on the essential skills necessary for success must continue.
- 5. Begin assessing learning and implementing intervention strategies early.** Early assessment and intervention are critical to improving educational outcomes. If students are not on track for college and career readiness by the time they reach middle school, it may be too late. Assessing learning and implementing intervention strategies to help students get on the right path for college and career readiness must begin in elementary school.