

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

Arizona Key Findings

Performance

- In the Arizona graduating class of 2017, 42,232 graduates took the ACT® test, compared to 31,658 in 2013.
 - ~ In Arizona, 62 percent of 2017 graduates took the ACT, compared to 60 percent nationally.
- Arizona graduates of 2017 had an average Composite score of 19.7, compared to the national average of 21.0.
 - ~ The Composite score for Hispanic/Latino students has grown 0.4 from 2013 to 2017, even as the Hispanic/Latino tested population has grown by 32 percent in that same time period.
- In 2017, 21 percent of Arizona graduates met all four ACT College Readiness Benchmarks. This compares to 23 and 21 percent of 2016 and 2013 graduates, respectively.
- With an increase of almost 6,000 Arizona students taking the ACT in 2017, it is not uncommon to see a drop in benchmark attainment as well as average subject and Composite scores. The following details that benchmark attainment:
 - ~ A 4 percent decrease in English and mathematics, a 1 percent decrease in reading, and a 2 percent decrease in science.
- In 2017, 42 percent of Arizona graduates met zero ACT College Readiness Benchmarks. This compares to 39 and 41 percent of 2016 and 2013 graduates, respectively.

STEM

- In 2017, 19,740 Arizona graduates (47 percent) indicated having an interest in STEM majors and/or careers.
- In Arizona, 2017 graduates taking physics had an average science score of 22.1, compared to the average science score of 18.8 for students not taking physics.
- In Arizona, 2017 graduates taking three or more years of math had an average math score of 20.4, compared to the average math score of 16.5 for students taking less than three years of math.
- In Arizona, 39 percent of 2017 graduates taking three or more years of math met the ACT Math College Readiness Benchmark, compared to 10 percent for students taking less than three years of math.

Career Readiness

- In 2017, 8,276 Arizona 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 Arizona 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:
 - ~ 89 more students enrolling in college.
 - ~ 106 more students persisting to year two.
 - ~ 92 fewer students needing remedial English.
 - ~ 158 fewer students needing remedial math.
 - ~ 119 more students persisting to year four.
 - ~ 128 more students earning a postsecondary degree within six years.

Behaviors that Impact Access and Opportunity

- In Arizona, 2017 graduates taking the ACT two or more times had an average Composite score of 23.4, compared to 18.7 for single-time testers.
- Of Arizona's 2017 graduating class, there were 18,177 (43 percent) Hispanic students taking the ACT. This compares to 347,906 (17 percent) nationally.
- Of Arizona's 2017 graduating class, there were 14,446 (34 percent) White students taking the ACT. This compares to 1,062,439 (52 percent) nationally.
- Of Arizona's 2017 graduating class, there were 1,764 (4 percent) African American students taking the ACT. This compares to 256,756 (13 percent) nationally.
- Of Arizona's 2017 graduating class, there were 1,482 (4 percent) American Indian students taking the ACT. This compares to 16,135 (1 percent) nationally.
- Of Arizona's 2017 graduating class, there were 1,405 (3 percent) Asian students taking the ACT. This compares to 96,097 (5 percent) nationally.
- For Arizona's 2017 ACT-tested graduates, the top five schools to which scores were sent were Arizona State University, University Of Arizona, Northern Arizona University, Grand Canyon University, and Glendale Community College.
 - ~ For Arizona's 2017 ACT-tested graduates, the top three out-of-state schools to which scores were sent were University Of California-Los Angeles, University Of Southern California, and Stanford University.
- Compared to 73 percent of 2017 graduates nationally, 76 percent of Arizona graduates opted into EOS.
 - ~ The ACT "Get Your Name in the Game" initiative allows colleges and universities access to underserved students' names free of charge.
 - ~ By opting in, students allow colleges and universities to communicate with them about various academic majors, scholarships, and student life opportunities.
- ACT issued 8,312 ACT fee waivers to qualified Arizona students. However, 2,345 students (28 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. Note: This is the number of fee waivers issued for the state, not specific to this graduating class.
 - ~ Finally, of the 4,496 Hispanic/Latino students that were awarded fee waivers, 1,223 did not participate in an actual testing experience, representing more than 50% of all unused waivers.

Pipeline

- In the Arizona graduating class of 2017, 10,117 (24 percent) had parents who did not attend college.
- In the Arizona graduating class of 2017, 1,947 (5 percent) aspired to attain an associate's degree. They had an average Composite score of 15.8.
- In the Arizona graduating class of 2017, 16,108 (38 percent) aspired to attain a bachelor's degree. They had an average Composite score of 19.7.
- In the Arizona graduating class of 2017, 5,413 (13 percent) aspired to attain a graduate degree. They had an average Composite score of 22.9.
- In the Arizona graduating class of 2017, 8,440 (20 percent) aspired to attain a professional degree. They had an average Composite score of 22.0.
- In order of prevalence, the five most commonly indicated college majors of interest for 2017 Arizona graduates were: Undecided; Nursing, Registered (BS/RN); Medicine (Pre-Medicine); Business Administration and Management, General; and Mechanical Engineering.
 - ~ In the Arizona graduating class of 2017, 1,075 (3 percent) indicated planning on majoring in education. They had an average Composite score of 19.3.
 - ~ In the Arizona graduating class of 2017, 3,938 (9 percent) indicated being undecided about their college major. They had an average Composite score of 21.0.

ACT Footprint

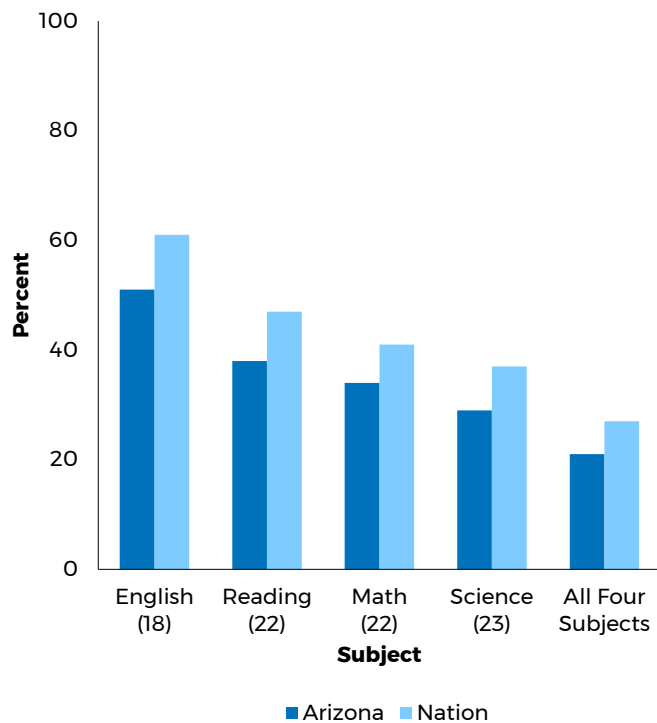
- Number of administrations:
 - ~ ACT Aspire® Summative: 23,709
 - ~ ACT Aspire Periodic: 24,336
 - ~ ACT Engage®: 1,336
 - ~ PreACT®: 11,287
 - ~ ACT WorkKeys: 3,118

Additional Points

- There will be three ACT College and Career Readiness Workshops offered throughout the state in fall 2017. These will be hosted in Flagstaff, Phoenix, and Tucson.
- ACT - Arizona Partnerships: Helios Foundation and NAU Gear Up
- 2017 College and Career Readiness Campaign Award Recipients: Student Readiness: Moises Guzman, Trinity High School; College and Career Transition (High School): Sunnyslope High School, Phoenix; Career Preparedness: University of Arizona
- The Arizona ACT State Organization continues to grow in membership and in diversity. The membership includes educators from state agencies, K-12, access, and postsecondary institutions, as well as members involved in workforce development. Each year, ACT hosts a state conference that brings together professionals representing each of these areas, providing a unique and diverse professional development opportunity. This year, more than 196 individuals across the state participated.

Arizona College and Career Readiness Attainment, Participation, and Opportunity

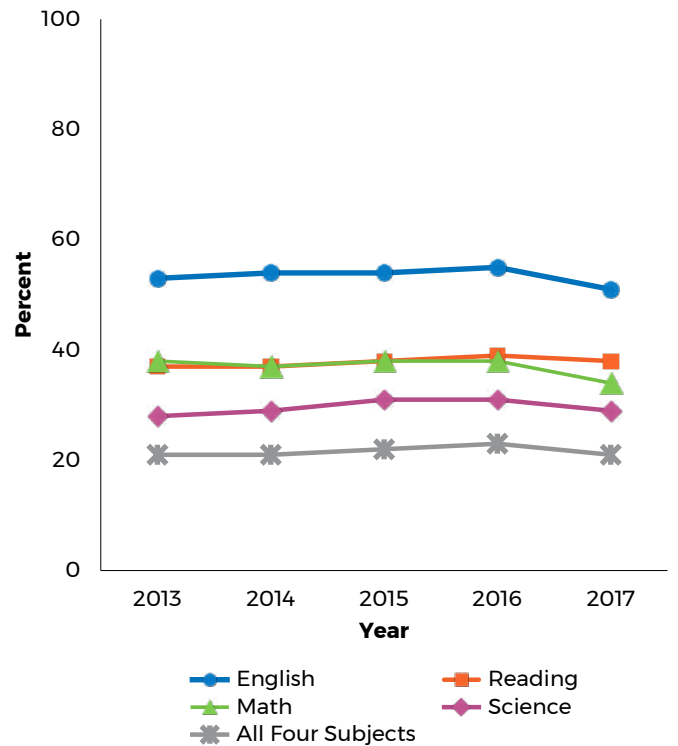
Percent of 2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks* by Subject



Data from graph above:

State / Nation	English (18)	Reading (22)	Math (22)	Science (23)	All Four
Arizona	51	38	34	29	21
Nation	61	47	41	37	27

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

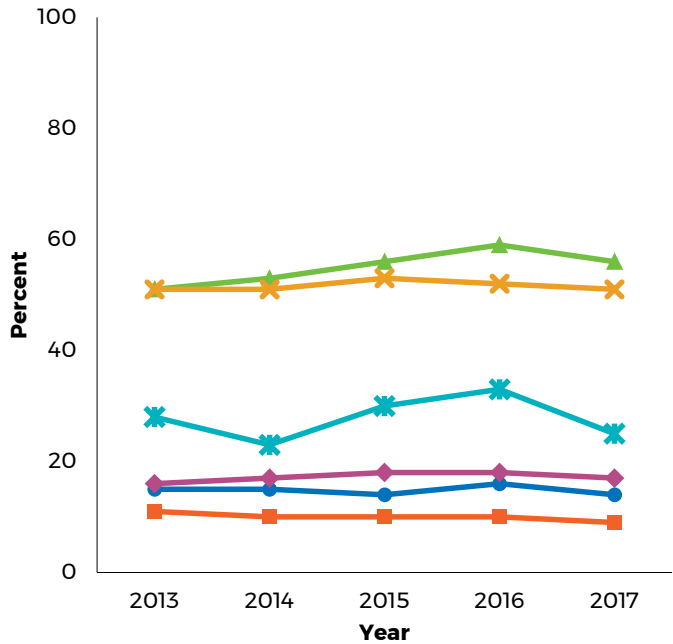


Data from graph above:

Subject	2013	2014	2015	2016	2017
English	53	54	54	55	51
Reading	37	37	38	39	38
Math	38	37	38	38	34
Science	28	29	31	31	29
All Four Subjects	21	21	22	23	21

* 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*



● African American ■ American Indian ▲ Asian American
◆ Hispanic ✱ Pacific Islander ✕ White

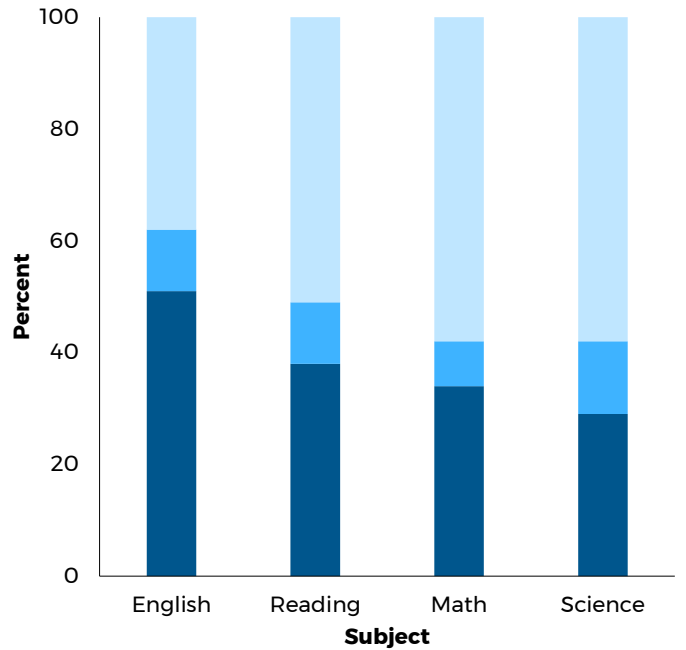
Data from graph above:

Race	2013	2014	2015	2016	2017
African American	15	15	14	16	14
American Indian	11	10	10	10	9
Asian American	51	53	56	59	56
Hispanic	16	17	18	18	17
Pacific Islander	28	23	30	33	25
White	51	51	53	52	51

* 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.

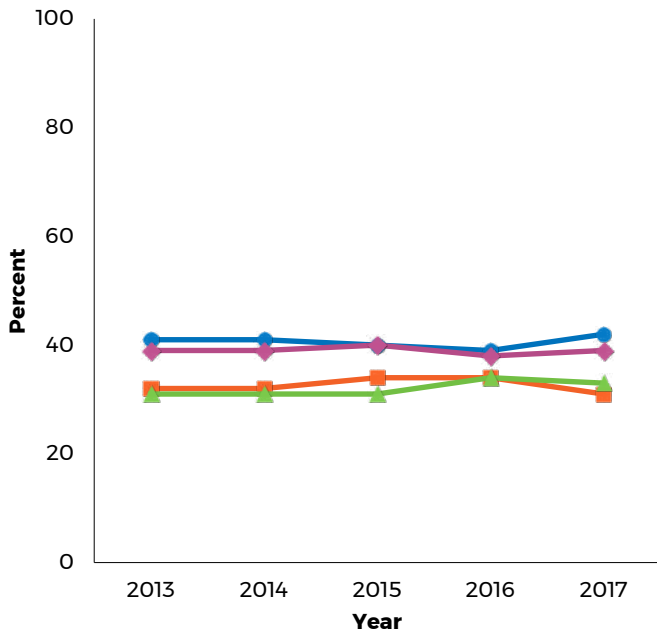


■ Met Benchmark ■ Within 2 Points of Benchmark ■ Below Benchmark by 3+ Points

Data from graph above:

Attainment	English	Reading	Math	Science
Met Benchmark	51	38	34	29
Within 2 Points of Benchmark	11	11	8	13
Below Benchmark by 3+ Points	38	51	58	58

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



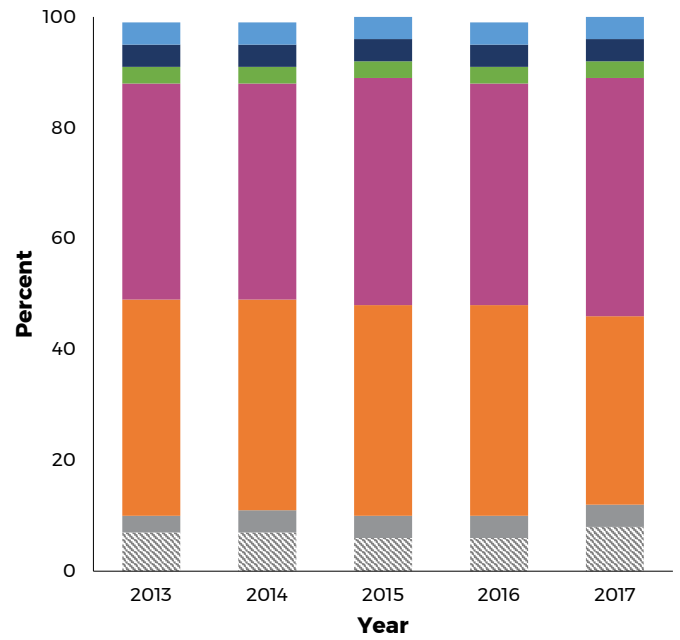
- Arizona Students Attaining 0 CRBs
- Arizona Students Attaining 3 or 4 CRBs
- ▲— National Students Attaining 0 CRBs
- ◆— National Students Attaining 3 or 4 CRBs

Data from graph above:

Attainment	2013	2014	2015	2016	2017
Arizona Students Attaining 0 CRBs	41	41	40	39	42
Arizona Students Attaining 3 or 4 CRBs	32	32	34	34	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.



- African American
- American Indian
- Asian American
- Hispanic
- Pacific Islander
- White
- Two or More Races
- No Response

Data from graph above:

Race	2013	2014	2015	2016	2017
African American	4	4	4	4	4
American Indian	4	4	4	4	4
Asian American	3	3	3	3	3
Hispanic	39	39	41	40	43
Pacific Islander	0	0	0	0	0
White	39	38	38	38	34
Two or More Races	3	4	4	4	4
No Response	7	7	6	6	8

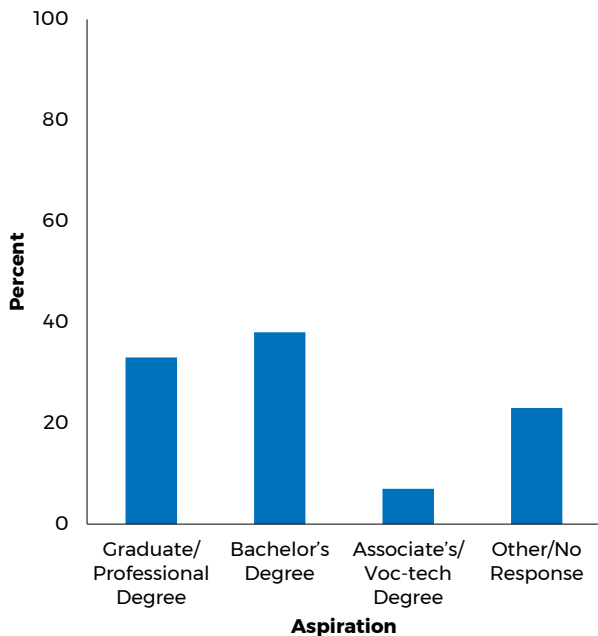
Arizona: Between 2013 and 2017, the number of students taking the ACT in Arizona increased by 10,574 students (33 percent).

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

Outcome	Cohort	2013	2014	2015	2016	2017
Percent Tested	Arizona	50	55	56	58	62
	Nation	54	57	59	64	60
N Tested	Arizona	31,658	33,999	35,248	36,285	42,232
	Nation	1,799,243	1,845,787	1,924,436	2,090,342	2,030,038
Average English Score	Arizona	18.5	18.8	18.8	19.1	18.6
	Nation	20.2	20.3	20.4	20.1	20.3
Average Reading Score	Arizona	19.6	20.0	20.2	20.5	20.1
	Nation	21.1	21.3	21.4	21.3	21.4
Average Math Score	Arizona	20.3	20.2	20.2	20.2	19.8
	Nation	20.9	20.9	20.8	20.6	20.7
Average Science Score	Arizona	19.4	19.5	19.7	20.0	19.8
	Nation	20.7	20.8	20.9	20.8	21.0
Average Composite Score	Arizona	19.6	19.7	19.9	20.1	19.7
	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 77% of Arizona's 2017 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 80% of Arizona's 2016 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 58% who actually did enroll. If we fully closed the aspirational gap, an additional 8,199 of the 2016 ACT-tested graduates from Arizona would have enrolled in postsecondary education.

Data from graph

Aspiration	Percent
Graduate / Professional Degree	33
Bachelor's Degree	38
Associate's / Voc-tech Degree	7
Other / No Response	23



Arizona State Exemplar

2017 ACT College and Career Readiness Campaign

Moises Guzman

Trinity High School, Dysart Unified School District

“I have been working since the end of my sophomore year about twenty-five plus hours a week to help contribute to the bills with the rest of my family.”

A driven young man, Moises is president of his school’s AVID (Advancement Via Individual Determination) club, a tennis player, and a frequent volunteer, all while working his way through high school to help support his family. He spearheaded a fundraiser to recycle cans and bottles, helping the environment while raising money for AVID club college visits.

Moises is looking forward to earning his master’s degree in aerospace engineering. In college, he will be well prepared to progress toward his goal after taking and succeeding in Advanced Placement calculus and physics courses in high school, among other challenging courses.

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.