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
Colorado Key Findings

Performance

- In the Colorado graduating class of 2017, 59,259 graduates took the ACT® test, compared to 56,027 in 2013.
- Colorado graduates of 2017 had an average Composite score of 20.8, compared to the national average of 21.0.
  - ~ Compared to the 2017 Colorado graduating class Composite average of 20.8, Colorado graduates in 2016 and 2013 had Composite averages of 20.6 and 20.4, respectively.
  - ~ Colorado African American 2017 graduates who took the ACT had an average Composite score of 17.8. This compares to average Composite scores of 17.7 and 17.3 for graduating classes from 2016 and 2013, respectively.
  - ~ Colorado White 2017 graduates who took the ACT had an average Composite score of 22.6. This compares to average Composite scores of 22.4 and 22.0 for graduating classes from 2016 and 2013, respectively.
  - ~ Colorado Hispanic 2017 graduates who took the ACT had an average Composite score of 18.1. This compares to average Composite scores of 17.9 and 17.7 for graduating classes from 2016 and 2013, respectively.
- In 2017, 38 percent of Colorado graduates met three or four ACT College Readiness Benchmarks. This compares to 37 and 37 percent of 2016 and 2013 graduates, respectively.
  - ~ The percentage of graduates taking three or more years of Social Science meeting the ACT Reading College Readiness Benchmark was 24% higher than those who did not. The same can be said for the percentage in science.
  - ~ For those taking four years vs. less than four years of English, the gap was 30 percent.
  - ~ For those taking three or more years vs. less than three years of math, the gap was 38 percent.

STEM

- In 2017, 23,399 Colorado graduates (39 percent) indicated having an interest in STEM majors and/or careers.
- Compared to a 2017 Colorado graduating class STEM average of 20.9, graduates in 2016 and 2013 had STEM averages of 20.8 and 20.7, respectively.
- For the years 2013 and 2017, Colorado graduates meeting the ACT STEM College Readiness Benchmark had average science scores of 28.3 and 28.8, respectively.

Career Readiness

- In 2017, 14,893 Colorado graduates (25 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 Colorado 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:
  - ~ 120 more students enrolling in college.
  - ~ 145 more students persisting to year two.
  - ~ 116 fewer students needing remedial English.
  - ~ 214 fewer students needing remedial math.
  - ~ 165 more students persisting to year four.
  - ~ 180 more students earning a postsecondary degree within six years.

Behaviors that Impact Access and Opportunity

- In Colorado, 2017 graduates taking the ACT two or more times had an average Composite score of 23.7, compared to 19.2 for single-time testers.
- Of Colorado's 2017 graduating class, there were 29,514 (50 percent) White students taking the ACT. This compares to 1,062,439 (52 percent) nationally.
- Of Colorado's 2017 graduating class, there were 16,459 (28 percent) Hispanic students taking the ACT. This compares to 347,906 (17 percent) nationally.
- Of Colorado's 2017 graduating class, there were 2,256 (4 percent) African American students taking the ACT. This compares to 256,756 (13 percent) nationally.
- For Colorado's 2017 ACT-tested graduates, the top five schools to which scores were sent were University of Colorado-Boulder, Colorado State University, University of Northern Colorado, University of Colorado-Colorado Springs, and Metropolitan State University of Denver.
  - ~ For Colorado's 2017 ACT-tested graduates, the top three out-of-state schools to which scores were sent were Arizona State University, University Of Wyoming, and University Of Arizona.
- Compared to 73 percent of 2017 graduates nationally, 68 percent of Colorado graduates opted into EOS.
  - ~ Compared to 85 percent of African American students nationally, 75 percent of Colorado African American 2017 graduates opted into EOS.
  - ~ Compared to 83 percent of Hispanic students nationally, 77 percent of Colorado Hispanic 2017 graduates opted into EOS.
  - ~ Compared to 69 percent of White students nationally, 67 percent of Colorado White 2017 graduates opted into EOS.
- ACT issued 5,495 ACT fee waivers to qualified Colorado students. However, 1,423 students (26 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. Note: This is the number of fee waivers issued for the state, not specific to this graduating class.

Pipeline

- In the Colorado graduating class of 2017, 9,469 (16 percent) had parents who did not attend college.
- In the Colorado graduating class of 2017, 8,342 (14 percent) aspired to attain a professional degree. They had an average Composite score of 23.6.
- In the Colorado graduating class of 2017, 6,778 (11 percent) aspired to attain a graduate degree. They had an average Composite score of 24.6.
- In the Colorado graduating class of 2017, 20,791 (35 percent) aspired to attain a bachelor's degree. They had an average Composite score of 21.1.
- In the Colorado graduating class of 2017, 2,928 (5 percent) aspired to attain an associate's degree. They had an average Composite score of 17.0.
- In order of prevalence, the five most commonly indicated college majors of interest for 2017 Colorado graduates were: Undecided; Nursing, Registered (BS/RN); Medicine (Pre-Medicine); Business Administration and Management, General; and Mechanical Engineering.
  - ~ In the Colorado graduating class of 2017, 1,621 (3 percent) indicated planning on majoring in education. They had an average Composite score of 21.0.
  - ~ In the Colorado graduating class of 2017, 5,824 (10 percent) indicated being undecided about their college major. They had an average Composite score of 22.0.

ACT Footprint

- Number of administrations:
  - ~ ACT Aspire® Summative: 22,542
  - ~ ACT Aspire Periodic: 68,072
  - ~ ACT Engage®: 480
  - ~ PreACT®: 5,645
  - ~ ACT WorkKeys: 14,750

Additional Points

- In 2017, ACT honored exemplars in 50 states and Washington, DC, as part of our ACT College & Career Readiness Campaign. In Colorado, these honorees included:
  - ~ Student Readiness Exemplar: Jennika Chapman, Jefferson Academy High School; College and Career Transition Exemplar (High School): York International
- There will be four ACT College and Career Readiness Workshops offered throughout the state in fall 2017 (Denver, Colorado Springs, Fort Collins, and Golden).
- Mesa County is now a certified ACT Work Ready Community.

# Colorado College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks* by Subject
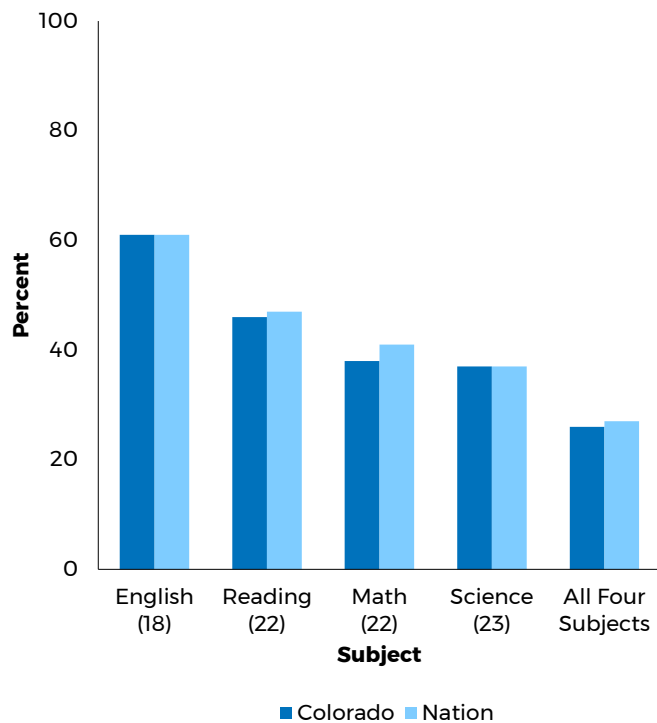
Data from graph above:

State / Nation	English (18)	Reading (22)	Math (22)	Science (23)	All Four
Colorado	61	46	38	37	26
Nation	61	47	41	37	27

Percent of 2013–2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks
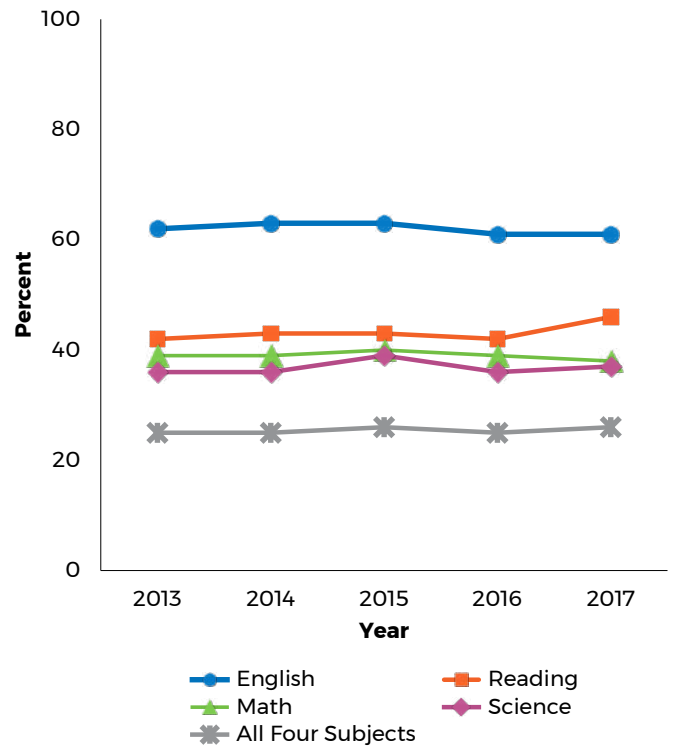
Data from graph above:

Subject	2013	2014	2015	2016	2017
English	62	63	63	61	61
Reading	42	43	43	42	46
Math	39	39	40	39	38
Science	36	36	39	36	37
All Four Subjects	25	25	26	25	26

* 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*
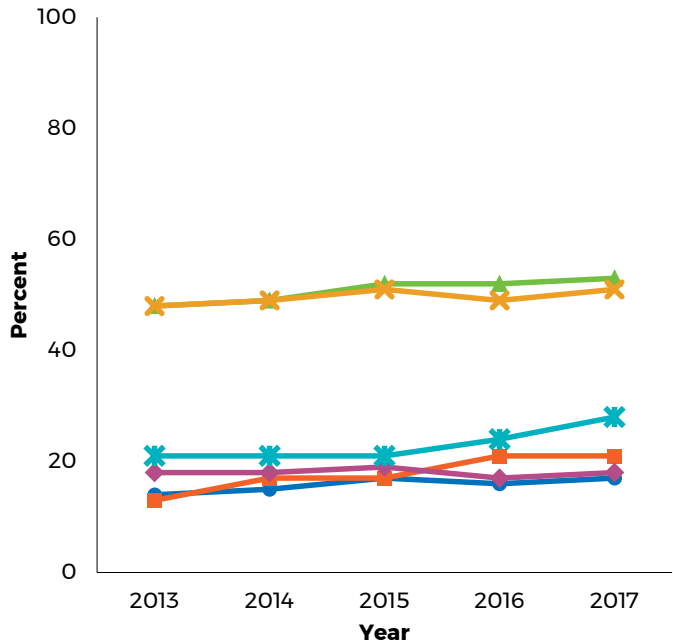
Data from graph above:

Race	2013	2014	2015	2016	2017
African American	14	15	17	16	17
American Indian	13	17	17	21	21
Asian American	48	49	52	52	53
Hispanic	18	18	19	17	18
Pacific Islander	21	21	21	24	28
White	48	49	51	49	51

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.
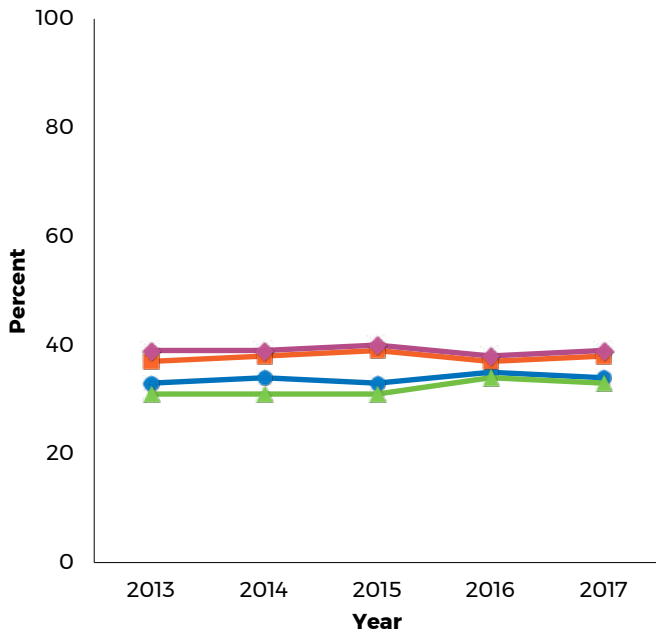

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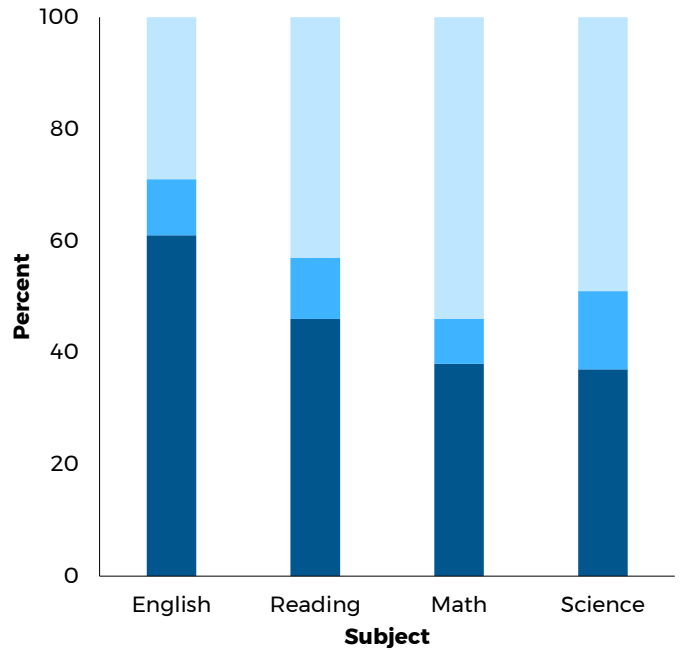
Attainment	English	Reading	Math	Science
Met Benchmark	61	46	38	37
Within 2 Points of Benchmark	10	11	8	14
Below Benchmark by 3+ Points	30	43	54	49

* Percentages for groups with insufficient counts will be missing.

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

Data from graph above:
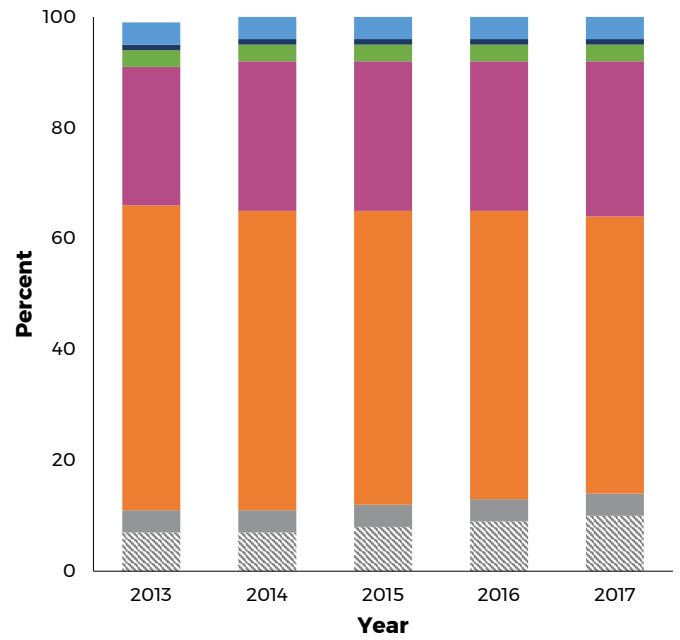
Attainment	2013	2014	2015	2016	2017
Colorado Students Attaining 0 CRBs	33	34	33	35	34
Colorado Students Attaining 3 or 4 CRBs	37	38	39	37	38
National Students Attaining 0 CRBs	31	31	31	34	33
National Students Attaining 3 or 4 CRBs	39	39	40	38	39

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	4	4	4	4	4
American Indian	1	1	1	1	1
Asian American	3	3	3	3	3
Hispanic	25	27	27	27	28
Pacific Islander	0	0	0	0	0
White	55	54	53	52	50
Two or More Races	4	4	4	4	4
No Response	7	7	8	9	10

Colorado: Between 2013 and 2017, the number of students taking the ACT in Colorado increased by 3,232 students (6 percent).

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

Outcome	Cohort	2013	2014	2015	2016	2017
Percent Tested	Colorado	100	100	100	100	100
	Nation	54	57	59	64	60
N Tested	Colorado	56,027	56,510	57,328	58,616	59,259
	Nation	1,799,243	1,845,787	1,924,436	2,090,342	2,030,038
Average English Score	Colorado	19.9	20.1	20.2	20.0	20.1
	Nation	20.2	20.3	20.4	20.1	20.3
Average Reading Score	Colorado	20.5	20.9	21.0	20.9	21.2
	Nation	21.1	21.3	21.4	21.3	21.4
Average Math Score	Colorado	20.4	20.4	20.4	20.3	20.3
	Nation	20.9	20.9	20.8	20.6	20.7
Average Science Score	Colorado	20.5	20.6	20.8	20.9	20.9
	Nation	20.7	20.8	20.9	20.8	21.0
Average Composite Score	Colorado	20.4	20.6	20.7	20.6	20.8
	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.
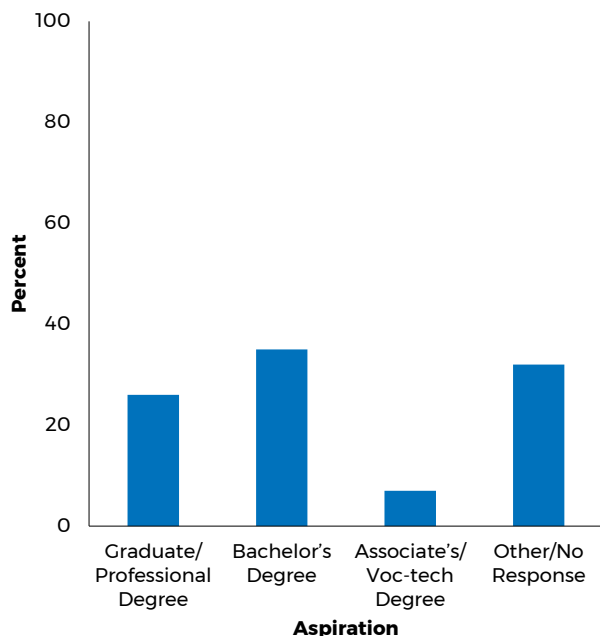
There is good news in that 68% of Colorado's 2017 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 77% of Colorado's 2016 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 52% who actually did enroll. If we fully closed the aspirational gap, an additional 14,576 of the 2016 ACT-tested graduates from Colorado would have enrolled in postsecondary education.

Data from graph

Aspiration	Percent
Graduate / Professional Degree	26
Bachelor's Degree	35
Associate's / Voc-tech Degree	7
Other / No Response	32

Colorado State Exemplar
2017 ACT College and Career Readiness Campaign

Jennika Chapman

Jefferson Academy High School, Jeffco Public Schools

"As I enter into my final semester of high school, and maybe my most challenging, I must continue to work hard. As a result to taking dual-enrollment classes in high school I will have about thirty college credits completed once I graduate high school."

Jennika holds herself and her work to high standards, and is determined to overcome difficulties in high school science classes to achieve her dream of becoming a physical therapist.

Jennika is entering college with more than a year's worth of credits after taking college courses during high school, and is looking forward to earning her bachelor's degree majoring in biology while participating in a pre-physical therapy program, then entering professional school. As someone accustomed to working hard and challenging herself, Jennika is ready to excel in her postsecondary education.

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.