

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

Maryland Key Findings

Performance

- In the Maryland graduating class of 2017, 17,179 graduates took the ACT® test, compared to 13,820 in 2013.
 - ~ In Maryland, 28 percent of 2017 graduates took the ACT, compared to 60 percent nationally.
 - ~ In 2017, there were 4,016 African American graduates from Maryland who took the ACT (23 percent). This compares to 4,203 (25 percent) and 3,469 (25 percent) for 2016 and 2013 graduating classes, respectively.
 - ~ In 2017, there were 1,410 Hispanic graduates from Maryland who took the ACT (8 percent). This compares to 1,278 (8 percent) and 997 (7 percent) for 2016 and 2013 graduating classes, respectively.
 - ~ In 2017, there were 7,960 White graduates from Maryland who took the ACT (46 percent). This compares to 8,020 (48 percent) and 6,906 (50 percent) for 2016 and 2013 graduating classes, respectively.
- Maryland graduates of 2017 had an average Composite score of 23.6, compared to the national average of 21.0.
 - ~ Compared to the 2017 Maryland graduating class Composite average of 23.6, Maryland graduates in 2016 and 2013 had Composite averages of 23.0 and 22.3, respectively.
- In 2017, 44 percent of Maryland graduates met all four ACT College Readiness Benchmarks. This compares to 41 and 36 percent of 2016 and 2013 graduates, respectively.
 - ~ In 2017, 19 percent of Maryland graduates met zero ACT College Readiness Benchmarks. This compares to 21 and 23 percent of 2016 and 2013 graduates, respectively.

STEM

- In 2017, 8,978 Maryland graduates (52 percent) indicated having an interest in STEM majors and/or careers.
 - ~ Students with an interest in STEM show higher levels of college readiness than ACT-tested students as a whole.
- Compared to a 2017 Maryland graduating class STEM average of 23.4, graduates in 2016 and 2013 had STEM averages of 23.0 and 22.4, respectively.
- Compared to 36 percent of 2017 Maryland graduates meeting the ACT STEM College Readiness Benchmark, graduates in 2016 and 2013 had STEM Benchmark percentages of 33 and 28, respectively.

Career Readiness

- In 2017, 7,584 Maryland graduates (44 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 Maryland 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:
 - ~ 31 more students enrolling in college.
 - ~ 38 more students persisting to year two.
 - ~ 24 fewer students needing remedial English.
 - ~ 45 fewer students needing remedial math.
 - ~ 45 more students persisting to year four.
 - ~ 51 more students earning a postsecondary degree within six years.

Behaviors that Impact Access and Opportunity

- In Maryland, 2017 graduates taking the ACT two or more times had an average Composite score of 24.9, compared to 22.6 for single-time testers.
- Of Maryland's 2017 graduating class, there were 4,016 (23 percent) African American students taking the ACT. This compares to 256,756 (13 percent) nationally.
- Of Maryland's 2017 graduating class, there were 7,960 (46 percent) White students taking the ACT. This compares to 1,062,439 (52 percent) nationally.
- Of Maryland's 2017 graduating class, there were 1,410 (8 percent) Hispanic students taking the ACT. This compares to 347,906 (17 percent) nationally.
- Of Maryland's 2017 graduating class, there were 1,374 (8 percent) Asian students taking the ACT. This compares to 96,097 (5 percent) nationally.
- For Maryland's 2017 ACT-tested graduates, the top five schools to which scores were sent were University of Maryland-College Park, Towson University, University of Maryland-Baltimore County, Salisbury University, and Bowie State University.
 - ~ For Maryland's 2017 ACT-tested graduates, the top three out-of-state schools to which scores were sent were Penn State University Park Campus, Howard University, and Virginia Tech.
- Compared to 73 percent of 2017 graduates nationally, 66 percent of Maryland graduates opted into EOS.
 - ~ Compared to 85 percent of African American students nationally, 86 percent of Maryland African American 2017 graduates opted into EOS.
 - ~ Compared to 69 percent of White students nationally, 57 percent of Maryland White 2017 graduates opted into EOS.
 - ~ Compared to 83 percent of Hispanic students nationally, 78 percent of Maryland Hispanic 2017 graduates opted into EOS.
 - ~ Compared to 76 percent of Asian students nationally, 72 percent of Maryland Asian 2017 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. In Maryland, 165,709 names were given to nine colleges and universities.
- ACT issued 4,153 ACT fee waivers to qualified Maryland students. However, 1,091 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. This represents a great opportunity for high schools within the state to increase the socio-economic diversity of their students tested. Note: This is the number of fee waivers issued for the state, not specific to this graduating class.

Pipeline

- In the Maryland graduating class of 2017, 1,296 (8 percent) had parents who did not attend college.
- In the Maryland graduating class of 2017, 4,838 (28 percent) aspired to attain a professional degree. They had an average Composite score of 25.0.
- In the Maryland graduating class of 2017, 4,130 (24 percent) aspired to attain a graduate degree. They had an average Composite score of 24.9.
- In the Maryland graduating class of 2017, 5,863 (34 percent) aspired to attain a bachelor's degree. They had an average Composite score of 21.5.
- In order of prevalence, the five most commonly indicated college majors of interest for 2017 Maryland graduates were: Undecided; Medicine (Pre-Medicine); Biology, General; Business Administration and Management, General; and Nursing, Registered (BS/RN).
 - ~ In the Maryland graduating class of 2017, 2,930 (17 percent) indicated being undecided about their college major. They had an average Composite score of 24.5.
 - ~ In the Maryland graduating class of 2017, 531 (3 percent) indicated planning on majoring in education. They had an average Composite score of 21.2.

ACT Footprint

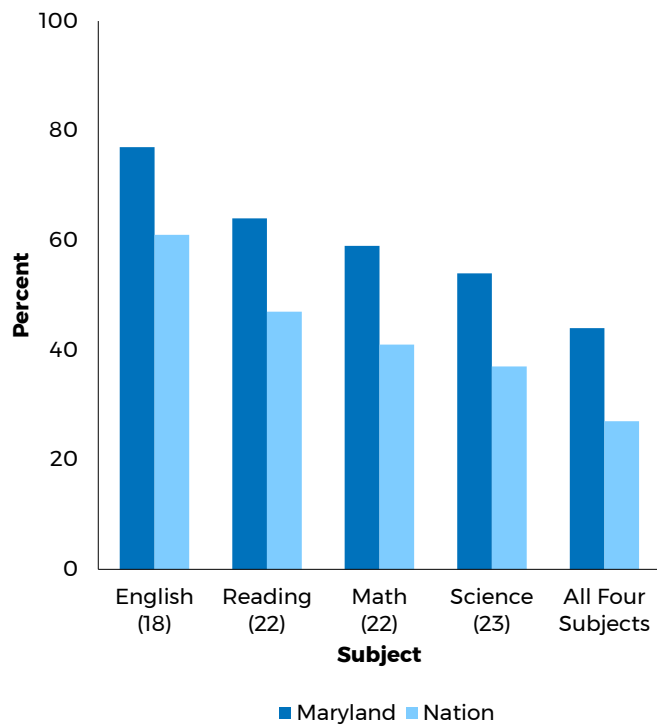
- Number of administrations:
 - ~ ACT Aspire® Summative: 926
 - ~ ACT Engage®: 259
 - ~ PreACT®: 916
 - ~ ACT WorkKeys: 792

Additional Points

- According to the US Department of Labor, the top five emerging professions in Maryland are: Continuous Mining Machine Operators; Earth Drillers, except oil and gas; Choreographers; Nursing Instructors and Teachers, Postsecondary; and Interpreters and Translators.
- More STEM Detail:
 - ~ In 2017, 11,030 Maryland graduates (64 percent) indicated taking physics. This compares to 64 and 62 percent for 2016 and 2013 graduating classes, respectively.
 - ~ In Maryland, 2017 graduates taking physics had an average science score of 24.3, compared to the average science score of 20.8 for students not taking physics.

Maryland College and Career Readiness Attainment, Participation, and Opportunity

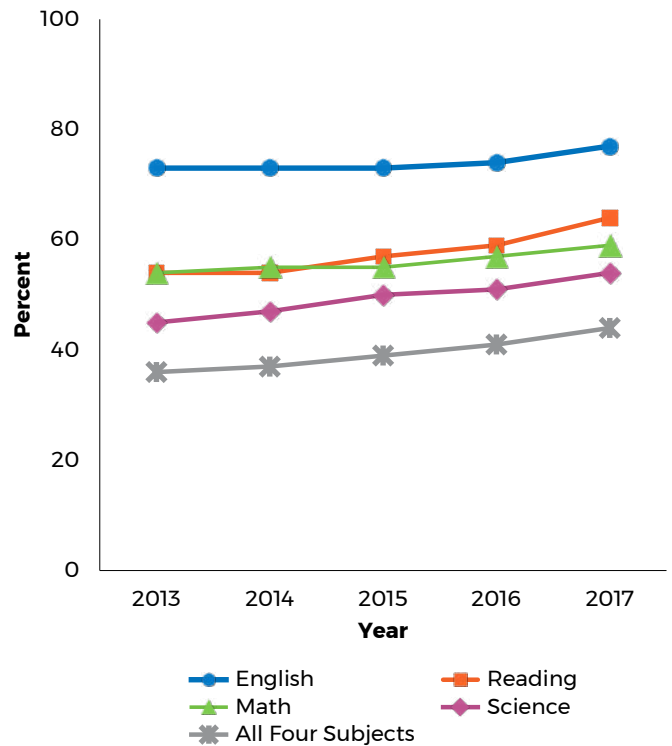
Percent of 2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks* by Subject



Data from graph above:

State / Nation	English (18)	Reading (22)	Math (22)	Science (23)	All Four
Maryland	77	64	59	54	44
Nation	61	47	41	37	27

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

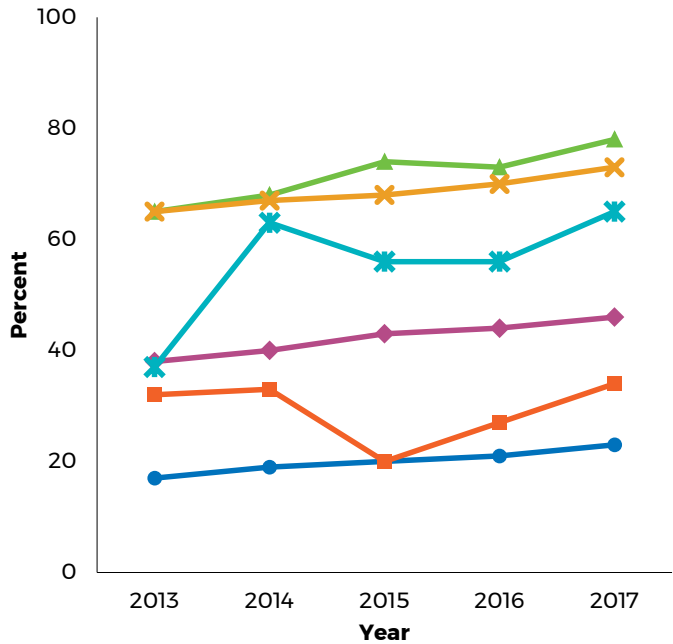


Data from graph above:

Subject	2013	2014	2015	2016	2017
English	73	73	73	74	77
Reading	54	54	57	59	64
Math	54	55	55	57	59
Science	45	47	50	51	54
All Four Subjects	36	37	39	41	44

* 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

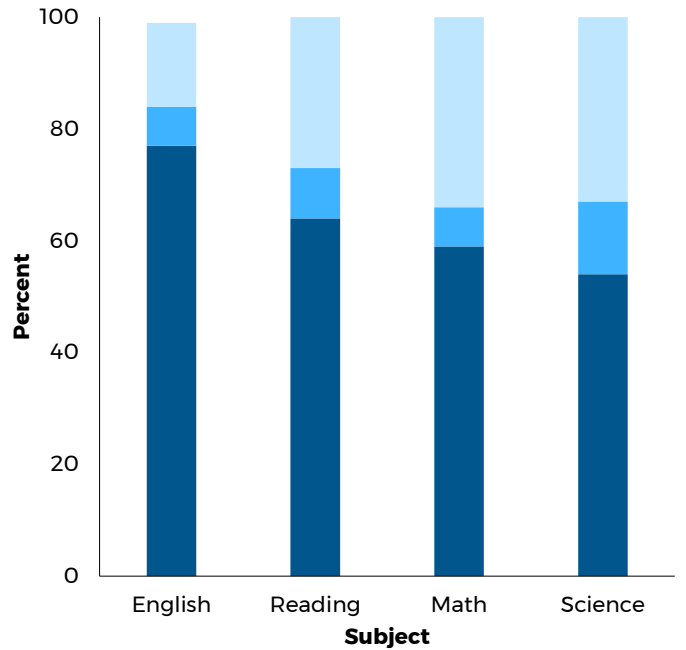
Data from graph above:

Race	2013	2014	2015	2016	2017
African American	17	19	20	21	23
American Indian	32	33	20	27	34
Asian American	65	68	74	73	78
Hispanic	38	40	43	44	46
Pacific Islander	37	63	56	56	65
White	65	67	68	70	73

* 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.

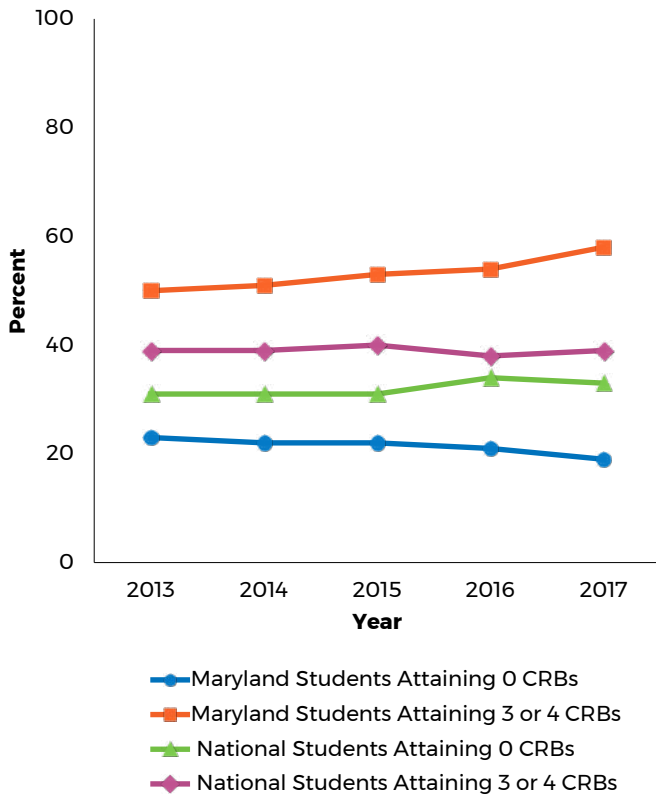


■ Met Benchmark
■ Within 2 Points of Benchmark
■ Below Benchmark by 3+ Points

Data from graph above:

Attainment	English	Reading	Math	Science
Met Benchmark	77	64	59	54
Within 2 Points of Benchmark	7	9	7	13
Below Benchmark by 3+ Points	15	27	34	33

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

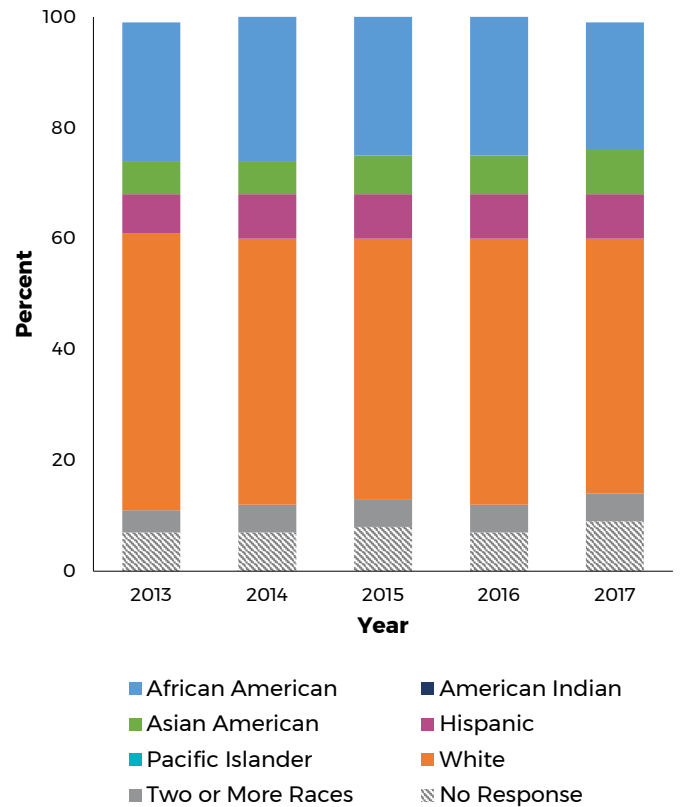


Data from graph above:

Attainment	2013	2014	2015	2016	2017
Maryland Students Attaining 0 CRBs	23	22	22	21	19
Maryland Students Attaining 3 or 4 CRBs	50	51	53	54	58
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	25	26	26	25	23
American Indian	0	0	0	0	0
Asian American	6	6	7	7	8
Hispanic	7	8	8	8	8
Pacific Islander	0	0	0	0	0
White	50	48	47	48	46
Two or More Races	4	5	5	5	5
No Response	7	7	8	7	9

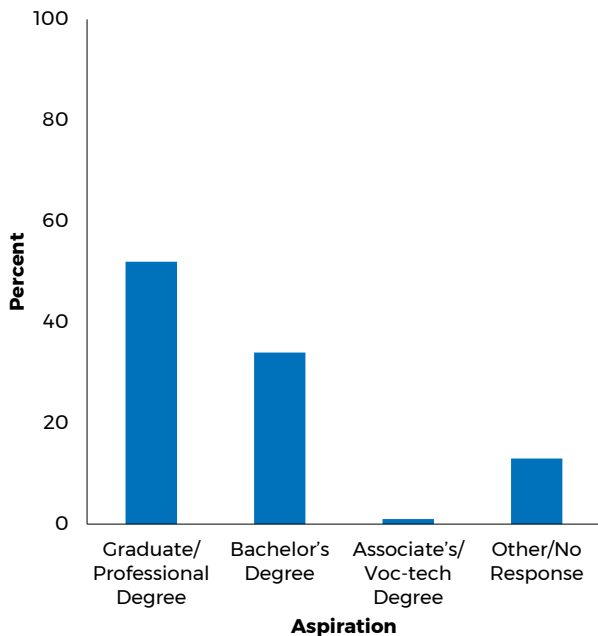
Maryland: Between 2013 and 2017, the number of students taking the ACT in Maryland increased by 3,359 students (24 percent).

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

Outcome	Cohort	2013	2014	2015	2016	2017
Percent Tested	Maryland	21	22	25	27	28
	Nation	54	57	59	64	60
N Tested	Maryland	13,820	14,080	15,753	16,769	17,179
	Nation	1,799,243	1,845,787	1,924,436	2,090,342	2,030,038
Average English Score	Maryland	21.8	22.1	22.3	22.6	23.3
	Nation	20.2	20.3	20.4	20.1	20.3
Average Reading Score	Maryland	22.7	23.0	23.2	23.6	24.2
	Nation	21.1	21.3	21.4	21.3	21.4
Average Math Score	Maryland	22.3	22.5	22.5	22.7	23.1
	Nation	20.9	20.9	20.8	20.6	20.7
Average Science Score	Maryland	21.9	22.2	22.5	22.8	23.2
	Nation	20.7	20.8	20.9	20.8	21.0
Average Composite Score	Maryland	22.3	22.6	22.7	23.0	23.6
	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 87% of Maryland's 2017 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 87% of Maryland's 2016 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 82% who actually did enroll. If we fully closed the aspirational gap, an additional 836 of the 2016 ACT-tested graduates from Maryland would have enrolled in postsecondary education.

Data from graph

Aspiration	Percent
Graduate / Professional Degree	52
Bachelor's Degree	34
Associate's / Voc-tech Degree	1
Other / No Response	13



Maryland State Exemplar 2017 ACT College and Career Readiness Campaign

Victoria Matos

Manchester Valley High School, Carroll County Public Schools

“To fulfill my dream of college and an eventual PhD, I have worked hard, part-time and academically, and earned hundreds of service hours.”

Victoria has earned straight A’s in high school while dealing with a difficult family situation, the closure of her original high school, and financial difficulties that required her to find a part-time job. She also served as the vice president of her school’s service-focused Key Club, where she focused on smoothing the way for the students of two local high schools to blend together into one.

Victoria plans to earn a PhD, potentially in mathematics, and is ready for college after taking college-level courses during high school in social studies, English, and mathematics.

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.