

## 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

## Michigan Key Findings

### Performance

- In the Michigan graduating class of 2017, 29,944 graduates took the ACT® test, compared to 120,451 in 2013.
  - ~ In Michigan, 29 percent of 2017 graduates took the ACT, compared to 60 percent nationally.
- It is worth noting that this is a significantly different cohort than in years past, when all Michigan juniors took the ACT. This will skew any comparison to previous years' cohorts.
- Michigan graduates of 2017 had an average Composite score of 24.1, compared to the national average of 21.0.
  - ~ Compared to the 2017 Michigan graduating class Composite average of 24.1, Michigan graduates in 2016 and 2013 had Composite averages of 20.3 and 19.9, respectively.
  - ~ 2017 Michigan graduates taking four or more years of English had an English average of 24.2, compared to the average English score of 21.8 for students taking less than four years of English.
  - ~ 2017 Michigan graduates taking three or more years of math had a math average of 23.8, compared to the average math score of 19.2 for students taking less than three years of math.
- In 2017, 47 percent of Michigan graduates met all four ACT College Readiness Benchmarks. This compares to 23 and 21 percent of 2016 and 2013 graduates, respectively.

### STEM

- In 2017, 16,558 Michigan graduates (55 percent) indicated having an interest in STEM majors and/or careers.
- Compared to a 2017 Michigan graduating class STEM average of 24.0, graduates in 2016 and 2013 had STEM averages of 20.4 and 20.3, respectively.
- Compared to 39 percent of 2017 Michigan graduates meeting the ACT STEM College Readiness Benchmark, graduates in 2016 and 2013 had STEM Benchmark percentages of 17 and 16, respectively.
- In Michigan, 64 percent of graduates taking physics met the ACT Science College Readiness Benchmark, compared to 46 for students not taking physics.

### Career Readiness

- Michigan tests all 11th-grade students with ACT WorkKeys®, which allows students to earn the ACT WorkKeys National Career Readiness Certificate®. 87.8% of the Michigan ACT-tested population (94,476 students) in the 2017 graduating class earned an ACT NCRC® (Bronze—20,761, Silver—52,853, Gold—20,653, Platinum—209). 13,136 students did not qualify for a certificate.
  - ~ ACT NCRC levels correspond to the skill requirements of more than 20,000 ACT-profiled jobs in the ACT JobPro® database. Platinum indicates the skills required for approximately 99% of profiled jobs. Gold indicates the skills required for at least 93% of profiled jobs. Silver indicates the skills required for at least 69% of profiled jobs. Bronze indicates the skills required for at least 17% of profiled jobs.

## Impact

- Based on the actual test volume and ACT score distributions of 2016 ACT-tested Michigan 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:
  - ~ 53 more students enrolling in college.
  - ~ 65 more students persisting to year two.
  - ~ 38 fewer students needing remedial English.
  - ~ 69 fewer students needing remedial math.
  - ~ 78 more students persisting to year four.
  - ~ 90 more students earning a postsecondary degree within six years.

## Behaviors that Impact Access and Opportunity

- In Michigan, 2017 graduates taking the ACT two or more times had an average Composite score of 25.4, compared to 22.6 for single-time testers.
  - ~ 55 percent (16,452) of 2017 Michigan graduates took the ACT more than once, compared to 45 percent nationally.
    - Among White students who tested at least twice, 81.6 percent first tested in their junior year, increased their score by 1.3 point(s), and scored 1.3 point(s) higher than 11th-grade White students who tested only once.
    - Among Hispanic students who tested at least twice, 83.2 percent first tested in their junior year, increased their score by 1.3 point(s), and scored 2.7 point(s) higher than 11th-grade Hispanic students who tested only once.
    - Among African American students who tested at least twice, 71.6 percent first tested in their junior year, increased their score by 0.8 point(s), and scored 1.8 point(s) higher than 11th-grade African American students who tested only once.
- For Michigan's 2017 ACT-tested graduates, the top five schools to which scores were sent were Michigan State University, University of Michigan-Ann Arbor, Grand Valley State University, Central Michigan University, and Western Michigan University.
  - ~ For Michigan's 2017 ACT-tested graduates, the top three out-of-state schools to which scores were sent were Purdue University, University of Chicago, and University of Notre Dame.
- Compared to 73 percent of 2017 graduates nationally, 70 percent of Michigan graduates opted into EOS.
  - ~ Compared to 76 percent of American Indian students nationally, 77 percent of Michigan American Indian 2017 graduates opted into EOS.
  - ~ Compared to 69 percent of White students nationally, 68 percent of Michigan White 2017 graduates opted into EOS.
  - ~ Compared to 83 percent of Hispanic students nationally, 82 percent of Michigan Hispanic 2017 graduates opted into EOS.
  - ~ Compared to 76 percent of Asian students nationally, 75 percent of Michigan Asian 2017 graduates opted into EOS.
  - ~ Compared to 77 percent of Pacific Islander students nationally, 85 percent of Michigan Pacific Islander 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.

- ACT issued 4,481 ACT fee waivers to qualified Michigan students. However, 1,387 students (31 percent) did not take advantage of this opportunity to test for free. This compares to 656,061 fee waivers 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 Michigan graduating class of 2017, 1,992 (7 percent) had parents who did not attend college.
- In the Michigan graduating class of 2017, 7,954 (27 percent) aspired to attain a professional degree. They had an average Composite score of 25.9.
- In the Michigan graduating class of 2017, 6,899 (23 percent) aspired to attain a graduate degree. They had an average Composite score of 25.6.
- In the Michigan graduating class of 2017, 12,726 (42 percent) aspired to attain a bachelor's degree. They had an average Composite score of 22.5.
- In the Michigan graduating class of 2017, 237 (1 percent) aspired to attain an associate's degree. They had an average Composite score of 18.7.
- In order of prevalence, the five most commonly indicated college majors of interest for 2017 Michigan graduates were: Undecided; Medicine (Pre-Medicine); Nursing, Registered (BS/RN); Business Administration and Management, General; and Mechanical Engineering.
  - ~ In the Michigan graduating class of 2017, 5,889 (20 percent) indicated being undecided about their college major. They had an average Composite score of 24.5.
  - ~ In the Michigan graduating class of 2017, 1,068 (4 percent) indicated planning on majoring in education. They had an average Composite score of 22.8.

## ACT Footprint

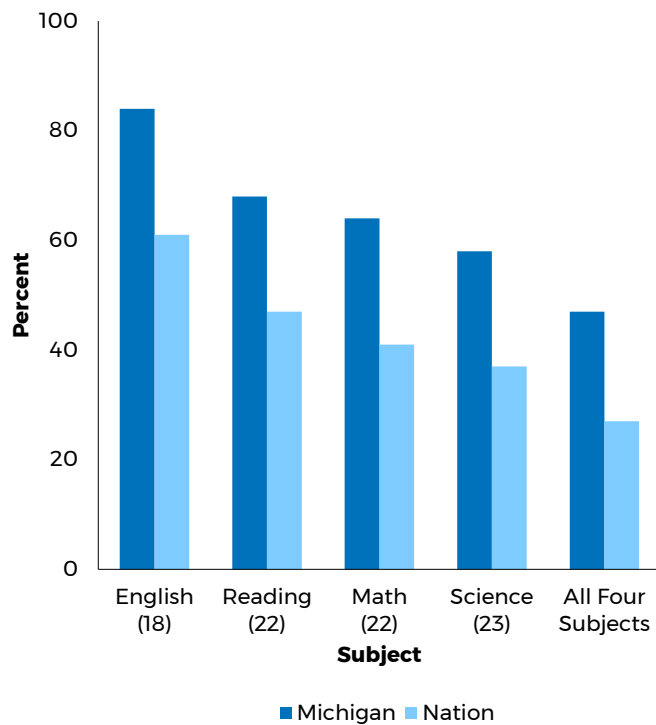
- Number of administrations:
  - ~ ACT Aspire® Summative: 11,560
  - ~ ACT Aspire Periodic: 2,875
  - ~ ACT Engage®: 3,164
  - ~ PreACT®: 2,594
  - ~ ACT WorkKeys: 73,835

## Additional Points

- There will be four ACT College and Career Readiness Workshops offered throughout the state in fall 2017 (Detroit, Lansing, Kalamazoo, and Houghton). Last year, there were 150 registrants.
- Lake and Kent counties are now certified Gold ACT Work Ready Communities.
- According to the US Department of Labor, the top five emerging professions in Michigan that require a bachelor's degree or higher include: Registered Nurse, Mechanical Engineer, General and Operational Managers, Accountants and Auditors, and Computer Systems Analysts.
- Michigan graduates meeting the ACT STEM College Readiness Benchmark had average math scores of 29.0 and average science score of 28.8. The national average math and science scores for students meeting the ACT STEM Benchmark were 28.7 and 28.7 respectively.

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

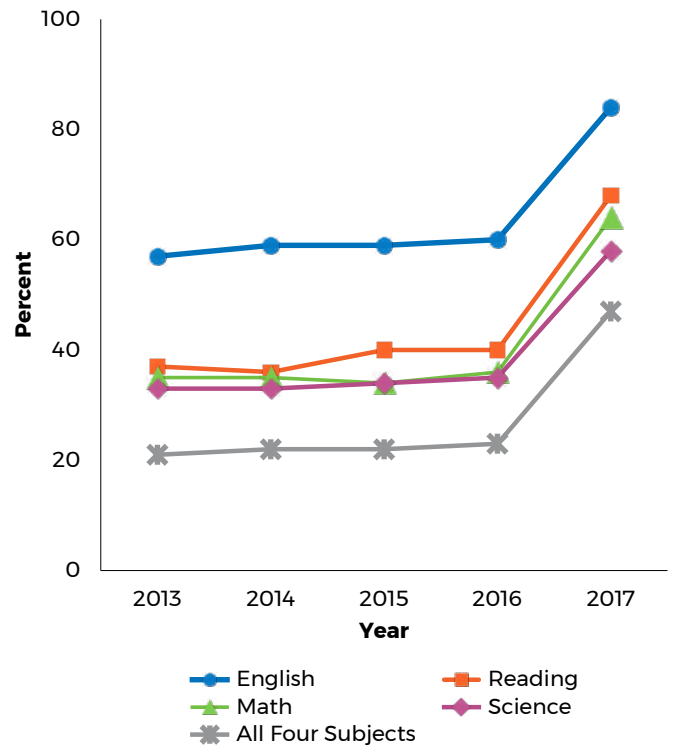
Percent of 2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks\* by Subject



Data from graph above:

State / Nation	English (18)	Reading (22)	Math (22)	Science (23)	All Four
Michigan	84	68	64	58	47
Nation	61	47	41	37	27

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

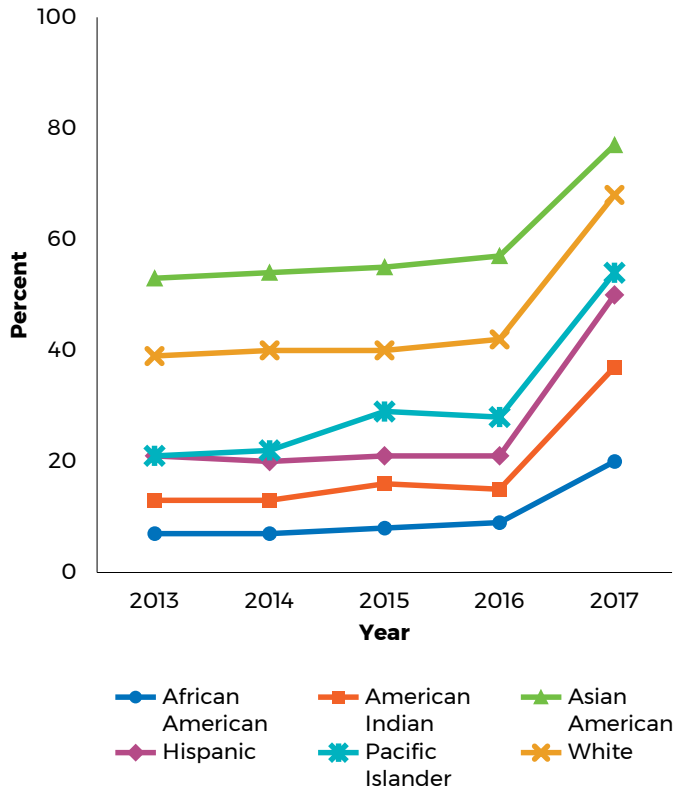


Data from graph above:

Subject	2013	2014	2015	2016	2017
English	57	59	59	60	84
Reading	37	36	40	40	68
Math	35	35	34	36	64
Science	33	33	34	35	58
All Four Subjects	21	22	22	23	47

\* 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\***



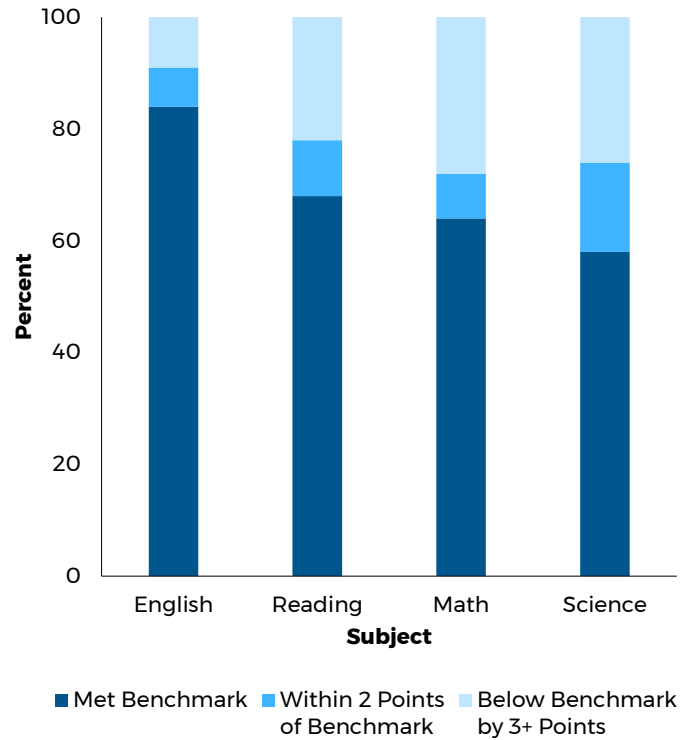
Data from graph above:

Race	2013	2014	2015	2016	2017
African American	7	7	8	9	20
American Indian	13	13	16	15	37
Asian American	53	54	55	57	77
Hispanic	21	20	21	21	50
Pacific Islander	21	22	29	28	54
White	39	40	40	42	68

\* 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**

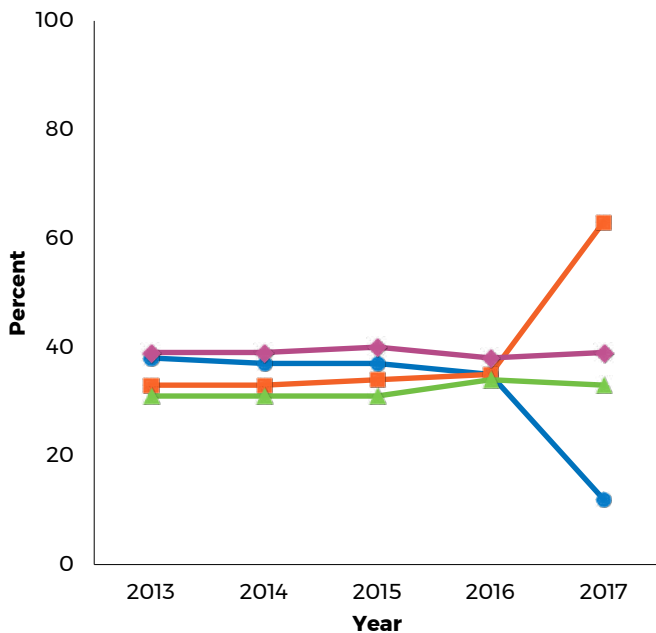
Note: Percents in this graph may not sum to 100% due to rounding. Values less than 0.5% will not appear.



Data from graph above:

Attainment	English	Reading	Math	Science
Met Benchmark	84	68	64	58
Within 2 Points of Benchmark	7	10	8	16
Below Benchmark by 3+ Points	10	23	28	26

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



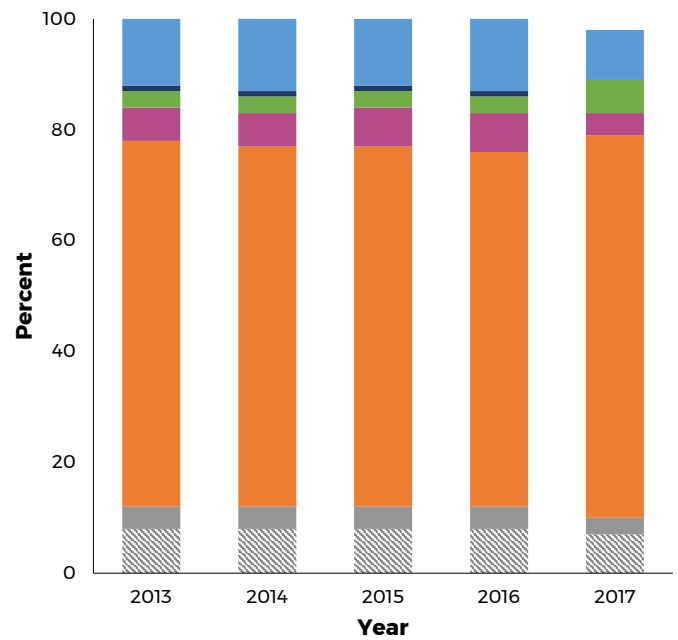
- Michigan Students Attaining 0 CRBs
- Michigan Students Attaining 3 or 4 CRBs
- National Students Attaining 0 CRBs
- National Students Attaining 3 or 4 CRBs

Data from graph above:

Attainment	2013	2014	2015	2016	2017
Michigan Students Attaining 0 CRBs	38	37	37	35	12
Michigan Students Attaining 3 or 4 CRBs	33	33	34	35	63
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	13	13	13	13	9
American Indian	1	1	1	1	0
Asian American	3	3	3	3	6
Hispanic	6	6	7	7	4
Pacific Islander	0	0	0	0	0
White	66	65	65	64	69
Two or More Races	4	4	4	4	3
No Response	8	8	8	8	7

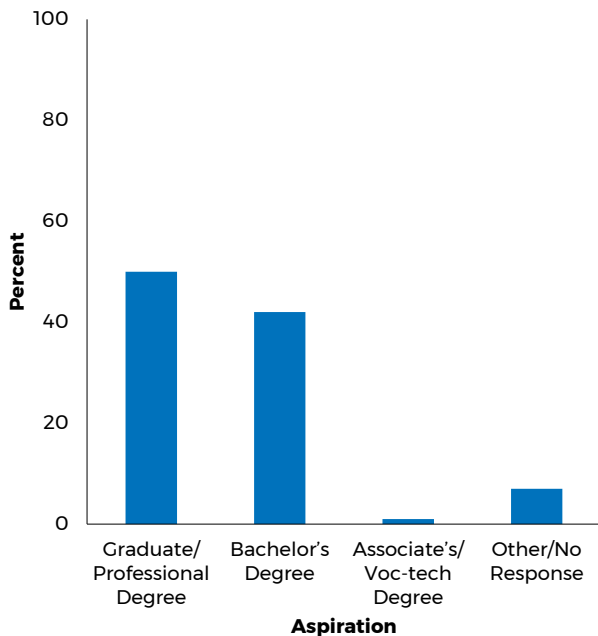
**Michigan:** Between 2013 and 2017, the number of students taking the ACT in Michigan decreased by 90,507 students (-75 percent).

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

Outcome	Cohort	2013	2014	2015	2016	2017
Percent Tested	Michigan	100	100	100	100	29
	Nation	54	57	59	64	60
N Tested	Michigan	120,451	119,990	118,555	115,454	29,944
	Nation	1,799,243	1,845,787	1,924,436	2,090,342	2,030,038
Average English Score	Michigan	19.1	19.3	19.4	19.9	24.1
	Nation	20.2	20.3	20.4	20.1	20.3
Average Reading Score	Michigan	20.0	20.2	20.3	20.7	24.5
	Nation	21.1	21.3	21.4	21.3	21.4
Average Math Score	Michigan	19.9	19.9	19.9	19.9	23.7
	Nation	20.9	20.9	20.8	20.6	20.7
Average Science Score	Michigan	20.2	20.4	20.4	20.5	23.8
	Nation	20.7	20.8	20.9	20.8	21.0
Average Composite Score	Michigan	19.9	20.1	20.1	20.3	24.1
	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 93% of Michigan's 2017 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 82% of Michigan's 2016 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 59% who actually did enroll. If we fully closed the aspirational gap, an additional 27,232 of the 2016 ACT-tested graduates from Michigan would have enrolled in postsecondary education.

*Data from graph*

Aspiration	Percent
Graduate / Professional Degree	50
Bachelor's Degree	42
Associate's / Voc-tech Degree	1
Other / No Response	7



## Michigan State Exemplar 2017 ACT College and Career Readiness Campaign

### Brenda Bekins

Saugatuck Middle High School, Saugatuck Public Schools

*“Persistence and ingenuity, I’ve learned, are key, and are what allowed me to overcome my situation.”*

Brenda and her family experienced severe financial difficulties during the Great Recession, but she did not allow her circumstances to impact her stellar academic achievement, and used her misfortunes to spur an entrepreneurial spirit. While running her own business, she has been successful in college-level courses from calculus to Spanish.

Brenda plans to attend the University of Michigan to earn her degree in business administration and a foreign language and to study abroad as often as possible, followed by a master’s degree in business administration.

## Information and products for further review

	Knowledge & Skills	Social & Emotional
<b>Assessments</b>	ACT Aspire®	ACT Tessera™
	PreACT®	ACT Engage®
	The ACT® Test	
	ACT WorkKeys®	
<b>Research</b>	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™	
<b>Resources</b>	PLDs Learning Description Review	Tessera Teacher Playbook
	Curriculum Review Worksheets	
	OpenEd Learning Resources	
	Test Prep	
<b>Training</b>	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](http://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](http://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.