

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

Vermont Key Findings

Performance

- In the Vermont graduating class of 2017, 2,108 graduates took the ACT® test, compared to 2,005 in 2013.
 - ~ In Vermont, 29 percent of 2017 graduates took the ACT, compared to 60 percent nationally.
- Vermont graduates of 2017 had an average Composite score of 23.6, compared to the national average of 21.0.
 - ~ Compared to the 2017 Vermont graduating class Composite average of 23.6, Vermont graduates in 2016 and 2013 had Composite averages of 23.4 and 23.0, respectively.
- In 2017, 44 percent of Vermont graduates met all four ACT College Readiness Benchmarks. This compares to 43 and 39 percent of 2016 and 2013 graduates, respectively.
 - ~ In 2017, 59 percent of Vermont graduates met three or four ACT College Readiness Benchmarks. This compares to 58 and 55 percent of 2016 and 2013 graduates, respectively.
 - ~ In 2017, 15 percent of Vermont graduates met zero ACT College Readiness Benchmarks. This compares to 15 and 16 percent of 2016 and 2013 graduates, respectively.

STEM

- In 2017, 939 Vermont graduates (45 percent) indicated having an interest in STEM majors and/or careers.
- Compared to a 2017 Vermont graduating class STEM average of 23.4, graduates in 2016 and 2013 had STEM averages of 23.3 and 23.0, respectively.
- Compared to 35 percent of 2017 Vermont graduates meeting the ACT STEM College Readiness Benchmark, graduates in 2016 and 2013 had STEM Benchmark percentages of 32 and 31, respectively.
- The ACT is the only college entrance exam with a dedicated Science assessment, making the ACT a great fit for Vermont's Mathematics and Science Partnership.

Career Readiness

- 90% of the 2017 Vermont graduating class is likely to attain a Silver- or higher-level ACT WorkKeys® National Career Readiness Certificate®, should those students take ACT WorkKeys assessments.
 - ~ 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.
- The Vermont Community College System offers college credit for the ACT WorkKeys National Career Readiness Certificate.

Impact

- Based on the actual test volume and ACT score distributions of 2016 ACT-tested Vermont 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:
 - ~ 4 more students enrolling in college.
 - ~ 5 more students persisting to year two.
 - ~ 3 fewer students needing remedial English.
 - ~ 5 fewer students needing remedial math.
 - ~ 6 more students persisting to year four.
 - ~ 6 more students earning a postsecondary degree within six years.

Behaviors that Impact Access and Opportunity

- In Vermont, 2017 graduates taking the ACT two or more times had an average Composite score of 26.0, compared to 22.5 for single-time testers.
 - ~ 31 percent (656) of 2017 Vermont graduates took the ACT more than once, compared to 45 percent nationally.
- Of Vermont's 2017 graduating class, there were 1,587 (75 percent) White students taking the ACT. This compares to 1,062,439 (52 percent) nationally.
- For Vermont's 2017 ACT-tested graduates, the top five schools to which scores were sent were University of Vermont, Castleton University, Champlain College, University of New Hampshire, and Vermont Technical College.
 - ~ For Vermont's 2017 ACT-tested graduates, the top three out-of-state schools to which scores were sent were University of New Hampshire, Northeastern University, and The University Of Maine.
- Compared to 73 percent of 2017 graduates nationally, 53 percent of Vermont graduates opted into EOS.
 - ~ Compared to 85 percent of African American students nationally, 74 percent of Vermont African American 2017 graduates opted into EOS.
 - ~ Compared to 69 percent of White students nationally, 58 percent of Vermont White 2017 graduates opted into EOS.
 - ~ Compared to 83 percent of Hispanic students nationally, 54 percent of Vermont Hispanic 2017 graduates opted into EOS.
 - ~ Compared to 76 percent of Asian students nationally, 58 percent of Vermont 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. Two colleges and universities in Vermont acquired 2,041 students' names using the "Get Your Name in the Game" initiative.
- ACT issued 289 ACT fee waivers to qualified Vermont students. However, 67 students (23 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 Vermont graduating class of 2017, 130 (6 percent) had parents who did not attend college.
- In the Vermont graduating class of 2017, 381 (18 percent) aspired to attain a professional degree. They had an average Composite score of 26.6.
- In the Vermont graduating class of 2017, 398 (19 percent) aspired to attain a graduate degree. They had an average Composite score of 25.3.
- In the Vermont graduating class of 2017, 689 (33 percent) aspired to attain a bachelor's degree. They had an average Composite score of 22.8.
- In the Vermont graduating class of 2017, 22 (1 percent) aspired to attain an associate's degree. They had an average Composite score of 18.5.
- In order of prevalence, the five most commonly indicated college majors of interest for 2017 Vermont graduates were: Undecided; Nursing, Registered (BS/RN); Medicine (Pre-Medicine); Biology, General; and Business Administration and Management, General.
 - ~ In the Vermont graduating class of 2017, 398 (19 percent) indicated being undecided about their college major. They had an average Composite score of 24.5.
 - ~ In the Vermont graduating class of 2017, 72 (3 percent) indicated planning on majoring in education. They had an average Composite score of 22.1.

ACT Footprint

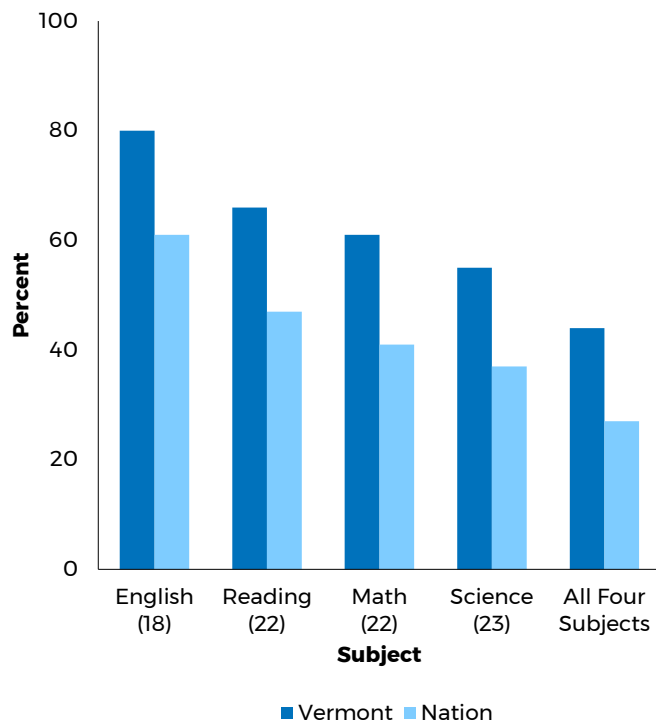
- Number of administrations:
 - ~ ACT Engage®: 43
 - ~ PreACT®: 1,561
 - ~ ACT WorkKeys: 1,035

Additional Points

- ACT will host two ACT College and Career Readiness Workshops this fall in Vermont: September 28 (College of St. Joseph) and September 29 (Saint Michael's College). The theme for this year's workshop is "Preparing Students for Success: A Holistic Approach."

Vermont College and Career Readiness Attainment, Participation, and Opportunity

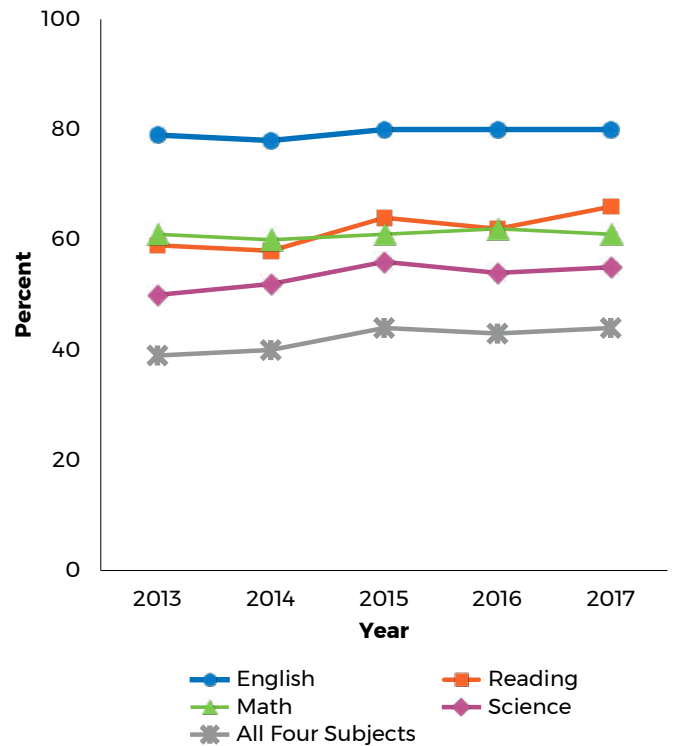
Percent of 2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks* by Subject



Data from graph above:

| State / Nation | English (18) | Reading (22) | Math (22) | Science (23) | All Four |
|----------------|--------------|--------------|-----------|--------------|----------|
| Vermont | 80 | 66 | 61 | 55 | 44 |
| Nation | 61 | 47 | 41 | 37 | 27 |

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

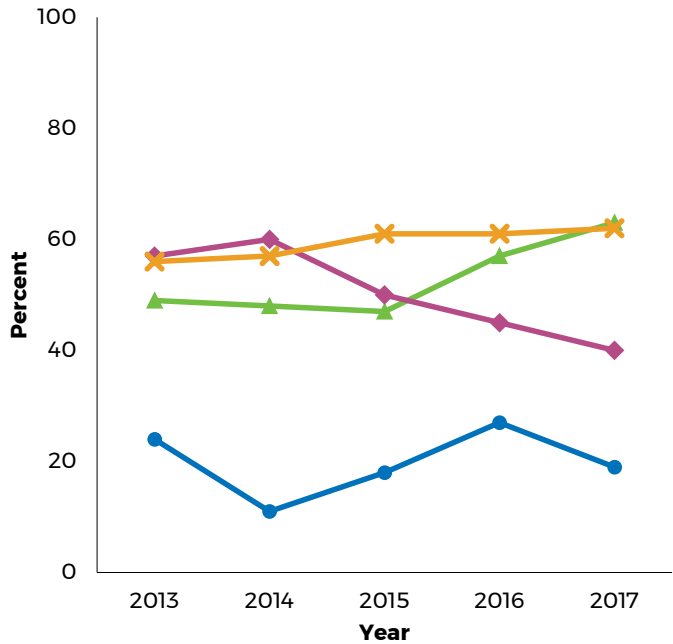


Data from graph above:

| Subject | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------------|------|------|------|------|------|
| English | 79 | 78 | 80 | 80 | 80 |
| Reading | 59 | 58 | 64 | 62 | 66 |
| Math | 61 | 60 | 61 | 62 | 61 |
| Science | 50 | 52 | 56 | 54 | 55 |
| All Four Subjects | 39 | 40 | 44 | 43 | 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

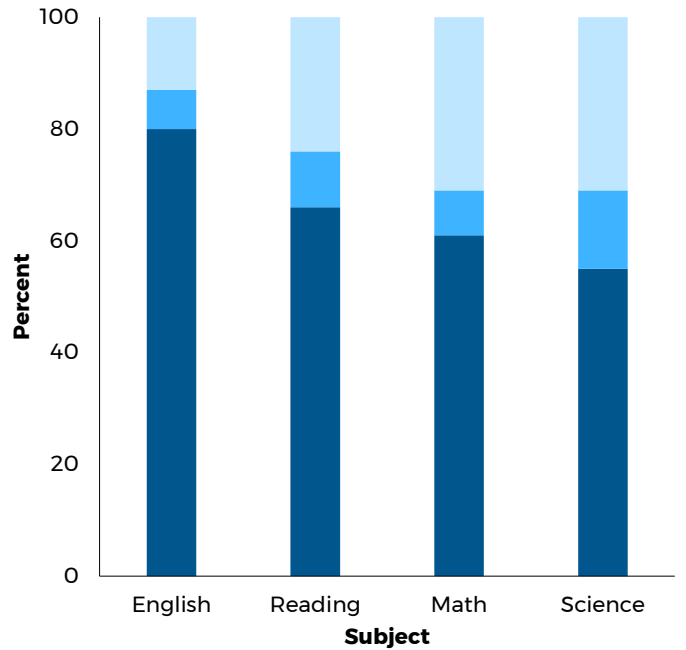
Data from graph above:

| Race | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------|------|------|------|------|------|
| African American | 24 | 11 | 18 | 27 | 19 |
| American Indian | | | | | |
| Asian American | 49 | 48 | 47 | 57 | 63 |
| Hispanic | 57 | 60 | 50 | 45 | 40 |
| Pacific Islander | | | | | |
| White | 56 | 57 | 61 | 61 | 62 |

* 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.

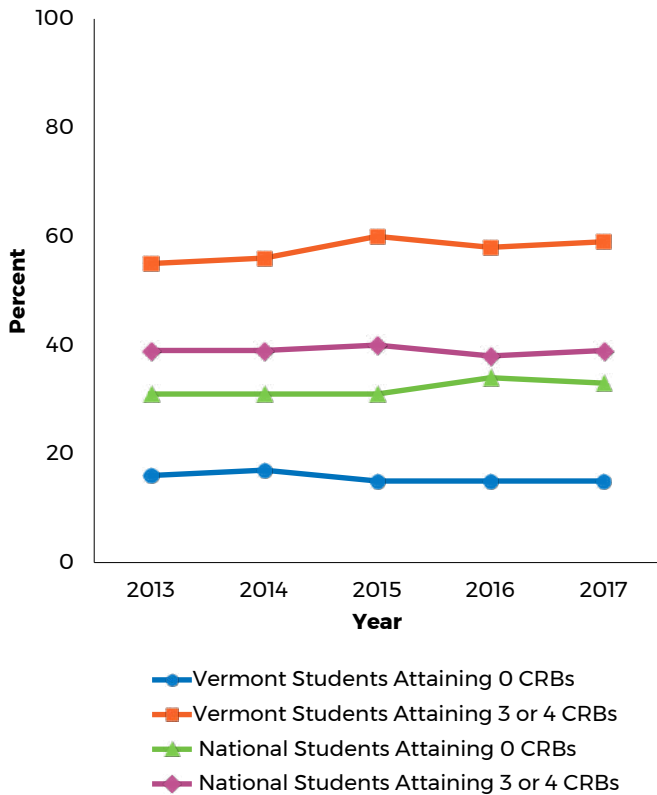


- Met Benchmark
- Within 2 Points of Benchmark
- Below Benchmark by 3+ Points

Data from graph above:

| Attainment | English | Reading | Math | Science |
|------------------------------|---------|---------|------|---------|
| Met Benchmark | 80 | 66 | 61 | 55 |
| Within 2 Points of Benchmark | 7 | 10 | 8 | 14 |
| Below Benchmark by 3+ Points | 13 | 24 | 31 | 31 |

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

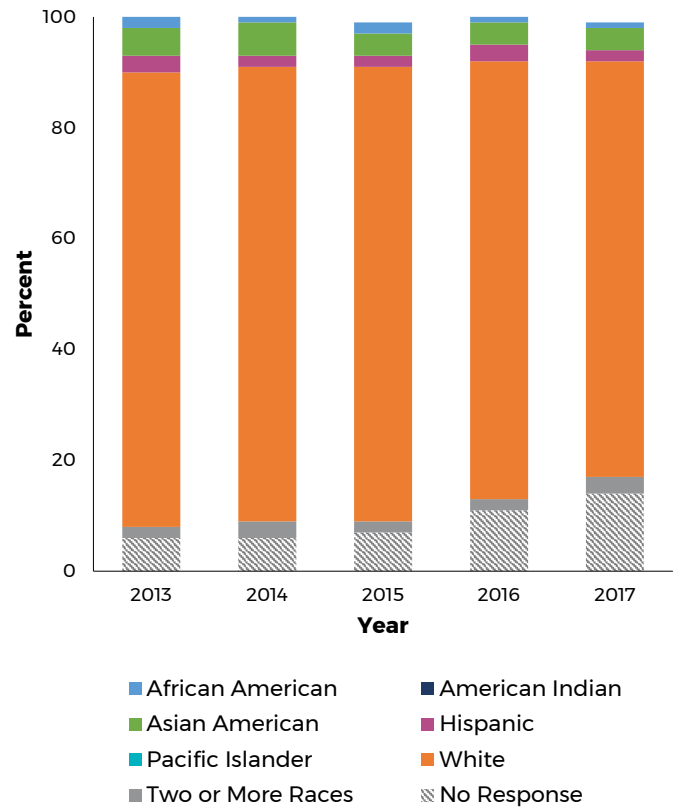


Data from graph above:

| Attainment | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|------|------|------|------|------|
| Vermont Students Attaining 0 CRBs | 16 | 17 | 15 | 15 | 15 |
| Vermont Students Attaining 3 or 4 CRBs | 55 | 56 | 60 | 58 | 59 |
| 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 | 2 | 2 | 2 | 1 | 1 |
| American Indian | 0 | 0 | 0 | 0 | 0 |
| Asian American | 5 | 6 | 4 | 4 | 4 |
| Hispanic | 3 | 2 | 2 | 3 | 2 |
| Pacific Islander | 0 | 0 | 0 | 0 | 0 |
| White | 82 | 82 | 82 | 79 | 75 |
| Two or More Races | 2 | 3 | 2 | 2 | 3 |
| No Response | 6 | 6 | 7 | 11 | 14 |

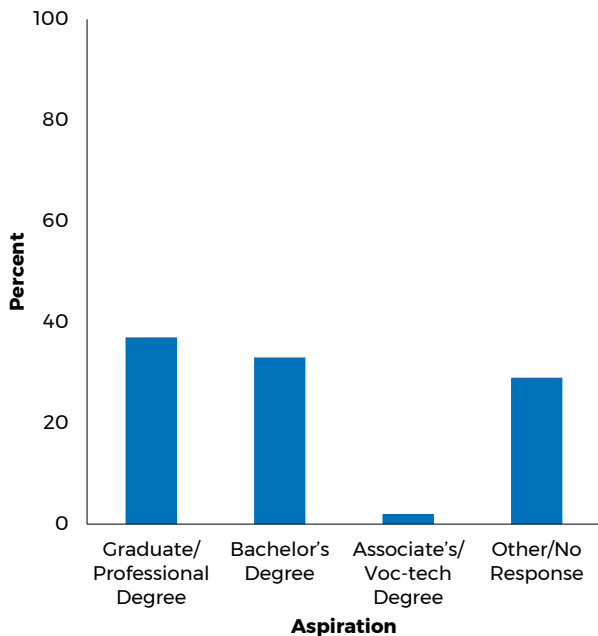
Vermont: Between 2013 and 2017, the number of students taking the ACT in Vermont increased by 103 students (5 percent).

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

| Outcome | Cohort | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------------------|---------|-----------|-----------|-----------|-----------|-----------|
| Percent Tested | Vermont | 26 | 29 | 29 | 29 | 29 |
| | Nation | 54 | 57 | 59 | 64 | 60 |
| N Tested | Vermont | 2,005 | 2,105 | 2,179 | 2,104 | 2,108 |
| | Nation | 1,799,243 | 1,845,787 | 1,924,436 | 2,090,342 | 2,030,038 |
| Average English Score | Vermont | 22.7 | 22.8 | 23.2 | 22.9 | 23.3 |
| | Nation | 20.2 | 20.3 | 20.4 | 20.1 | 20.3 |
| Average Reading Score | Vermont | 23.4 | 23.7 | 24.1 | 24.1 | 24.4 |
| | Nation | 21.1 | 21.3 | 21.4 | 21.3 | 21.4 |
| Average Math Score | Vermont | 22.8 | 23.0 | 23.0 | 22.9 | 23.1 |
| | Nation | 20.9 | 20.9 | 20.8 | 20.6 | 20.7 |
| Average Science Score | Vermont | 22.6 | 22.8 | 23.2 | 23.2 | 23.2 |
| | Nation | 20.7 | 20.8 | 20.9 | 20.8 | 21.0 |
| Average Composite Score | Vermont | 23.0 | 23.2 | 23.5 | 23.4 | 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 71% of Vermont's 2017 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 81% of Vermont's 2016 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 77% who actually did enroll. If we fully closed the aspirational gap, an additional 69 of the 2016 ACT-tested graduates from Vermont would have enrolled in postsecondary education.

Data from graph

| Aspiration | Percent |
|--------------------------------|---------|
| Graduate / Professional Degree | 37 |
| Bachelor's Degree | 33 |
| Associate's / Voc-tech Degree | 2 |
| Other / No Response | 29 |



Vermont State Exemplar

2017 ACT College and Career Readiness Campaign

Erik Brown

Fair Haven Union High School, Addison-Rutland Supervisory Union

“I was waiting with an elderly woman for the bus. . . . She then went on to say one of her favorite parts of coming to the hospital was being able to talk with the younger volunteers.”

Erik volunteers his time helping patients at his local hospital and participated during his senior year in a dual enrollment program at his local community college. This taught him how to apply for, and succeed in, a four-year college as well as enabled him to earn 36 credits that will transfer to his bachelor’s degree-granting institution.

Erik plans to earn his degree in applied mathematics and computer science (in three years, thanks to his dual enrollment credits), then work as an applied mathematician at a research institute.

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.