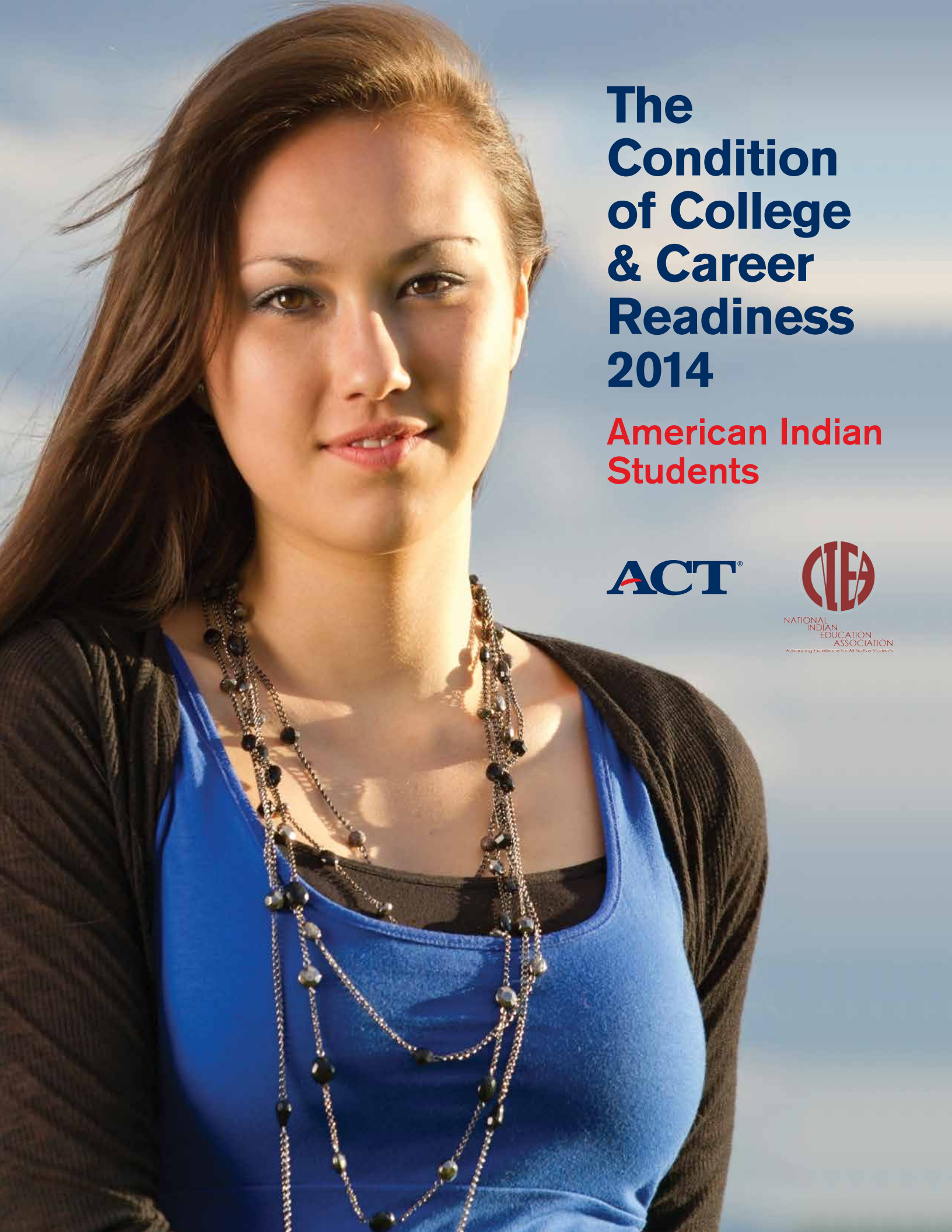

The Condition of College & Career Readiness 2014

American Indian Students

ACT®

NATIONAL INDIAN EDUCATION ASSOCIATION

Advancing Excellence for All Native Students

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June 2015

Dear colleagues,

ACT and the National Indian Education Association (NIEA) are united in our desire to help all people succeed in education and the workplace. We share a commitment to the effective use of data and analysis to support the continuous improvement of individuals, organizations, and systems, and we respect that traditional ways of knowing and doing can be complemented by innovative practices to foster academic success for Native students.

NIEA and ACT are proud to collaborate on this report, which is an extension of the annual ACT *Condition of College & Career Readiness* series. The report provides a national snapshot of academic performance among American Indian/Alaska Native students in the high school graduating class who took the ACT® college readiness assessment and addresses questions of critical importance to our nation. Are Native high school students prepared for college and career? Are younger Native students on target for college and career? Are enough Native students taking core courses that will prepare them for college and career? Are Native students who are ready for college and career actually succeeding?

About one-third of American Indian/Alaska Natives are under the age of 18, compared to one-quarter of the total US population, and the relative youth of this population underscores the urgent need to improve educational outcomes for this generation and future generations of Native people and tribal communities. According to the US Census Bureau, the American Indian and Alaska Native population exceeds 5.2 million people, and the states with the largest Native populations are California, Oklahoma, Arizona, Texas, New Mexico, Washington, New York, North Carolina, Florida, and Alaska. Native students live in every state, in urban, suburban, rural, and reservation communities. In fact, about 90% of the more than 600,000 American Indian/Alaska Native students in K–12 education attend regular public schools, and about 10% attend schools affiliated with the Bureau of Indian Education.

While many American Indian and Alaska Native students do well in school, only about half will graduate from high school. And of those who graduate from high school, about one in four will complete a postsecondary certificate or associate's degree, and about one in three will complete a bachelor's degree within six years of enrolling in college. But these averages obscure the fact that graduation rates vary considerably by state and school and magnify the need for better data and focused efforts to improve college and career readiness for Native students.

Progress will require that we look to the evidence of what works. To that end, this report offers several recommendations for improving readiness for Native students and all students by establishing clear, high, and common academic standards in the classroom; increasing the rigor of high school core courses; monitoring student performance beginning in the early grades; and making academic interventions with students who are off target as soon as possible, based on timely and reliable performance data.

We worked together to share this rigorous data analysis with you, and it is our hope to work with you to increase college and career readiness among Native students so they are prepared for success on their educational pathways after high school. We hope that the information in this report will assist states, districts, schools, and educators who play such important and interdependent roles in preparing Native students, and all students, to thrive in education, career, and life.

Jon Whitmore
CEO, ACT

Ahniwake Rose
Executive Director, National Indian Education Association

American Indian Students

The Condition of College & Career Readiness 2014

The Condition of College & Career Readiness 2014 is ACT's annual report on the progress of the graduating class relative to college readiness. This year, 57% of the graduating class took the ACT® college readiness assessment. The increased number of test takers over the past several years enhances the breadth and depth of the data pool, providing a comprehensive picture of the current graduating class in the context of readiness levels as well as offering a glimpse of the emerging educational pipeline.

Our Commitment to College and Career Readiness

As a research-based nonprofit, ACT is committed to providing a wider range of solutions across a wider range of life decision points in an increasingly individualized manner so everyone can benefit. This commitment has led ACT to a mode of continuous improvement in an ever-changing educational and workplace landscape. Over the last year, ACT has made several key announcements, including:

- **Release of ACT Aspire™.** In spring 2014, ACT released an assessment system that spans grades 3–10. It aligns to the ACT College Readiness Standards, which allows monitoring and intervening to take place much earlier and helps prepare students to succeed at college-level work, culminating with the ACT college readiness assessment. To date, more than 1 million assessments have been taken.
- **Enhancements to the ACT college readiness assessment.** Several key modifications to the ACT were announced. These include:
  - Online, computer-based administration of the ACT, with more than 4,000 students tested in spring 2014
  - Optional constructed-response computer-based testing tasks in mathematics, reading, and science—offered alongside the existing optional Writing Test—assessing whether students can justify, explain, and use evidence to support claims
  - Additional questions on the Reading Test that address whether students can integrate knowledge and ideas across multiple texts
  - Additional statistics and probability items on the Mathematics Test to allow for reporting of student achievement in this area
  - Additional reporting to include a STEM score, career readiness indicator, English language arts score, text complexity indicator, and reporting categories consistent with college and career readiness language
  - Enhanced Writing Test based on the newly developed ACT writing competency framework that provides results in four domains

While the evolution of the ACT continues and additional scores will be provided, it will remain a curriculum-based achievement exam, and the 1–36 score scale will not change.

- **A continued commitment to evidence and validity monitoring.** The ACT National Curriculum Survey®, completed every three to five years, is used to build and update a valid suite of ACT assessments, empirically aligned to the ACT College Readiness Standards. The survey informs the test blueprint for the assessments. Assessment results validate the ACT College Readiness Standards and the ACT College Readiness Benchmarks. This evidence and the validity cycle drive the development and continuous improvement of ACT's current and future solutions, as well as the associated research agenda.
- **Release of ACT Profile™.** ACT Profile is a first-of-its-kind college and career planning community, built on 30-plus years of ACT research. Mobile, social, and *free to students* (over the age of 13), ACT Profile develops personalized insights and populates an interactive career graph to show students the best career matches based on their self-assessment results. The tool then extends those insights to help students make informed career and educational plans.

ACT is committed to being a leader in education and career success by infusing innovation into our foundation of assessment excellence. We make changes only after a thorough analysis of user need, coupled with our commitment to the highest-quality test development and helping *all* students achieve college and career success.

A Holistic View of College Readiness

ACT continues in its steadfast support of the purpose and intent of the Common Core State Standards, which focus on the key essential standards that can prepare students for college and career success. However, we also believe that academic readiness is just one of several factors that contribute to educational success. Other key factors include the academic behaviors of students and informed career planning (e.g., based on interests). Together, these elements define a clear picture of student readiness for postsecondary education. To encourage progress, the educational system needs to monitor and sustain all key factors of success.

Using This Report[1]

This report is designed to help inform the following questions driving national efforts to strengthen P–16 education.

- Are American Indian students prepared for college and career?
- Are enough American Indian students taking core courses?
- Are core courses rigorous enough?
- Are younger American Indian students on target for college and career?
- What other dimensions of college and career readiness should we track?
- Are American Indian students who are ready for college and career actually succeeding?

Key Findings

Condition of College & Career Readiness 2014— American Indian Students

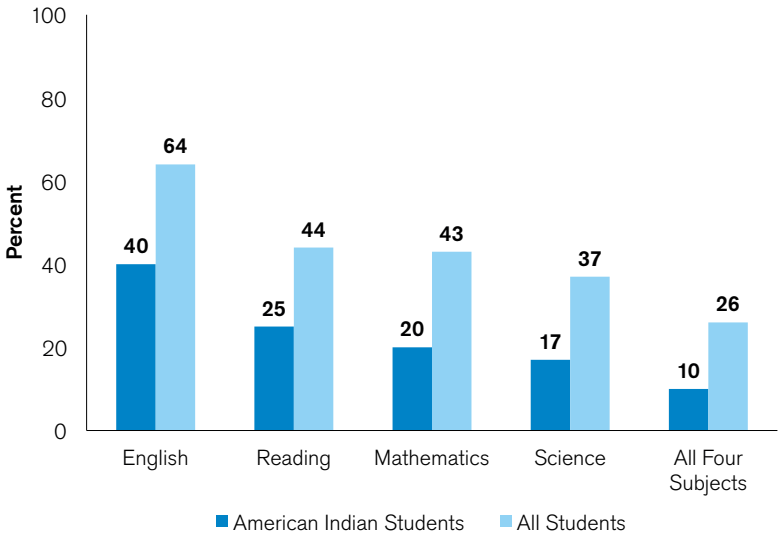
Key Findings	Implications	Recommendations
Academic readiness • Most students are not academically ready for college • This is unchanged since 2010 • Most students are not close to being academically ready See graphs on pp. 6–7	Individuals • Many students will have limited postsecondary education opportunities • Students who attend postsecondary institutions with limited academic preparation are at risk to drop out Institutions • Increased number of students attend postsecondary institutions unaware of expectations	• Review existing policies to determine the differences across institutions/systems that require students to take remedial courses • Develop partnerships between secondary and postsecondary institutions to align academic expectations
Academic readiness and race/ethnicity • Ethnicity/race and readiness are related; American Indian / Alaska Native students are less likely to be academically ready across all subject areas See graphs on pp. 8–9	Individuals • Many students will struggle to succeed in postsecondary education, regardless of subject • Many students are required to register for remedial coursework Institutions • Potentially lower graduation rates for remediated students	• Increase access to rigorous coursework • Establish academic support systems for students to meet rigorous coursework requirements in high school
Core course taking and readiness • Students who take a core high school curriculum are more likely to be academically ready • Readiness rates for American Indian/Alaska Native students remain low regardless of core course taking See graph on p. 10	Individuals • Even most students who take a core curriculum will struggle to succeed in a postsecondary environment Institutions • Limited access to resources increases barriers to rigorous academic courses • Hardships related to student preparedness can cause effective teachers to leave rural or isolated school systems	• Align high school graduation requirements and college entrance requirements • Create mentoring or induction programs to provide personalized attention for new teachers • Collaborate with colleges/universities to support professional learning and growth
A look at STEM • Ethnicity/race and readiness are related for students with an interest in STEM fields See graph on p. 10	Individuals • Many students with an interest in STEM fields will struggle academically in postsecondary institutions • Secondary schools are not equipped instructionally or academically to prepare students for postsecondary STEM programs Institutions • STEM majors missing American Indian/Alaska Native students	• Partner with colleges/universities to offer distance learning curriculum and technology for STEM fields • Increase secondary program funding to support student interests in STEM majors
Postsecondary aspirations • Most students aspire to some postsecondary education See graph on p. 14	Individuals • Many American Indian/Alaska Native students are highly motivated, seeking out postsecondary opportunities for which they may be ill-prepared academically Institutions • Student success is based on academic preparedness and their resiliency	• Create supportive, positive institutional experiences that strengthen a student's self-efficacy to overcome at-risk factors • Provide effective academic advising and workshops to meet student needs
College enrollment • Academic readiness and college enrollment are related; less prepared students have limited postsecondary education opportunities See graph on p. 15	Individuals • Most American Indian/Alaska Native students are likely to enroll in a two-year postsecondary educational institution Institutions • Students spend more time and money to complete a two- or four-year degree	• Establish a success plan with high school students so they become aware of necessary skills and knowledge needed to earn a postsecondary degree

American Indian Students

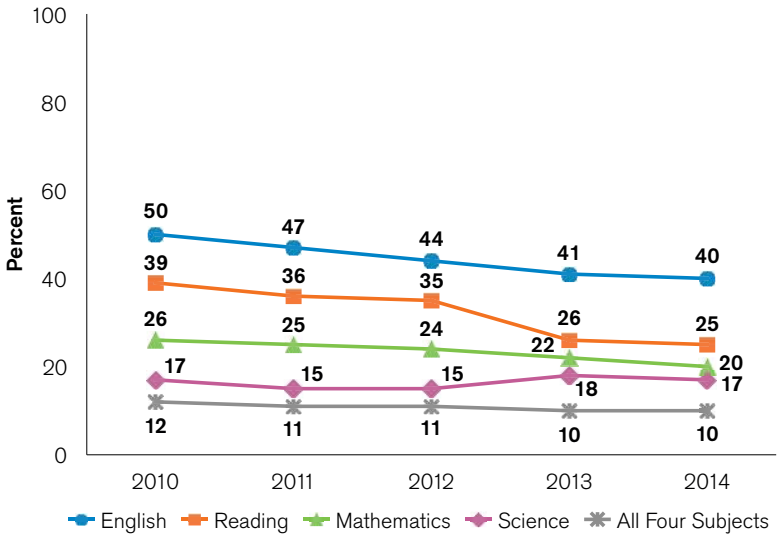
Attainment of College and Career Readiness

- 14,263 American Indian high school 2014 graduates took the ACT.
- From 2010–2014, the number of ACT test-taking American Indian graduates has decreased by about 13 percent.

Percent of 2014 ACT-Tested American Indian High School Graduates Meeting ACT College Readiness Benchmarks by Subject



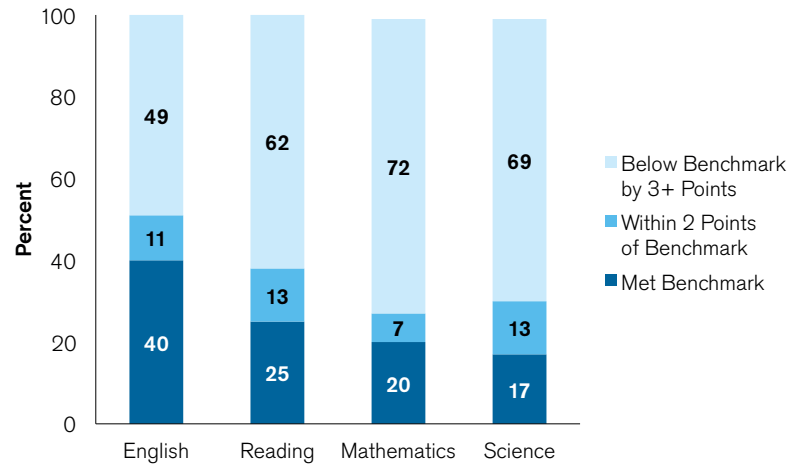
Percent of 2010–2014 ACT-Tested American Indian High School Graduates Meeting ACT College Readiness Benchmarks



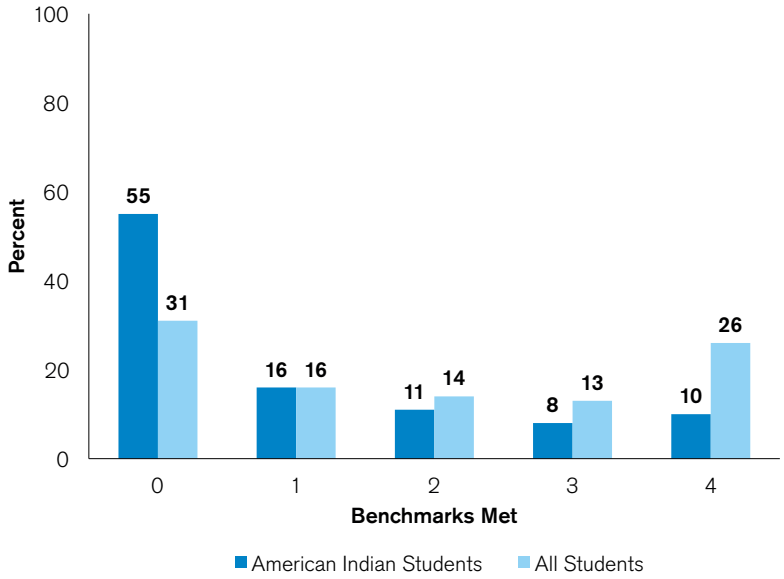
Note: Percents in this report may not sum to 100% due to rounding.

Near Attainment of College and Career Readiness

Percent of 2014 ACT-Tested American Indian High School Graduates by ACT College Readiness Benchmark Attainment and Subject



Percent of 2014 ACT-Tested American Indian High School Graduates by Number of ACT College Readiness Benchmarks Attained

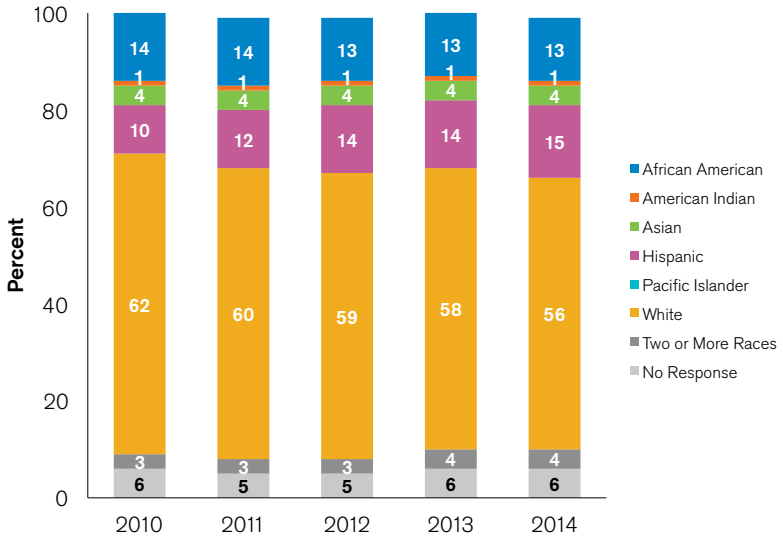


American Indian Students

Participation and Opportunity

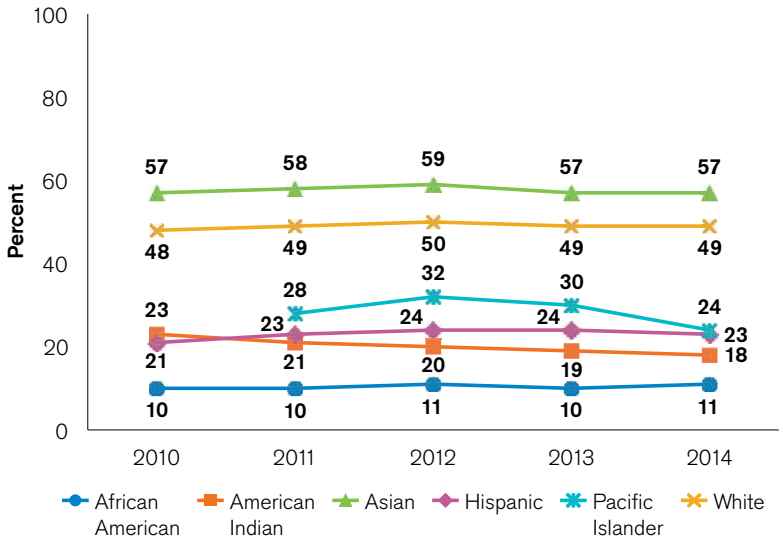
Over the past decade, ACT has experienced unprecedented growth in the number of students tested, as well as statewide partnerships in 13 states and in many districts across the country. As a result, the 2014 *Condition of College & Career Readiness* report provides a much deeper and more representative sample in comparison to a purely self-selected college-going population.

Percent of 2010–2014 ACT-Tested High School Graduates by Race/Ethnicity*



Note: Values less than 0.5% will not appear.

Percent of 2010–2014 ACT-Tested High School Graduates Meeting Three or More Benchmarks by Race/Ethnicity*

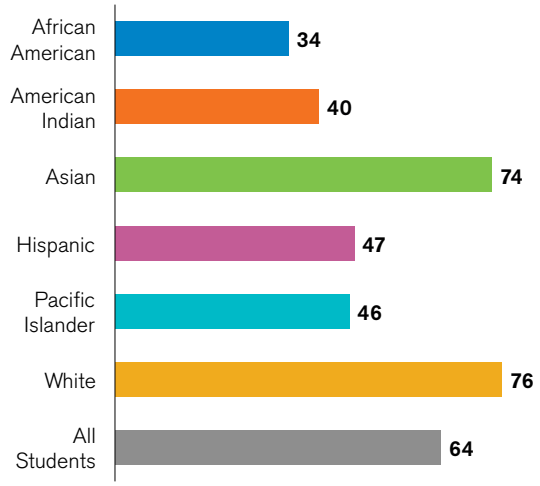


* Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.[2]

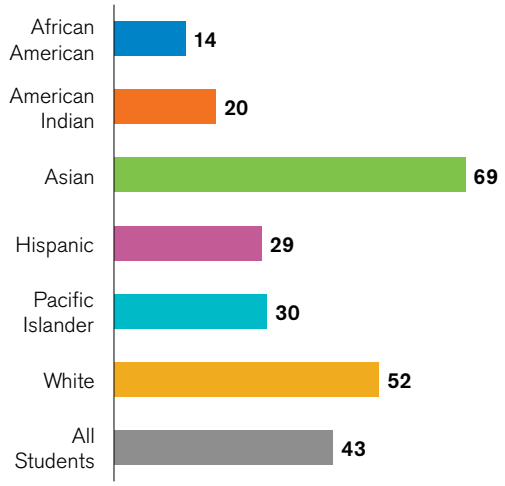
Participation and Opportunity by Subject

Percent of 2014 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Race/Ethnicity and Subject*

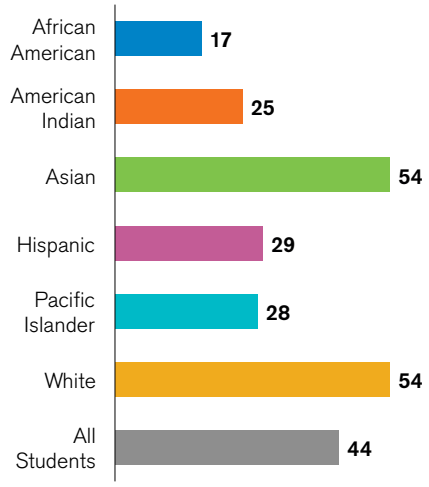
English



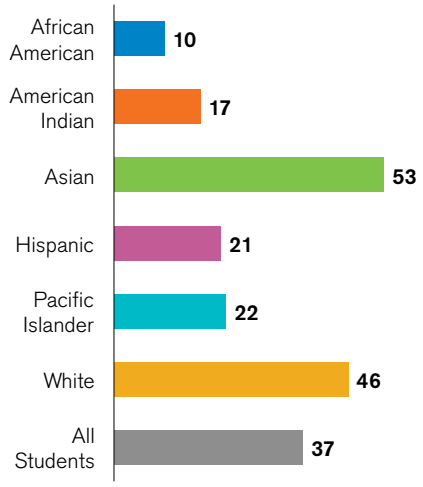
Mathematics



Reading



Science



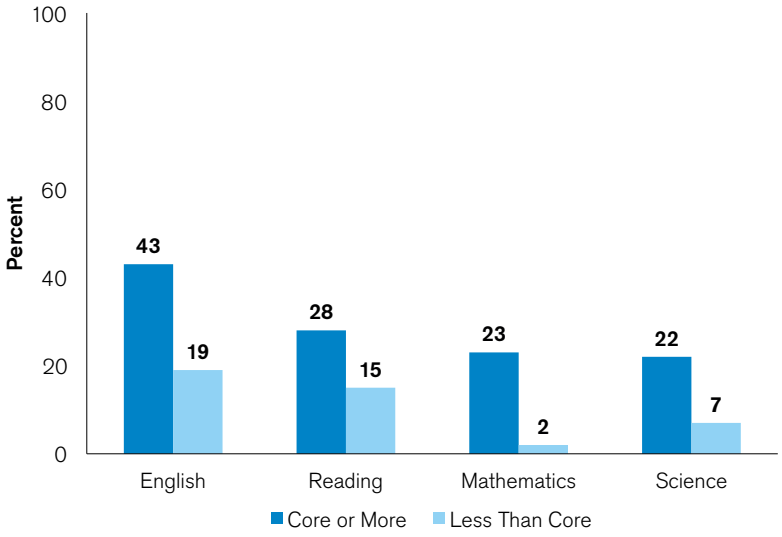
* Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.[2]

American Indian Students

Course-Taking Patterns and Benchmark Performance

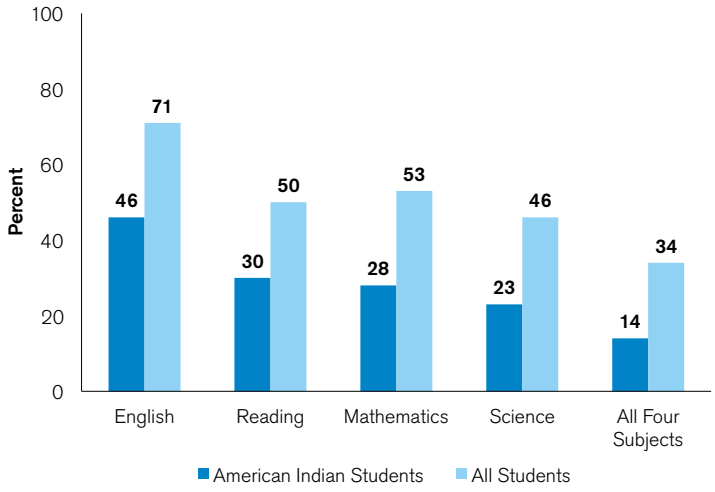
Within subjects, ACT has consistently found that students who take the recommended core curriculum are more likely to be ready for college or career than those who do not. A core curriculum is defined as four years of English and three years each of mathematics, social studies, and science.[3]

Percent of 2014 ACT-Tested American Indian High School Graduates in Core or More vs. Less Than Core Courses Meeting ACT College Readiness Benchmarks by Subject



A First Look at STEM

Percent of 2014 ACT-Tested American Indian High School Graduates with an Interest in STEM Meeting ACT College Readiness Benchmarks by Subject

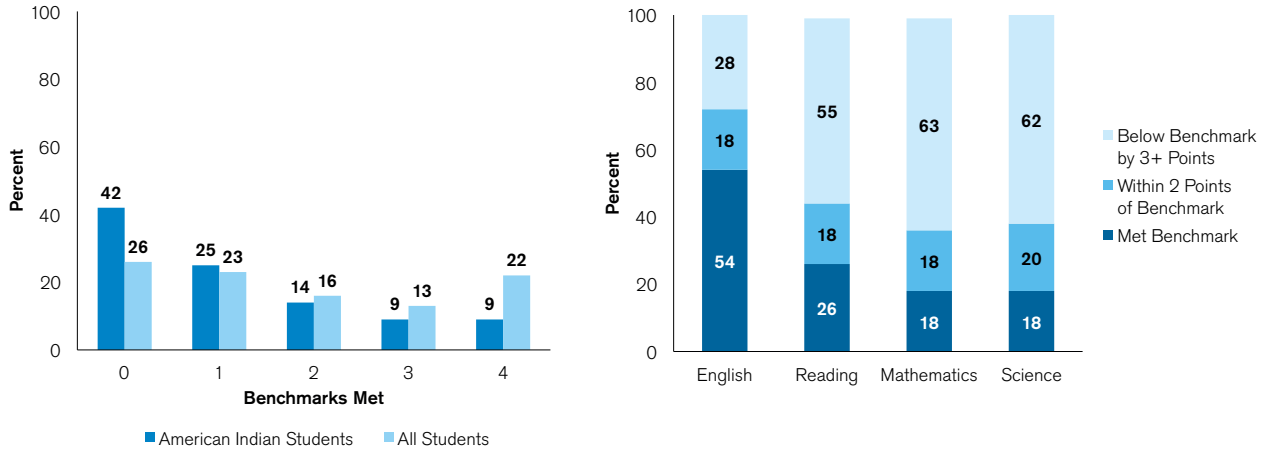


This chart describes ACT College Readiness Benchmark attainment for 2014 low-income high school graduates nationwide who have an interest in STEM majors or occupations. Characteristics of students with an interest in STEM were addressed in greater depth in the ACT *Condition of STEM 2014* report.

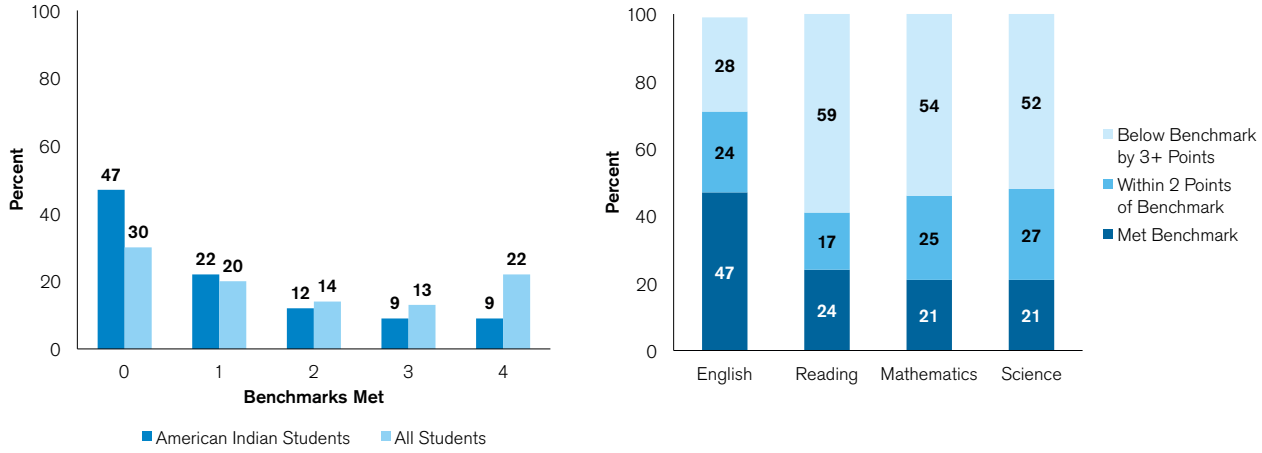
Early Preparation

ACT research shows that younger students who take rigorous curricula are more prepared to graduate from high school ready for college or career. Moreover, our research (*The Forgotten Middle*, 2008) found that "the level of academic achievement that students attain by 8th grade has a larger impact on their college and career readiness by the time they graduate from high school than anything that happens academically in high school."

Percent of 2013–2014 ACT Plan®–Tested American Indian 10th Graders Meeting ACT College Readiness Benchmarks (N = 12,554)



Percent of 2013–2014 ACT Explore®–Tested American Indian 8th Graders Meeting ACT College Readiness Benchmarks (N = 12,192)



American Indian Students

ACT College Readiness Benchmark Attainment for Top Planned College Majors: 2014 Graduates

When students register for the ACT, they can select a college major—from a list of 294 majors—that they plan to pursue in college. Among recent ACT-tested high school graduates nationwide, about 80% selected a specific planned major, whereas about 20% indicated that they were undecided or did not select a major.

This table ranks the nation's top (most frequently selected) majors among 2014 graduates. The percentages of students meeting the ACT College Readiness Benchmarks are shown for each major. Across these planned majors, there are considerable differences in the percentage of students who are ready to succeed in college.

Major Name	N	English	Reading	Math	Science	All Four
Undecided	1,922	42	27	21	19	11
No Major Indicated	1,282	16	9	6	4	2
Nursing, Registered (BS/RN)	694	34	20	14	11	5
Medicine (Pre-Medicine)	381	68	47	43	40	25
Business Administration and Management, General	278	43	27	24	20	10
Mechanical Engineering	275	39	24	32	23	16
Law (Pre-Law)	241	42	29	22	19	12
Criminology	230	30	17	11	13	4
Athletic Training	212	38	21	12	14	5
Medical Assisting	211	18	9	7	6	1
Physical Therapy (Pre-Physical Therapy)	167	49	25	20	15	5
Biology, General	162	68	45	42	38	23
Accounting	145	43	23	33	21	9
Graphic Design	138	36	25	10	13	5
Pharmacy (Pre-Pharmacy)	138	54	33	44	21	16
Psychology, Clinical and Counseling	138	57	39	30	25	16
Music, General	135	40	23	20	16	10
Nursing, Practical/Vocational (LPN)	135	21	5	5	4	1
Engineering (Pre-Engineering), General	123	52	36	46	36	28
Veterinary Medicine (Pre-Veterinarian)	123	51	33	25	25	11
Physical Therapy Assisting	116	24	9	7	3	1
Music, Performance	110	36	21	15	12	10
Art, General	106	35	30	13	13	8
Animal Sciences	105	43	32	22	24	10
Medical Radiologic Technology	105	50	24	18	13	7
Elementary Education	104	50	27	19	14	8
Health-Related Professions and Services, General	102	49	40	27	20	13
Welding Technology	102	10	9	3	3	1
Early Childhood Education	100	30	15	5	5	1

Note: *Undecided* and/or *No Major Indicated* are included in the table, if applicable. The former refers to students who selected the option *Undecided* from the list of majors. The latter refers to students who did not respond to the question.

ACT College Readiness Benchmark Attainment for the Top Planned College Majors with Good Fit: 2014 Graduates

Many students gravitate toward majors that align with their preferred activities and values. ACT research has shown that greater *interest-major fit* is related to important student outcomes such as persistence in a major or college. This table shows, for each planned major, the numbers and percentages of students displaying good interest-major fit[4], as well as the percentages of students meeting the ACT College Readiness Benchmarks. Since only students who completed the ACT Interest Inventory during ACT registration are included here, this table shows results for a subset of the students in the prior table. These planned majors vary considerably in the percentage of students displaying good interest-major fit and meeting the ACT College Readiness Benchmarks. The results highlight the importance of examining multiple predictors of college success and affirm the value of a holistic view of college readiness.

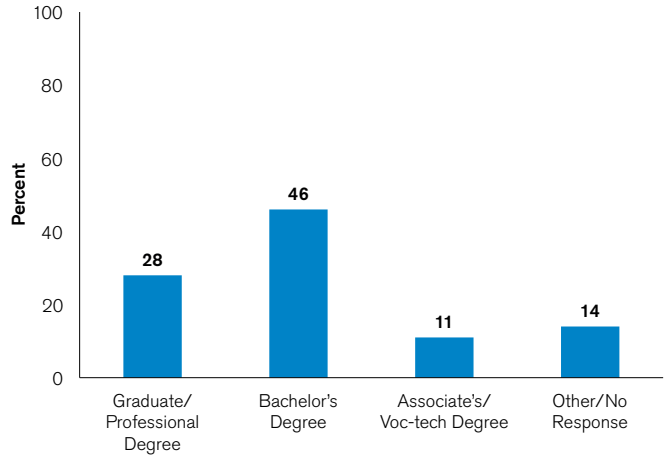
Major Name	N Fit	% Fit	English	Reading	Math	Science	All Four
Undecided			No profile available				
No Major Indicated			No profile available				
Nursing, Registered (BS/RN)	190	27	37	23	20	11	7
Medicine (Pre-Medicine)	167	44	72	51	47	41	27
Business Administration and Management, General	68	24	50	34	32	24	13
Mechanical Engineering	95	35	38	23	35	25	19
Law (Pre-Law)	64	27	47	34	27	17	11
Criminology	31	13	48	26	23	19	13
Athletic Training	34	16	35	21	3	12	3
Medical Assisting	58	27	19	5	5	5	0
Physical Therapy (Pre-Physical Therapy)	32	19	56	28	22	22	3
Biology, General	76	47	76	53	50	45	30
Accounting	74	51	41	24	35	22	8
Graphic Design	68	49	37	25	9	10	4
Pharmacy (Pre-Pharmacy)	59	43	61	41	46	27	24
Psychology, Clinical and Counseling	19	14	68	58	21	37	21
Music, General	74	55	45	26	23	18	9
Nursing, Practical/Vocational (LPN)	24	18	33	8	13	8	0
Engineering (Pre-Engineering), General	41	33	56	29	44	32	24
Veterinary Medicine (Pre-Veterinarian)	42	34	64	52	31	43	21
Physical Therapy Assisting	28	24	18	7	0	0	0
Music, Performance	47	43	38	23	13	9	6
Art, General	42	40	45	33	14	14	12
Animal Sciences	35	33	49	31	34	29	11
Medical Radiologic Technology	22	21	59	18	14	14	5
Elementary Education	21	20	67	43	24	29	10
Health-Related Professions and Services, General			No profile available				
Welding Technology	54	53	13	13	4	6	2
Early Childhood Education	19	19	42	5	5	5	0

Note: *Undecided* and/or *No Major Indicated* are included in the table, if applicable. The former refers to students who selected the option *Undecided* from the list of majors. The latter refers to students who did not respond to the question.

American Indian Students

Other College and Career Readiness Factors

Percent of 2014 ACT-Tested American Indian High School Graduates by Educational Aspirations

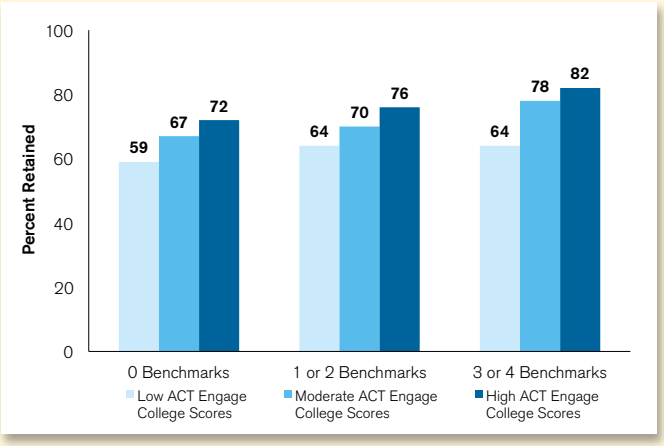


Aligning Student Behaviors, Planning, and Aspirations

Most students aspire to a post–high school credential. To help them meet those aspirations, educational planning, monitoring, and interventions must be aligned to their aspirations, begin early, and continue throughout their educational careers.

Academic Achievement, Behaviors, and College Retention

College Retention Rates by Number of ACT Benchmarks Met and ACT Engage® College Scores*



Across all ACT College Readiness Benchmark attainment levels, students with higher ACT Engage College scores (based on the mean percentile scores of ACT Engage scales Academic Discipline, Commitment to College, and Social Connection) remain enrolled in a postsecondary institution after the first year of college at substantially higher rates than students with lower ACT Engage College scores.

* Based on N = 13,697 ACT-tested graduates of 2011 and 2012 who also took the ACT Engage College assessment and enrolled in college. Students with a mean percentile score of less than 25 were classified as low, those with scores between 25 and 75 were classified as moderate, and those with scores greater than 75 were classified as high.

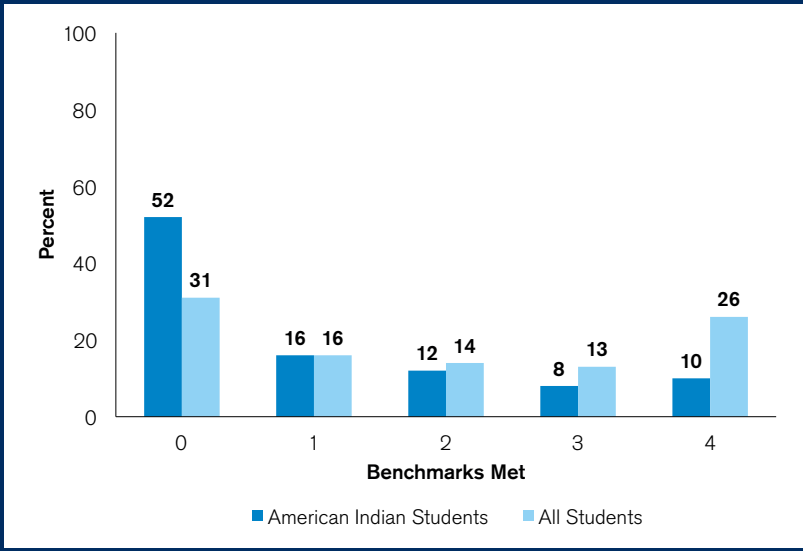
Looking Back at the Class of 2013

American Indian Students

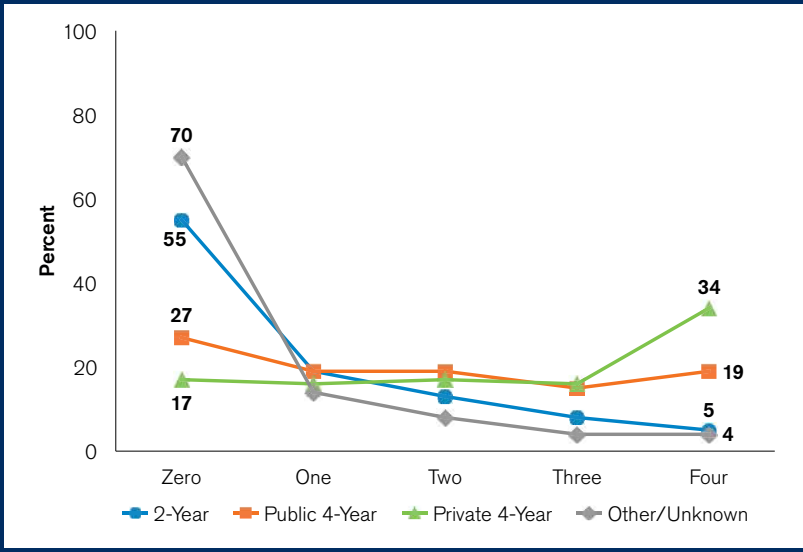
ACT College Readiness Benchmarks and Fall 2013 College Enrollment

Academic achievement, as measured by ACT College Readiness Benchmark attainment, has a clear and distinctive relationship with the path taken by high school graduates. Those who were more academically ready were more likely to enroll in 4-year institutions. Graduates who enrolled in 2-year colleges or pursued other options after high school were more likely to have met fewer Benchmarks. For the sizable number of 2013 graduates who did not meet any Benchmarks, their post–high school opportunities appear to have been limited compared to their college-ready peers.

Percent of 2013 ACT-Tested American Indian High School Graduates by Number of ACT College Readiness Benchmarks Attained



Percent of 2013 ACT-Tested American Indian High School Graduates by Number of ACT College Readiness Benchmarks Attained and Fall 2013 College Enrollment Status



Policies and Practices

How to Increase Readiness

Approximately 10% of all 2014 ACT-tested American Indian high school graduates met all four of the ACT College Readiness Benchmarks indicating academic readiness for credit-bearing first-year college courses in English Composition, College Algebra, Biology, and the social sciences. At the same time, 16% of all 2014 ACT-tested American Indian high school graduates met only one Benchmark, and 55% met none. Based on decades of ACT research, the following recommendations include steps that states, districts, schools, and classrooms can take to increase student readiness for college-level work.

Advance college and career readiness through a renewed focus on teaching and learning. With the majority of states and the District of Columbia having adopted more rigorous college and career readiness standards—and assessments to measure student progress toward those standards—it is more important than ever for state and local systems to align other educational elements to these standards. These elements include curriculum alignment to standards; experiential learning opportunities; and teacher professional development, especially as it relates to integrating the standards into current teaching practices and increasing assessment literacy. Research shows that systemic alignment of key policies and school activities empowers educators to support students in making notable gains in student achievement. Some states now require curriculum on regional tribal sovereignty and culture. All states should consider some facet of Native history that is accurate and relevant to that specific state and region.

Set clear performance standards to evaluate college and career readiness. States must define performance standards so that everyone knows "how good is good enough" for students to have a reasonable chance of success at college or on the job. ACT defines college readiness in English, reading, math, and science using decades of student performance data. For each area, students who are considered college ready have a 50% chance of earning a B or higher or about a 75% chance of earning a C or higher in the corresponding first-year English Composition, introductory social science, College Algebra, or Biology course. Longitudinal, real-world data and research on what constitutes student success are now available to every state and district, as are standards and benchmarks against which the performance of students and schools can be measured and state progress noted. States must also better integrate their ACT college readiness data with other data about their American Indian student populations. Such data and data integrations represent an opportunity to enhance standards that reflect the needs of American Indian students and increase their success in college and career readiness.

Implement a high-quality student assessment system. As states adopt and implement new high-quality assessment systems, they should ensure that those systems measure and provide timely and actionable information about student performance aligned to college and career readiness.

High-quality assessments must:

- Monitor growth over a student's educational experience, starting in elementary school and through high school, so that educators can make timely instructional decisions and interventions based on reliable information.
- Be aligned, linked, and longitudinal in nature to be an effective tool for students, teachers, administrators, parents, and tribal communities in monitoring student progress.
- Be mindful of and incorporate the unique accessibility needs of English language learners and students with disabilities, and the tests must be constructed in deep consultation with experts on these populations.
- Vary according to the type of standards that need to be measured. These multiple measures can be used to offer more comprehensive evaluations of student achievement, from multiple-choice and constructed-response assessments to performance tasks and project-based learning.
- Be offered through multiple platforms. While computer-based testing is highly applicable to formative assessments that can be conducted on an on-demand basis, paper-and-pencil testing may be a reality for states and districts with less technological capacity. Until computer and broadband access for such large groups of students are sufficiently widespread in schools, both platforms must be available.
- Offer multiple stakeholders—especially teachers, tribal communities, and education departments—ongoing, real-time, interactive reporting and access to assessment results and other related data to inform how they can support and advocate for their students.

These principles are consistent with the goals of other principles for high-quality college and career readiness assessments set forth by experts in the field.[5]

Support programs targeted at developing behaviors that aid students' academic success. Monitoring students' academic performance is critical, but certain academically related behaviors also contribute to student persistence and success. If students are to be successful in meeting a core set of academic standards, they need to be sufficiently motivated to persist at their work. The behavioral habits that contribute most directly to student postsecondary success include motivation, social engagement, and self-regulation.[6] Measuring these and other academically related factors is possible, and doing so can assess risk at important points in students' academic trajectories and identify areas of need and support.[7] Cultivating behavioral habits that contribute to postsecondary and workforce achievement can have a noticeable impact on students' achievement and persistence levels.

Provide all students with access to a rigorous high school core curriculum. While most states have increased

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course requirements for high school graduation in recent years, those requirements too often have not specified the particular courses that prepare students for postsecondary success. In the absence of such specific and rigorous high school graduation requirements, too many students are not taking either the right number or the right kinds of courses they need to be ready for college and career. All states, therefore, should specify the number and kinds of courses that students need to take to graduate academically ready for life after high school. At minimum, ACT recommends the following:

- Four years of English
- Three years of mathematics, including rigorous courses in Algebra I, Geometry, and Algebra II
- Three years of science, including rigorous courses in Biology, Chemistry, and Physics
- Three years of social studies

Invest in early childhood education programs so that more children are ready to learn. Improving college and career readiness for all students begins as early as kindergarten—where gaps between low-income students and their more advantaged peers already exist.[8] Large numbers of underserved students enter kindergarten behind academically in early reading and mathematics skills, oral language development, vocabulary, and general knowledge. Gaps also exist in the development of academic and social behaviors such as listening, following instructions, and resolving conflicts. States should not only continue to invest in, but also expand access to, high-quality, research-based early learning opportunities for *all* students from prekindergarten to third grade to address learning gaps well before 8th grade, by which time these gaps become much more difficult to reverse. This includes highlighting and replicating early childhood programs that incorporate tribal culture and curriculum in addition to addressing academic rigor.

Continue to implement monitoring and early warning systems that help educators identify and intervene with at-risk students. An effective monitoring system should provide an evolving picture of students over time and identify their unique learning needs at various points along their educational careers. Adoption of such systems in states where they do not yet exist—as well as expansion of system capabilities in states where they currently exist—will support earlier and more effective interventions by providing teachers, parents, families, and communities with information to implement the necessary interventions to maximize student potential. Parents, families, and communities have a positive impact on students' academic success and on reducing the number of at-risk students. Teachers, who have been consistently identified as the most important school-based factor in student achievement, should be equipped with as much relevant data as possible to inform and supplement their efforts.[9] The data should help to identify students in need of intervention and model student growth toward college and career readiness.

Continue development of thoughtful and fair teacher evaluation systems that include multiple measures of performance—including student growth data. To help ensure that teachers and administrators have access to relevant feedback about their effectiveness at preparing all students for college and career, it is critical to offer continued support for developing and implementing robust teacher evaluation systems that include multiple measures of performance. Such development and implementation must proceed thoughtfully and be accompanied by education and communication about the appropriate use of student growth data in these systems. American Indian students, in particular, transfer in and out of school systems with varied jurisdictional—and, therefore, system—arrangements. Effectively monitoring and sharing student growth data for students who transfer between jurisdictional school systems is an important challenge to overcome for teaching American Indian students.

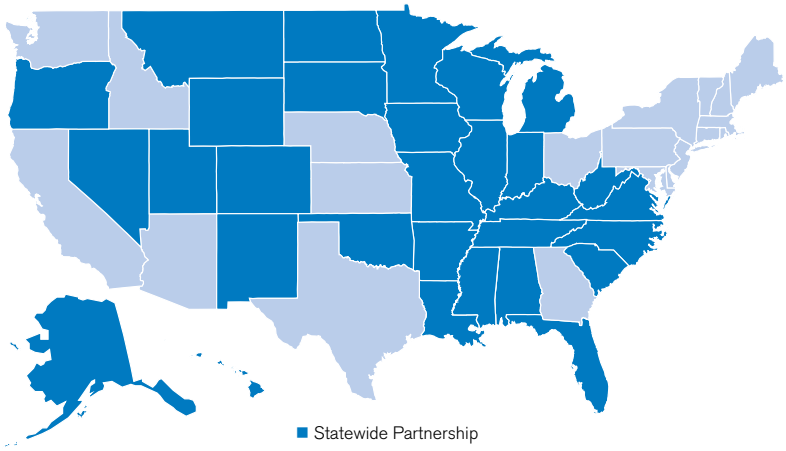
Increase support for the development of STEM-related courses to meet the coming demand for a larger STEM workforce. Education in science, technology, engineering, and mathematics (STEM) is vital to the ability of the United States to maintain its position of global leadership and economic competitiveness. With more than 8.6 million STEM-related jobs anticipated by the year 2018, preparing and encouraging students to pursue STEM majors and careers becomes even more important. To identify new programs that will better attract students to and retain them in STEM-related careers, states should seek opportunities to collaborate with multiple entities, including business; national workforce and job readiness groups; local chambers of commerce; universities, community colleges, and technical schools; and tribal colleges and organizations such as the American Indian Science and Engineering Society (AISES) and the Society for Advancement of Hispanic/Chicano and Native Americans in Science (SACNAS).

Implement policies for data-driven decision making. Teachers must have access to high-quality, actionable data that can be used to improve instruction. Without such data, opinion can overly influence key instructional decisions. To address this challenge, states have been hard at work developing longitudinal P–16 data systems. This work should continue, but more must be done. To ensure that students are prepared for the 21st century, states must have systems that allow schools and districts to closely monitor student performance at every stage of the learning pipeline, from preschool through college. Policies governing teacher and administrator preparation and professional development must include an emphasis on developing skills to use data appropriately to improve the practices of teaching and learning for all students in the pipeline. This includes ensuring that data follow American Indian students across school systems and monitor progress over time. This information should be accessible to teachers, administrators, tribal education departments, and parents/guardians.

Resources

Statewide Partnerships in College and Career Readiness

States that incorporate ACT college and career readiness solutions as part of their statewide assessments provide greater access to higher education and increase the likelihood of student success in postsecondary education. Educators also have the ability to establish a longitudinal plan using ACT assessments, which provide high schools, districts, and states with unique student-level data that can be used for effective student intervention plans.



State administration of ACT programs and services:

- Increases opportunities for minority and middle- to low-income students.
- Promotes student educational and career planning.
- Reduces the need for remediation.
- Correlates with increases in college enrollment, persistence, and student success.
- Aligns with state standards.

ACT Aspire 3rd- through 8th-grade students	ACT Explore 8th- and 9th-grade students	ACT Plan 10th-grade students	The ACT 11th- and 12th-grade students	ACT QualityCore 8th- through 12th-grade students	ACT WorkKeys 11th- and 12th-grade students	ACT National Career Readiness Certificate™	
Alabama	Alabama	Alabama	Alabama	Alabama	Alaska	Alabama	Oklahoma
South Carolina	Arkansas	Arkansas	Arkansas	Kentucky	Illinois	Alaska	Oregon
	Hawaii	Florida	Colorado		Hawaii	Arkansas	South Carolina
	Illinois	Hawaii	Hawaii		Michigan	Indiana	South Dakota
	Kentucky	Illinois	Illinois		North Carolina	Iowa	Tennessee
	Louisiana	Kentucky	Kentucky		North Dakota	Kentucky	Utah
	Michigan	Louisiana	Louisiana		Wyoming	Minnesota	Virginia
	Minnesota	Michigan	Michigan			Missouri	Wisconsin
	North Carolina	Minnesota	Minnesota			New Mexico	
	Oklahoma	New Mexico	Mississippi			North Carolina	
	South Carolina	North Carolina	Missouri				
	Tennessee	Oklahoma	Montana				
	Utah	Tennessee	Nevada				
	West Virginia	Utah	North Carolina				
	Wyoming	West Virginia	North Dakota				
		Wyoming	South Carolina				
			Tennessee				
			Utah				
			Wisconsin				
			Wyoming				

All listed partnerships are effective as of December 31, 2014.

ACT Research

The continued increase of test takers enhances the breadth and depth of the data pool, providing a comprehensive picture of the current college readiness levels of the graduating class as well as offering a glimpse of the emerging national educational pipeline. It also allows us to review various aspects of the ACT-tested graduating class, including the following reports:

Releasing in the 2014–2015 Academic Year

- *The Condition of STEM 2014*
- *The Condition of College & Career Readiness—African American Students*
- *The Condition of College & Career Readiness—American Indian Students*
- *The Condition of College & Career Readiness—Asian Students*
- *The Condition of College & Career Readiness—Hispanic Students*
- *The Condition of College & Career Readiness—Pacific Islander Students*
- *The Condition of College & Career Readiness—First-Generation Students*
- *The Condition of College & Career Readiness—Students from Low-Income Families*

Other ACT Research Reports

College Choice Report **(for the graduating class of 2012)**

- *Part 1: Preferences and Prospects*—November 2012
- *Part 2: Enrollment Patterns*—July 2013
- *Part 3: Persistence and Transfer*—April 2014

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- *Part 3: Persistence and Transfer*—April 2015

To be notified of exact release dates, please subscribe here: **www.act.org/research/subscribe.html**.

How Does ACT Determine if Students Are College Ready?

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. Based on a nationally stratified sample, the Benchmarks are median course placement values for these institutions and represent a typical set of expectations. ACT College Readiness Benchmarks were revised for 2013 graduating class reporting. The ACT College Readiness Benchmarks are:

College Course	Subject Area Test	Original ACT College Readiness Benchmark	Revised ACT College Readiness Benchmark
English Composition	English	18	18
Social Sciences	Reading	21	22
College Algebra	Mathematics	22	22
Biology	Science	24	23

Notes

1. The data presented herein are based on the *ACT Profile Report—National: Graduating Class 2014 for American Indian Students*, accessible at **www.act.org/readiness/2014**. With the exception of the top graph on page 6, data related to students who did not provide information or who responded "Other" to questions about gender, race/ethnicity, high school curriculum, etc., are not presented explicitly.
2. The race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements; trends to previous reports may not be available for all race/ethnicity categories.
3. Data reflect subject-specific curriculum. For example, English "Core or More" results pertain to students who took at least four years of English, regardless of courses taken in other subject areas.
4. The interest-major fit score measures the strength of the relationship between the student's profile of ACT Interest Inventory scores and the profile of students' interests in the major shown. Interest profiles for majors are based on a national sample of undergraduate students with a declared major and a GPA of at least 2.0. Major was determined in the third year for students in 4-year colleges and in the second year for students in 2-year colleges. Interest-major fit scores range from 0–99, with values of 80 and higher indicating good fit.
5. See, for example, Council of Chief State School Officers, *Transition to High-Quality, College- and Career-Ready Assessments: Principles to Guide State Leadership and Federal Requirements* (Washington, DC: Council of Chief State School Officers, May 23, 2013), http://www.ccsso.org/Documents/2013/CCSSO_State_Principles_on_Assessment_Transition_5-23-13.pdf; and Linda Darling-Hammond et al., *Criteria for High-Quality Assessment* (Stanford, CA: Stanford Center for Opportunity Policy in Education, June 2013), https://edpolicy.stanford.edu/sites/default/files/publications/criteria-higher-quality-assessment_2.pdf.
6. ACT, *Enhancing College and Career Readiness and Success: The Role of Academic Behaviors* (Iowa City, IA: ACT), http://www.act.org/engage/pdf/ENGAGE_Issue_Brief.pdf.
7. ACT, *Importance of Student Self-Regulation* (Iowa City, IA: ACT, January 2013), http://www.act.org/research/researchers/briefs/pdf/2013-3.pdf.
8. Chrys Dougherty, *College and Career Readiness: The Importance of Early Learning Success* (Iowa City, IA: ACT, February 2013), http://www.act.org/research/policymakers/pdf/ImportanceofEarlyLearning.pdf.
9. Daniel F. McCaffrey, J.R. Lockwood, Daniel M. Koretz, and Laura S. Hamilton, *Evaluating Value-Added Models for Teacher Accountability* (Santa Monica, CA: RAND Corporation, 2003), http://www.rand.org/content/dam/rand/pubs/monographs/2004/RAND_MG158.pdf.

ACT is an independent, nonprofit organization that provides assessment, research, information, and program management services in the broad areas of education and workforce development. Each year, we serve millions of people in high schools, colleges, professional associations, businesses, and government agencies, nationally and internationally. Though designed to meet a wide array of needs, all ACT programs and services have one guiding purpose—helping people achieve education and workplace success.

For more information, visit **www.act.org**.

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About NIEA

The National Indian Education Association (NIEA) is the nation's most inclusive advocacy organization working to advance comprehensive education opportunities for American Indians, Alaska Natives, and Native Hawaiians. Formed by Native educators in 1969 to encourage a national discourse on education, NIEA adheres to the organization's founding principles—to bring educators together to explore ways to improve schools and the educational systems serving Native children; to promote the maintenance and continued development of language and cultural programs; and to develop and implement strategies for influencing local, state, and federal policy and decision makers. Through advocacy, capacity building, and education, NIEA helps Native students and their communities succeed.

For more information, visit **www.niea.org**.

NIEA
NATIONAL INDIAN EDUCATION ASSOCIATION
Advancing Excellence for All Native Students

A copy of this report can be found at
www.act.org/readiness/2014

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