



The Condition of Future Educators 2015

National

ACT[®]

The Condition of Future Educators 2015

ACT has conducted groundbreaking research on college and career readiness since its founding in 1959. Over the past decade in particular, ACT research has provided data and information guiding some of the nation's most important education and workforce issues and related initiatives. Each August, we release *The Condition of College & Career Readiness* (www.act.org/research), our annual report on the achievement of the ACT®-tested graduating class relative to college readiness.

In 2015, a record 59% of the US graduating class took the ACT test. The steady increase in ACT test takers in recent years has enhanced the breadth and depth of our data pool, providing a more comprehensive picture of the college readiness levels of the graduating class while giving us a deeper look into the data. Our data review from this year's graduating class has offered a glimpse into new areas of study, including emerging educational pipelines.

In this report, ACT looks specifically at students expressing an interest in education as a profession. ACT-defined education majors are categorized into four areas:

- **Administration/Student Services**—non-teaching education majors, such as counseling, curriculum, and administration
- **Teacher Education, General**—a single major considered by individuals who have an interest in teaching but have not yet determined a student population and/or subject area focus
- **Teacher Education, Specific Student Population**—majors defined by the type of student being served, such as early childhood education and postsecondary education
- **Teacher Education, Subject Specific**—majors defined by the type of subject taught, such as art education, foreign languages, and mathematics education

Our Commitment to Educators

ACT conducts its exclusive ACT National Curriculum Survey® every three to five years, surveying thousands of elementary, secondary, and postsecondary instructors to keep abreast of the specific skills and knowledge taught in America's schools and expected of first-year college students. We use these empirical data to inform the ACT College and Career Readiness Standards, which align with our assessments. These standards help ACT to give students, educators, schools, and states the insights they need to determine whether students are on track for college and career readiness and to help improve educational outcomes.

Teacher Support and Development—ACT's Call to Action

Develop robust teacher evaluation systems. Efforts to safeguard and use data appropriately and to fully align the education system are moot if we do not invest in one of the most important components of student learning: teachers. As stated in our K–12 education platform, ACT applauds states' and districts' development and use of robust teacher evaluation systems that include multiple measures of performance to identify effective teaching and focus on professional development. All teacher evaluations should include classroom observations, parent and

student surveys, and measures of student growth on assessments. Teachers should be involved in the creation and rollout of these systems.

Strengthen admissions criteria for teacher education programs and offer professional development to new teachers. We must ensure that the admissions criteria for teacher education programs are rigorous and produce high-quality candidates armed with the tools—sound instructional methods, content mastery, and data literacy—to teach effectively. Once in the classroom, teachers must have the opportunity to participate in professional development opportunities that enhance their work.

Increase teacher compensation. Given that teachers are the most important school-based factor in student achievement, if we truly want the best teaching force in the world, teachers must be compensated correspondingly. Doing so demonstrates investment not only in teachers, but in students as well.

It is time to take these and other meaningful steps to solve the issues hindering student success. ACT sincerely hopes that this call to action, informed by decades of educational research, contributes to the enhancement of education and career opportunities for all students, including our nation's most underserved individuals. ACT stands ready to work with like-minded organizations to support systemic education reforms. Ensuring a world-class US educational system should be a responsibility shared by all of us: Our future rests on the education of tomorrow's leaders. We must do better.

ACT research (*Using Dual Enrollment*, 2015) demonstrates that education leaders are looking to dual credit classes and concurrent enrollment to ease the transition to college coursework. Shortening the amount of time students spend working toward a postsecondary credential can reduce their total college cost, which is highly desirable to students, their parents, and policymakers. Critically, both of these factors disproportionately affect students from low-income families and/or first-generation college students. Certifying high school teachers for dual enrollment programs is valuable not only because it can advance a more rigorous high school curriculum, but also because of the positive influence certification can exert on the teachers' non-collegiate courses. Dual enrollment programs can also potentially reduce the gap between high school teachers' perception of college readiness of their high school graduates and college instructors' perception of the readiness of their incoming first-year students.

ACT research (*Use of Data to Support Teaching and Learning: A Case Study of Two School Districts*, 2015) also shows the positive nature of the intersection between quality assessment and teaching. ACT can provide data and insights to help new and existing teachers better understand how to use assessment data to inform instruction.

The goal of this report is to provide current educators and policymakers a glimpse inside the pipeline of future educators. If the United States hopes to reclaim its perch as the world's leader in education, we must first address some of the key findings highlighted in this report.

Key Findings

from the National Condition of Future Educators 2015 Report

1. Interest among ACT-tested graduates in becoming educators continues to decline at an alarming rate.

Five-year trends indicate that of the more than 1.9 million students who took the ACT in 2015, fewer than 88,000 students indicated an interest in education majors or professions. In the areas of math and science education, the numbers are even more concerning, with fewer than 3,700 indicating an interest in these subjects.

When combined with the fact that a teacher shortage already exists in many states and subject areas, these figures are very sobering. According to the National Center for Education Statistics, the total number of elementary and secondary school teaching positions needed in the United States is projected to increase by 14% between 2010 and 2021. Coupled with the expected retirement of many “baby boomer” educators, the fact that fewer students are interested in becoming educators will likely magnify the teacher shortage.

Research continues to validate the critical role of quality teaching in student success. However, quantity is also important: The nation must fill the pipeline to alleviate the expected shortfall in the number of available teachers. Our inability to do so will force educational systems to think differently about how we deliver education—which might, in turn, have a negative impact on student success.

2. Students interested in education have lower-than-average achievement levels, particularly in STEM areas.

The percentage of aspiring educators who meet the ACT College and Career Readiness Benchmarks is lower than the national average in every subject area except English. In science and math, the gaps are significant. In short, not only are fewer students interested in becoming educators, but those who are interested have lower-than-average achievement levels in three of the four subject areas measured by the ACT. In addition, 30% of these students missed the benchmark in all four subject areas. Graduates interested in Administration/Student Services majors demonstrated the lowest benchmark attainment within the four categories. These findings raise a key question: How can the education field capture the interest and attention of more students—particularly the best and brightest students?

3. Interest in pursuing an education career is low among males.

More than three-quarters of the ACT-tested graduates interested in an education career are female. This number rises to over 90% among students interested in early childhood and elementary education.

4. In general, there is a lack of diversity among students interested in education.

Just over 70% of ACT-tested 2015 graduates who are interested in becoming educators are white. In comparison, 59% of all ACT-tested graduates are white. The percentage of future educators is lower than the overall percentage of tested students in each minority racial/ethnic category.

ACT-Tested 2015 Graduates	African American	American Indian	Asian	Hispanic	Pacific Islander	White	Two or More Races
All ACT-Tested Graduates	14.1%	0.8%	4.9%	16.7%	0.3%	58.9%	4.2%
Future Educators	10.1%	0.7%	1.8%	13.2%	0.2%	70.5%	3.4%

Note: Students who selected the “prefer not to respond” option or left ethnicity blank were not used in the calculations for this table.

Additional Recommendations

There has never been a more critical time to the success of our children. Educators are courageously raising the bar for student achievement higher than ever before, and we need to support them. To help drive greater interest in the teaching profession among a diverse population of high-achieving students, ACT recommends the following:

Recruit high-achieving college students who are undecided about their future careers.

Postsecondary institutions should focus on identifying high-achieving students who are undecided about their college majors and encourage them to consider pursuing the teaching profession. In particular, because ACT data indicate that relatively few minority students are interested in education as a career, recruitment efforts should target more minority students to enter the teaching pipeline. A more diverse teacher population may also lead to greater achievement among minority students. Recent research shows that K–12 students—particularly African American and Asian American students—benefit from being taught by a teacher of the same race;¹ however, ACT data indicate that few minority students are interested in education.

Improve educator benefits to attract and retain quality teachers.

Teachers are the most important school-based factor in a student's achievement, so states and districts should advance policies that make the teaching profession more attractive. For example, beginning teacher salaries should be comparable to entry-level salaries for recent college graduates in other fields, and effective teaching should be supported and rewarded over the number of years spent in the classroom.

Empower, encourage, and equip teachers to lead and to solve challenges in education

using their own talent and experience. Enlist federal programs such as Teacher Incentive Fund grants to cultivate leadership of the strongest teachers in each school. Have teachers take on hybrid roles, such as teaching for part of the day and supporting and/or coaching their peers when they are not teaching. Build leadership teaching communities so that entire communities can come together to stand behind both the teachers and the students they teach. We need to champion teachers to be the leaders of change and provide teachers with the time and training to equip them as agents of change.²

¹ Anna J. Egalite, Brian Kisida, and Marcus A. Winters. “Representation in the Classroom: The Effect of Own-Race Teachers on Student Achievement.” *Economics of Education Review* 45 (2015): 44–52.

² Arne Duncan. *Why Teaching is the Most Important Profession*. LinkedIn (2015).

National Future Educators Report

Attainment of College and Career Readiness

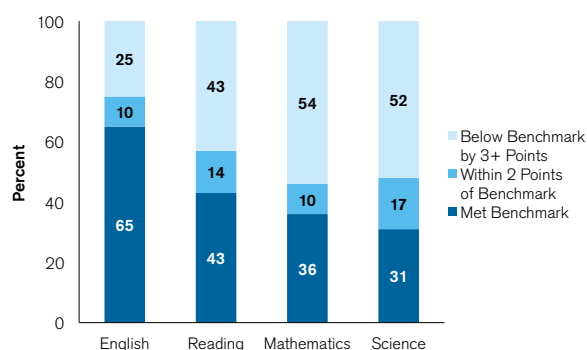
Trends of Student Interest in Education Majors: 2011–2015

- Between 2011 and 2015, the percent of all ACT-tested graduates who expressed an interest in education majors decreased by 1%.

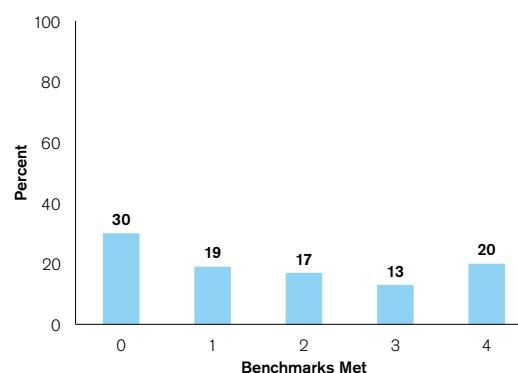
		2011	2012	2013	2014	2015
Nation	Percent	6%	6%	5%	5%	5%
	N Count	103,932	94,458	91,186	89,192	87,653

All Students Planning Education Majors

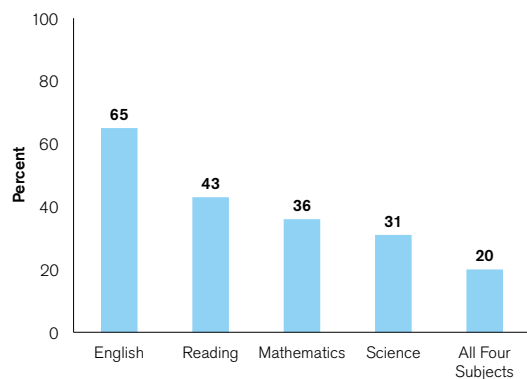
Percent of 2015 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject



Percent of 2015 ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks Attained



Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject



Number and Percent of 2015 ACT-Tested High School Graduates by Area of Planned Major

Education Area	N Count	Percent
Administration/Student Services	3,686	4
General Teacher Education	10,751	12
Student Population Specific	45,717	52
Subject Specific	27,499	31
Total	87,653	100

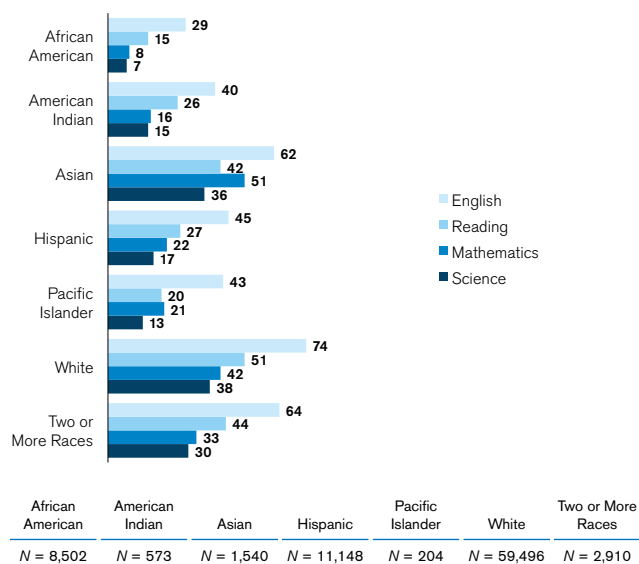
Note: Percents in this report may not sum to 100% due to rounding.

National Future Educators Report

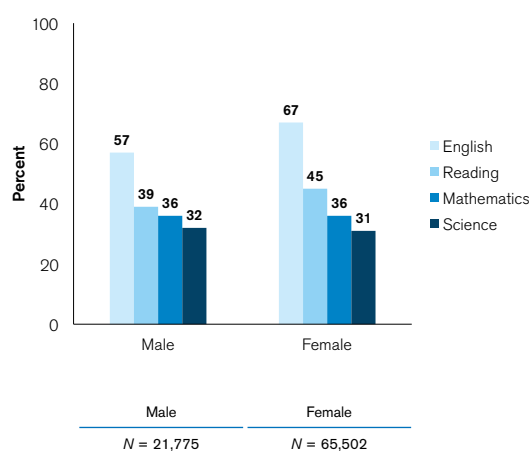
Attainment of College and Career Readiness

All Students Planning Education Majors

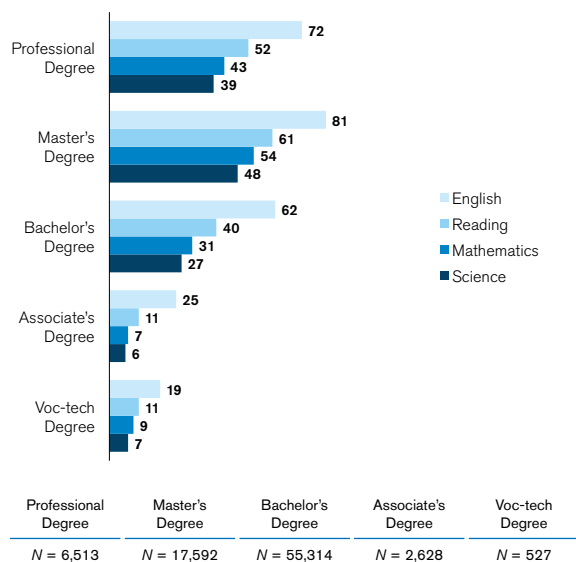
Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Race/Ethnicity and Subject*



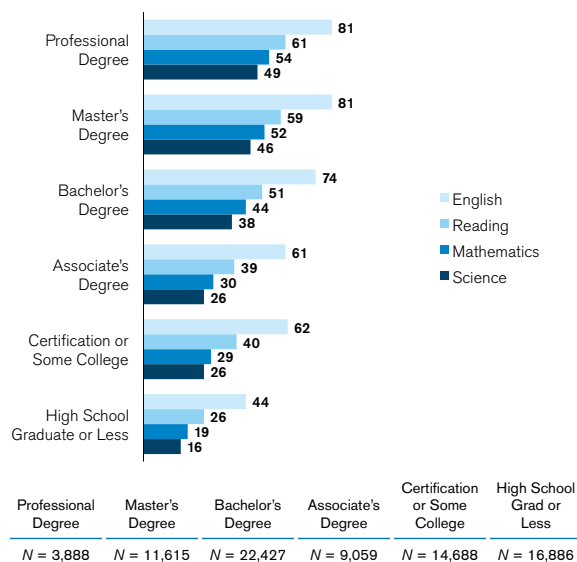
Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Gender and Subject



Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Educational Aspirations and Subject



Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Highest Parental Education Level and Subject



* Race/ethnicity categories changed for the 2010–2011 academic year to reflect updated US Department of Education reporting requirements.

Administration/Student Services Majors

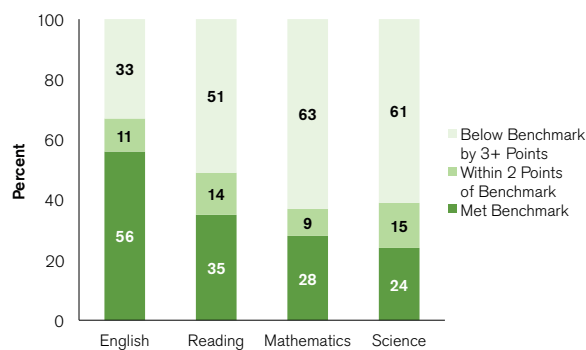
Trends of Student Interest in Administration/Student Services Majors: 2011–2015

- Between 2011 and 2015, the percent of students interested in these education majors increased by 2%.

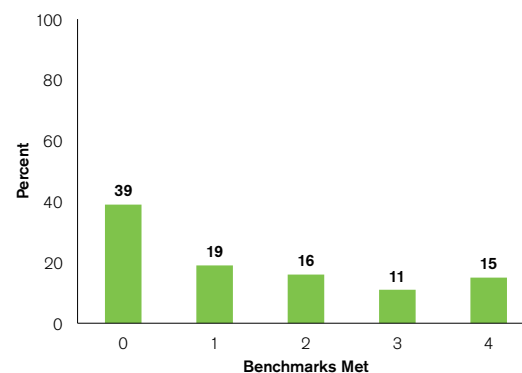
		2011	2012	2013	2014	2015
Nation	Percent	2%	4%	4%	4%	4%
	N Count	2,524	3,638	3,786	3,818	3,686

All Students Planning Administration/Student Services Majors

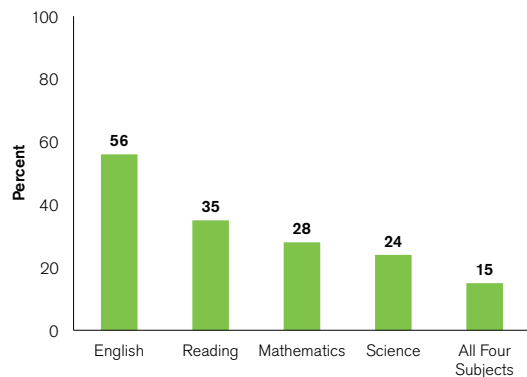
Percent of 2015 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject



Percent of 2015 ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks Attained



Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject



Number and Percent of 2015 ACT-Tested High School Graduates by Planned Major

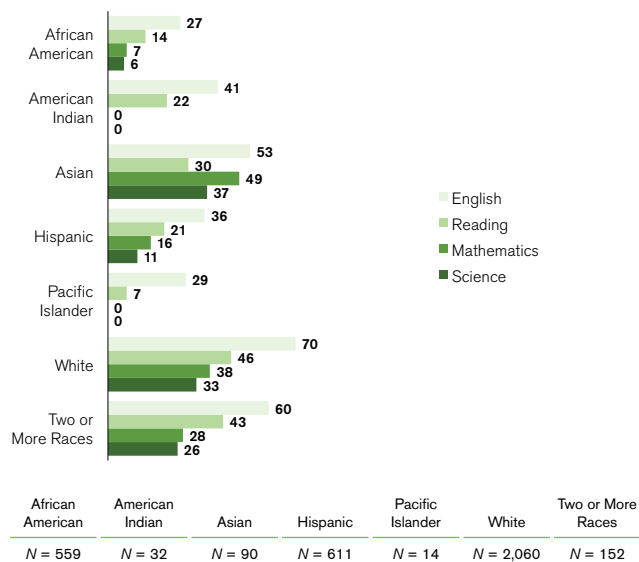
Education Majors	N Count	Percent
Counseling and Student Services	2,681	73
Curriculum and Instruction	265	7
Educational Administration	740	20
Total	3,686	100

Note: Reporting achievement by combinations of student characteristics may give rise to small N counts. As a result, outcomes reported in this section should be interpreted with caution.

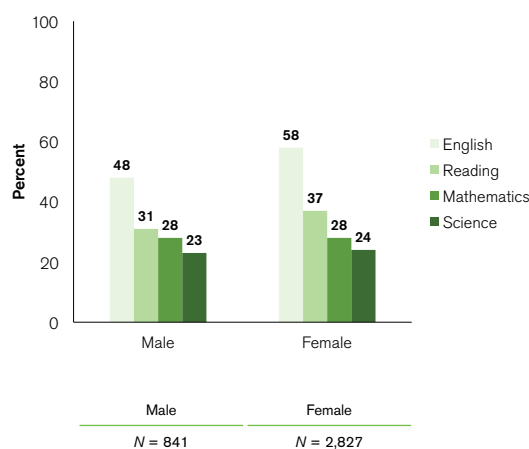
Administration/Student Services Majors

All Students Planning Administration/Student Services Majors

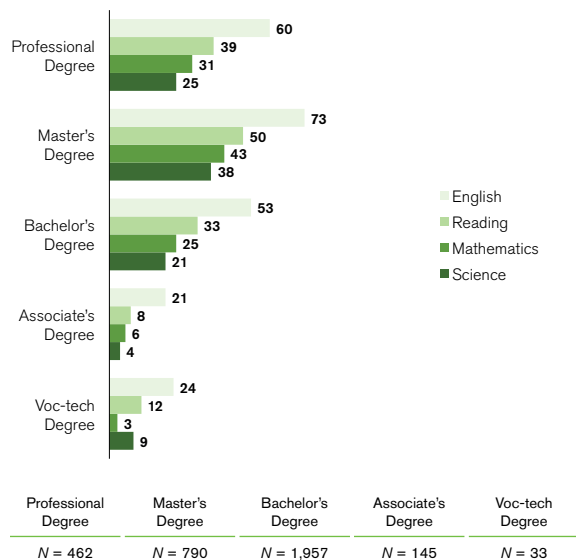
Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Race/Ethnicity and Subject*



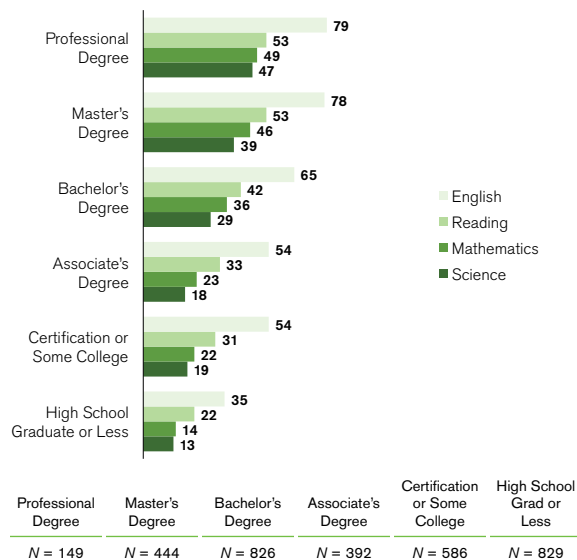
Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Gender and Subject



Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Educational Aspirations and Subject



Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Highest Parental Education Level and Subject



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General Teacher Education Majors

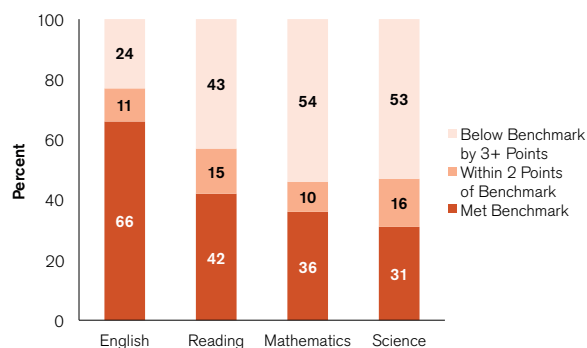
Trends of Student Interest in General Teacher Education Majors: 2011–2015

- Between 2011 and 2015, the percent of students interested in these education majors decreased by 1%.

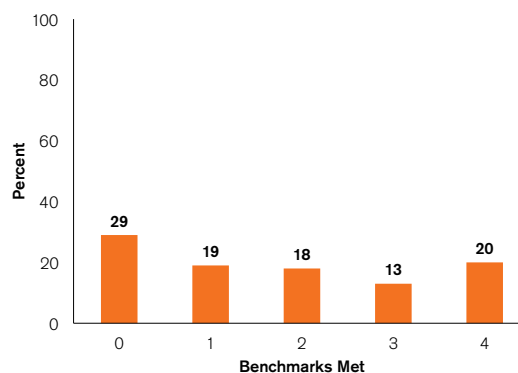
		2011	2012	2013	2014	2015
Nation	Percent	13%	12%	12%	12%	12%
	N Count	13,754	11,347	11,089	10,678	10,751

All Students Planning General Teacher Education Majors

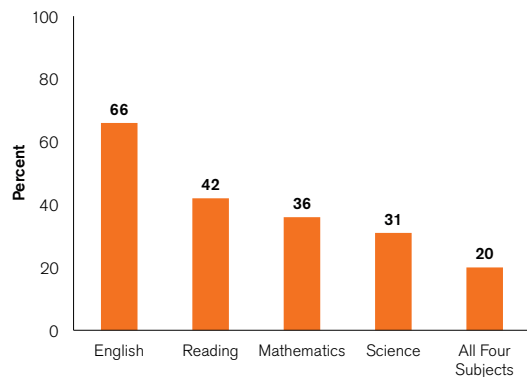
Percent of 2015 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject



Percent of 2015 ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks Attained



Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject



Number and Percent of 2015 ACT-Tested High School Graduates by Planned Major

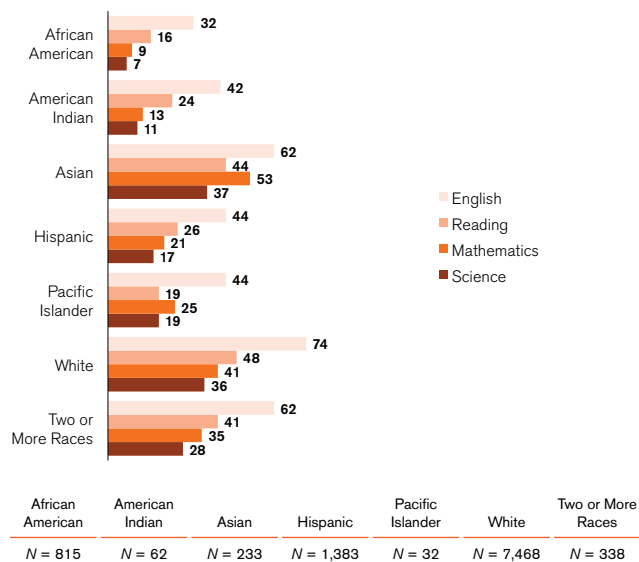
Education Majors	N Count	Percent
General Teacher Education	10,751	100
Total	10,751	100

Note: Reporting achievement by combinations of student characteristics may give rise to small N counts. As a result, outcomes reported in this section should be interpreted with caution.

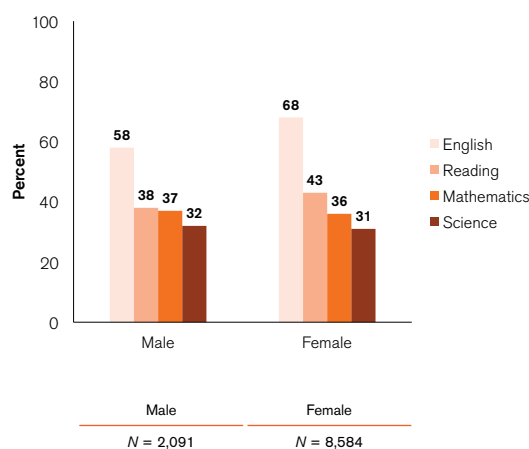
General Teacher Education Majors

All Students Planning General Teacher Education Majors

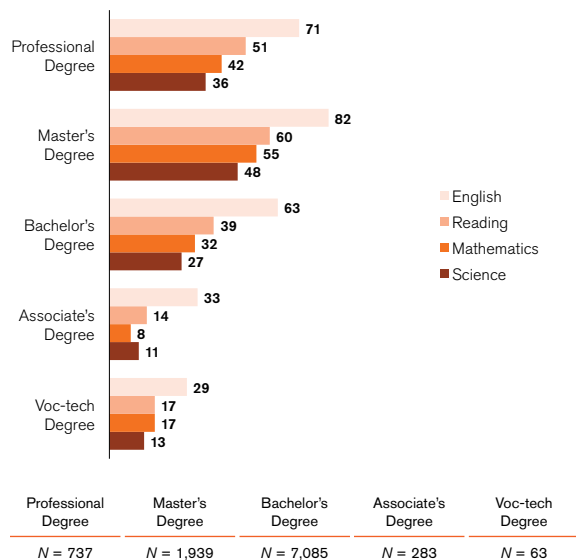
Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Race/Ethnicity and Subject*



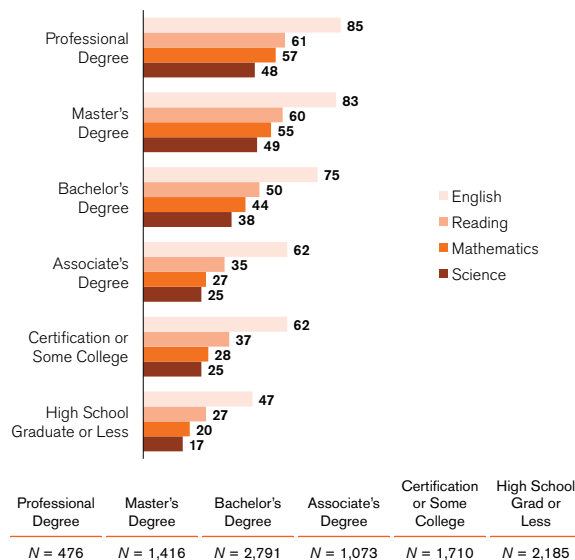
Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Gender and Subject



Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Educational Aspirations and Subject



Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Highest Parental Education Level and Subject



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Student Population-Specific Majors

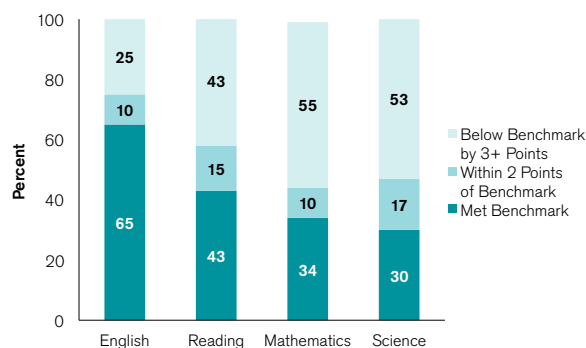
Trends of Student Interest in Student Population-Specific Teacher Education Majors: 2011–2015

- Between 2011 and 2015, the percent of students interested in these education majors increased by 5%.

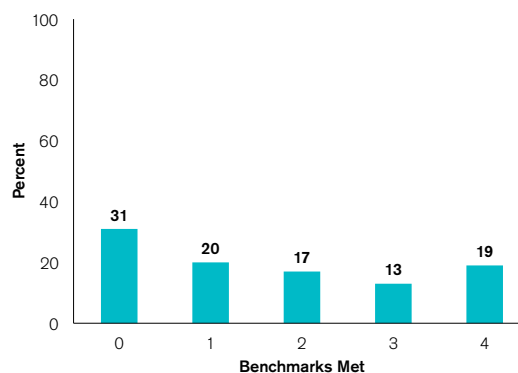
		2011	2012	2013	2014	2015
Nation	Percent	47%	52%	52%	53%	52%
	N Count	48,739	49,437	47,393	47,247	45,717

All Students Planning Student Population-Specific Teacher Education Majors

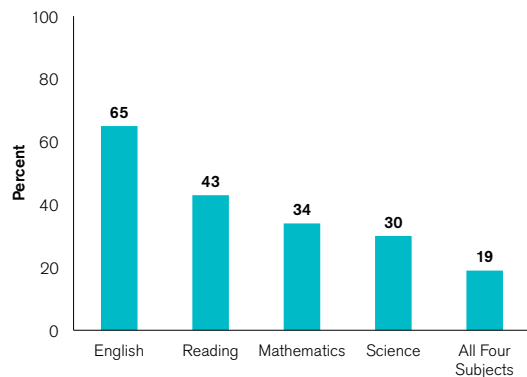
Percent of 2015 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject



Percent of 2015 ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks Attained



Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject



Number and Percent of 2015 ACT-Tested High School Graduates by Planned Major

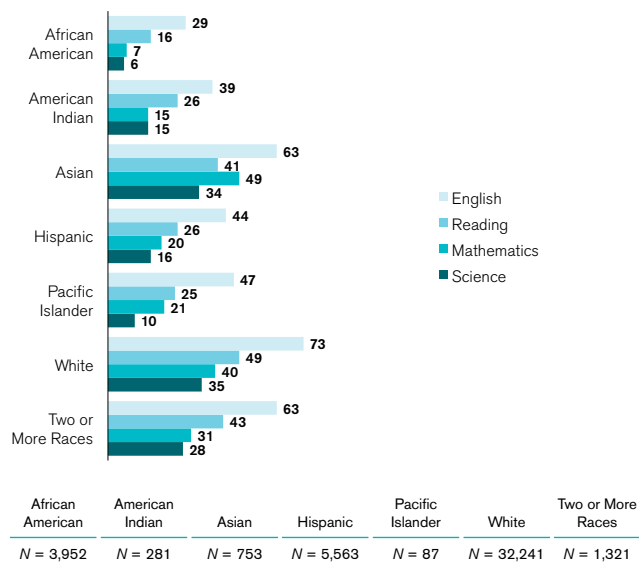
Education Majors	N Count	Percent
Early Childhood Education	11,050	24
Elementary Education	18,321	40
Junior High/Middle School Education	4,228	9
Postsecondary Education	967	2
Secondary Education	4,553	10
Special Education	6,598	14
Total	45,717	100

Note: Reporting achievement by combinations of student characteristics may give rise to small N counts. As a result, outcomes reported in this section should be interpreted with caution.

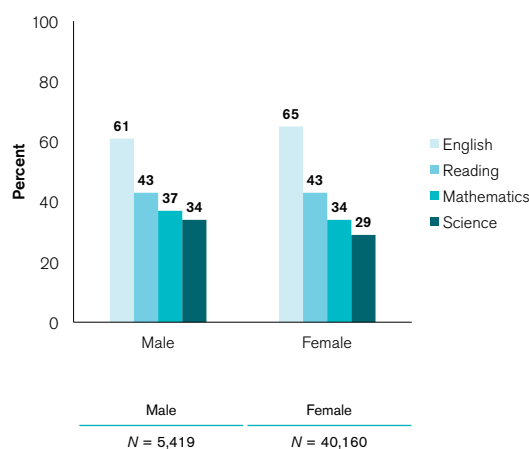
Student Population-Specific Majors

All Students Planning Student Population-Specific Teacher Education Majors

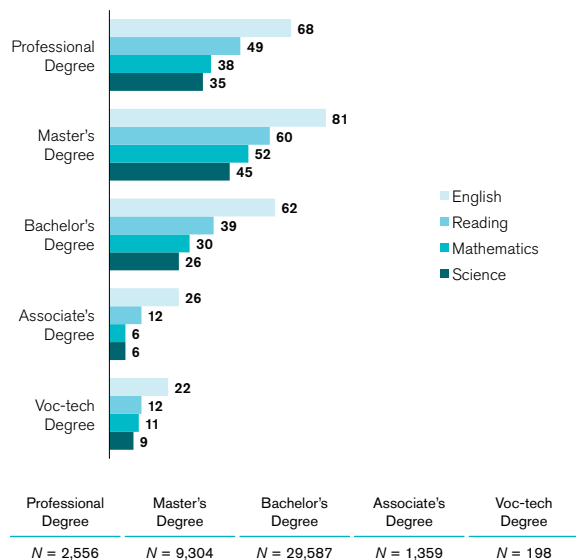
Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Race/Ethnicity and Subject*



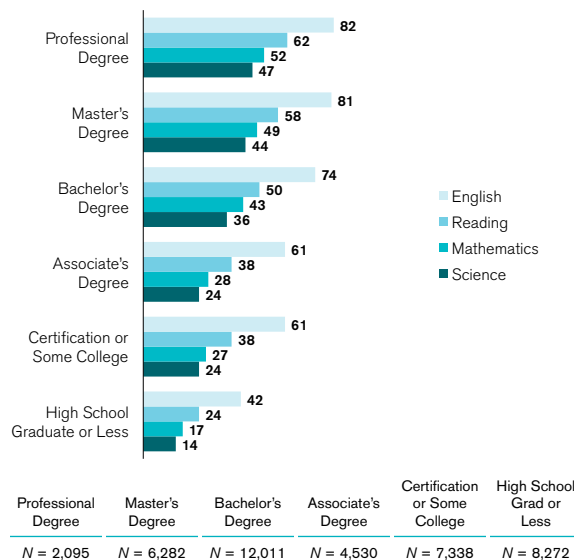
Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Gender and Subject



Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Educational Aspirations and Subject



Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Highest Parental Education Level and Subject



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Subject-Specific Majors

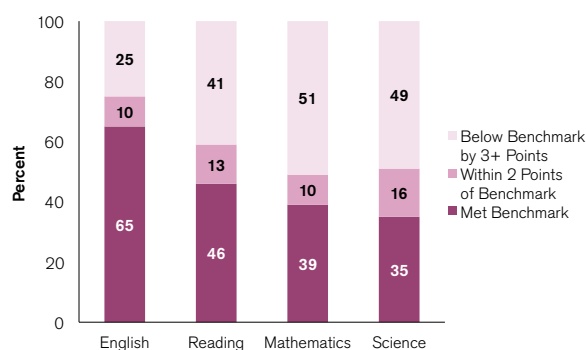
Trends of Student Interest in Subject-Specific Teacher Education Majors: 2011–2015

- Between 2011 and 2015, the percent of students interested in these education majors decreased by 6%.

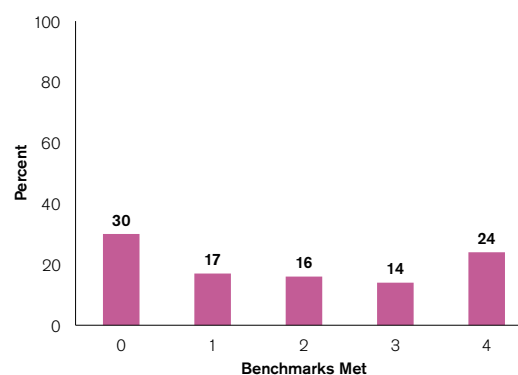
		2011	2012	2013	2014	2015
Nation	Percent	37%	32%	32%	31%	31%
	N Count	38,915	30,036	28,918	27,449	27,499

All Students Planning Subject-Specific Teacher Education Majors

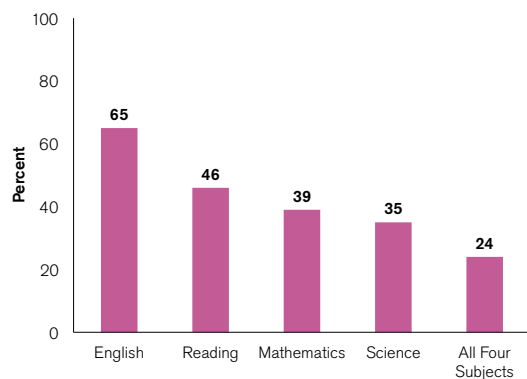
Percent of 2015 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject



Percent of 2015 ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks Attained



Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject



Number and Percent of 2015 ACT-Tested High School Graduates by Planned Major

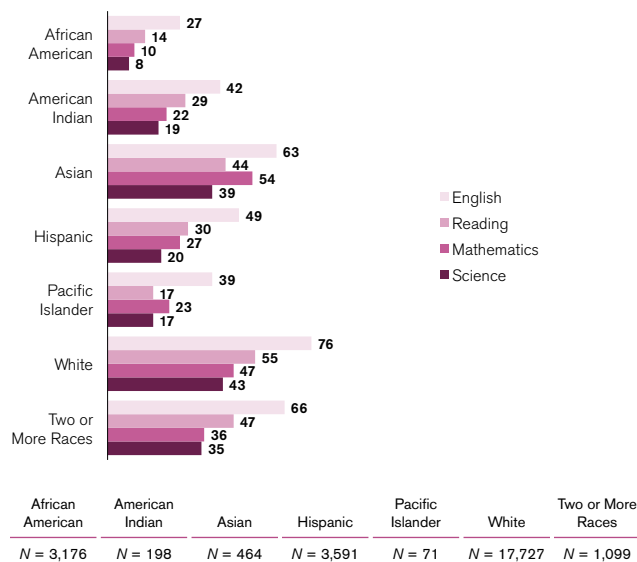
Education Majors	N Count	Percent
Agricultural Education	493	2
Art Education	1,375	5
Business Education	326	1
Career and Technical Education	238	1
English-as-a-Second-Language Education	456	2
English/Language Arts Education	2,640	10
Foreign Languages Education	783	3
Health Education	596	2
Mathematics Education	2,834	10
Music Education	4,432	16
Physical Education and Coaching	5,954	22
Science Education	797	3
Social Studies/Sciences Education	3,269	12
Subject Specific	3,306	12
Total	27,499	100

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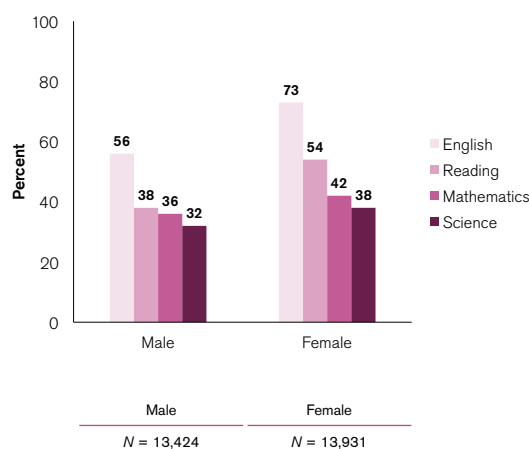
Subject-Specific Majors

All Students Planning Subject-Specific Teacher Education Majors

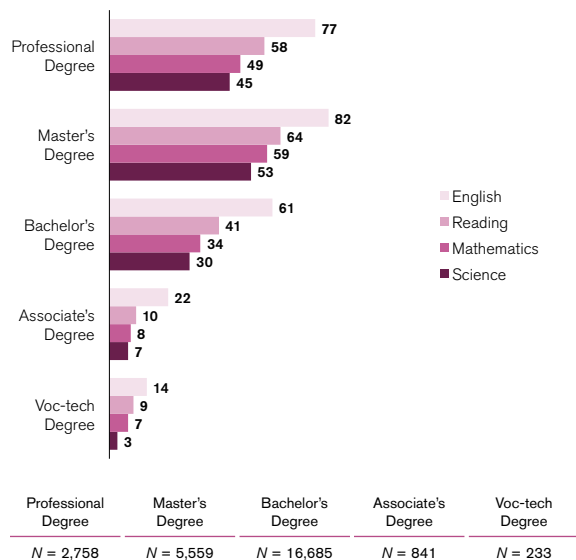
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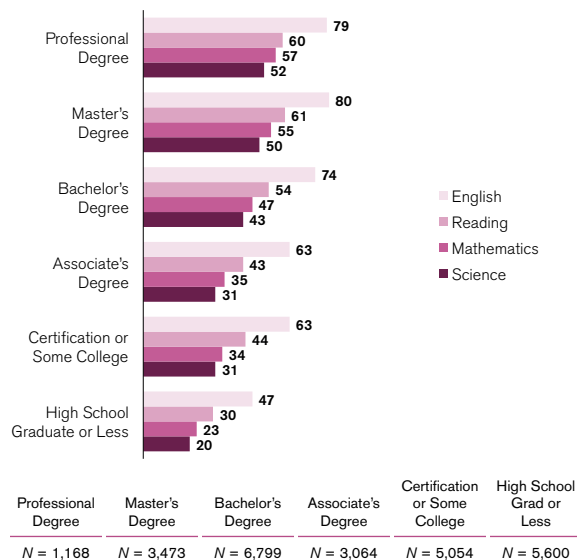
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Percent of 2015 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Highest Parental Education Level and Subject



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Future Educators

Interest and Achievement by State

State	Percent of All Graduates Tested*	Percent of All ACT-Tested Graduates Interested in Education Majors	Number of All ACT-Tested Graduates Interested in Education Majors	Percent of Students with Education Majors Meeting Benchmarks			
				English	Reading	Math	Science
Alabama	100	5	2,806	59	36	21	23
Colorado	100	4	2,025	71	48	39	38
Illinois	100	5	7,501	68	43	41	35
Kentucky	100	6	2,883	66	41	31	29
Louisiana	100	3	1,688	66	40	27	25
Michigan	100	4	4,498	65	42	34	33
Mississippi	100	5	1,532	50	29	17	16
Montana	100	5	515	58	41	37	31
North Carolina	100	4	3,592	55	37	31	24
North Dakota	100	6	403	68	46	45	38
Tennessee	100	4	2,827	64	41	29	28
Utah	100	4	1,819	68	49	38	34
Wyoming	100	8	470	66	42	37	33
Arkansas	93	7	1,813	64	41	32	27
Hawaii	93	3	346	48	32	26	21
Nebraska	88	8	1,433	72	48	40	36
Oklahoma	80	5	1,513	62	44	25	25
Florida	79	3	4,011	52	39	25	22
Minnesota	78	5	2,502	74	54	51	45
Missouri	77	7	3,349	70	47	38	34
South Dakota	76	6	418	67	48	42	36
Kansas	74	6	1,518	70	48	41	34
Ohio	73	6	5,282	70	50	42	36
Wisconsin	73	6	2,655	74	48	43	40
New Mexico	71	4	469	61	43	27	25
Iowa	67	8	1,801	74	50	40	39
West Virginia	66	8	871	68	45	24	23
South Carolina	62	7	1,724	61	40	30	26
Georgia	58	5	2,764	60	39	26	26
Arizona	56	3	1,066	54	37	32	25
District of Columbia	42	2	38	29	24	21	16
Idaho	42	5	368	75	60	47	44
Indiana	41	5	1,500	71	50	42	33
Texas	41	5	6,180	52	36	31	27
Nevada	40	4	338	65	48	40	33
Alaska	39	5	131	68	53	47	34
Oregon	38	4	514	68	49	39	32

Future Educators

Interest and Achievement by State

State	Percent of All Graduates Tested*	Percent of All ACT-Tested Graduates Interested in Education Majors	Number of All ACT-Tested Graduates Interested in Education Majors	Percent of Students with Education Majors Meeting Benchmarks			
				English	Reading	Math	Science
Connecticut	32	4	555	79	52	51	44
California	30	3	3,425	63	42	40	29
Virginia	30	4	1,069	67	52	41	39
New Jersey	29	4	1,313	67	41	43	32
Vermont	29	5	117	70	50	48	42
Massachusetts	28	4	765	77	56	53	42
New York	28	4	2,324	71	49	51	42
Maryland	25	4	592	65	44	36	32
Washington	25	4	700	60	47	40	32
New Hampshire	23	4	130	80	55	42	40
Pennsylvania	22	4	1,298	68	45	39	32
Delaware	21	4	83	73	49	37	30
Rhode Island	19	4	79	62	48	29	30
Maine	10	3	40	73	53	50	40
Nation	59	5	87,653	65	43	36	31

* Totals for graduating seniors were obtained from *Knocking at the College Door: Projections of High School Graduates*, 8th edition. © December 2012 by the Western Interstate Commission for Higher Education.

ACT-Defined Education Majors

Administration/Student Services	Subject Specific
Counseling and Student Services	Teacher Education—Subject Specific
Educational Administration	Agricultural Education
Curriculum and Instruction	Art Education
	Business Education
	Career and Technical Education
	English-as-a-Second-Language Education
	English/Language Arts Education
	Foreign Languages Education
	Health Education
	Mathematics Education
	Music Education
	Physical Education and Coaching
	Science Education
	Social Studies/Sciences Education
General Teacher Education	
Teacher Education—General	
Student Population Specific	
Special Education	
Early Childhood Education	
Elementary Education	
Junior High/Middle School Education	
Postsecondary Education	
Secondary Education	

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