



# CIVIL RIGHTS DATA COLLECTION

## Data Snapshot: College and Career Readiness

### Issue Brief No. 3 (March 2014)

For other data snapshots in the series, visit the CRDC at: <http://ocrdata.ed.gov>

#### *INSIDE THIS SNAPSHOT: College and Career Readiness Highlights*

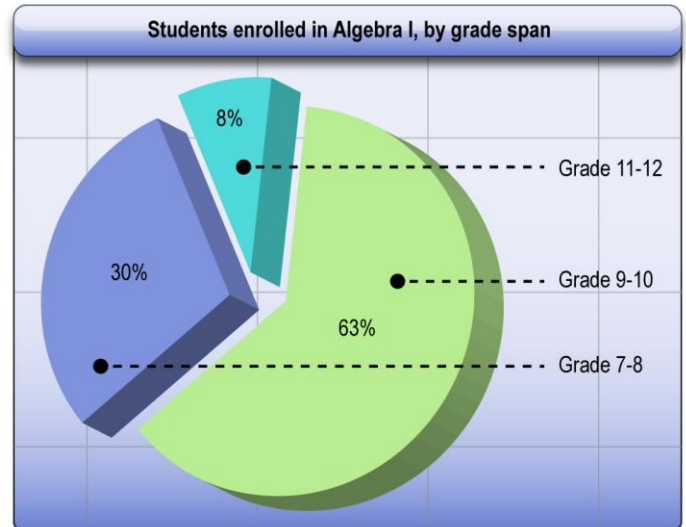
- **Limited access to high-level math and science courses:** Nationwide, only 50% of high schools offer calculus, and only 63% offer physics.
- **Significant lack of access to other core courses:** Nationwide, between 10-25% of high schools do not offer more than one of the core courses in the typical sequence of high school math and science education — such as Algebra I and II, geometry, biology, and chemistry.
- **Even less access for black, Latino, American Indian, and Alaska Native students:** A quarter of high schools with the highest percentage of black and Latino students do not offer Algebra II; a third of these schools do not offer chemistry. Fewer than half of American Indian and Native-Alaskan high school students have access to the full range of math and science courses in their high school.
- **Growing opportunity gap in gifted and talented education:** Black and Latino students represent 26% of the students enrolled in gifted and talented education programs, compared to black and Latino students' 40% enrollment in schools offering gifted and talented programs.
- **Advanced Placement (AP) course enrollment and testing:**
  - Black and Latino students make up 37% of students in high schools, 27% of students enrolled in at least one Advanced Placement (AP) course, and 18% of students receiving a qualifying score of 3 or above on an AP exam.
  - English learners represent 5% of high school students, 2% of the students enrolled in at least one AP course, and 1% of the students receiving a qualifying score of 3 or above on an AP exam.
  - Students with disabilities served by IDEA represent 12% of high school students, 2% of students enrolled in an AP course, and 1% of the students receiving a qualifying score of 3 or above on an AP exam.
- **Less access to English language instruction programs for American Indian and Native-Alaskan English learners:** Eighty-one percent (81%) of American Indian and Native-Alaskan English learners are enrolled in English language instruction programs, compared to 92% of their Latino and black peers.
- **Higher rates of retention for students of color, English learners, and students with disabilities:** Students with disabilities served by IDEA and English learners make up 12% and 5% of high school enrollment, respectively, but 19% and 11% of students held back or retained a year, respectively. (Some students may be counted in both categories). Twelve percent (12%) of black students are retained in grade 9 — about double the rate that all students are retained (6%).

# PATHWAYS TO SUCCESS

Early mastery of algebra is critical to preparing students for subsequent coursework they will need to graduate from high school to prepare for college and careers. The CRDC reveals disparities in which students have access to algebra, when they take it, and whether they are succeeding.

## Early access to Algebra I

About 30% of students taking Algebra I did so in grades 7 or 8. The majority of students taking Algebra I did so in grades 9 or 10. About 8% of students taking Algebra I did so in grades 11 or 12.

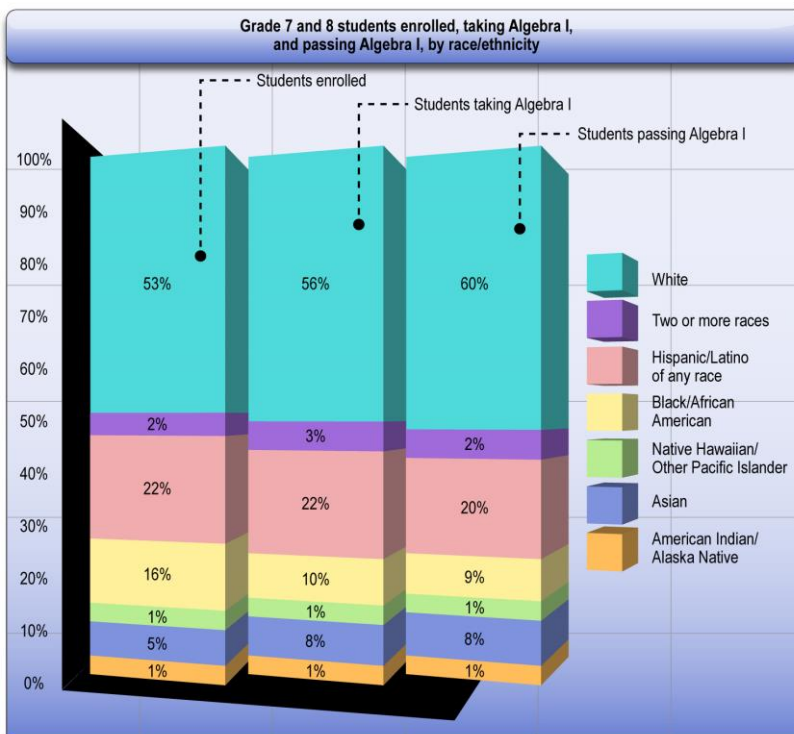


NOTE: Detail may not sum to 100% because of rounding. Figure represents students enrolled in Algebra I.

SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.

## Early completion of Algebra I, by race/ethnicity

Across the sample, white students represent 53% of students enrolled in grades 7 and 8; 56% of students taking Algebra I in those grades; and 60% of those passing Algebra I.



While Latino and black students represent 38% of students enrolled in grades 7 or 8, they represent 32% of students taking Algebra I in those grades and 29% of students passing Algebra I.

NOTE: Data reflects only those schools included in both the CRDC collection and the National Center for Education Statistics (NCES) Common Core of Data Public School Universe Survey, approximately 98.5% of CRDC schools. Totals include 6.8 million students enrolled in grades 7 or 8, 1.4 million students enrolled in Algebra I in grades 7 or 8, and 1.1 million students passing Algebra I in grades 7 or 8.

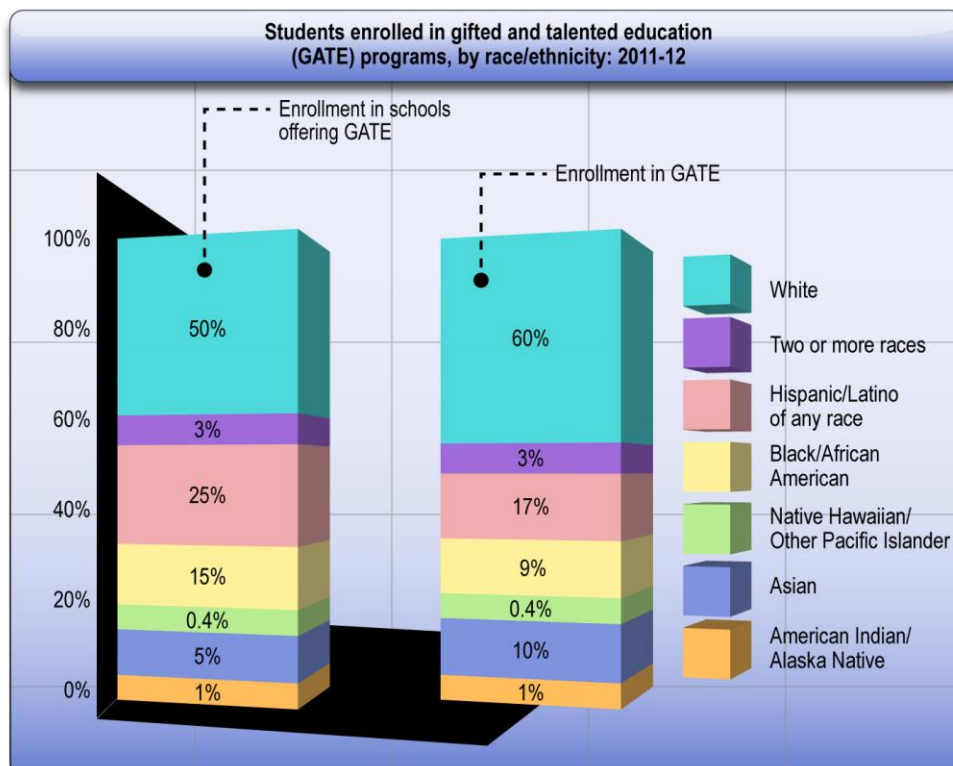
SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12; the NCES Common Core of Data, "Public Elementary/Secondary School Universe Survey," 2011-12.

**The CRDC also reveals:**

- For English learners taking Algebra I in the last years of high school (grade 11 or 12), only 69% successfully passed the course compared to 71% of their non-English-learner peers.
- Eighty-six percent (86%) of white students taking Algebra I in middle school passed the course, as did 72% of Latino and black students.

**Participation in gifted and talented education program, by race/ethnicity**

White and Asian-American students make up 70% of the students enrolled in gifted and talented education programs, compared to 55% of white and Asian-American enrollment in schools offering gifted and talented programs. Latino and black students represent 26% of the students enrolled in gifted and talented programs, compared to 40% of Latino and black student enrollment in schools offering gifted and talented programs.

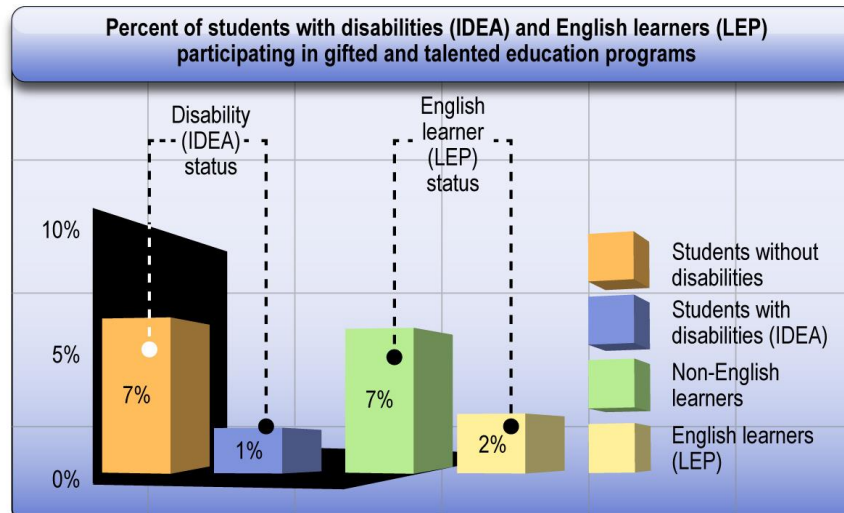


NOTE: Detail may not sum to 100% due to rounding. Figure reflects 33 million students enrolled in schools offering gifted and talented education (GATE) programs and about 3.3 million students enrolled in GATE programs.

SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.

## Participation of English learners and students with disabilities in gifted and talented education programs

While 7% of students without disabilities are participating in gifted and talented education (GATE) programs, only 1% of students with disabilities served under IDEA do so. (Note: In 2011-12, 7% of children ages 3-21 served under the IDEA were classified as having intellectual, as opposed to learning, disabilities that might preclude GATE participation.) Similarly, the percentage of non-English learners participating in GATE programs is three and a half times greater than the percentage of English learners participating in these programs.

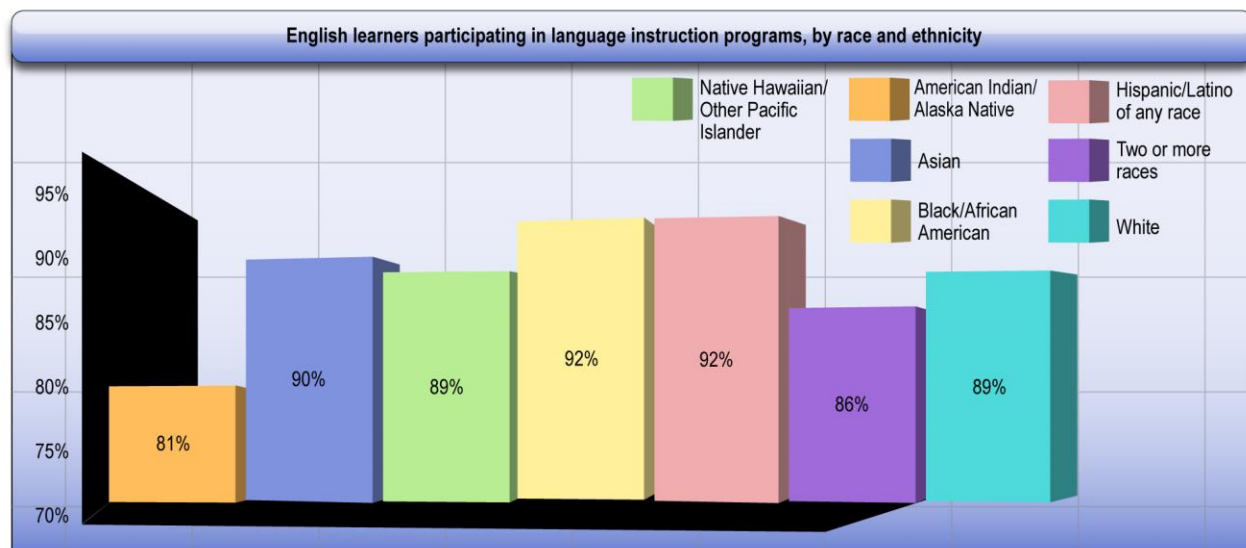


NOTE: Detail may not sum to 100% due to rounding. Figure reflects 43.6 million non-IDEA students, 6 million IDEA students, 4.7 million LEP students, and about 45 million non-LEP students.

SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.

## English learner enrollment in English language instruction educational programs, by race/ethnicity

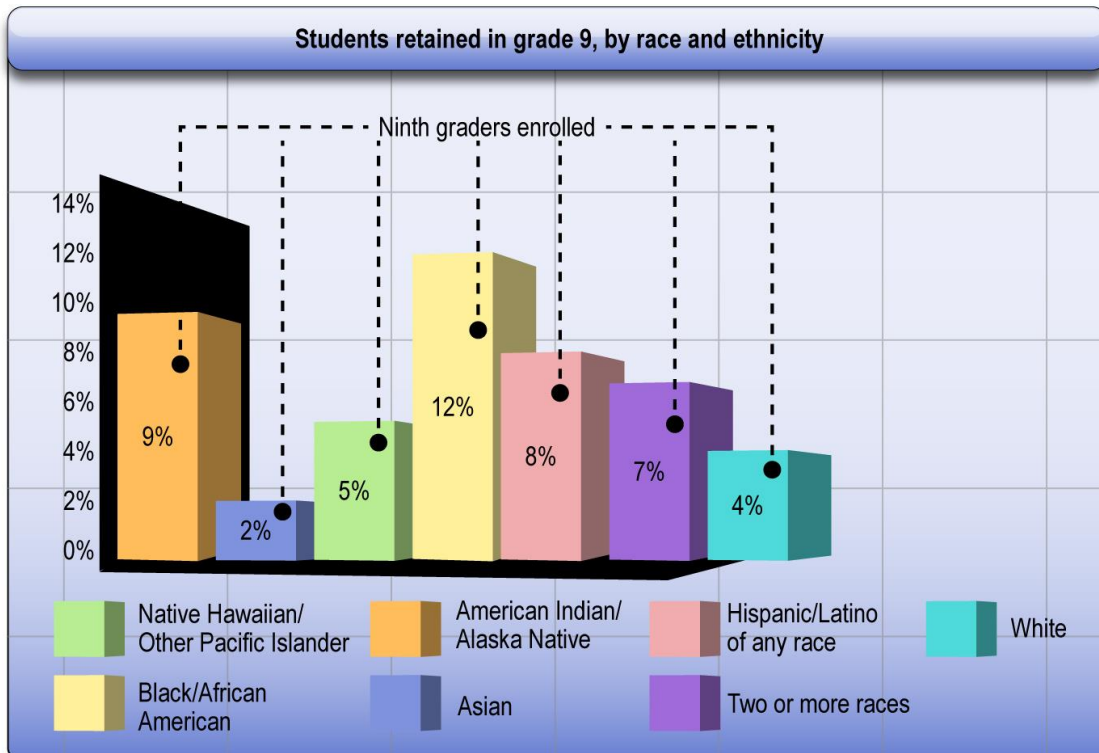
Overall, a high percentage of English learners are participating in English language instruction programs. However, just 81% of American Indian and Native-Alaskan English learners are enrolled in English language instruction programs, compared to 92% of their Latino and black peers.



NOTE: Figure represents 53,000 American Indian/Alaska Native LEP students, 542,000 Asian LEP students, 34,000 Native Hawaiian/Other Pacific Islander LEP students, 180,000 black LEP students, 3.4 million Latino LEP students, 45,000 LEP students of two or more races, and 279,000 white LEP students. SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.

## Grade 9 retention

About 6% of all ninth-grade students are held back or retained in grade 9. Twelve percent (12%) of black and 9% of American Indian and Native-Alaskan students repeat grade 9.



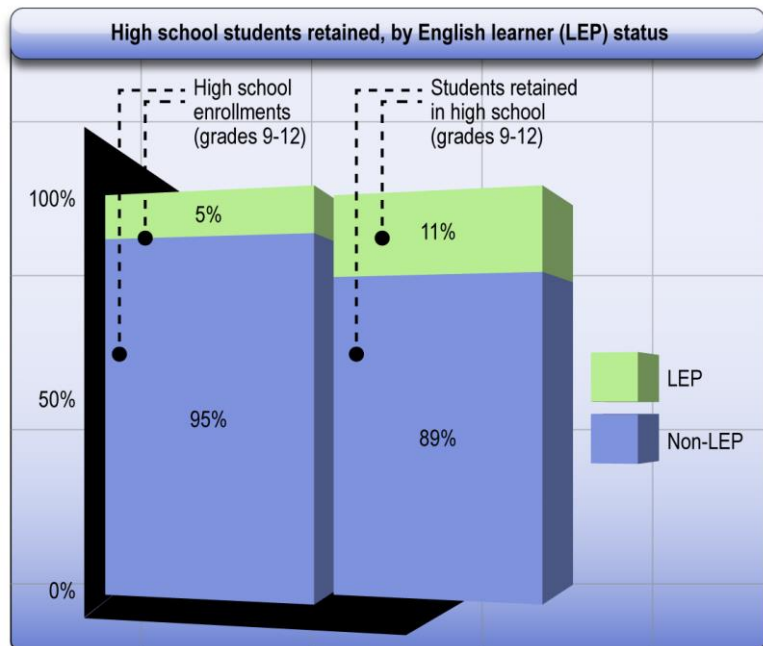
NOTE: Data reflects only those schools included in both the CRDC collection and the NCES Common Core of Data Public School Universe Survey (approximately 98.5% of CRDC all schools), where both data sources reported grade 9 offered, and where the NCES Common Core of Data reported at least one student enrolled in grade 9 (92% of all CRDC schools with grade 9). Figure reflects 44,000 American Indian/Alaska Native students, 180,000 Asian students, 14,000 Native Hawaiian/Other Pacific Islander students, 660,000 black students, 896,000 Latino students, 89,000 students of two or more races, and 2 million white students.

SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12; the NCES Common Core of Data, "Public Elementary/Secondary School Universe Survey," 2011-12.



## English learners retained in high school

English learners make up 5% of high school enrollment, but 11% of high school students held back a year.

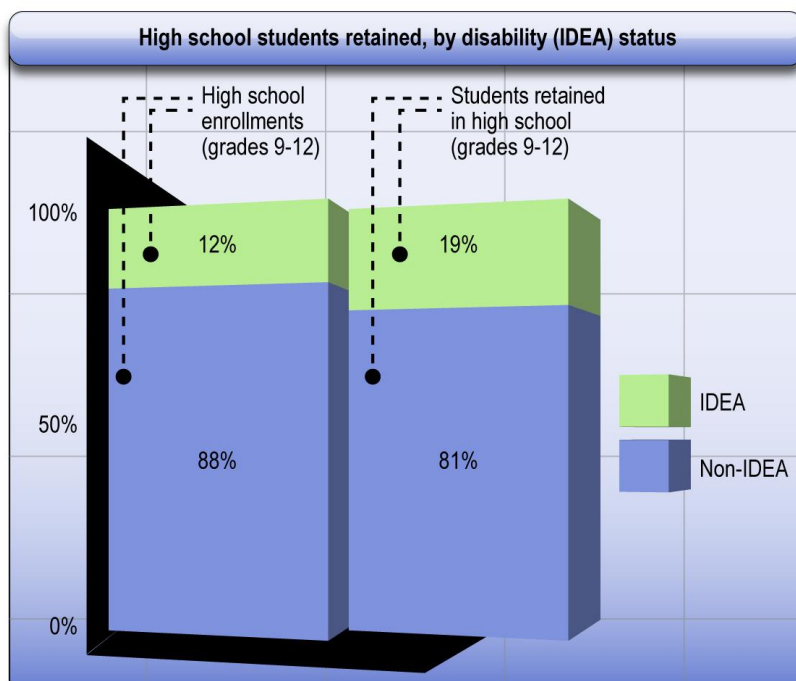


NOTE: High school enrollment reflects the LEP enrollment in schools offering any of the grades 9-12. Figure represent 97% of CRDC schools offering any of the grades 9-12, including 16 million high school students and 747,000 students retained in high school.

SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.

## Students with disabilities retained in high school

Students with disabilities served by IDEA make up 12% of high school enrollment, but 19% of high school students held back a year.



NOTE: High school enrollment reflects the IDEA enrollment in schools offering any of the grades 9-12. Figure represent 97% of CRDC schools offering any of the grades 9-12, including 16 million high school students and 747,000 students retained in high school.

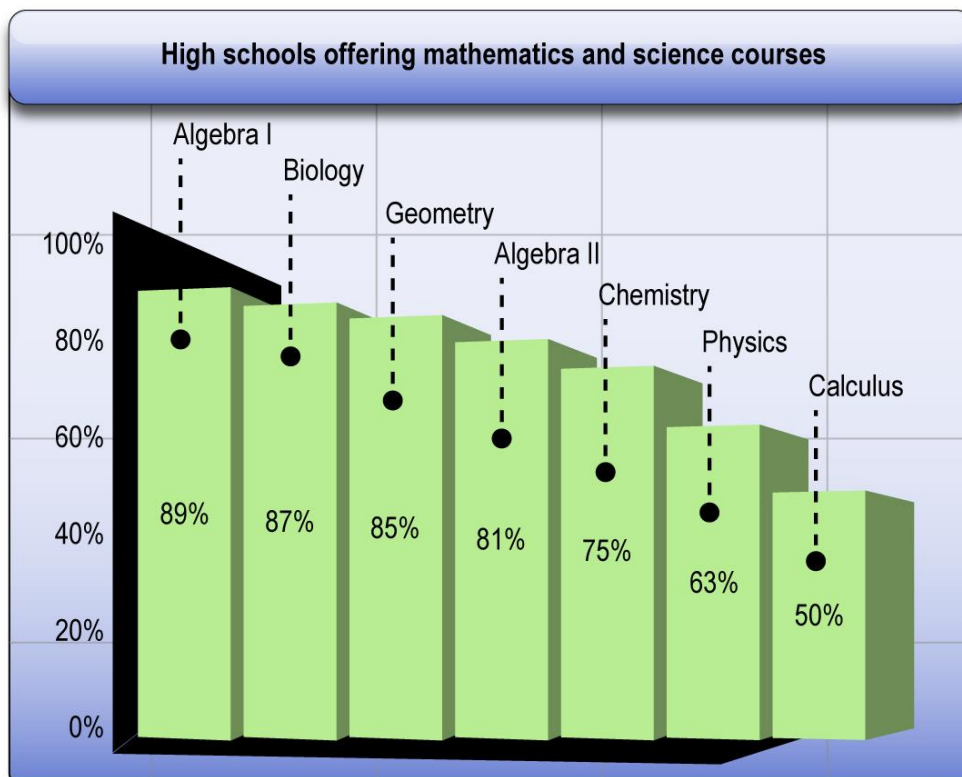
SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.

# COLLEGE AND CAREER READINESS

The CRDC reveals opportunity strengths and deficits nationwide in student access to college- and career-preparatory coursework and opportunities, as well as disparities in which students are successful in advanced mathematics and science courses and Advanced Placement (AP) courses and tests.

## Unavailability of key courses

More than one in ten high schools does not offer Algebra I; only about one in two schools offers calculus.

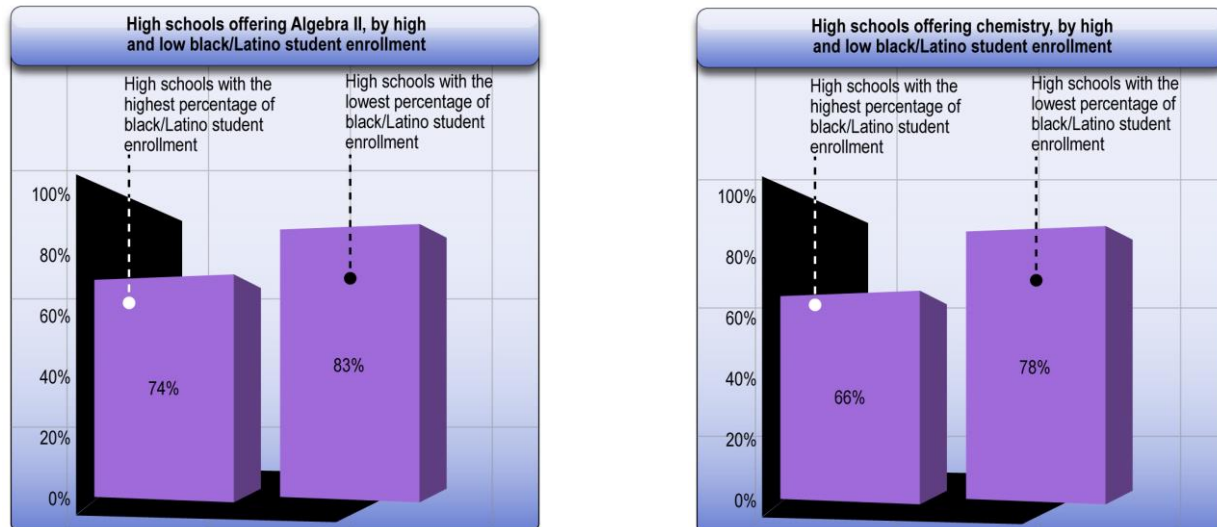


NOTE: "High schools" is defined as public schools offering grades 10 or 11. Data in this chart represents 99% of high schools in the CRDC universe (25,030 high schools).

SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.

## Unequal access to key courses

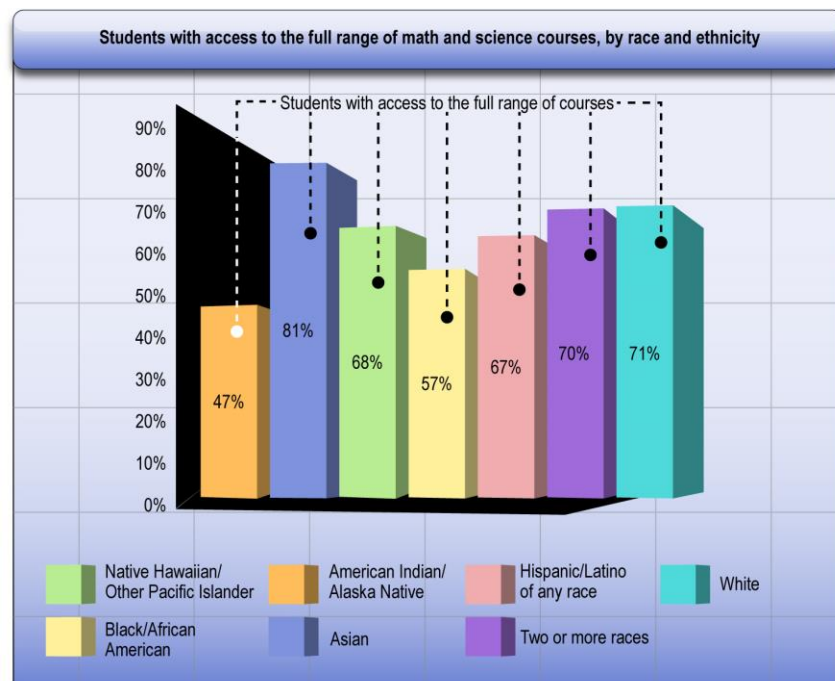
The CRDC reveals disparities in access to high-level math and science courses. While 78% and 83% of the schools serving the lowest percentages of black and Latino students offer chemistry and Algebra II, respectively only 66% and 74% of schools serving the highest percentages of black and Latino students offer chemistry and Algebra II, respectively.



NOTE: Data reflects only schools in districts with more than one high school. See data notes for more information on the categorization of schools. **SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.**

## Access to full range of courses, by race/ethnicity

Eighty-one percent (81%) of Asian-American high school students and 71% of white high school students attend high schools where the full range of math and science courses are offered (Algebra I, geometry, Algebra II, calculus, biology, chemistry, physics). However, fewer than half of American Indian and Native-Alaskan high school students have access to the full range of math and science courses in their high schools.



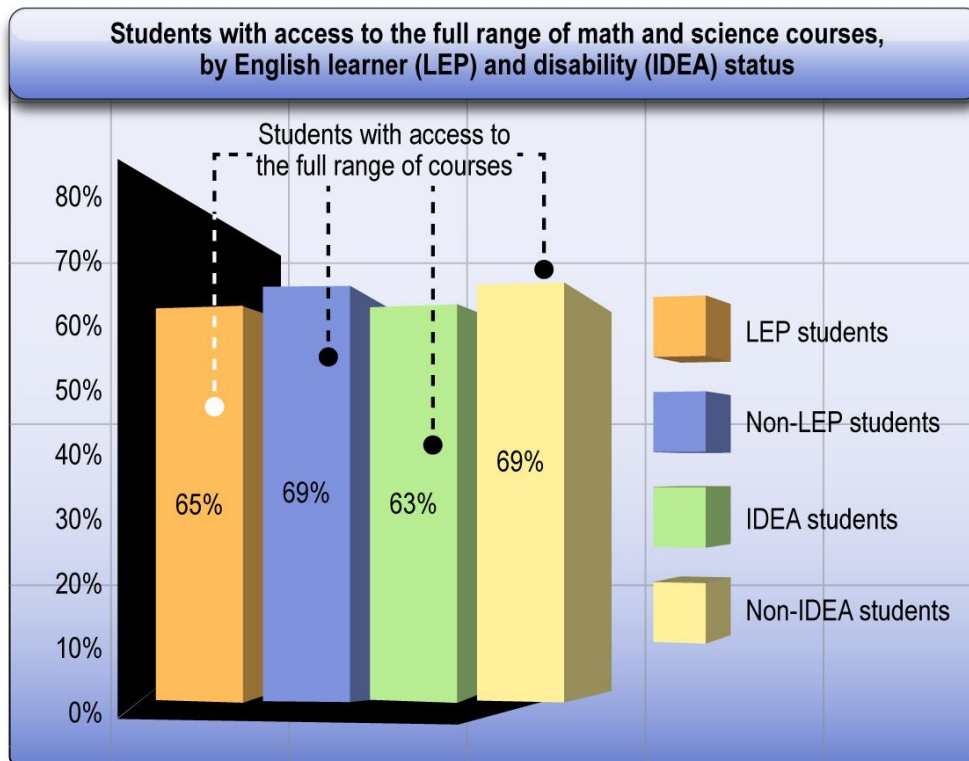
NOTE: Figure reflects data for 99% of CRDC high schools, including approximately 200,000 American Indian/Alaska Native students, 743,000 Asian students, 75,000 Native Hawaiian/Other Pacific Islander students, 2.5 million black students, 3.3 million Latino students, 340,000 students of two or more races, and 8.5 million white students.

**SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.**



## Access to full range of courses, by disability and English learner status

While 69% of students without disabilities have access to the full range of math and science courses, only 63% of students with disabilities served by IDEA attend schools offering Algebra I, geometry, Algebra II, calculus, biology, chemistry and physics. For English learners, a difference in access still exists but on a smaller scale; 65% of English learners attend schools that offer the full range of courses, compared to 69% of their non-English learner peers.

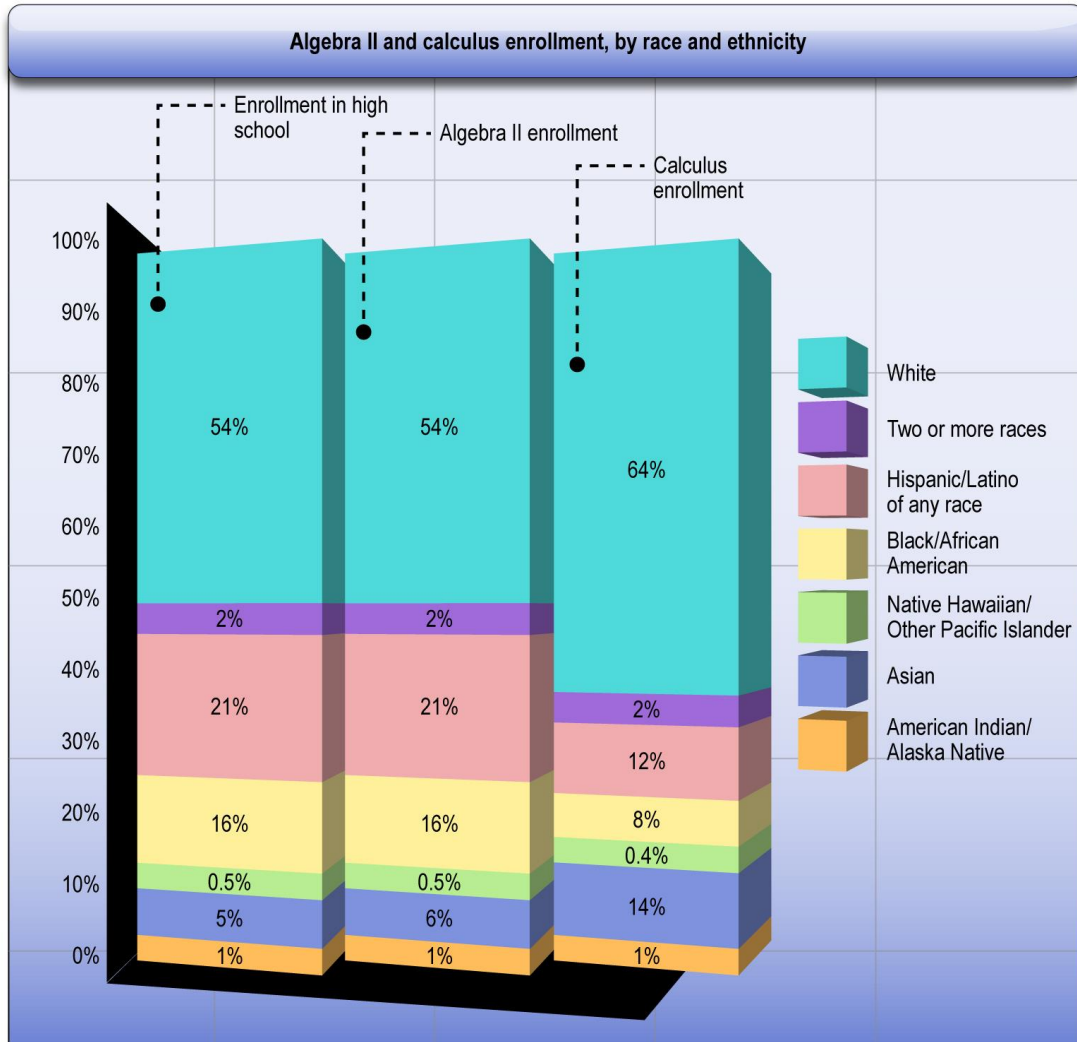


NOTE: Figure represents 99% of CRDC high schools (offering grades 10 or 11), including 800,000 LEP students, 14.9 million non-LEP students, 1.9 million IDEA students and 13.9 million non-IDEA students.

SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.

## Algebra II and calculus enrollment, by race/ethnicity

CRDC reveals good news on a national level, showing the proportion of students enrolled in Algebra II courses closely matching enrollment in public high schools. However, this promising trend does not continue into calculus. For example, while black and Latino students represent 16% and 21%, respectively, of high school enrollment, they are only 8% and 12%, respectively, of the students enrolled in calculus.

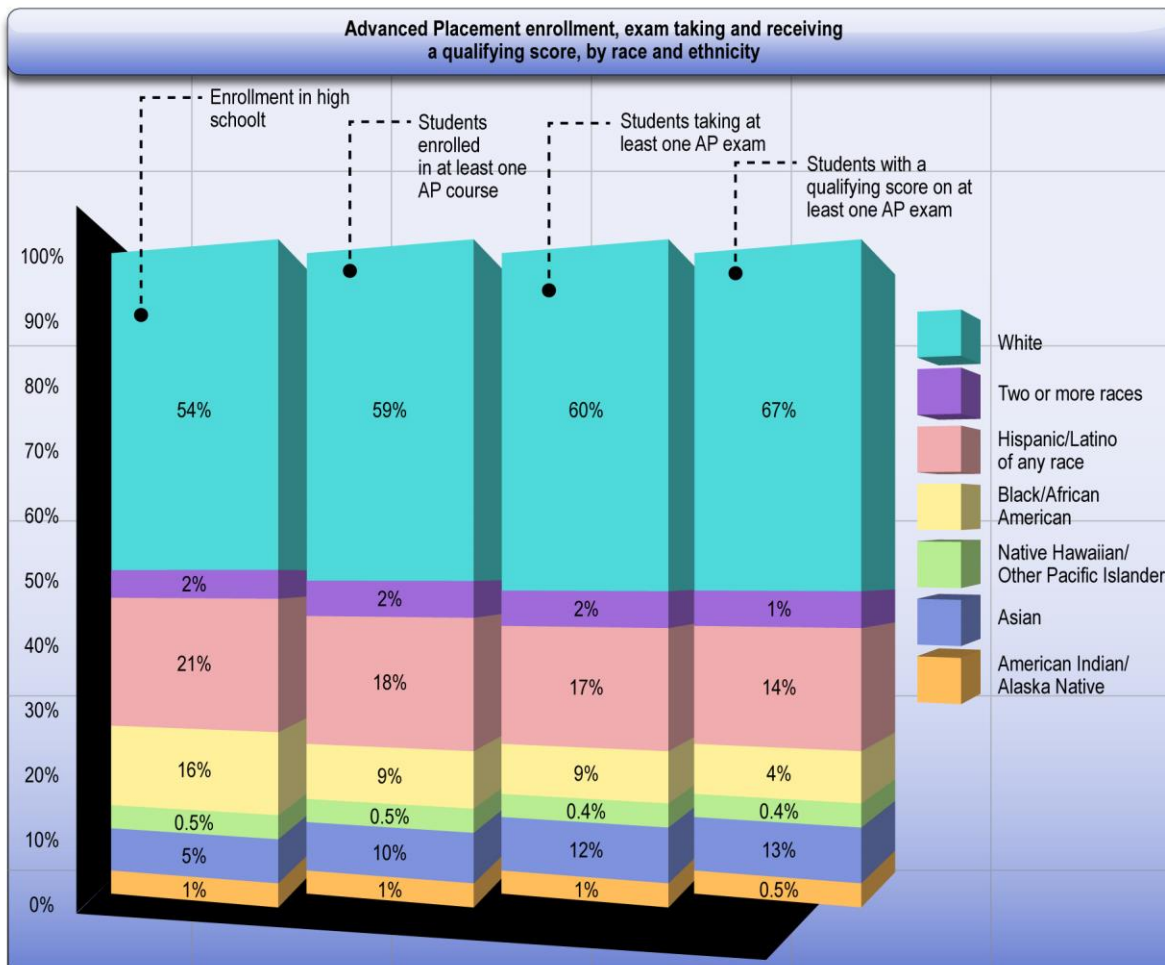


NOTE: Detail may not sum to 100% due to rounding. Figure represents 99% of CRDC schools, including 16 million high school students, 2.9 million students enrolled in Algebra II, and 534,000 students enrolled in calculus.

SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.

## Advanced Placement enrollment and success, by race/ethnicity

Black and Latino students combined represent 37% of high school enrollment, but 27% of students taking AP courses, 26% of students taking AP exams, and 18% of students receiving a qualifying score of 3 or above on one or more AP exams.



NOTE: Detail may not sum to 100% due to rounding. Data in this chart represents 98.9% of high schools in the CRDC universe. Overall high school enrollment is 16 million students, enrolled in at least one AP course is 2.5 million students, taking at least one AP exam is 1.75 million students, and with a qualifying score on at least one AP exam is 980,000 students.

SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.

### The CRDC also reveals:

- Students with disabilities served by IDEA represent 12% of high school students, but only 2% of students enrolled in an AP course and only 1% of the students taking and receiving a qualifying score of 3 or above on an AP exam.
- English learners represent 5% of high school students, but only 2% of the students enrolled in an AP course and only 1% of the students taking and receiving a qualifying score of 3 or above on an AP exam.

# COLLEGE AND CAREER READINESS: STATE-BY-STATE

For the first time since 2000, the CRDC included every public school and district in the nation, allowing more accurate depictions of statewide trends and inter-state disparities. The following tables provide state-level data on student access to math and science courses, Algebra I enrollment, Gifted and Talented Education enrollment, AP course enrollment, and AP exam-taking and exam-passing. Here are some select highlights:

## Access to Gifted and Talented Education (GATE) Programs

- **States with highest percent of students in GATE, by race/ethnicity**
  - *American Indian/Alaska Native*: Alabama (15%), Oklahoma (14%), and Georgia (13%)
  - *Asian*: Maryland (38%), Indiana (26%), and Oklahoma (26%)
  - *Black/African American*: Maryland (10%), Arkansas (8%), and Oklahoma (8%)
  - *Hispanic or Latino of any race*: Maryland (15%), Indiana (8%), and Oklahoma (8%)
  - *Native Hawaiian/Other Pacific Islander*: South Carolina (15%), Virginia (14%), and Kentucky (13%)
  - *Two or more races*: Maryland (20%), Virginia (15%), Georgia (13%), and Nebraska (13%)
  - *White*: Maryland (20%), Oklahoma (17%), and South Carolina (17%)
- **States with lowest percent of students in GATE, by race/ethnicity**
  - *American Indian/Alaska Native*: Vermont (0%) and Rhode Island (0.2%)
  - *Asian*: Massachusetts (1%), Rhode Island (1%), and Vermont (1%)
  - *Black/African American*: Vermont (0.3%) and New Hampshire (0.4%)
  - *Hispanic or Latino of any race*: Massachusetts (0.4%), New Hampshire (0.4%), and Vermont (0.4%)
  - *Native Hawaiian/Other Pacific Islander*: Vermont (0%) and Massachusetts (0.4%)
  - *Two or more races*: Vermont (0.2%) and Rhode Island (0.2%)
  - *White*: Vermont (0.3%), Massachusetts (1%), New Hampshire (1%), and Rhode Island (1%)
- **States with highest and lowest percent of students with disabilities in GATE**
  - *Highest*: Arkansas (6.5%), Tennessee (4.9%), Maryland (4.3%)
  - *Lowest*: Vermont (0.02%), and Rhode Island (0.04%)
- **States with highest and lowest percent of English learners in GATE**
  - *Highest*: Minnesota (8.3%), South Carolina (5.9%), and Alabama (5%)
  - *Lowest*: Rhode Island (0.02%), New Hampshire (0.1%), South Dakota (0.1%), and Vermont (0.1%)

## Access to Math and Science Courses

- **States (and D.C.) with highest percent of high schools offering math and science courses**
  - *Algebra I*: Wyoming (100%); New Hampshire (99%); and North Dakota and Montana (98%)
  - *Algebra II*: Montana (97%); Arkansas (96%); Wyoming (95%); and New Hampshire and Oklahoma (94%)
  - *Geometry*: Wyoming (98%); Arkansas and New Hampshire (96%); and District of Columbia, Massachusetts, and Rhode Island (95%)
  - *Calculus*: New Hampshire (83%); Maine (76%); Indiana (74%), Pennsylvania (71%), and Rhode Island (69%)
  - *Biology*: Montana (98%); Arkansas and Massachusetts (97%); and New Hampshire and Ohio (96%)
  - *Chemistry*: District of Columbia (92%); Maine (91%); and Arkansas, Massachusetts, New Hampshire, and Rhode Island (90%)
  - *Physics*: New Hampshire (91%); Maine and Massachusetts (88%); Arkansas (86%)
  
- **States with lowest percentage of high schools offering math and science classes**
  - *Algebra I*: Georgia (66%), Utah (74%), Minnesota (76%), and Hawaii (77%)
  - *Algebra II*: Georgia and Alaska (56%); California (62%); and Minnesota (70%)
  - *Geometry*: Georgia (53%), Delaware (63%), Alaska (65%), and Minnesota (73%)
  - *Calculus*: Alaska (18%), North Dakota (32%), Oklahoma (34%), and Minnesota (35%)
  - *Biology*: Hawaii (71%), Alaska (72%), Minnesota (74%), and California (75%)
  - *Chemistry*: Alaska (38%), California (53%), Florida (54%), and Washington (56%)
  - *Physics*: Alaska (30%), Oklahoma (36%), Florida (39%), and Kentucky (46%)



**Table 1. Percentage of students enrolled in gifted and talented programs, by race/ethnicity and state: 2011-12**

State	All Students	American Indian/Alaska Native	Asian	Native Hawaiian/Other Pacific Islander	Black/African American	Hispanic/Latino	Two or more races	White
<i>UNITED STATES</i>	7%	6%	13%	6%	4%	5%	8%	8%
Alabama	9%	15%	18%	11%	5%	6%	9%	11%
Alaska	5%	1%	7%	3%	3%	5%	7%	6%
Arizona	6%	3%	14%	6%	3%	4%	7%	8%
Arkansas	10%	10%	17%	4%	8%	6%	7%	11%
California	8%	6%	16%	12%	6%	6%	10%	11%
Colorado	7%	5%	11%	7%	3%	4%	9%	8%
Connecticut	2%	2%	5%	2%	2%	1%	3%	3%
Delaware	2%	2%	5%	1%	1%	1%	3%	2%
District Of Columbia <sup>1</sup>	-	-	-	-	-	-	-	-
Florida	6%	6%	13%	5%	2%	5%	7%	7%
Georgia	11%	13%	25%	9%	5%	5%	13%	16%
Hawaii	1%	1%	2%	1%	1%	1%	2%	2%
Idaho	3%	2%	8%	3%	2%	1%	4%	3%
Illinois	4%	3%	10%	6%	2%	2%	6%	4%
Indiana	13%	12%	26%	10%	6%	8%	11%	14%
Iowa	10%	7%	15%	5%	4%	5%	10%	10%
Kansas	3%	3%	8%	2%	1%	1%	4%	4%
Kentucky	13%	9%	20%	13%	5%	6%	9%	14%

State	All Students	American Indian/Alaska Native	Asian	Native Hawaiian/Other Pacific Islander	Black/African American	Hispanic/Latino	Two or more races	White
Louisiana	3%	3%	12%	6%	2%	3%	5%	4%
Maine	5%	3%	9%	5%	3%	5%	3%	5%
Maryland	16%	12%	38%	8%	10%	15%	20%	20%
Massachusetts	1%	1%	1%	0.4%	1%	0.4%	1%	1%
Michigan	2%	1%	4%	2%	1%	1%	1%	2%
Minnesota	8%	5%	17%	3%	7%	6%	6%	8%
Mississippi	7%	6%	16%	6%	3%	7%	6%	10%
Missouri	4%	4%	13%	3%	2%	3%	5%	4%
Montana	4%	2%	11%	4%	4%	3%	5%	5%
Nebraska	12%	6%	21%	11%	7%	6%	13%	14%
Nevada	2%	2%	4%	2%	1%	1%	3%	3%
New Hampshire	1%	1%	2%	1%	0.4%	0.4%	1%	1%
New Jersey	7%	6%	13%	9%	4%	3%	6%	8%
New Mexico	5%	3%	15%	4%	5%	3%	8%	9%
New York	2%	1%	3%	2%	1%	1%	2%	2%
North Carolina	11%	8%	21%	10%	5%	5%	12%	15%
North Dakota	3%	4%	9%	4%	2%	1%	2%	3%
Ohio	4%	3%	11%	3%	1%	2%	3%	4%
Oklahoma	14%	14%	26%	11%	8%	8%	10%	17%

State	All Students	American Indian/Alaska Native	Asian	Native Hawaiian/Other Pacific Islander	Black/African American	Hispanic/Latino	Two or more races	White
Oregon	7%	4%	17%	5%	4%	3%	9%	8%
Pennsylvania	4%	3%	10%	5%	2%	2%	4%	4%
Rhode Island	1%	0.2%	1%	1%	1%	1%	0.5%	1%
South Carolina	12%	10%	23%	15%	5%	7%	12%	17%
South Dakota	2%	1%	4%	1%	1%	1%	1%	2%
Tennessee	3%	3%	8%	5%	2%	1%	4%	3%
Texas	8%	10%	18%	9%	4%	6%	12%	11%
Utah	4%	3%	11%	6%	4%	3%	2%	4%
Vermont	0.3%	0.0%	1%	0.0%	0.3%	0.4%	0.2%	0.3%
Virginia	12%	11%	22%	14%	6%	8%	15%	14%
Washington	4%	2%	7%	2%	2%	2%	4%	4%
West Virginia	2%	2%	11%	5%	2%	1%	2%	2%
Wisconsin	6%	3%	8%	4%	6%	4%	5%	6%
Wyoming	3%	1%	7%	4%	1%	2%	3%	4%

<sup>1</sup> The District of Columbia provided only partial information on gifted and talented education programs.

NOTE: Data in this chart represents 98.5% of schools in the CRDC universe that were matched to the NCES common core of data grade-level enrollment data.

SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.

**Table 2. Percentage of students enrolled in gifted and talented programs, by disability (IDEA) and English learner (LEP) status and state: 2011-12**

State	Students without disabilities	Students with disabilities (IDEA)	Non-English learners	English learners (LEP)
<i>UNITED STATES</i>	7.3%	1.4%	7.0%	2.0%
Alabama	9.5%	0.9%	8.6%	5.0%
Alaska	5.5%	1.0%	5.5%	0.5%
Arizona	6.5%	1.2%	6.3%	0.9%
Arkansas	11.0%	6.5%	10.5%	3.0%
California	9.1%	2.1%	10.3%	2.0%
Colorado	7.2%	1.5%	7.4%	1.4%
Connecticut	2.7%	0.3%	2.5%	0.3%
Delaware	2.3%	0.4%	2.1%	0.8%
District of Columbia	--	--	--	--
Florida	6.3%	0.5%	6.1%	0.5%
Georgia	11.6%	1.6%	11.1%	0.8%
Hawaii	1.6%	0.1%	1.6%	0.2%
Idaho	3.4%	0.4%	3.3%	0.4%
Illinois	4.0%	0.6%	3.9%	0.4%
Indiana	14.5%	2.3%	13.2%	4.4%
Iowa	10.7%	1.6%	9.9%	1.8%

State	Students without disabilities	Students with disabilities (IDEA)	Non-English learners	English learners (LEP)
Kansas	3.4%	1.2%	3.4%	0.4%
Kentucky	14.2%	4.2%	13.1%	2.2%
Louisiana	3.5%	0.5%	3.2%	1.9%
Maine	5.5%	0.8%	4.8%	1.5%
Maryland	17.4%	4.3%	16.8%	2.7%
Massachusetts	0.8%	0.1%	0.7%	0.3%
Michigan	2.2%	0.2%	2.0%	0.2%
Minnesota	9.0%	3.0%	8.1%	8.3%
Mississippi	7.5%	1.4%	6.9%	3.1%
Missouri	4.7%	0.9%	4.2%	1.7%
Montana	4.8%	0.6%	4.5%	0.3%
Nebraska	13.6%	2.9%	12.7%	1.9%
Nevada	2.3%	0.3%	2.5%	0.4%
New Hampshire	1.6%	0.1%	1.5%	0.1%
New Jersey	7.6%	1.3%	6.9%	0.7%
New Mexico	5.2%	2.1%	5.7%	0.5%
New York	1.7%	0.4%	1.7%	0.2%
North Carolina	12.1%	1.5%	11.5%	1.8%



State	Students without disabilities	Students with disabilities (IDEA)	Non-English learners	English learners (LEP)
North Dakota	3.8%	0.6%	3.4%	1.9%
Ohio	4.3%	0.6%	3.9%	0.8%
Oklahoma	16.1%	2.8%	14.9%	3.3%
Oregon	7.7%	2.0%	7.7%	0.7%
Pennsylvania	4.3%	1.9%	4.1%	0.3%
Rhode Island	0.7%	0.0%	0.6%	0.0%
South Carolina	13.7%	1.9%	12.6%	5.9%
South Dakota	2.3%	0.3%	2.1%	0.1%
Tennessee	2.2%	4.9%	2.6%	1.3%
Texas	8.5%	1.3%	8.8%	3.4%
Utah	4.4%	0.7%	3.9%	4.9%
Vermont	0.4%	0.0%	0.3%	0.1%
Virginia	13.4%	3.1%	12.7%	4.3%
Washington	4.0%	0.7%	3.9%	0.6%
West Virginia	2.3%	0.2%	2.0%	1.6%
Wisconsin	6.7%	2.1%	6.3%	2.4%
Wyoming	3.8%	0.5%	3.4%	0.4%

<sup>1</sup> The District of Columbia provided only partial information on gifted and talented education programs.

NOTE: Data in this chart represents 98.5% of schools in the CRDC universe that were matched to the NCES common core of data grade-level enrollment data.

SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.

**Table 3. Mathematics and science course offerings in high schools, by course and state: 2011-12**

State	% Offering Algebra I	% offering geometry	% offering Algebra II	% offering calculus	% offering biology	% offering chemistry	% offering physics
<i>UNITED STATES</i>	<i>89%</i>	<i>85%</i>	<i>81%</i>	<i>50%</i>	<i>87%</i>	<i>75%</i>	<i>63%</i>
<b>Alabama</b>	<b>91%</b>	<b>90%</b>	<b>85%</b>	<b>44%</b>	<b>89%</b>	<b>82%</b>	<b>61%</b>
<b>Alaska</b>	<b>85%</b>	<b>65%</b>	<b>56%</b>	<b>18%</b>	<b>72%</b>	<b>38%</b>	<b>30%</b>
<b>Arizona</b>	<b>91%</b>	<b>88%</b>	<b>88%</b>	<b>38%</b>	<b>87%</b>	<b>66%</b>	<b>50%</b>
<b>Arkansas</b>	<b>93%</b>	<b>96%</b>	<b>96%</b>	<b>55%</b>	<b>97%</b>	<b>90%</b>	<b>86%</b>
<b>California</b>	<b>87%</b>	<b>73%</b>	<b>62%</b>	<b>41%</b>	<b>75%</b>	<b>53%</b>	<b>47%</b>
<b>Colorado</b>	<b>94%</b>	<b>92%</b>	<b>88%</b>	<b>53%</b>	<b>90%</b>	<b>78%</b>	<b>66%</b>
<b>Connecticut</b>	<b>89%</b>	<b>88%</b>	<b>85%</b>	<b>65%</b>	<b>89%</b>	<b>78%</b>	<b>69%</b>
<b>Delaware</b>	<b>82%</b>	<b>63%</b>	<b>72%</b>	<b>48%</b>	<b>82%</b>	<b>68%</b>	<b>55%</b>
<b>District Of Columbia</b>	<b>95%</b>	<b>95%</b>	<b>92%</b>	<b>41%</b>	<b>95%</b>	<b>92%</b>	<b>79%</b>
<b>Florida</b>	<b>84%</b>	<b>82%</b>	<b>74%</b>	<b>37%</b>	<b>79%</b>	<b>54%</b>	<b>39%</b>
<b>Georgia</b>	<b>66%</b>	<b>53%</b>	<b>56%</b>	<b>49%</b>	<b>92%</b>	<b>81%</b>	<b>64%</b>
<b>Hawaii</b>	<b>77%</b>	<b>79%</b>	<b>73%</b>	<b>44%</b>	<b>71%</b>	<b>68%</b>	<b>62%</b>
<b>Idaho</b>	<b>92%</b>	<b>87%</b>	<b>78%</b>	<b>48%</b>	<b>86%</b>	<b>65%</b>	<b>48%</b>
<b>Illinois</b>	<b>92%</b>	<b>90%</b>	<b>78%</b>	<b>53%</b>	<b>90%</b>	<b>78%</b>	<b>69%</b>
<b>Indiana</b>	<b>94%</b>	<b>91%</b>	<b>93%</b>	<b>74%</b>	<b>92%</b>	<b>89%</b>	<b>79%</b>
<b>Iowa</b>	<b>91%</b>	<b>87%</b>	<b>86%</b>	<b>64%</b>	<b>92%</b>	<b>84%</b>	<b>79%</b>

State	% Offering Algebra I	% offering geometry	% offering Algebra II	% offering calculus	% offering biology	% offering chemistry	% offering physics
Kansas	96%	93%	92%	56%	95%	89%	83%
Kentucky	86%	85%	84%	48%	82%	71%	46%
Louisiana	91%	89%	88%	40%	89%	84%	61%
Maine	91%	90%	91%	76%	93%	91%	88%
Maryland	90%	90%	86%	57%	89%	82%	72%
Massachusetts	94%	95%	93%	74%	97%	90%	88%
Michigan	92%	88%	87%	40%	89%	83%	66%
Minnesota	76%	73%	70%	35%	74%	58%	50%
Mississippi	83%	81%	82%	41%	84%	78%	58%
Missouri	86%	77%	77%	44%	84%	70%	52%
Montana	98%	93%	97%	54%	98%	85%	78%
Nebraska	94%	92%	90%	61%	92%	82%	77%
Nevada	89%	82%	85%	51%	85%	71%	60%
New Hampshire	99%	96%	94%	83%	96%	90%	91%
New Jersey	90%	90%	89%	67%	91%	87%	76%
New Mexico	89%	87%	89%	40%	91%	78%	55%
New York	94%	90%	84%	52%	92%	79%	66%
North Carolina	92%	91%	92%	59%	94%	79%	53%
North Dakota	98%	90%	92%	32%	95%	82%	62%

State	% Offering Algebra I	% offering geometry	% offering Algebra II	% offering calculus	% offering biology	% offering chemistry	% offering physics
Ohio	95%	93%	91%	65%	96%	87%	75%
Oklahoma	95%	94%	94%	34%	94%	75%	36%
Oregon	91%	84%	82%	49%	81%	61%	52%
Pennsylvania	90%	87%	87%	71%	88%	85%	79%
Rhode Island	97%	95%	91%	69%	95%	90%	79%
South Carolina	88%	88%	88%	61%	88%	84%	68%
South Dakota	90%	88%	86%	42%	90%	79%	64%
Tennessee	91%	91%	91%	55%	91%	88%	60%
Texas	89%	87%	84%	43%	88%	86%	80%
Utah	74%	76%	75%	46%	81%	65%	58%
Vermont	92%	92%	89%	66%	92%	88%	80%
Virginia	94%	92%	87%	68%	93%	82%	77%
Washington	84%	78%	71%	38%	77%	56%	48%
West Virginia	89%	91%	87%	59%	87%	77%	59%
Wisconsin	88%	85%	71%	58%	86%	77%	76%
Wyoming	100%	98%	95%	50%	93%	82%	55%

NOTE: Data in this chart represents 98.5% of schools in the CRDC universe that were matched to the NCES common core of data grade-level enrollment data.  
 SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.

## Data Notes and Methodology

Since 1968, the Civil Rights Data Collection (CRDC) has collected data on key education and civil rights issues in our nation's public schools for use by the Department of Education's Office for Civil Rights (OCR), other Department offices, other federal agencies, and by policymakers and researchers outside of the Department. The CRDC collects information about school characteristics and about programs, services, and outcomes for students. Most student data is disaggregated by race/ethnicity, sex, limited English proficiency, and disability.

### Schools and Districts Included

The CRDC has generally been collected biennially from school districts in each of the 50 states, plus the District of Columbia. The 2011–12 CRDC included all public schools and public school districts in the nation that serve students for at least 50% of the school day. The CRDC also includes long-term secure juvenile justice agencies, schools for the blind and deaf, and alternative schools. The response rate for this large national collection was 98.4% of school districts and 99.2% of schools, representing 99.6% of students in the nation.

### Race and Ethnicity

For the 2011-12 CRDC, districts reported data using the seven race and ethnicity categories (Hispanic/Latino, white, black/African-American, Asian, Native Hawaiian/Other Pacific Islander, American Indian/Alaska Native, and Two or More Races). For more information on the Department's 2007 guidance regarding race and ethnicity categories, please visit <http://www2.ed.gov/policy/rschstat/guid/raceethnicity/index.html>.

### Privacy Protection and Data Rounding

To ensure the protection of privacy while meeting the purposes of the CRDC, OCR conducted the analysis presented in this document on the privacy protected CRDC data. The CRDC data is privacy protected by rounding student counts in groups of three to prevent the disclosure of individual student information. For example, student counts from 1-3 are rounded to two, student counts from 4-6 are rounded to five.

In previous years, OCR has rounded CRDC data to the nearest five. However, in collaboration with the Department's Disclosure Review Board, OCR implemented a new rounding method for the 2011-12 CRDC to reveal true zeroes where possible and minimize the distortion of rounding. In general, for the 2011-12 CRDC data, the distortion of rounding one student to two would be balanced by the rounding down of three students to two. However, this new privacy protection method may inflate total counts for CRDC data elements in which there are prevalent cases of schools reporting only one student (e.g., one student retained is rounded to two students retained).

### Limitations of CRDC Data

OCR strives to ensure CRDC data are an accurate and comprehensive depiction of student access to educational opportunities in school districts. The submission system includes a series of embedded edit checks to ensure significant data errors are corrected before the district submits its data. Additionally, each district is required to certify the accuracy of its submission. Only a district superintendent, or the superintendent's designee, may certify the CRDC submission. Ultimately, the quality of the CRDC data depends on accurate collection and reporting by the participating districts.

After reviewing the data, OCR is aware that inconsistencies may still remain in the data file. Users should be aware that outliers in the dataset may be a function of districts misreporting data. For example, outliers in the data on single-sex classes may be reporting the number of students enrolled in single-sex classes rather than the number of single-sex classes. In the analysis provided in this report, some schools and districts with potential reporting



errors were excluded from the analysis. The percentage of schools included can be found in the notes section below each chart.

## College and Career

### **CRDC Definitions:**

- *Advanced Placement:* Advanced Placement (AP) is a program sponsored by the College Board through which high school students can earn college credit and advanced college placement.
- *Advanced Placement Qualifying Score/Passing:* For the purpose of the CRDC, a score of 3 or higher on an AP examination is considered passing.
- *Algebra I:* Algebra I is a course that includes the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.
- *Gifted and Talented:* Programs during regular school hours offered to students because of unusually high academic ability or aptitude or a specialized talent or aptitude.
- *Retained:* A student is retained if he or she is not promoted to the next grade prior to the beginning of the following school year. Students are not considered retained if they can proceed to the next grade because they successfully completed a summer school program or for a similar reason. At the high school level, a student who has not accumulated enough credits to be classified as being in the next grade is considered retained.

**Algebra I:** The CRDC collects Algebra I enrollment by grade span (7-8, 9-10, and 11-12). The pie chart reflects the percent of all students enrolled in Algebra I who were taking the course in certain grades. These students may be taking the course for the first time or repeating the course. Enrollment in grades 7 or 8 is provided by the Common Core of Data, where 98.5% of the CRDC schools were matched to the CCD data set.

The number of students enrolled in Algebra I was collected at the beginning of the school year and the count of students passing Algebra I at the end of the school year. Therefore, the cohort of students reported as taking Algebra I and passing Algebra I may be slightly different.

**Gifted and Talented Education:** The chart compares overall enrollment in schools offering gifted and talented education programs to the enrollment of students in those programs. In the state tables, DC reported only a small number of students enrolled in gifted and talented education programs, representing less than 1% of students in each race/ethnicity category.

**Ninth Grade Retention:** This analysis combines data from multiple sources. Approximately 98.5% of CRDC schools were matched to schools in the Common Core of Data (ranging from 100% in Hawaii and Wyoming to 94.5% in Oregon). The Common Core of Data provides a rich set of grade-level enrollments that are not collected on the CRDC. A few schools reported offering ninth grade on the CRDC but reported no ninth grade students enrolled on the Common Core of Data. These schools were excluded from the analysis. Additionally, a small number of schools reported retaining more ninth grade students than the CCD reported as enrolled in ninth grade. These schools were also removed from the analysis.

**Course Offering Analysis:** For the purpose of this analysis, high schools were defined as offering grades 10 or 11 to include as many schools as possible in the analysis. The tables providing the percent of high schools offering math and science courses by state also define a high school as offering grades 10 or 11. Please note that the states

with a high proportion of students enrolled in Algebra I in grades 7 or 8 may have fewer high schools offering Algebra I, since students are enrolling in Algebra I in middle school.

For each district, the upper and lower quintiles of schools in percentage of combined black and Latino enrollment were identified. To assign schools to quintiles, high schools were arranged in descending order of combined black and Latino enrollment percentage. For each quintile, high schools were selected until each quintile was equal to or greater than 20% of the total district enrollment. The number of students in the top and bottom quintile schools usually exceeds 20% of the total students in the district, because it is unlikely that the schools in the respective quintiles will comprise exactly 20% of the total enrollment. This analysis only includes school districts with more than one high school (64% of all CRDC districts).

Specifically, this analysis compares the percent of high schools offering Algebra II and Chemistry in the top quintile of schools and districts by enrollment, ranked by percentage of Latino and black enrollment, with the percentage of high schools in the lowest quintile offering Algebra II and Chemistry.

**Advanced Placement:** The charts and tables include the demographics of students enrolled in high schools, students enrolled in AP courses, and achieving a qualifying score on an AP exam. Users should note that the overall high school enrollment and AP course enrollments are collected as a fall snapshot, while the exam-taking and AP score information is collected at the end of the school year. Therefore the enrollment and test-taking data may not represent the same cohort of students.

For more information about the CRDC, please visit: <http://www2.ed.gov/about/offices/list/ocr/data.html>

## About the CRDC

Since 1968, the Civil Rights Data Collection (CRDC), formerly the Elementary and Secondary School Survey, has collected data on key education and civil rights issues in our nation's public schools for use by the Department of Education's Office for Civil Rights (OCR) in its enforcement and monitoring efforts regarding schools' and districts' obligation to provide equal educational opportunity. The CRDC is also a tool for other Department offices and federal agencies, policymakers and researchers, educators and school officials, and the public to analyze student equity and opportunity trends locally and nationwide. The CRDC database, with hundreds of data elements, is fully accessible to the public. All data presented are self-reported by school districts. For more information about the CRDC, please visit <http://ocrdata.ed.gov>.

### About the 2011-12 Civil Rights Data Collection (CRDC)

- For the first time since 2000, includes data from *every* public school in the nation (approximately 16,500 school districts, 97,000 schools, and 49 million students)
- Includes traditional public schools (preschool through 12<sup>th</sup> grade), alternative schools, career and technical education schools, and charter schools
- Data for every public school disaggregated by race/ethnicity, English learner status, sex, and disability
- New for 2014: data for *all* schools now disaggregated by seven race and ethnicity categories, including Native-Hawaiian, Pacific-Islander, and multiracial students
- Measures student access to college- and career-preparatory science and math courses, AP courses and tests, SAT/ACT tests, gifted and talented programs, IB programs, preschool programs, and interscholastic athletics
- Tracks teacher and resource equity, including teacher experience and salary levels, other personnel and non-personnel expenditures, and access to school counselors
- Reveals school climate disparities related to student discipline, restraint and seclusion, retention, and bullying and harassment

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