

4 Academics and Achievements

This section presents findings on early childhood, elementary, and secondary student achievement and other academic outcomes, and reports on improvements in American Indian/Alaska Native student performance and on closing achievement gaps.

Children enter school with varying levels of knowledge and skill. As students progress through

school, it is important to measure their achievement to ensure that they are acquiring necessary skills and understanding challenging subject matter. Academic outcomes are measured as the change in performance over time and the percentage of students achieving predetermined standards of competence.

4.1. Motor and Cognitive Skill Development

At about 9 months of age, there was no measurable difference between the motor and cognitive skills of American Indian/Alaska Native children and children of other races/ethnicities; however, at 2 and 4 years of age, some differences were detected between American Indian/Alaska Native children and the total population.

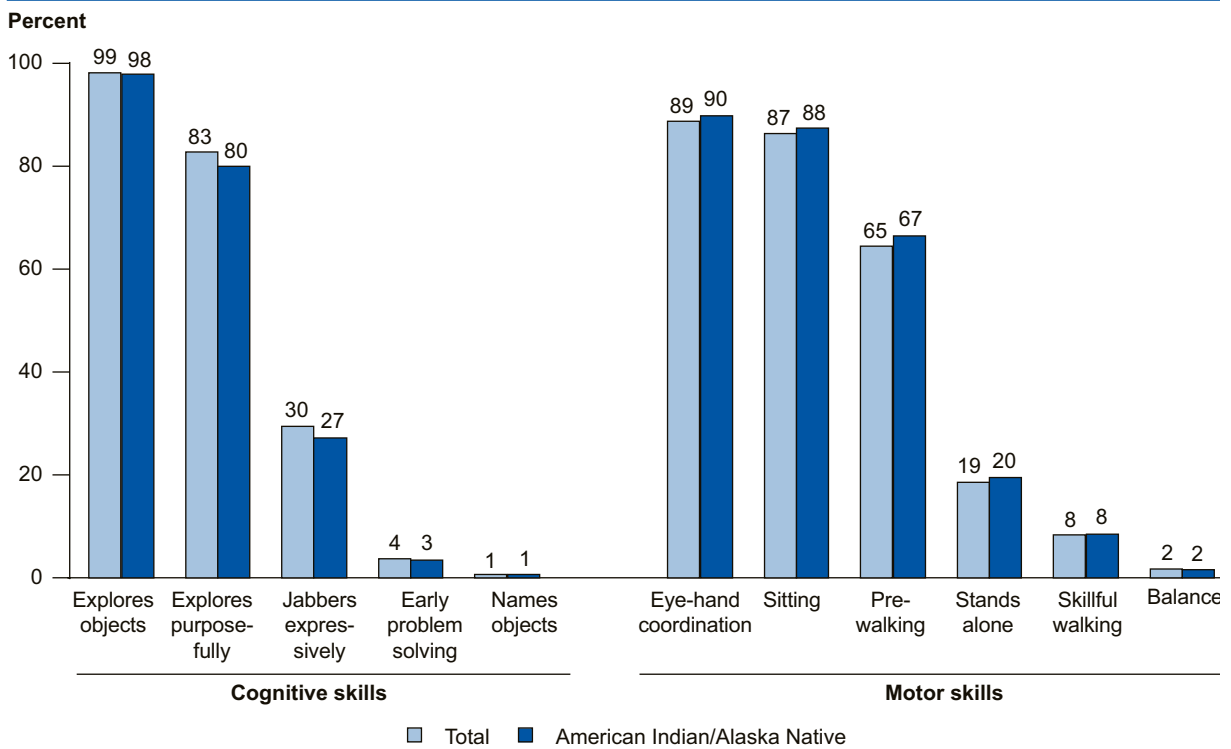
The Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) assessed children's early mental and physical development from birth through their entry into kindergarten. To date, information has been collected from a nationally representative sample of births in 2001, when the children were about 9 months of age (2001), about 2 years of age (2003), and about preschool age (age 4, 2005).

The assessments from when the children were about 9 months of age provide information on the development of children's motor skills, including eye-hand coordination as the child reaches for objects; sitting alone without assistance; prewalking (taking steps, and supporting own weight while standing, with assistance); standing alone (without assistance); skillful walking (walking without assistance); and balance (can balance in various positions). These assessments also provide information on the development of children's cognitive skills, including exploring objects in play;

exploring their environment purposefully; jabbering expressively and making simple gestures; early problem solving (using reasoning to interact with objects); and naming objects (communicating with words).

When children were about 9 months of age, most of those assessed demonstrated skill in exploring objects and exploring purposefully. There was no measurable difference between the skills of American Indian/Alaska Native children and the total population of children in exploring objects with purpose and jabbering expressively. Similar percentages of American Indian/Alaska Native children and all children about 9 months of age demonstrated exploring objects in play, early problem solving, and object naming skills. (*appendix table A-4.1a*). Further, at this age, no measurable differences were detected among the percentages of American Indian/Alaska Native children and all other children exhibiting the motor skills mentioned above.

Figure 4.1a. Percentage of American Indian/Alaska Native children and all children demonstrating specific cognitive and motor skills at about 9 months of age: 2000–01



NOTE: Estimates weighted by W1C0. The Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) sampled children born in 2001 and was designed to collect information about them for the first time when the children were about 9 months of age (i.e., 8 to 10 months). Data are graphed using unrounded estimates while the value labels are rounded. Race categories exclude persons of Hispanic ethnicity.

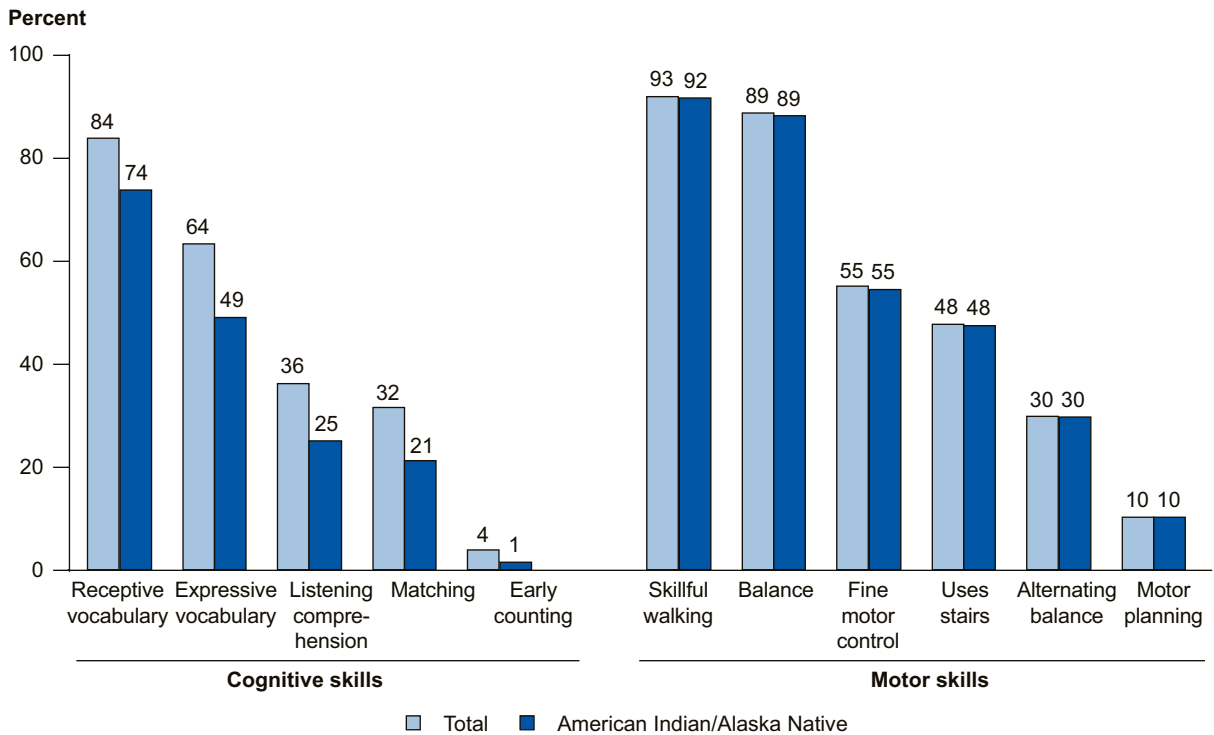
SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), Longitudinal 9-month–Preschool Restricted-Use Data File.

The assessments from when the children were about 2 years of age provide information on children's ability to communicate with words (both receptively and expressively); children's listening comprehension (understanding actions depicted by a story, pictures, or instructions); the ability to match or discriminate objects by their properties (such as color); the knowledge of counting words or quantities; skillful (independent) walking; balance; fine motor control (such as grasping a pencil); walking up and down stairs; maintaining balance when alternating positions or in motion; and motor planning (replicating the motions of others).

At age 2, a smaller percentage of American Indian/Alaska Native children demonstrated the specific cognitive skills of interest when compared to all children. For example, 74 percent of American

Indian/Alaska Native children demonstrated receptive vocabulary, compared to 84 percent of all children. Forty-nine percent of American Indian/Alaska Native children demonstrated expressive vocabulary, compared to 64 percent of all children. Similarly, smaller percentages of American Indian/Alaska Native children demonstrated listening comprehension (25 percent), matching (21 percent), and early counting skills (1 percent), compared to all children demonstrating these skills (36 percent, 32 percent, and 4 percent, respectively) at this age. Similar percentages of American Indian/Alaska Native children and all children 2 years of age demonstrated the physical skills of interest, including skillful walking, balance, fine motor control, stair use, alternating balance, and motor planning (*appendix table A-4.1b*).

Figure 4.1b. Percentage of American Indian/Alaska Native children and all children demonstrating specific cognitive and motor skills at about 2 years of age: 2003–04



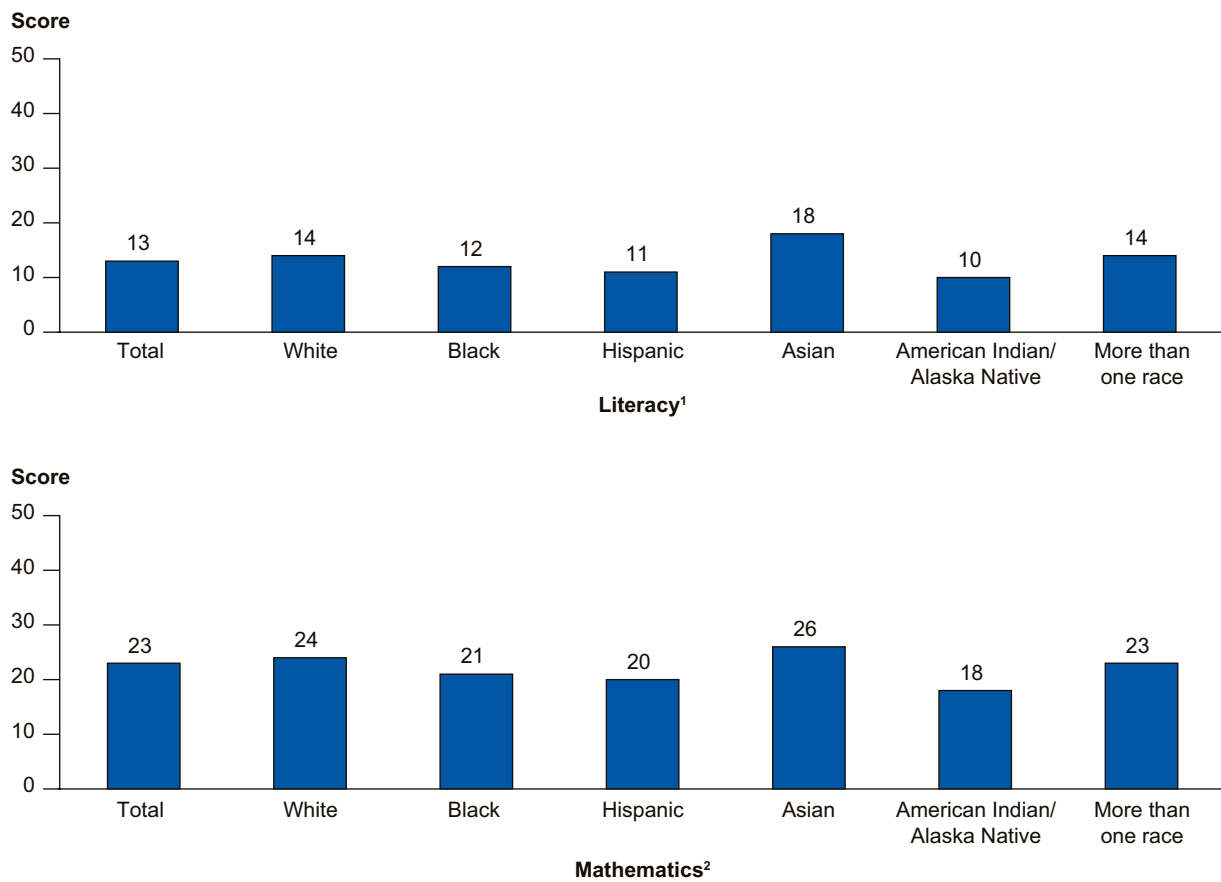
NOTE: Estimates weighted by W2C0. Estimates pertain to children assessed between 22 months and 25 months of age. Data are graphed using unrounded estimates while the value labels are rounded. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), Longitudinal 9-month–Preschool Restricted-Use Data File.

When children were preschool age (about 4 years old), the ECLS-B assessments obtained information on certain aspects of children's language, literacy, mathematics, color identification, and fine motor skills. Language knowledge and skills include both receptive and expressive vocabulary as well as an overall literacy score, which includes the child's ability to recognize a letter by either its name or its sound; phonological awareness, or an understanding of the sounds and structure of spoken language; and the understanding of what print represents and its function (top to bottom and left to right). Mathematics knowledge and skills include an overall math score which includes number sense, geometry, counting, operations, and patterns; and the ability to recognize single-digit numbers and basic shapes. Also, the percentage of children who can correctly identify five out of five colors and the ability of the child to use fine motor skills in drawing basic forms and shapes were assessed.

At 4 years of age, smaller percentages of American Indian/Alaska Native children demonstrated language, literacy, mathematics, and color identification skills, compared to all children. American Indian/Alaska Native children had lower scores, on average, than all children on the overall literacy and mathematics components. More specifically, a smaller percentage of American/Indian Alaska Native children were able to recognize letters by their shapes or sounds (19 percent) than all children (33 percent) within the literacy component, and a smaller percentage of American Indian/Alaska Native children were able to demonstrate proficiency in identifying numbers and shapes (41 percent) than all children (66 percent) within the mathematics component. Forty-three percent of American Indian/Alaska Native children were able to identify five out of five colors, compared to 64 percent of all children (*appendix table A-4.1c*).

Figure 4.1c. Average overall literacy and mathematics scores for children at about 4 years of age, by selected race/ethnicity: 2005–06



¹ Includes letter recognition, in both receptive and expressive modes; letter sounds; and early reading knowledge and skills. Potential score ranges from 0 to 37.

² Includes number sense, geometry, counting, operations, and patterns. Potential score ranges from 0 to 44.

NOTE: Estimates weighted by W3C0. Estimates pertain to children assessed between 48 months and 57 months of age. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), Longitudinal 9-month–Preschool Restricted-Use Data File.

4.2. Student Performance in Reading

In 2007, American Indian/Alaska Native students in grades 4 and 8 scored lower than White and Asian/Pacific Islander students on NAEP reading assessments.

The National Assessment of Educational Progress (NAEP) assesses the skills of 4th-, 8th-, and 12th-grade students. In reading, potential NAEP scores range from 0 to 500. This reading scale score reflects students' performance across various content strands, including reading for literary experience, and reading for information, and, in grades 8 and 12, reading to perform a task.

In 2007, American Indian/Alaska Native students had lower average reading scale scores than White and Asian/Pacific Islander students in both the 4th and 8th grades. American Indian/Alaska Native students scored about the same as Black students in the 4th grade and Hispanic students in the 4th and 8th grades in 2007.

Table 4.2a. Average reading scale scores, by race/ethnicity and grade: 2000, 2002, 2005, and 2007

Grade and year	Total ¹	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native
4th grade						
2000	213	224	190	190	225	214
2002	219	229	199	201	224	207
2005	219	229	200	203	229	204
2007	221	231	203	205	232	203
8th grade						
2000	—	—	—	—	—	—
2002	264	272	245	247	267	250
2005	262	271	243	246	271	249
2007	263	272	245	247	271	247

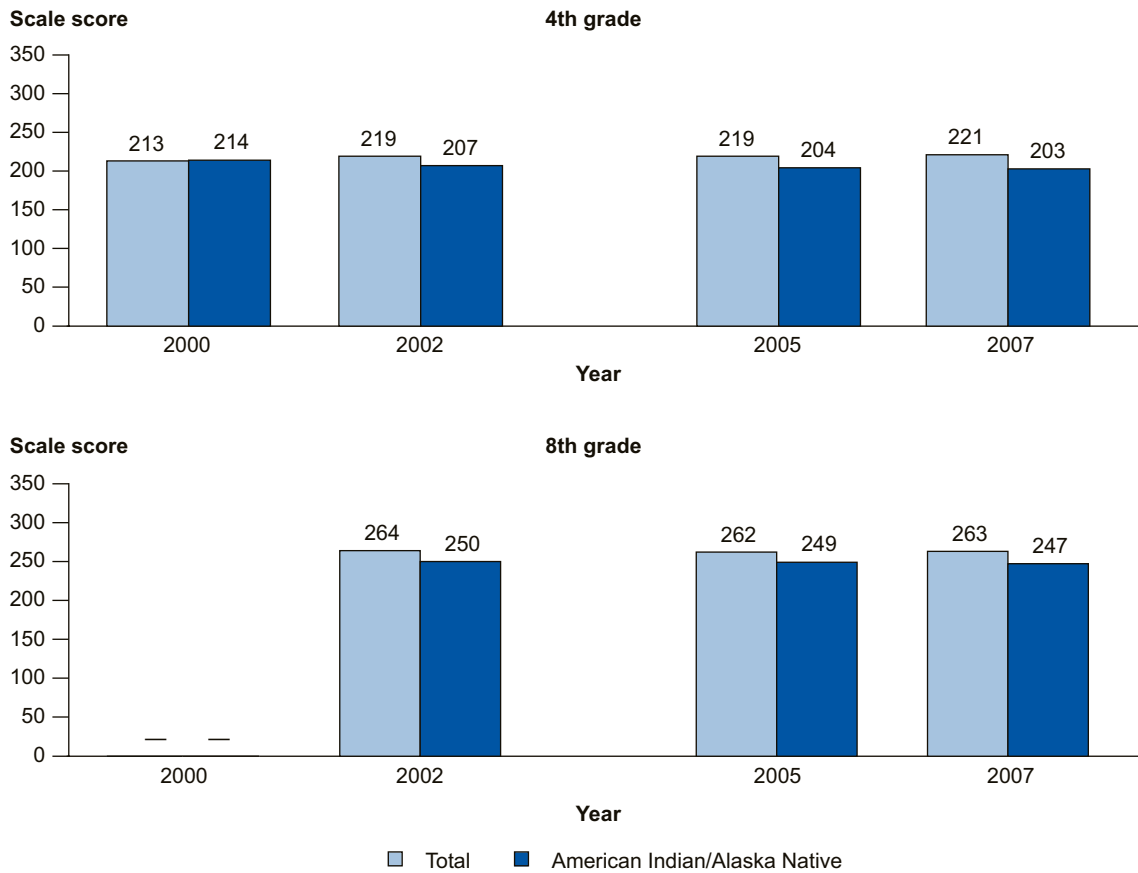
— Not available.

¹ Total includes races/ethnicities not separately shown.

NOTE: Scale score ranges from 0 to 500. Data were not collected at grade 8 in 2000. The reading data include students for whom accommodations were permitted. For a discussion of the reading scale score definitions, see <http://nces.ed.gov/nationsreportcard/reading/scale.asp>. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000, 2002, 2005, and 2007 Reading Assessments and the NAEP Data Explorer, retrieved January 25, 2008, from <http://nces.ed.gov/nationsreportcard/nde/>.

Figure 4.2a. Average reading scale scores for American Indian/Alaska Native students and for all students, by grade: 2000, 2002, 2005, and 2007



— Not available.

NOTE: Scale score ranges from 0 to 500. Data were not collected at grade 8 in 2000. The reading data include students for whom accommodations were permitted. For a discussion of the reading scale score definitions, see <http://nces.ed.gov/nationsreportcard/reading/scale.asp>. Total includes race/ethnicity categories not separately shown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000, 2002, 2005, and 2007 Reading Assessments and the NAEP Data Explorer, retrieved January 25, 2008, from <http://nces.ed.gov/nationsreportcard/nde/>.

In addition to calculating an overall reading scale score, NAEP data are expressed as a series of achievement levels to indicate how well students perform against expectations for what students should know and be able to do. In 2007, a larger percentage of American Indian/Alaska Native 4th- and 8th-graders

than Black 4th- and 8th-graders achieved “at or above proficient.” Higher percentages of White and Asian/Pacific Islander 4th- and 8th-grade students achieved “at or above proficient” than did American Indian/Alaska Native 4th- and 8th-grade students.

Table 4.2b. Percentage distribution of students across reading achievement levels, by race/ethnicity and grade: 2007

Grade and level	Total ¹	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native
4th grade						
Below basic	33	22	54	50	23	51
At or above basic	67	78	46	50	77	49
At or above proficient	33	43	14	17	46	18
At advanced	8	11	2	3	15	4
8th grade						
Below basic	26	16	45	42	20	44
At or above basic	74	84	55	58	80	56
At or above proficient	31	40	13	15	41	18
At advanced	3	4	#	1	5	2

Rounds to zero.

¹ Total includes races/ethnicities not separately shown.

NOTE: Detail may not sum to totals because of rounding. The reading data include students for whom accommodations were permitted. For a discussion of the reading achievement level definitions, see <http://nces.ed.gov/nationsreportcard/reading/achieve.asp>. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Reading Assessments and NAEP Data Explorer, retrieved January 25, 2008, from <http://nces.ed.gov/nationsreportcard/nde/>.

Specific states with relatively large populations of American Indian/Alaska Native students were selected for NAEP's National Indian Education Study (NIES) in the years 2005 and 2007. In 2007, American Indian/Alaska Native 4th- and 8th-graders in Oklahoma had higher reading scale scores, on average, than their American Indian/Alaska Native peers nationwide. In contrast, the average reading scale scores of 4th- and 8th-graders nationally were higher

than the scores of American Indian/Alaska Native students in Alaska, New Mexico, and South Dakota. In the seven states participating in the 2007 NIES, the percentage of American Indian/Alaska Native students achieving at or above the basic level ranged from 29 percent in Arizona to 60 percent in Oklahoma for 4th-graders and from 40 percent in Arizona to 67 percent in Oklahoma for 8th-graders.

Table 4.2c. Average reading scale scores and achievement levels for American Indians/Alaska Natives attending Bureau of Indian Education (BIE) schools and other public schools, by grade and selected states: 2005 and 2007

Grade and state	Average scale score		Percent									
	2005	2007	Below basic		At basic		At proficient		At advanced		At or above basic	
			2005	2007	2005	2007	2005	2007	2005	2007	2005	2007
Grade 4												
Nation	204	204	52	51	30	30	15	15	3	4	48	49
Alaska	183	188	71	67	20	24	8	8	1	2	29	33
Arizona	184	184	75	71	17	21	7	6	1	2	25	29
Montana	201	204	55	50	32	33	12	14	1	3	45	50
New Mexico	186	193	72	66	22	24	6	9	#	1	28	34
North Dakota	198	201	61	56	31	31	8	12	‡	‡	39	44
Oklahoma	211	213	43	40	35	36	18	20	3	5	57	60
South Dakota	194	192	63	65	26	26	10	8	1	1	37	35
Grade 8												
Nation	249	247	41	43	41	39	16	16	1	2	59	57
Alaska	240	236	51	55	39	35	10	9	#	‡	49	45
Arizona	238	232	57	60	32	32	10	7	#	‡	43	40
Montana	247	249	44	43	41	36	15	19	1	1	56	57
New Mexico	236	233	56	59	39	34	5	7	#	‡	44	41
North Dakota	248	246	41	44	45	44	13	11	#	‡	59	56
Oklahoma	254	256	34	33	47	44	19	21	#	2	66	67
South Dakota	238	241	54	50	36	37	10	12	#	‡	46	50

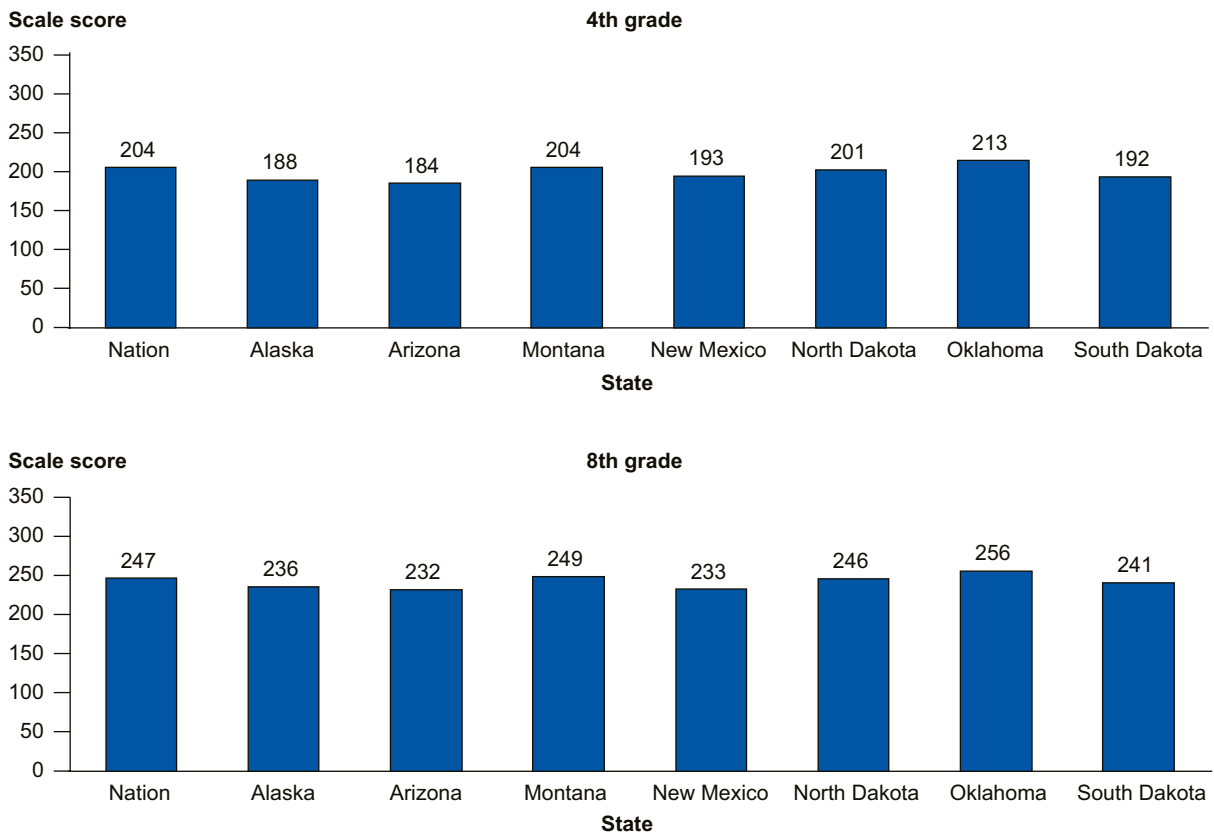
Rounds to zero.

‡ Reporting standards not met.

NOTE: Scale score ranges from 0 to 500. The reading data include students for whom accommodations were permitted. For a discussion of the reading scale score definitions and achievement levels, see <http://nces.ed.gov/nationsreportcard/reading/scale.asp> and <http://nces.ed.gov/nationsreportcard/reading/achieve.asp>. National and state data presented in this table represent American Indian/Alaska Native students only. Data for Minnesota, North Carolina, Washington, and Oregon are not shown because these states only participated in the 2007 NIES. Estimates include students who attended BIE and other public schools. Therefore, estimates presented here differ from those presented in table 4.2a, where private schools were included.

SOURCE: U.S. Department of Education, National Center for Education Statistics. *Performance of American Indian and Alaska Native Students at Grades 4 and 8 on NAEP 2007 Reading and Mathematics Assessments* (NCES 2008-457). National Assessment of Educational Progress (NAEP), National Indian Education Study (NIES), 2007.

Figure 4.2b. Average 4th- and 8th-grade reading scores for American Indian/Alaska Native students attending Bureau of Indian Education (BIE) and other public schools, by selected states: 2007



NOTE: Scale score ranges from 0 to 500. The reading data include students for whom accommodations were permitted. For a discussion of the reading scale score definitions see <http://nces.ed.gov/nationsreportcard/reading/scale.asp>. National and state data presented in this table represent American Indian/Alaska Native students only. Data for Minnesota, North Carolina, Washington, and Oregon are not shown because these states only participated in the 2007 NIES. Estimates include students who attended BIE and other public schools. Therefore, estimates presented here differ from those presented in table 4.2a, where private schools were included.

SOURCE: U.S. Department of Education, National Center for Education Statistics. *Performance of American Indian and Alaska Native Students at Grades 4 and 8 on NAEP 2007 Reading and Mathematics Assessments* (NCES 2008-457). National Assessment of Educational Progress (NAEP), National Indian Education Study (NIES), 2007.

4.3. Student Performance in Mathematics

In 2007, American Indian/Alaska Native 4th- and 8th-graders scored lower than Whites and Asians/Pacific Islanders in NAEP mathematics, but higher than Blacks. The NAEP mathematics scores of American Indian/Alaska Native 4th- and 8th-graders were similar to those of their Hispanic peers.

In mathematics, potential NAEP scores range from 0 to 500. In 2007, this assessment measured 4th- and 8th-grade students' abilities in five content strands: number sense, properties, and operations; measurement; geometry and spatial sense; data analysis, statistics, and probability; and algebra and functions.

The mathematics scores for American Indian/Alaska Native 4th- and 8th-grade students did not change

significantly between the most recent years, 2005 and 2007. In 2007, American Indian/Alaska Native 4th- and 8th-graders scored lower than Whites and Asians/Pacific Islanders in NAEP mathematics, but higher than Blacks. The scores of American Indian/Alaska Native 4th- and 8th-graders were similar to the scores of Hispanic 4th- and 8th-graders.

Table 4.3a. Average mathematics scale scores, by race/ethnicity and grade: 1996, 2000, 2005, and 2007

Grade and year	Total ¹	White	Black	Hispanic	Asian/Pacific Islander	American Indian/ Alaska Native
4th grade						
1996	224	232	198	207	229	217 !
2000	226	234	203	208	‡	208 !
2005	238	246	220	226	251	226
2007	240	248	222	227	253	228
8th grade						
1996	270	281	240	251	‡	‡
2000	273	284	244	253	288	259 !
2005	279	289	255	262	295	264
2007	281	291	260	265	297	264

! Interpret data with caution.

‡ Reporting standards not met.

¹ Total includes race/ethnicity categories not separately shown.

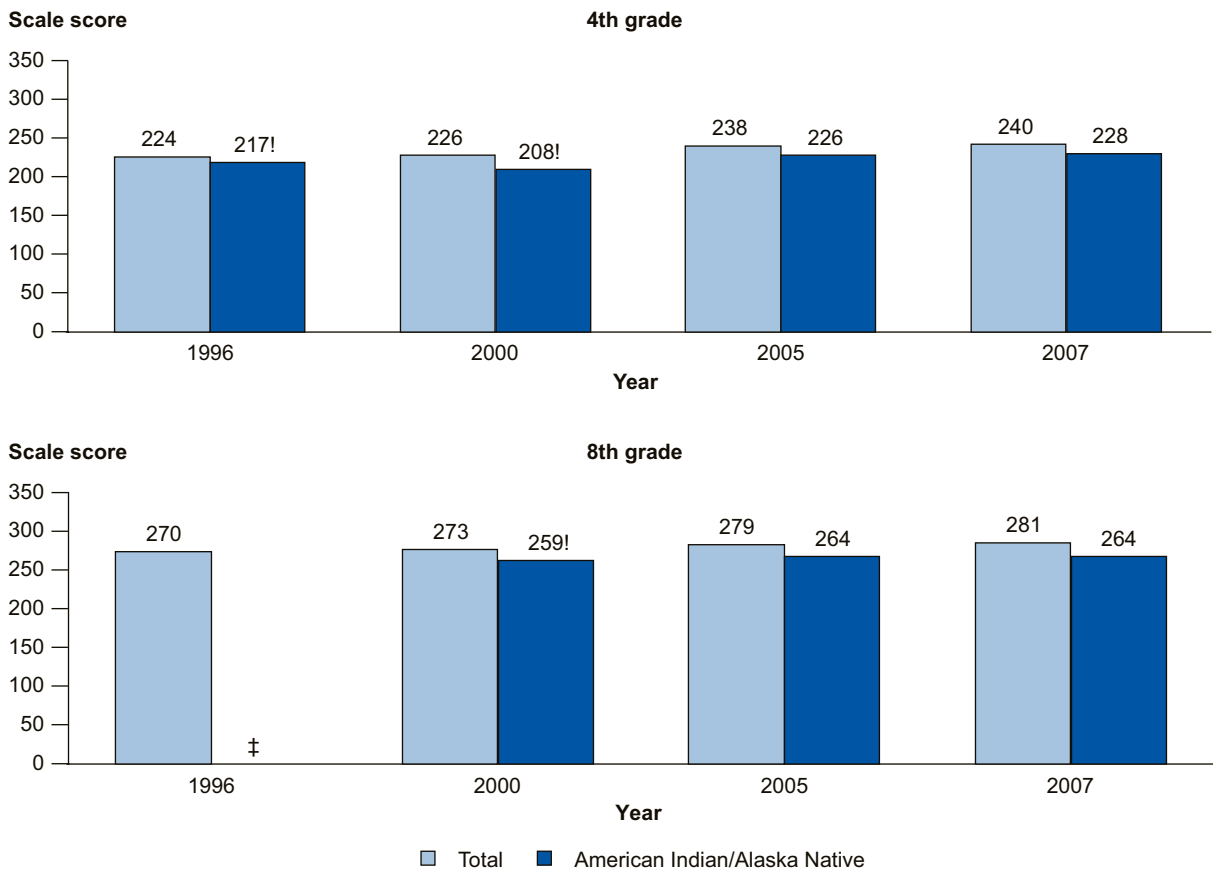
NOTE: Scale scores range from 0 to 500. The mathematics data include students for whom accommodations were permitted.

For a discussion of the mathematics scale score definitions, see <http://nces.ed.gov/nationsreportcard/mathematics/scale.asp>.

Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996, 2000, 2005, and 2007 Mathematics Assessments, retrieved January 22, 2008, from <http://www.nces.ed.gov/nationsreportcard/nde>.

Figure 4.3a. Average mathematics scale scores for American Indian/Alaska Native students and for all students, by grade: 1996, 2000, 2005, and 2007



! Interpret data with caution.

‡ Reporting standards not met.

NOTE: Scale scores range from 0 to 500. The mathematics data include students for whom accommodations were permitted. For a discussion of the mathematics scale score definitions, see <http://nces.ed.gov/nationsreportcard/mathematics/scale.asp>. Race categories exclude persons of Hispanic ethnicity. Total includes race/ethnicity categories not separately shown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996, 2000, 2005, and 2007 Mathematics Assessments, retrieved January 22, 2008, from <http://www.nces.ed.gov/nationsreportcard/nde>.

In addition to calculating an overall mathematics scale score, NAEP data are expressed as a series of achievement levels to indicate how well students perform against expectations for what students should know and be able to do. A larger percentage of American Indians/Alaska Natives in both the 4th and 8th grades achieved “at or above basic” and “at or above proficient” than their Black peers. In the same grades, a lower percentage of American Indians/

Alaska Natives achieved “at or above basic” and “at or above proficient” than their White peers. Similar percentages of American Indian/Alaska Native and Hispanic 4th-graders (70 percent for both) scored at the “at or above basic” level. At this level for grade 8, no measurable differences were detected between American Indian/Alaska Native and Hispanic children’s scores.

Table 4.3b. Percentage distribution of students across mathematics achievement levels, by race/ethnicity and grade: 2007

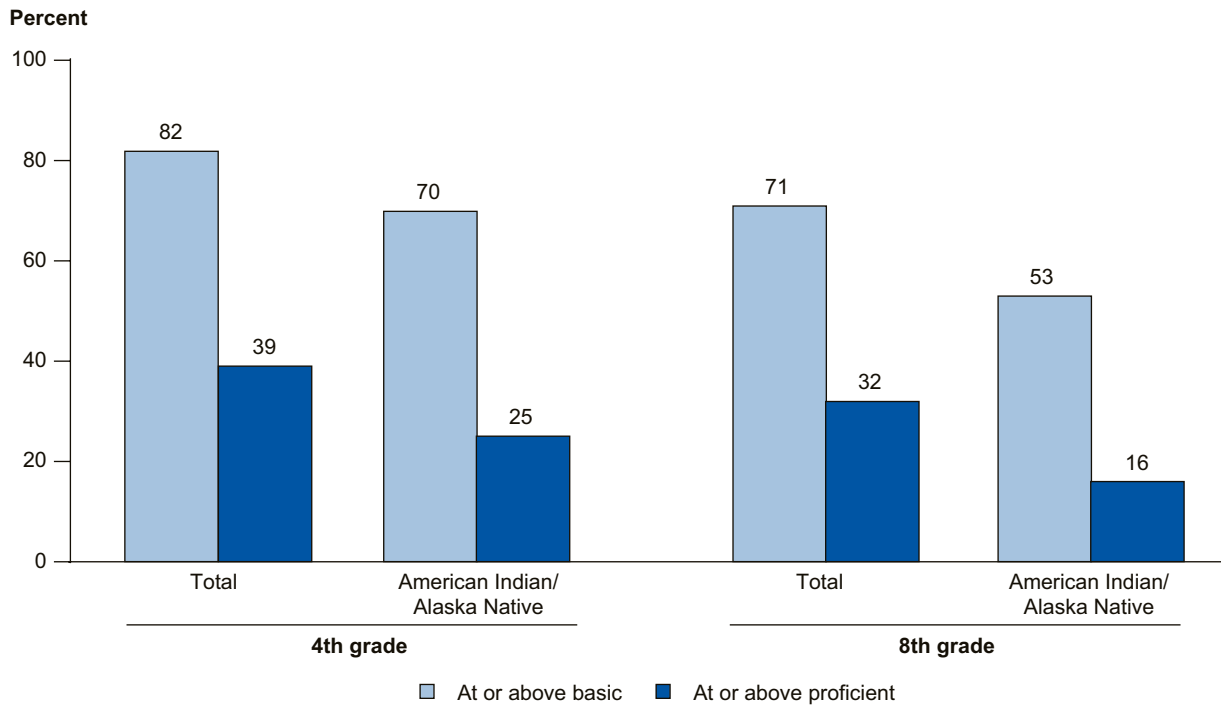
Grade and level	Total ¹	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native
4th grade						
Below basic	18	9	36	30	9	30
At or above basic	82	91	64	70	91	70
At or above proficient	39	51	15	22	58	25
At advanced	6	8	1	1	15	2
8th grade						
Below basic	29	18	53	45	17	47
At or above basic	71	82	47	55	83	53
At or above proficient	32	42	11	15	50	16
At advanced	7	9	1	2	16	2

¹ Total includes races/ethnicities not separately shown.

NOTE: Scale scores range from 0 to 500. The mathematics data include students for whom accommodations were permitted. For a discussion of the mathematics scale score and achievement level definitions, see <http://nces.ed.gov/nationsreportcard/mathematics/scale.asp> and <http://nces.ed.gov/nationsreportcard/mathematics/achieve.asp>. Detail may not sum to total because of rounding. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments, retrieved January 22, 2008, from <http://www.nces.ed.gov/nationsreportcard/nde>.

Figure 4.3b. Percentage of students at given mathematics achievement levels, by grade and selected race/ethnicity: 2007



NOTE: The mathematics data include students for whom accommodations were permitted. Below basic category data not shown. For a discussion of the mathematics achievement level definitions, see <http://nces.ed.gov/nationsreportcard/mathematics/achieve.asp>. Race categories exclude persons of Hispanic ethnicity. Total includes race/ethnicity categories not separately shown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments, retrieved January 22, 2008, from <http://www.nces.ed.gov/nationsreportcard/nde>.

Specific states with relatively large populations of American Indian/Alaska Native students were selected for NAEP's National Indian Education Study (NIES) in the years 2005 and 2007. In 2007, American Indian/Alaska Native 4th-graders in Oklahoma had higher mathematics scale scores, on average, than their American Indian/Alaska Native peers nationwide. In contrast, the average mathematics scale scores of 4th- and 8th-graders nationally were

higher than the scores of American Indian/Alaska Native students in New Mexico and South Dakota in 2005 and 2007. In the eleven states participating in the 2007 NIES, the percentage of American Indian/Alaska Native students achieving at or above the basic level ranged from 51 percent in Arizona to 80 percent in Oklahoma for 4th-graders and from 37 percent in New Mexico to 60 percent in Oklahoma for 8th-graders.

Table 4.3c. Average mathematics scale scores and achievement levels for American Indians/Alaska Natives attending Bureau of Indian Education (BIE) schools and other public schools, by grade and selected states: 2005 and 2007

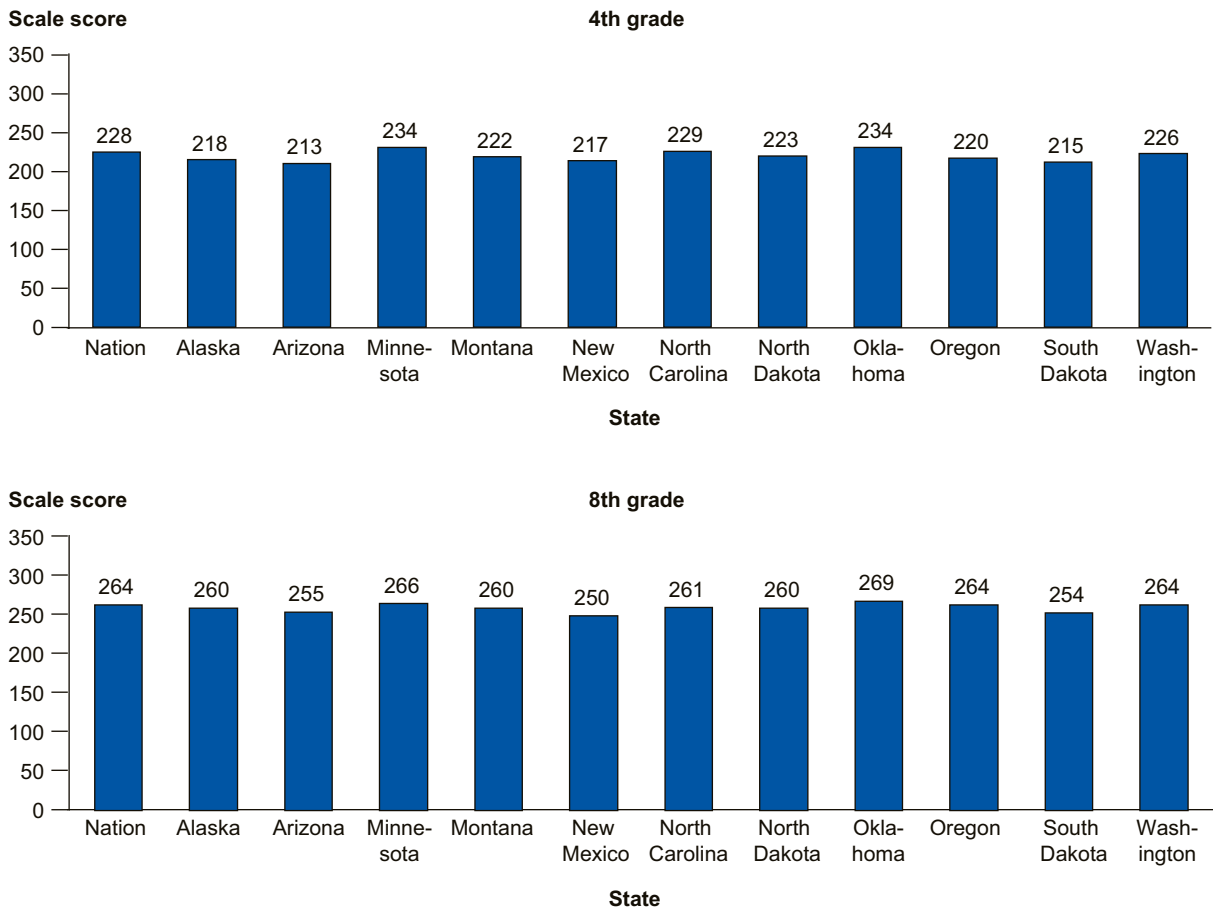
Grade and state	Average scale score		Percent									
	2005	2007	Below basic		At basic		At proficient		At advanced		At or above basic	
			2005	2007	2005	2007	2005	2007	2005	2007	2005	2007
Grade 4												
Nation	226	228	32	30	47	46	19	22	2	2	68	70
Alaska	220	218	43	43	42	41	14	14	2	2	57	57
Arizona	215	213	49	49	39	38	12	12	#	1	51	51
Minnesota	—	234	—	23	—	50	—	23	—	5	—	77
Montana	223	222	38	36	45	47	16	15	1	1	62	64
New Mexico	215	217	46	45	46	42	7	12	#	1	54	55
North Carolina	—	229	—	27	—	49	—	21	—	3	—	73
North Dakota	221	223	37	35	51	50	11	15	#	0	63	65
Oklahoma	229	234	24	20	55	20	20	27	1	2	76	80
Oregon	—	220	—	39	—	43	—	16	—	2	—	61
South Dakota	217	215	44	46	46	44	10	11	1	0	56	54
Washington	—	226	—	33	—	43	—	21	—	4	—	67
Grade 8												
Nation	264	264	47	46	40	37	12	14	2	2	53	54
Alaska	264	260	47	51	38	38	13	10	2	2	53	49
Arizona	256	255	58	54	33	35	8	10	1	1	42	46
Minnesota	—	266	—	44	—	37	—	17	—	2	—	56
Montana	259	260	52	50	37	35	10	13	#	2	48	50
New Mexico	251	250	64	63	32	30	4	5	#	1	36	37
North Carolina	—	261	—	49	—	34	—	15	—	1	—	51
North Dakota	260	260	53	51	39	37	8	11	#	1	47	49
Oklahoma	267	269	40	40	45	42	14	15	1	2	60	60
Oregon	—	264	—	51	—	33	—	13	—	3	—	49
South Dakota	250	254	63	56	29	34	8	10	1	1	37	44
Washington	—	264	—	46	—	36	—	15	—	3	—	54

Rounds to zero.

‡ Reporting standards not met.

NOTE: Scale score ranges from 0 to 500. The reading data include students for whom accommodations were permitted. For a discussion of the reading scale score definitions and achievement levels, see <http://nces.ed.gov/nationsreportcard/reading/scale.asp> and <http://nces.ed.gov/nationsreportcard/reading/achieve.asp>. National and state data presented in this table represent American Indian/Alaska Native students only. Data for Minnesota, North Carolina, Washington, and Oregon are not shown because these states only participated in the 2007 NIES. Estimates include students who attended BIE and other public schools. Therefore, estimates presented here differ from those presented in table 4.3c, where private schools were included. SOURCE: U.S. Department of Education, National Center for Education Statistics. *Performance of American Indian and Alaska Native Students at Grades 4 and 8 on NAEP 2007 Reading and Mathematics Assessments* (NCES 2008-457). National Assessment of Educational Progress (NAEP), National Indian Education Study (NIES), 2007.

Figure 4.3c. Average 4th- and 8th-grade mathematics scores for American Indian/Alaska Native students attending Bureau of Indian Education (BIE) and other public schools, by selected states: 2007



NOTE: Scale score ranges from 0 to 500. The mathematics data include students for whom accommodations were permitted. For a discussion of the mathematics scale score definitions, see <http://nces.ed.gov/nationsreportcard/mathematics/scale.asp>. National and state data presented in this table represent American Indian/Alaska Native students only. Estimates include students who attended BIE and other public schools.

SOURCE: U.S. Department of Education, National Center for Education Statistics. *Performance of American Indian and Alaska Native Students at Grades 4 and 8 on NAEP 2007 Reading and Mathematics Assessments* (NCES 2008-457). National Assessment of Educational Progress (NAEP), National Indian Education Study (NIES), 2007. NAEP, 2007 Mathematics Assessments, retrieved January 22, 2008, from <http://www.nces.ed.gov/nationsreportcard/nde>.

4.4. Student Performance in Science

American Indian/Alaska Native students' NAEP science assessment scores were lower, on average, than White and Asian/Pacific Islander students' scores in 2005.

In science, potential NAEP scores range from 0 to 300. NAEP's science assessment measures students' knowledge of earth, physical, and life sciences, as well as their familiarity with ways of knowing and doing science.

In 2005, American Indian/Alaska Native students in the 4th, 8th, and 12th grades scored lower, on average, than White and Asian/Pacific Islander students. American Indian/Alaska Native 4th- and 12th-graders scored higher than Blacks and Hispanics; however, no measurable differences were detected among American Indian/Alaska Native, Black, and Hispanic 8th-graders.

In addition to calculating an overall science scale score, NAEP data are expressed as a series of achievement levels to indicate how well students perform against expectations for what students should know

and be able to do. Among American Indian/Alaska Native students in 2005, some 52 percent of 4th-graders, 34 percent of 8th-graders, and 48 percent of 12th-graders scored at or above the basic proficiency level in science. American Indians/Alaska Natives in the 4th, 8th, and 12th grades had a lower percentage of students achieving at the "at or above basic" proficiency level in science than Whites, but the percentage was higher than that of Blacks and Hispanics in the 4th and 12th grades. A lower percentage of American Indian/Alaska Native students in the 4th and 8th grades achieved "at or above proficient" than Whites, and a higher percentage of American Indians/Alaska Native students achieved "at or above proficient" than Blacks across grade levels. American Indian/Alaska Natives also had a lower percentage of students "at or above proficient" than their Asian/Pacific Islander peers in the 4th and 8th grades.

Table 4.4a. Average science scale scores, by race/ethnicity and grade: 2000 and 2005

Grade and year	Total ¹	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native
4th grade						
2000	147	159	122	122	‡	135
2005	151	162	129	133	158	138
8th grade						
2000	149	161	121	127	153	147
2005	149	160	124	129	156	128
12th grade						
2000	146	153	122	128	149	151
2005	147	156	120	128	153	139

‡ Reporting standards not met.

¹ Total includes race/ethnicity categories not separately shown.

NOTE: Scale score ranges from 0 to 300. For a discussion of the science scale score definitions, please see <http://nces.ed.gov/nationsreportcard/science/scale.asp>. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2005 Science Assessments retrieved January 30, 2008, from <http://www.nces.ed.gov/nationsreportcard/nde>.

Table 4.4b. Percentage distribution of students across science achievement levels, by race/ethnicity and grade: 2005

Grade and level	Total ¹	White	Black	Hispanic	Asian/ Pacific Islander	American Indian
4th grade						
Below basic	32	18	62	55	24	48
At or above basic	68	82	38	45	76	52
At or above proficient	29	40	8	11	36	14
At advanced	3	4	#	#	5	1
8th grade						
Below basic	41	26	72	65	34	66
At or above basic	59	74	28	35	66	34
At or above proficient	29	39	7	10	36	12
At advanced	3	5	#	#	6	1
12th grade						
Below basic	46	35	81	70	40	52
At or above basic	54	65	19	30	60	48
At or above proficient	18	24	2	5	23	13
At advanced	2	3	#	1	3	#

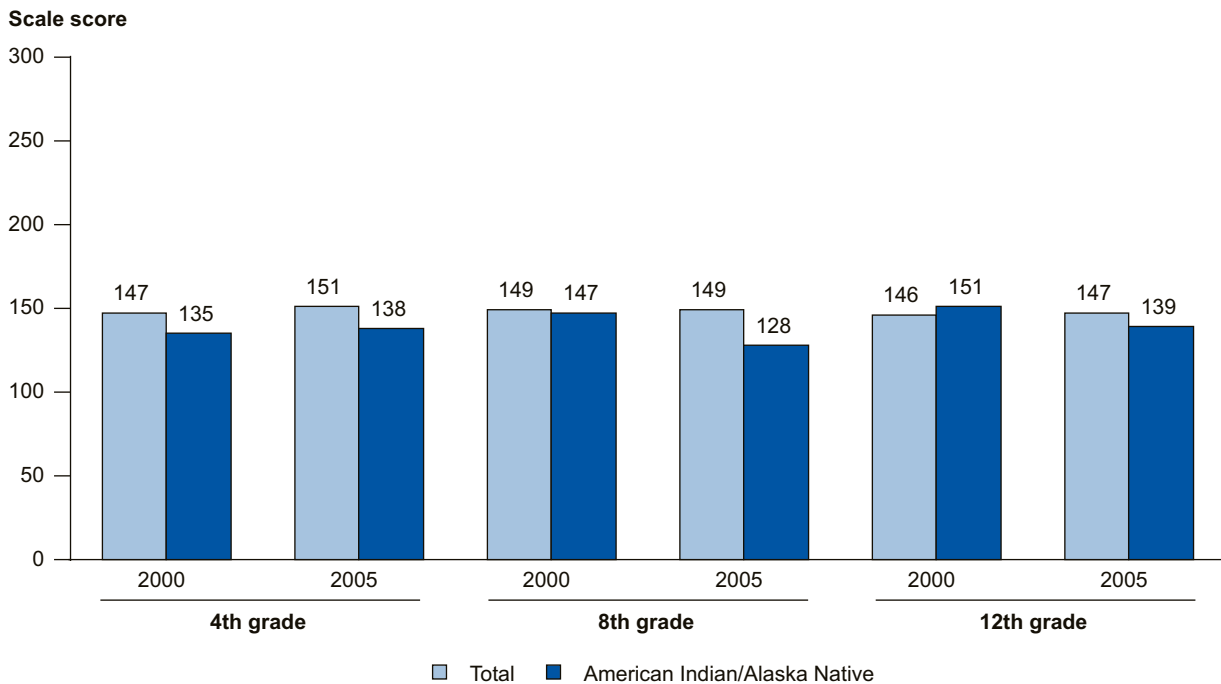
Rounds to zero.

¹ Total includes race/ethnicity categories not separately shown.

NOTE: Scale score ranges from 0 to 300. For a discussion of the science achievement level definitions, please see <http://nces.ed.gov/nationsreportcard/science/achieve.asp>. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Science Assessment, retrieved January 30, 2008, from <http://www.nces.ed.gov/nationsreportcard/nde>.

Figure 4.4. Average science scale scores for American Indian/Alaska Native students and for all students, by grade: 2000 and 2005



NOTE: Scale score ranges from 0 to 300. For a discussion of the science scale score definitions, please see <http://nces.ed.gov/nationsreportcard/science/scale.asp>. Race categories exclude persons of Hispanic ethnicity. Total includes race/ethnicity categories not separately shown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2005 Science Assessments, retrieved January 30, 2008, from <http://www.nces.ed.gov/nationsreportcard/nde>.

4.5. Student Performance in U.S. History

In 2006, no differences were observed among American Indian/Alaska Native, Black, and Hispanic students' scores on the NAEP history assessment.

In U.S. history, NAEP creates a single scale score ranging from 0 to 500. NAEP's history assessment is organized around three concepts or dimensions: major themes of U.S. history, chronological periods, and ways of knowing and thinking about U.S. history.

In 2006, American Indian/Alaska Native students in the 4th, 8th, and 12th grades scored lower, on average, than White and Asian/Pacific Islander 4th-, 8th-, and 12th-graders. No differences were observed among American Indian/Alaska Native, Black, and Hispanic students' scores on the NAEP history assessment in 2006. No differences were detected between 2001 and 2006 in the U.S. history scores for American Indian/Alaska Native students at the 8th- and 12th-grade levels.

As with its other recent assessments, NAEP uses

a series of achievement levels on the U.S. history assessment. Among American Indian/Alaska Native students in 2006, some 41 percent of 4th-graders, 43 percent of 8th-graders, and 32 percent of 12th-graders achieved at the "at or above basic" proficiency level in history. American Indians/Alaska Natives in the 4th, 8th, and 12th grades had a lower percentage of students achieving at the "at or above basic" proficiency level in history than Whites and Asian/Pacific Islander, but the percentage was not measurably different from that of Blacks and Hispanics across grades. American Indians/Alaska Natives had a lower percentage of students at the "at or above proficient" level than their White and Asian/Pacific Islander peers, but a percentage not different from that of Black and Hispanic students in the 4th and 12th grades.

Table 4.5a. Average U.S. history scale scores, by race/ethnicity and grade: Selected years, 1994, 2001, and 2006

Grade and year	Total ¹	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native
4th grade						
1994	205	214	176	175	204	‡
2001	208	217	186	184	216	‡
2006	211	223	191	194	214	190
8th grade						
1994	259	266	238	243	261	245
2001	260	268	240	240	264	255
2006	263	273	244	248	270	244
12th grade						
1994	286	292	265	267	283	272
2001	287	292	267	271	294	283
2006	290	297	270	275	296	278

‡ Reporting standards not met.

NOTE: Scale ranges from 0 to 500. The U.S. history data include students for whom accommodations were permitted. For a discussion of the U.S. history scale score definitions, see <http://nces.ed.gov/nationsreportcard/ushistory/scale.asp>. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1994, 2001, and 2006 U.S. History Assessments, and NAEP Data Explorer retrieved January 22, 2008, from <http://nces.ed.gov/nationsreportcard/nde/>.

Table 4.5b. Percentage distribution of students across U.S. history achievement levels, by race/ethnicity and grade: 2001 and 2006

Grade and level	Total ¹		White		Black		Hispanic		Asian/Pacific Islander		American Indian/Alaska Native	
	2001	2006	2001	2006	2001	2006	2001	2006	2001	2006	2001	2006
4th grade												
Below basic	34	30	24	16	59	54	60	51	26	29	‡	59
At or above basic	66	70	76	84	41	46	40	49	74	71	‡	41
At or above proficient	18	18	23	26	5	5	6	6	22	22	‡	6
At advanced	2	2	3	2	#	#	#	1	3	2	‡	#
8th grade												
Below basic	38	35	29	21	65	60	64	54	35	25	43	57
At or above basic	62	65	71	79	35	40	36	46	65	75	57	43
At or above proficient	16	17	20	23	5	4	5	6	19	22	9	5
At advanced	1	1	2	2	#	#	#	#	2	1	1	#
12th grade												
Below basic	57	53	51	44	81	80	76	73	49	46	63	68
At or above basic	43	47	49	56	19	20	24	27	51	54	37	32
At or above proficient	11	13	13	16	2	2	4	4	21	20	9	4
At advanced	1	1	1	1	#	#	#	#	5	3	#	#

Rounds to zero.

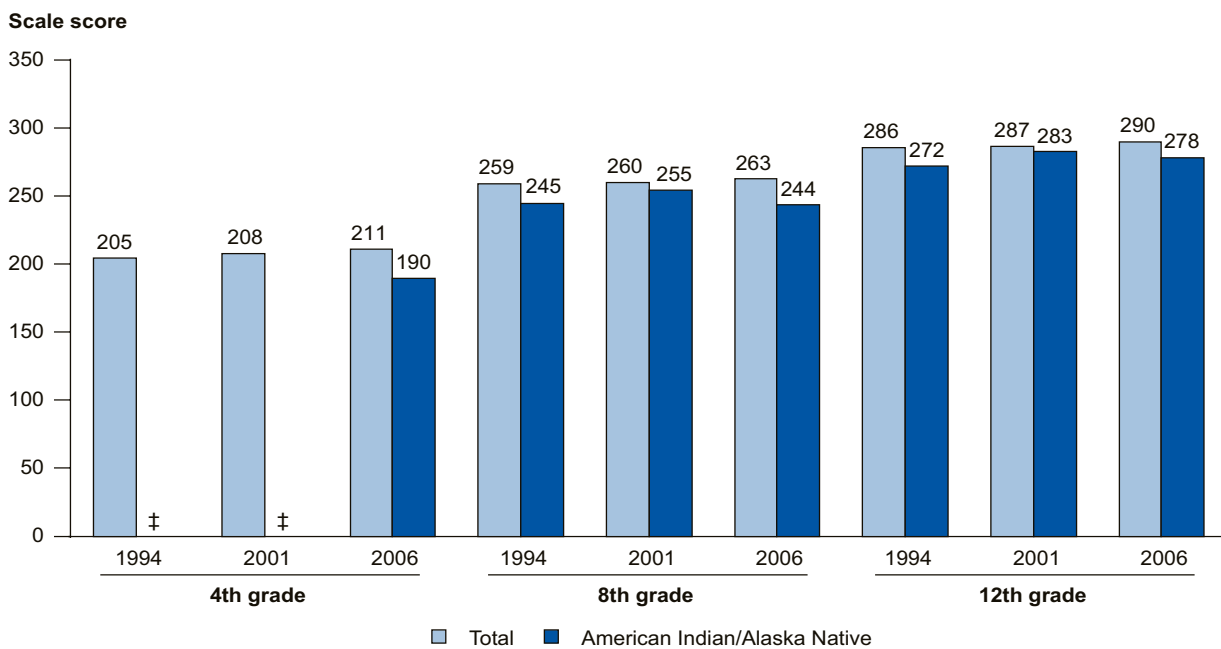
‡ Reporting standards not met.

¹ Total excludes race/ethnicity categories not separately shown.

NOTE: For a discussion of the U.S. history achievement level definitions, see <http://nces.ed.gov/nationsreportcard/ushistory/achieve.asp>. Race categories exclude persons of Hispanic ethnicity. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2001 and 2006 U.S. History Assessments and NAEP Data Explorer, retrieved January 22, 2008, from <http://nces.ed.gov/nationsreportcard/nde/>.

Figure 4.5. Average U.S. history scale scores for American Indian/Alaska Native students and for all students, by grade: 1994, 2001, and 2006



‡ Reporting standards not met.

NOTE: Scale score ranges from 0 to 500. The U.S. history data include students for whom accommodations were permitted. For a discussion of the U.S. history scale score definitions, see <http://nces.ed.gov/nationsreportcard/ushistory/scale.asp>. Total excludes race/ethnicity categories not separately shown. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1994, 2001, and 2006 U.S. History Assessments and NAEP Data Explorer, retrieved January 2008, from <http://nces.ed.gov/nationsreportcard/nde/>.

4.6. Core Academic Coursework

American Indian/Alaska Native high school graduates completed more academic high school coursework in 2005 than in 1982. However, the percentage of American Indian/Alaska Native high school graduates who completed a core academic track in 2005 was smaller than the percentage of White, Black, and Asian/Pacific Islander graduates who did so.

The National Commission on Excellence in Education recommended that a core academic track for high school students include at least four courses in English, three in social studies, three in science, three in mathematics, and two in a foreign language (National Commission on Excellence in Education 1983).¹¹ The percentage of American Indian/Alaska Native high school graduates who completed this level of academic coursework increased from 3 percent in 1982 to 36 percent in 2005.

The percentage of high school graduates who completed a core academic track changed for other racial/

ethnic groups, as well. The percentage of White high school graduates who completed a core academic track for high school graduates was higher in 2005 (53 percent) than in 1982 (11 percent). Similarly, higher percentages of Black, Hispanic, and Asian/Pacific Islander students completed a core academic track in 2005 than in 1982.

The percentage of American Indian/Alaska Native high school graduates who completed a core academic track in 2005 was smaller than the percentage of White, Black, and Asian/Pacific Islander graduates who did so.

Table 4.6. Percentage of public high school graduates who had completed a core academic track, by race/ethnicity: Selected years, 1982 to 2005

Race/ethnicity	1982	1987	1990	1994	1998	2000	2005
Total	10	18	30	39	44	46	52
White	11	19	32	42	46	48	53
Black	5	13	23	30	40	44	51
Hispanic	4	11	25	36	32	38	42
Asian/Pacific Islander	17	36	43	50	58	57	64
American Indian/Alaska Native	3!	5	10!	22	28	26	36

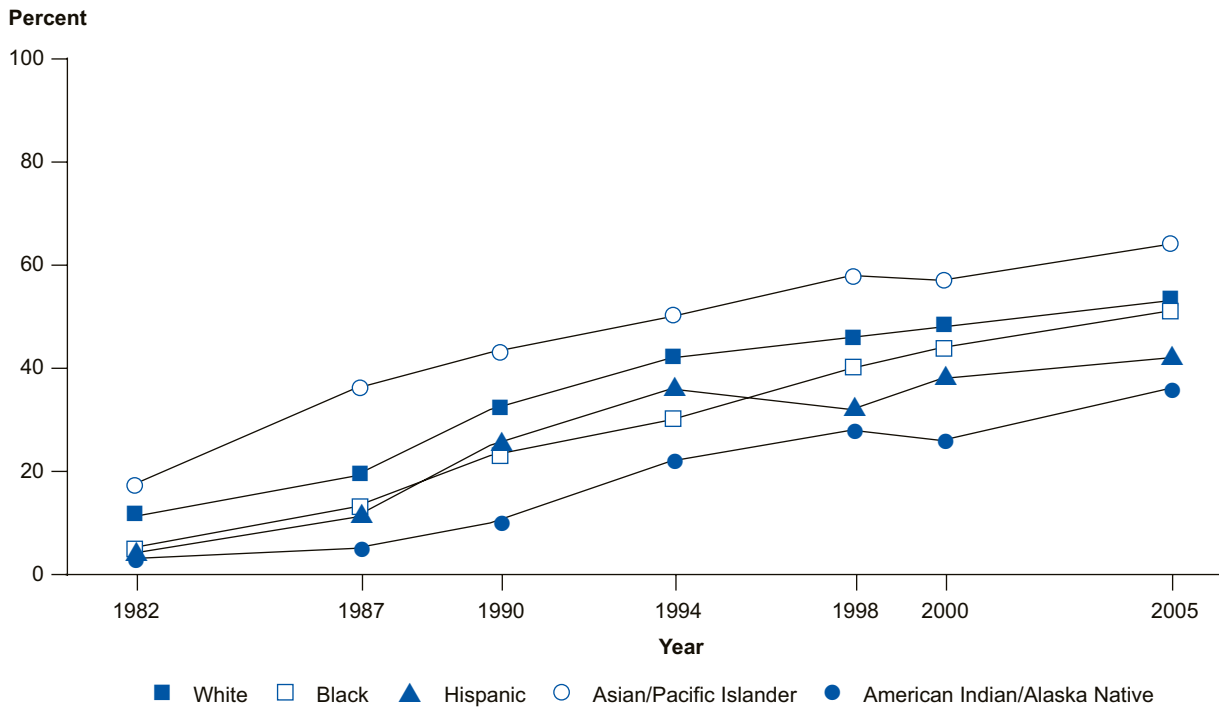
! Interpret data with caution.

NOTE: A core academic track is defined as at least 4 year-long courses in English; 3 each in social studies, science, and mathematics; and 2 in foreign languages. Race categories exclude persons of Hispanic ethnicity. Total for 2005 includes other race/ethnicity categories not separately shown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores (HS&B-So:80); National Education Longitudinal Study of 1988 (NELS:88/90), "First Follow-up, 1990"; and National Assessment of Educational Progress (NAEP), High School Transcript Study (HSTS), selected years, 1982 to 2005.

¹¹ The commission also recommended one-half year of computer science. This indicator focuses on a core academic track coursework that does not include computer science.

Figure 4.6. Percentage of public high school graduates who had completed a core academic track, by race/ethnicity: Selected years, 1982 to 2005



NOTE: A core academic track is defined as at least 4 year-long courses in English; 3 each in social studies, science, and mathematics; and 2 in foreign languages. Race categories exclude persons of Hispanic ethnicity.

SOURCE. U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores (HS&B-So:80); National Education Longitudinal Study of 1988 (NELS:88/90), "First Follow-up, 1990"; and National Assessment of Educational Progress (NAEP), High School Transcript Study (HSTS), selected years, 1982 to 2005.

4.7. Advanced Coursetaking in High School

In 2004, a smaller percentage of American Indian/Alaska Native high school graduates completed advanced science, mathematics, or English courses than their White or Asian/Pacific Islander peers.

In 2004, a smaller percentage of American Indian/Alaska Native high school graduates (48 percent) completed advanced science courses¹² than White (71 percent) and Asian/Pacific Islander (84 percent) students. No measurable differences were observed among the percentages of American Indian/Alaska Native, Black, and Hispanic students completing these courses.

Twenty-two percent of American Indian/Alaska Native high school graduates completed advanced mathematics courses.¹³ This percentage was lower than the percentages of White (54 percent), Black (42 percent), and Asian/Pacific Islander (69 percent) students, but not statistically different from the percentage of Hispanic (34 percent) students completing advanced mathematics courses.

Twenty-one percent of American Indian/Alaska Native high school graduates completed advanced

English courses¹⁴ in 2004. The percentage of American Indian/Alaska Native students completing advanced English courses was lower than that of White (35 percent) and Asian/Pacific Islander (43 percent) students. No differences were detected between the percentage of American Indian/Alaska Native students (21 percent) and the percentage of Black (24 percent) and Hispanic (25 percent) students completing advanced English courses.

Higher percentages of Asian/Pacific Islander (50 percent), White (37 percent), and Hispanic (33 percent) students completed either 3 or more years of foreign language courses or an advanced course in a foreign language than did American Indian/Alaska Native students (15 percent).¹⁵ However, the percentage for American Indian/Alaska Native students did not differ significantly from that of Black students (20 percent).

Table 4.7. Percentage of high school graduates who completed advanced academic courses, by school subject and race/ethnicity: 2004

Race/ethnicity	Science ¹	Mathematics ²	English ³	Foreign language ⁴
Total	68.4	50.0	32.7	34.5
White	70.7	54.3	35.4	37.2
Black	63.0	41.7	23.9	19.6
Hispanic	60.2	34.3	24.9	32.8
Asian/Pacific Islander	83.7	69.1	43.1	50.5
American Indian/Alaska Native	47.8	21.8	21.2	15.1!

! Interpret data with caution.

¹ Includes students who completed courses in chemistry I, physics I, chemistry II, physics II, or advanced biology.

² Includes students who completed precalculus, calculus, or other courses labeled as "advanced," such as trigonometry.

³ Includes students who completed more honors courses than "below grade level" courses.

⁴ Foreign language coursetaking based upon classes in Amharic (Ethiopian), Arabic, Chinese (Cantonese or Mandarin), Czech, Dutch, Finnish, French, German, Greek (Classical or Modern), Hawaiian, Hebrew, Italian, Japanese, Korean, Latin, Norse (Norwegian), Polish, Portuguese, Russian, Spanish, Swahili, Swedish, Turkish, Ukrainian, or Yiddish. Some graduates also studied more than one foreign language. Graduates who had completed courses in different languages were counted according to the highest level course completed.

NOTE: Students classified at any particular level need not have taken courses at a lower level and may have taken more than one course at that level. For more detailed descriptions of these categories, see Supplemental Note 12 in *The Condition of Education, 2007*. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *The Condition of Education, 2007* (NCES 2007-064), based on U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002/04), "High School Transcript Study."

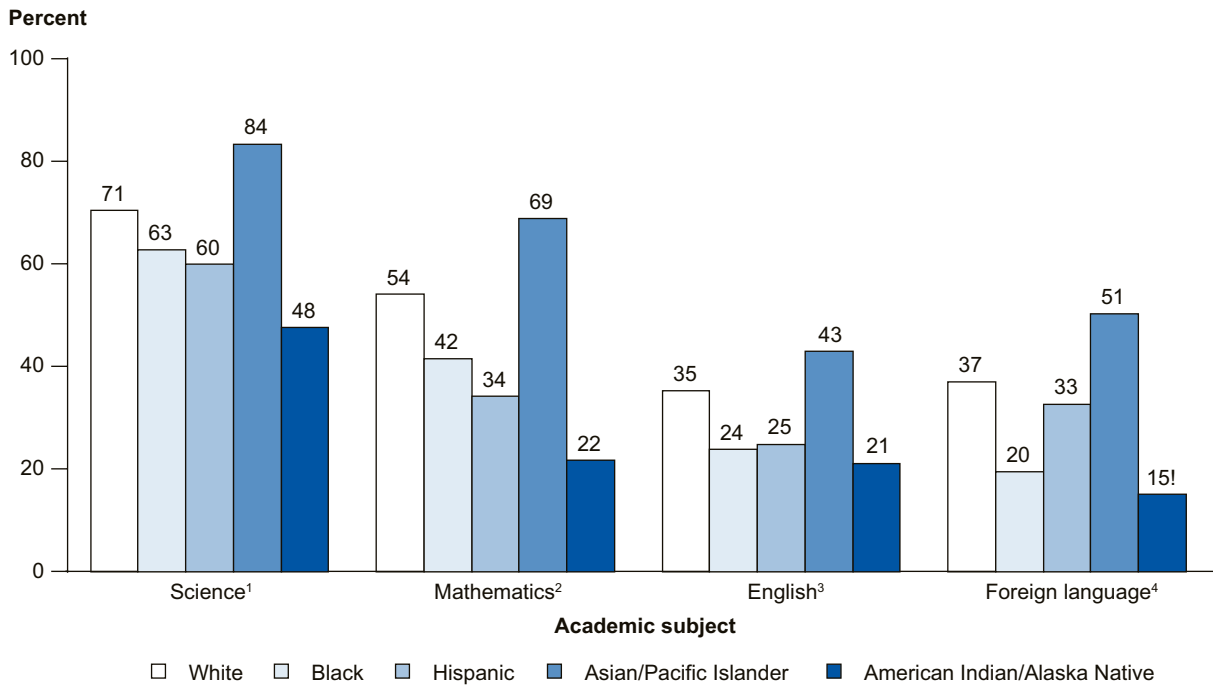
¹² Advanced science courses include chemistry I, physics I, chemistry II, physics II, or advanced biology.

¹³ Advanced mathematics courses include precalculus, calculus, or other courses labeled as "advanced," such as trigonometry.

¹⁴ Completion of advanced English courses indicates that students completed more honors courses than "below grade level" courses.

¹⁵ Foreign language coursetaking based upon classes in Amharic (Ethiopian), Arabic, Chinese (Cantonese or Mandarin), Czech, Dutch, Finnish, French, German, Greek (Classical or Modern), Hawaiian, Hebrew, Italian, Japanese, Korean, Latin, Norse (Norwegian), Polish, Portuguese, Russian, Spanish, Swahili, Swedish, Turkish, Ukrainian, or Yiddish. Some graduates also studied more than one foreign language. Graduates who had completed courses in different languages were counted according to the highest level course completed.

Figure 4.7. Percentage of high school graduates who completed advanced academic courses, by school subject and race/ethnicity: 2004



! Interpret data with caution.

¹ Includes students who completed courses in chemistry I, physics I, chemistry II, physics II, or advanced biology.

² Includes students who completed precalculus, calculus, or other courses labeled as “advanced,” such as trigonometry.

³ Includes students who completed more honors courses than “below grade level” courses.

⁴ Foreign language coursetaking based upon classes in Amharic (Ethiopian), Arabic, Chinese (Cantonese or Mandarin), Czech, Dutch, Finnish, French, German, Greek (Classical or Modern), Hawaiian, Hebrew, Italian, Japanese, Korean, Latin, Norse (Norwegian), Polish, Portuguese, Russian, Spanish, Swahili, Swedish, Turkish, Ukrainian, or Yiddish. Some graduates also studied more than one foreign language. Graduates who had completed courses in different languages were counted according to the highest level course completed.

NOTE: Students classified at any particular level need not have taken courses at a lower level and may have taken more than one course at that level. For more detailed descriptions of these categories, see supplemental note 12 in *The Condition of Education, 2007*. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *The Condition of Education, 2007* (NCES 2007-064), based on U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002/04), “High School Transcript Study.”

4.8. Advanced Placement Exams

Between 1999 and 2007, the number of American Indian/Alaska Native high school students taking Advanced Placement tests increased.

Students who take Advanced Placement (AP) courses in high school are eligible to take the corresponding AP examination and may earn college credit for scores above a minimum threshold. Currently, there are 37 AP exams available across 22 subject areas. Between 1999 and 2007, the number of American Indian/Alaska Native students taking AP exams in the 12th grade increased 78 percent, which was a higher rate of increase than that for students overall (73 percent). Over the same time period, the number of 12th-grade test takers in each other racial/ethnic group also increased.

American Indian/Alaska Native students scored, on average, consistently below the national average for all students. However, American Indian/Alaska Native students scored above Black and Hispanic students on the calculus, chemistry, and U.S. history AP examinations and had the same score as Hispanics on the English language and composition AP examination.

Table 4.8a. Number and percent change of 12th-grade students taking Advanced Placement (AP) examinations, by race/ethnicity: 1999 through 2007

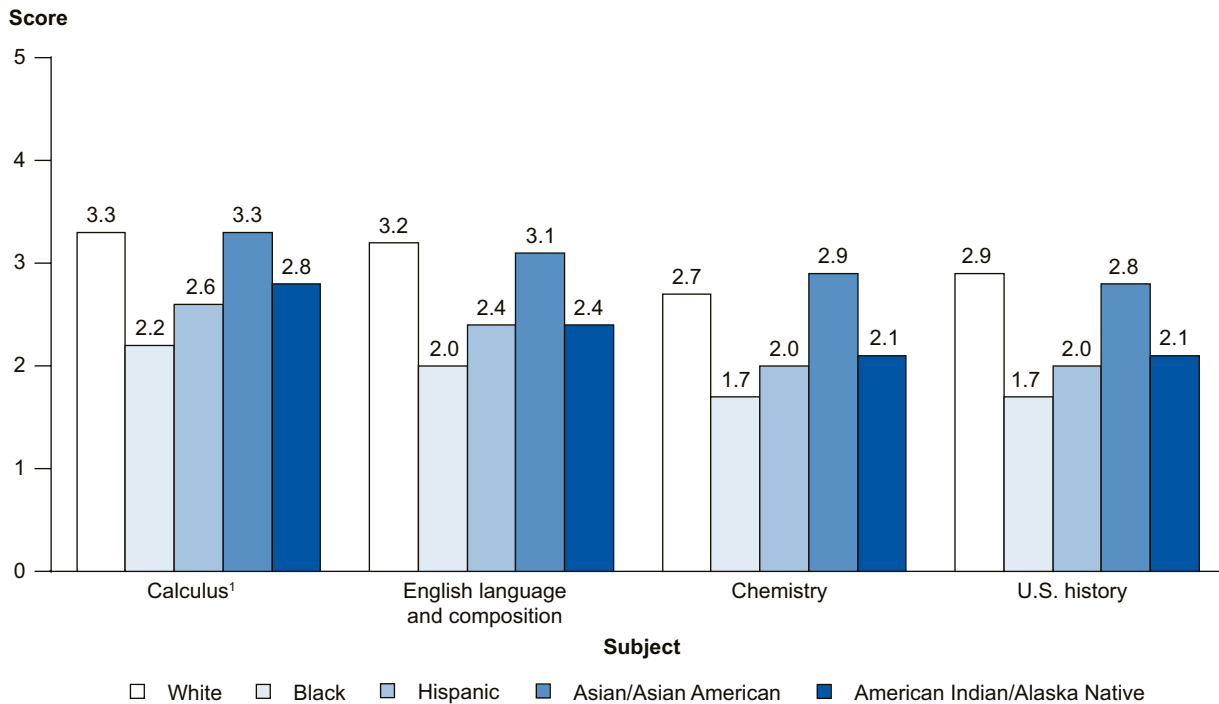
Race/ethnicity	1999	2000	2001	2002	2003	2004	2005	2006	2007	Percent change, 1999 to 2007
Total¹	349,300	378,540	407,572	440,916	470,398	490,232	532,128	561,114	604,597	73.1
White	234,307	262,399	280,165	302,463	321,074	331,683	353,419	366,363	392,504	67.5
Black	16,942	19,469	21,027	23,105	25,649	27,069	31,657	35,782	40,389	138.4
Hispanic	28,501	33,641	37,438	41,429	47,233	51,013	57,924	62,670	69,096	142.4
Asian/Asian American	37,182	41,538	44,539	48,040	50,710	52,071	56,789	61,665	66,847	79.8
American Indian/Alaska Native	1,679	1,779	1,799	1,948	2,106	2,289	2,534	2,800	2,986	77.8

¹ Total includes other race/ethnicity categories not separately shown.

NOTE: The College Board collects race/ethnicity information based on the categories American Indian/Alaskan; Asian/Asian American; Black/Afro-American; Latino: Chicano/Mexican, Puerto Rican, and Other Latino; White; and Other. Black refers to test takers who identified themselves as Black/Afro-American, and Hispanic refers to the sum of all Latino subgroups. Pacific Islander may or may not be included in Asian/Asian American because the response option provided by The College Board was given only as Asian/Asian American.

SOURCE: The College Board, Advanced Placement Program, *National Summary Report*, 1999 to 2007.

Figure 4.8. Average scores of 12th-grade students on Advanced Placement (AP) examinations, by subject and race/ethnicity: 2007



¹ Averages combined from Calculus AB and Calculus BC examinations.

NOTE: The College Board collects race/ethnicity information based on the categories American Indian/Alaskan; Asian/Asian American; Black/Afro-American; Latino: Chicano/Mexican, Puerto Rican, and Other Latino; White; and Other. Black refers to test takers who identified themselves as Black/Afro-American, and Hispanic refers to the sum of all Latino subgroups. Pacific Islander may or may not be included in Asian/Asian American because the response option provided by The College Board was given only as Asian/Asian American. Possible scores on Advanced Placement (AP) examinations range from 1 to 5. SOURCE: The College Board, Advanced Placement Program, *National Summary Report 2007*.

Table 4.8b. Average scores of 12th-grade students on Advanced Placement (AP) examinations, by subject and race/ethnicity: 2007

Race/ethnicity	Calculus ¹	English language and composition	Chemistry	U.S. history
Total²	3.2	3.0	2.6	2.7
White	3.3	3.2	2.7	2.9
Black	2.2	2.0	1.7	1.7
Hispanic	2.6	2.4	2.0	2.0
Asian/Asian American	3.3	3.1	2.9	2.8
American Indian/Alaska Native	2.8	2.4	2.1	2.1

¹ Averages combined from Calculus AB and Calculus BC examinations.

² Total includes other race/ethnicity categories not separately shown.

NOTE: The College Board collects race/ethnicity information based on the categories American Indian/Alaskan; Asian/Asian American; Black/Afro-American; Latino: Chicano/Mexican, Puerto Rican, and Other Latino; White; and Other. Black refers to test takers who identified themselves as Black/Afro-American, and Hispanic refers to the sum of all Latino subgroups. Pacific Islander may or may not be included in Asian/Asian American because the response option provided by The College Board was given only as Asian/Asian American. Possible scores on Advanced Placement (AP) examinations range from 1 to 5. SOURCE: The College Board, Advanced Placement Program, *National Summary Report 2007*.

4.9. Student Performance on College Entrance Examinations

In 2007, American Indian/Alaska Native college-bound seniors scored lower, on average, than Whites on the SAT and ACT.

On average, American Indian/Alaska Native college-bound seniors who elected to take the SAT college entrance exam in 2007 scored below the national average on the critical reading, mathematics, and writing sections of the exam. However, they scored higher than Black and Hispanic college-bound seniors.

In 1997, American Indian/Alaska Native students scored 30 points below the average critical reading score of all students; this gap decreased to 15 points in 2007. The gap between the average mathematics scores of American Indian/Alaska Native students

and the score of all students, decreased from 36 points in 1997 to 21 points in 2007. Beginning in 2006, the SAT results included scores for a writing component in addition to the critical reading and mathematics components. From 2006 to 2007, American Indian/Alaska Native students' average critical reading and mathematics scores stayed the same, while the average of all students decreased by 1 point in critical reading and by 3 points in mathematics. The average writing score of American Indian/Alaska Native students decreased by 1 point between 2006 and 2007, while the average of all students decreased by 3 points.

Table 4.9a. Average SAT scores for college-bound seniors, by race/ethnicity and section: 1996–97 through 2006–07

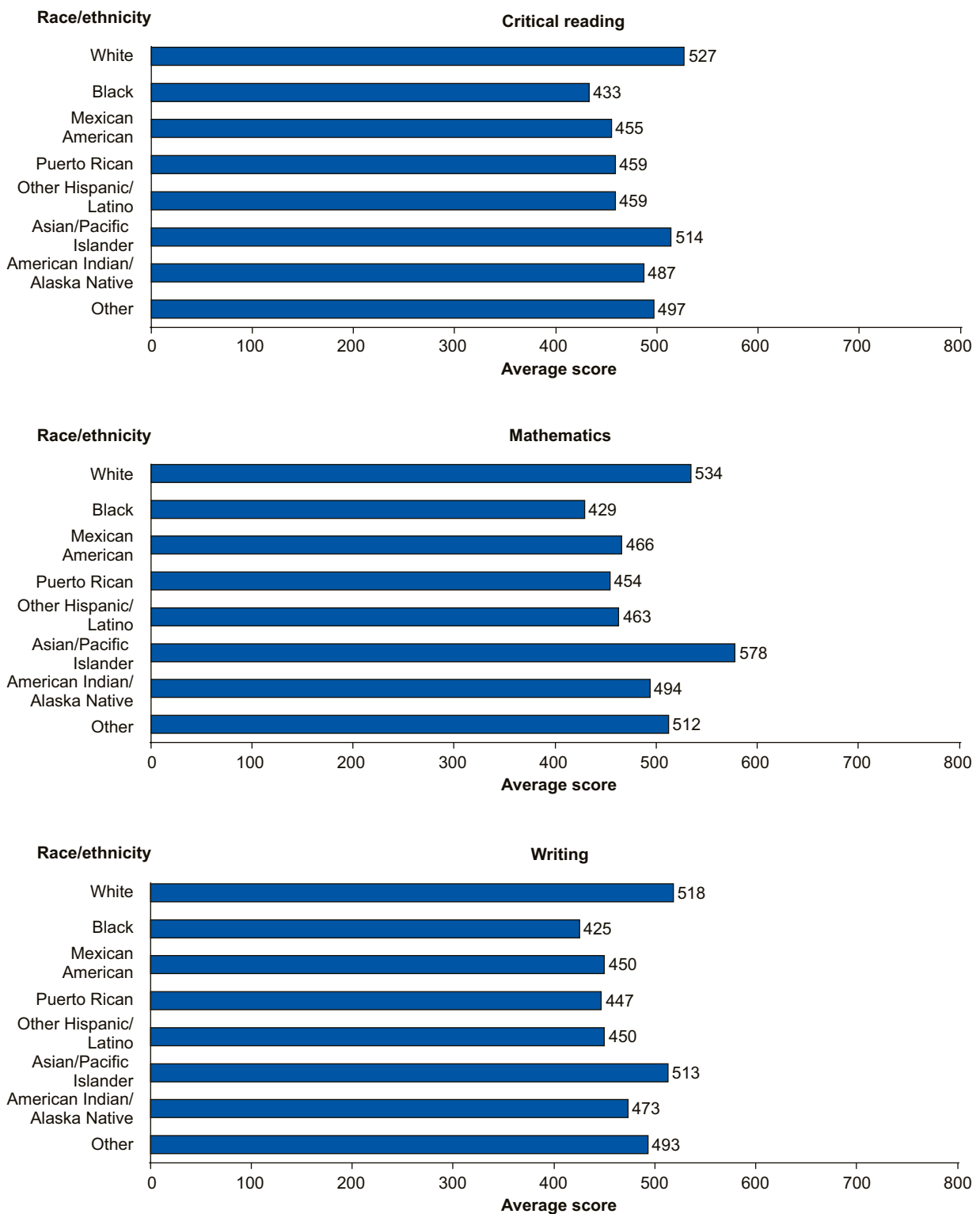
School year ending	Total ¹	White	Black	Mexican American	Puerto Rican	Other Hispanic/Latino	Asian/Pacific Islander	American Indian/Alaska Native	Other
Critical reading									
1997	505	526	434	451	454	466	496	475	512
1998	505	526	434	453	452	461	498	480	511
1999	505	527	434	453	455	463	498	484	511
2000	505	528	434	453	456	461	499	482	508
2001	506	529	433	451	457	460	501	481	503
2002	504	527	430	446	455	458	501	479	502
2003	507	529	431	448	456	457	508	480	501
2004	508	528	430	451	457	461	507	483	494
2005	508	532	433	453	460	463	511	489	495
2006	503	527	434	454	459	458	510	487	494
2007	502	527	433	455	459	459	514	487	497
Mathematics									
1997	511	526	423	458	447	468	560	475	514
1998	512	528	426	460	447	466	562	483	514
1999	511	528	422	456	448	464	560	481	511
2000	514	530	426	460	451	467	565	481	515
2001	514	531	426	458	451	465	566	479	512
2002	516	533	427	457	451	464	569	483	514
2003	519	534	426	457	453	464	575	482	513
2004	518	531	427	458	452	465	577	488	508
2005	520	536	431	463	457	469	580	493	513
2006	518	536	429	465	456	463	578	494	513
2007	515	534	429	466	454	463	578	494	512
Writing									
2006	497	519	428	452	448	450	512	474	493
2007	494	518	425	450	447	450	513	473	493

¹ Includes students who did not report their race/ethnicity.

NOTE: Data are for seniors who took the SAT any time during their high school years through March of their senior year. If a student took a test more than once, the most recent score was used. The SAT was formerly known as the Scholastic Assessment Test and the Scholastic Aptitude Test. Possible scores on each part of the SAT range from 200 to 800. The critical reading section was formerly known as the verbal section. The writing section was introduced in March 2005, however, the first aggregate data on the writing section were reported in 2006.

SOURCE: College Entrance Examination Board, *College-Bound Seniors: Total Group Profile [National] Report*, selected years, 1996–97 through 2006–07, retrieved August 28, 2007, from http://www.collegeboard.com/about/news_info/cbsenior/yr2007/reports.html.

Figure 4.9. Average SAT scores for college-bound seniors, by race/ethnicity: 2007



NOTE: Data are for seniors who took the SAT any time during their high school years through March of their senior year. If a student took a test more than once, the most recent score was used. The SAT was formerly known as the Scholastic Assessment Test and the Scholastic Aptitude Test. Possible scores on each part of the SAT range from 200 to 800. The critical reading section was formerly known as the verbal section. The writing section was introduced in March 2005, however, the first aggregate data on the writing section was reported in 2006.

SOURCE: College Entrance Examination Board, *College-Bound Seniors: Total Group Profile [National] Report, 2006–07*, retrieved August 28, 2007, from http://www.collegeboard.com/about/news_info/cbsenior/yr2007/reports.html.

The second most common college entrance examination is the ACT. Although the SAT and ACT measure different constructs, scores on the two tests are highly related. Composite scores below 19 on the ACT indicate minimal readiness for college, and students receiving such scores are likely to need additional precollege classes (ACT Program 2002).

The average ACT score in 2007 for American Indian/Alaska Native students was 17.9 for English and 18.7 for mathematics—about the same as the scores for Hispanic students (17.6 and 19.0), higher than the scores for Black students (16.1 and 17.0), and lower than the scores for White (21.8 and 21.7) and Asian/Pacific Islander students (21.7 and 23.6).

Table 4.9b. Average ACT scores by race/ethnicity and subject: 1996–97 through 2006–07

School year ending	Total	White	Black	Hispanic	Mexican-American	Puerto Rican/Other Hispanic	Asian/Pacific Islander	American Indian/Alaska Native
English								
1997	20.3	21.2	16.4	—	17.8	18.1	20.4	18.0
1998	20.4	21.2	16.4	—	17.5	18.7	20.5	18.1
1999	20.5	21.3	16.4	—	17.6	18.8	20.5	18.1
2000	20.5	21.3	16.4	—	17.6	18.7	20.5	18.0
2001	20.5	21.3	16.2	—	17.5	18.6	20.7	17.8
2002	20.2	21.2	16.2	—	17.1	17.9	20.5	17.6
2003	20.3	21.3	16.2	—	17.2	18.1	20.7	17.7
2004	20.4	21.4	16.3	—	17.3	17.9	21.0	17.8
2005	20.4	21.5	16.2	—	17.3	18.0	21.3	17.6
2006	20.6	21.7	16.3	—	17.4	18.1	21.5	17.8
2007	20.7	21.8	16.1	17.6	—	—	21.7	17.9
Mathematics								
1997	20.6	21.2	16.9	—	18.9	19.1	23.3	18.5
1998	20.8	21.4	16.9	—	18.6	19.7	23.4	18.6
1999	20.7	21.3	16.9	—	18.7	19.6	23.1	18.5
2000	20.7	21.3	16.8	—	18.7	19.5	23.2	18.5
2001	20.7	21.3	16.8	—	18.7	19.4	23.1	18.4
2002	20.6	21.3	16.7	—	18.4	18.9	22.9	18.4
2003	20.6	21.3	16.7	—	18.3	18.9	22.9	18.3
2004	20.7	21.4	16.9	—	18.5	18.9	23.0	18.6
2005	20.7	21.5	16.8	—	18.6	19.0	23.1	18.4
2006	20.8	21.6	17.0	—	18.7	19.1	23.4	18.6
2007	21.0	21.7	17.0	19.0	—	—	23.6	18.7

— Not available.

NOTE: Race categories exclude persons of Hispanic ethnicity.

SOURCE: ACT, *High School Profile Report*, selected years, 1997 through 2007.

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5 Educational and Social Environments

The indicators in this section examine the educational and social environments for learning. It begins with the contributions made by parents and others to support the education of their children. The resources and support that children receive outside of school from parents and others complement, reinforce, and add to children's school experiences. This section includes indicators about reading material available at home and access to computers for public school students, parental educational attainment, language spoken at home, and exposure to and participation in traditional American Indian/Alaska Native ceremonies.

At least four risk factors are associated with children's future academic and socioeconomic outcomes: living in a single-parent family, living in poverty, having a mother who has less than a high school education, and having parents whose primary language is a language other than English. The early reading and mathematics skills of children with at least one of these risk factors tend to lag behind those of children

with no risk factors. These risk factors are considerably more common among children from racial/ethnic minorities than among children from White families (U.S. Department of Education 2001).

As outlined in Chapter 1, more American Indian/Alaska Native children than White children live in a single-parent family or in poverty. The prevalence of other risk factors—a mother who has less than a high school education and parents whose primary language is a language other than English—will be discussed in this chapter.

This section also includes indicators that examine the social environment of American Indian/Alaska Native and other students. A few of these indicators examines various measures of school climate in schools that serve a higher percentage of American Indian/Alaska Native students relative to others¹⁶ from the perspective of teachers and principals. Additional indicators provide snapshots of at-risk behavior, such as students' exposure to drugs and violence.

¹⁶ In the text, this is referred to as school density. School density indicates the percentage of American Indian/Alaska Native students enrolled.

5.1. Learning Opportunities at Home

Among 8th-graders in public schools, 56 percent of American Indian/Alaska Native students reported having more than 25 books at home in 2007. This percentage was lower than the percentage of White and Asian/Pacific Islander students but higher than that of Hispanic and Black students.

The NAEP reading assessment includes background questions that ask students about access to reading materials in the home—such as books, encyclopedias (either as books or on the computer), magazines, and newspapers—and reading experiences in the home. Results suggest that in 2007, a smaller percentage of American Indian/Alaska Native 8th-graders attending public schools reported having more than 25 books in their home than the percentages of White and Asian/Pacific Islander 8th-graders (56 percent vs. 75 percent, and 67 percent, respectively). The percentage of American Indian/Alaska Native 8th-graders in public schools who reported having more than 25 books at home was larger, however, than that of Hispanic (41 percent) and Black (53 percent) 8th-graders.

A similar pattern was seen regarding access to encyclopedias and magazines. A smaller percentage of American Indian/Alaska Native 8th-graders had access to encyclopedias at home than their White,

Black, and Asian/Pacific Islander peers (66 percent vs. 78 percent, 73 percent, and 76 percent, respectively). Additionally, a smaller percentage of American Indians/Alaska Natives had regular access to magazines than their White and Black 8th-grade peers (57 percent vs. 73 percent and 61 percent, respectively). On the other hand, more American Indian/Alaska Native students reported having access to magazines at home than their Hispanic counterparts (57 percent vs. 53 percent).

The percentage of American Indian/Alaska Native 8th-grade public school students reporting regular access to a newspaper at home (39 percent) was similar to the percentage for Asian/Pacific Islander students (38 percent). This was lower than the percentage for White students (44 percent) but higher than the percentage for Hispanic students (30 percent) who reported regular access to a newspaper.

Table 5.1a. Percentage of 8th-grade students in public schools with selected literacy resources at home, by race/ethnicity: 2007

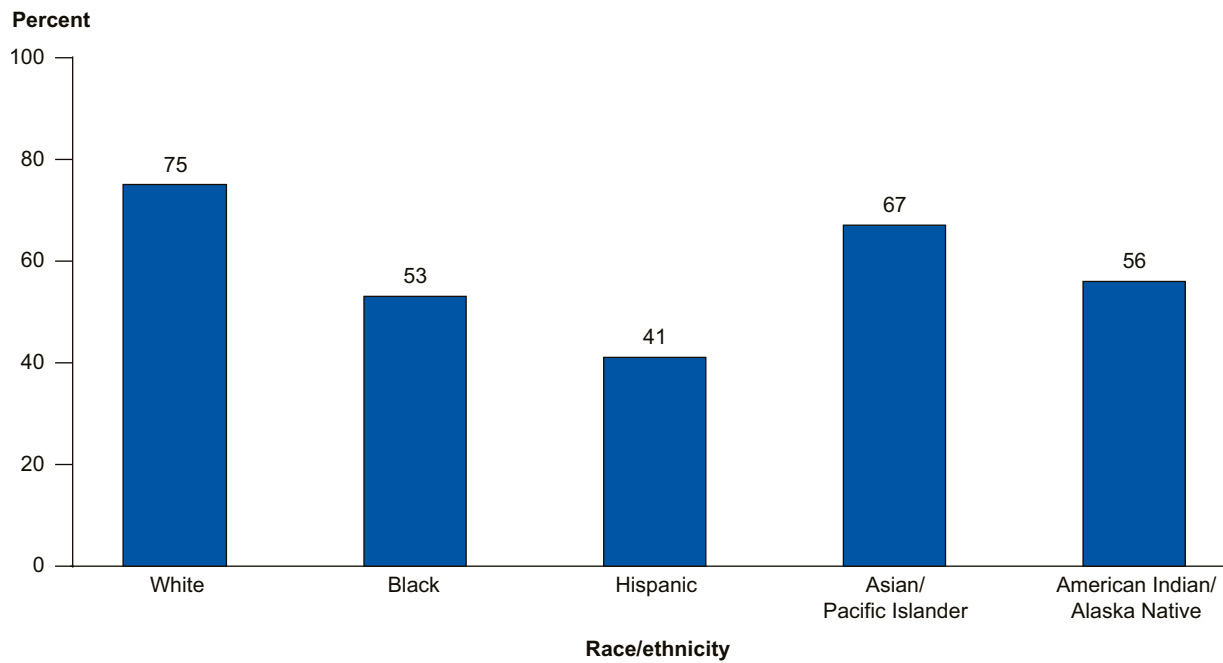
Race/ethnicity	More than 25 books	An encyclopedia	Regular access to magazines	Regular access to newspapers
Total¹	65	74	67	41
White	75	78	73	44
Black	53	73	61	41
Hispanic	41	63	53	30
Asian/Pacific Islander	67	76	56	38
American Indian/Alaska Native	56	66	57	39

¹ Total includes other race/ethnicity categories not separately shown.

NOTE: Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Reading Assessment, retrieved January 2008 from <http://nces.ed.gov/nationsreportcard/nde/>.

Figure 5.1a. Percentage of 8th-grade students in public schools with more than 25 books at home, by race/ethnicity: 2007



¹ Total includes other race/ethnicity categories not separately shown.

NOTE: Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Reading Assessment, retrieved January 2008 from <http://nces.ed.gov/nationsreportcard/nde/>.

Twenty-four percent of American Indian/Alaska Native 8th-graders reported that they read for fun on their own time at least 1–2 times a week in 2007. This percentage was lower than that of Asian/Pacific Islander (32 percent) and Black (29 percent) students and not measurably different than that of White

(22 percent) and Hispanic (24 percent) students. A smaller percentage of American Indian/Alaska Native 8th-graders reported daily leisure reading (17 percent) than White (21 percent) and Asian/Pacific Islander (23 percent) students but this percentage was higher than that of Hispanic students (12 percent).

Table 5.1b. Percentage distribution of 8th-grade students in public schools according to frequency of reading for fun, by race/ethnicity: 2007

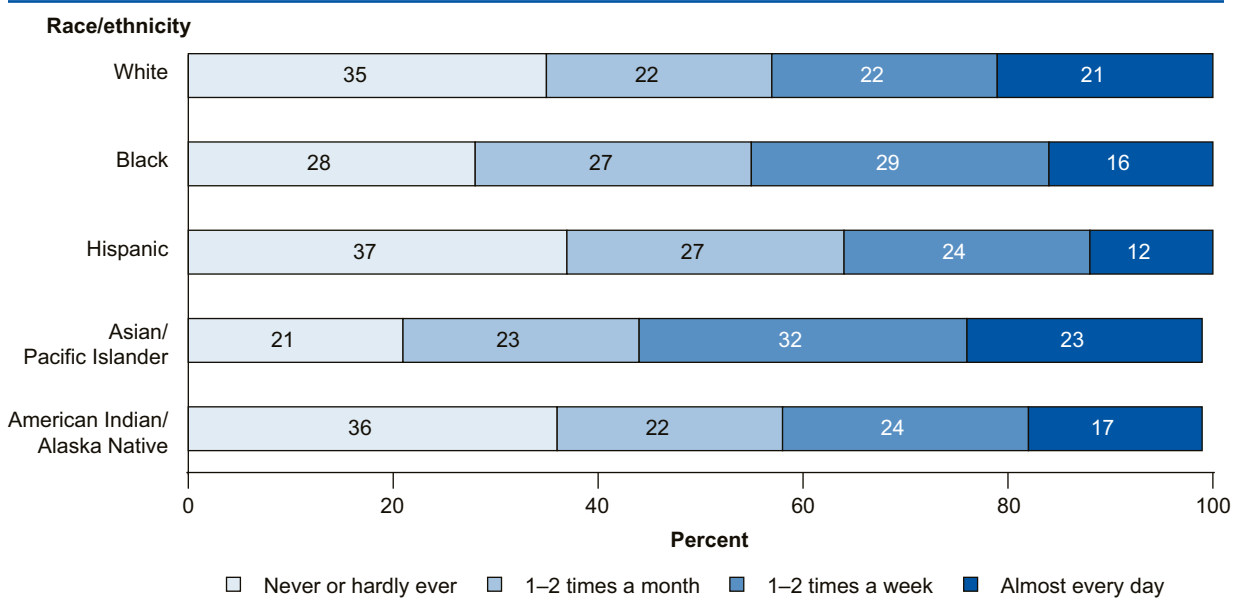
Race/ethnicity	Never or hardly ever	1–2 times a month	1–2 times a week	Almost every day
Total¹	34	24	24	18
White	35	22	22	21
Black	28	27	29	16
Hispanic	37	27	24	12
Asian/Pacific Islander	21	23	32	23
American Indian/Alaska Native	36	22	24	17

¹ Total includes other race/ethnicity categories not separately shown.

NOTE: Detail may not sum to totals because of rounding. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Reading Assessment, retrieved January 2008 from <http://nces.ed.gov/nationsreportcard/nde/>.

Figure 5.1b. Percentage distribution of 8th-grade students in public schools according to frequency of reading for fun, by race/ethnicity: 2007



¹ Total includes other race/ethnicity categories not separately shown.

NOTE: Detail may not sum to totals because of rounding. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Reading Assessment, retrieved January 2008 from <http://nces.ed.gov/nationsreportcard/nde/>.

5.2. Computer Use at Home

In 2007, fewer American Indian/Alaska Native 8th-grade students in public schools used computers at home than their peers in all other race/ethnicity groups.

Exposure to computers at home may help young people build necessary computer literacy skills. In 2007, some 78 percent of American Indian/Alaska Native 8th-graders in public schools reported using a

computer at home. In contrast, 95 percent of White, 84 percent of Black, 82 percent of Hispanic, and 96 percent of Asian/Pacific Islander 8th-graders reported using a computer at home.

Table 5.2. Percentage of 8th-grade students in public schools who use a computer at home, by race/ethnicity: 2007

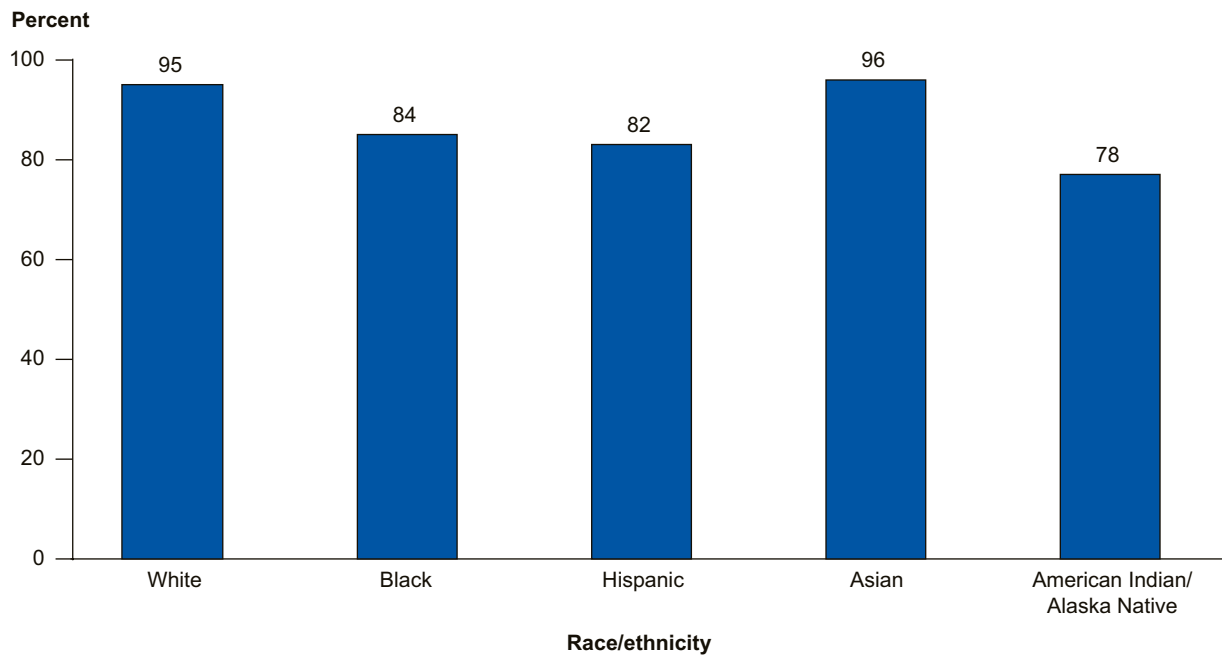
Race/ethnicity	Use a computer at home
Total¹	91
White	95
Black	84
Hispanic	82
Asian/Pacific Islander	96
American Indian/Alaska Native	78

¹Total includes other race/ethnicity categories not separately shown.

NOTE: Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Reading Assessment, retrieved April 2008 from <http://nces.ed.gov/nationsreportcard/nde/>.

Figure 5.2. Percentage of 8th-grade students in public schools who use a computer at home, by race/ethnicity: 2007



NOTE: Race categories exclude persons of Hispanic ethnicity. Total includes other race/ethnicity categories not separately shown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Reading Assessment, retrieved April 2008 from <http://nces.ed.gov/nationsreportcard/nde/>.

5.3. Parental Education

In 2007, about 84 percent of American Indian/Alaska Native children ages 6–18 had mothers who had attained at least a high school education.

Parents¹⁷ educational attainment has been identified as one of several factors positively related to children's academic achievement and socioeconomic levels (Grissmer et al. 1994; Grissmer et al. 2000). In 2007, a larger percentage of American Indian/Alaska Native children ages 6–18 had mothers who had attained a high school education (84 percent) than Hispanic children of the same age (60 percent). On the other hand, the percentage of American Indians/Alaska Natives was lower than the percentage

for White children of the same age (95 percent). A higher percentage of American Indian/Alaska Native than Hispanic children had fathers who had attained at least a high school education (90 percent vs. 59 percent). No measurable differences were observed between the percentage of American Indians/Alaska Natives having mothers or fathers who had completed high school compared to Black, Pacific Islander, or Asian children.

Table 5.3. Percentage of children ages 6–18 whose parents had completed high school, by parent and race/ethnicity: 2007

Race/ethnicity	Mother	Father
Total¹	86.4	86.8
White	94.6	93.8
Black	86.3	89.2
Hispanic	60.4	59.0
Asian	85.9	88.5
Pacific Islander	93.5	85.6
American Indian/Alaska Native	83.6	90.0

¹ Includes other race/ethnicity categories not separately shown.

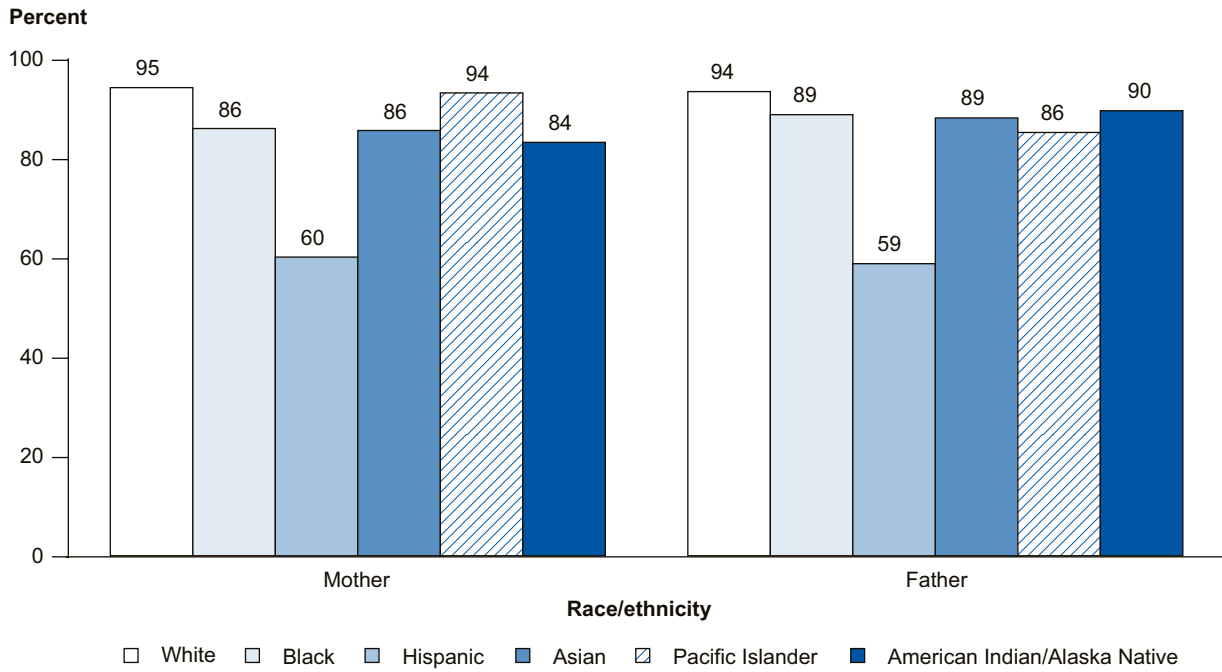
NOTE: Parents include adoptive and stepparents but exclude parents not residing in the same household as their children.

Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), Annual Social and Economic Supplement, 2007.

¹⁷ Parents include adoptive and step parents but exclude parents not residing in the same household as their children.

Figure 5.3. Percentage of children ages 6–18 whose parents had completed high school, by race/ethnicity and parent: 2007



NOTE: Parents include adoptive and stepparents but exclude parents not residing in the same household as their children. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), Annual Social and Economic Supplement, 2007.

5.4. Language and Ceremonies

About 20 percent of American Indian/Alaska Native children ages 5-17 spoke a language other than English at home and 3 percent spoke English with difficulty in 2006. In 2007, about one-third of 8th-grade children reported participating in American Indian/Alaska Native ceremonies or gatherings several times a year.

In 2006, 20 percent of American Indian/Alaska Native children ages 5–17 spoke a language other than English at home. A smaller percentage of American Indians/Alaska Natives than Hispanics or Asians/Pacific Islanders reported that people in their homes spoke a language other than English (20 percent vs. 69 and 63 percent, respectively). The percentage of American Indians/Alaska Natives reporting another language spoken at home

was larger, however, than that of Whites (6 percent) and Blacks (5 percent).

In 2006, some 3 percent of American Indian/Alaska Native children spoke English with difficulty, compared with 18 percent of Hispanics and 17 percent of Asians/Pacific Islanders. The percentage of children who spoke English with difficulty¹⁸ for both the White and Black groups was 1 percent.

Table 5.4a. Number and percentage of children ages 5–17 who spoke a language other than English at home and who spoke English with difficulty, by race/ethnicity: 2006

Race/ethnicity	Total population (in thousands)	Spoke a language other than English at home			
		Number (in thousands)	Percent of population ²	Number (in thousands)	Percent of population ²
Total³	53,406	10,845	20.3	2,758	5.2
White	31,154	1,762	5.7	378	1.2
Black	7,870	429	5.5	99	1.3
Hispanic	10,250	7,038	68.7	1,882	18.4
Asian/Pacific Islander	2,127	1,346	63.3	355	16.7
American Indian/Alaska Native	436	85	19.6	12	2.8

¹ Respondents were asked if each child in the household spoke a language other than English at home. If they answered “yes,” they were asked how well each child could speak English. Categories used for reporting were “very well,” “well,” “not well,” and “not at all.” All those who were reported as speaking English less than “very well” were considered to have difficulty speaking English. This presentation of the data is consistent with analyses conducted by the Census Bureau and other agencies, as well as those of the National Center for Education Statistics (see, for example, Shin and Bruno 2003; Federal Interagency Forum on Child and Family Statistics 2008; and U.S. Department of Education 2008). Analysis conducted in support of the presentation found substantial differences between those who responded they spoke English “very well” and those who spoke English less than “very well” (Clark, Raines, and Jackson 2003).

² Percentage of the total population for that particular subgroup. For example, 19.6 percent of all American Indians/Alaska Natives spoke a language other than English at home, and 2.8 percent of all American Indians/Alaska Natives spoke a language other than English at home and spoke English with difficulty.

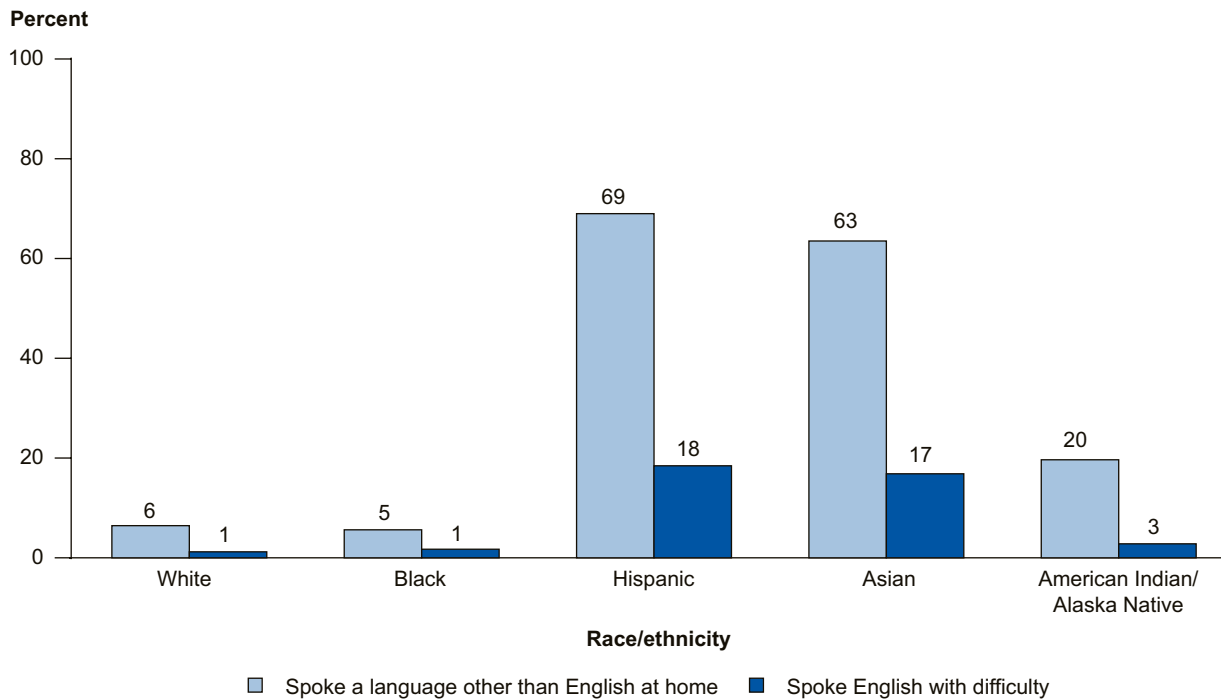
³ Total includes other race/ethnicity categories not separately shown.

NOTE: A Spanish-language version of the American Community Survey (ACS) was available to respondents. Race categories exclude persons of Hispanic ethnicity. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics. *The Condition of Education 2008* (NCES 2008-031), based on U.S. Department of Commerce, Census Bureau, American Community Survey, 2006.

¹⁸ Respondents were asked if each child in the household spoke a language other than English at home. If they answered “yes,” they were asked how well each child could speak English. Categories used for reporting were “very well,” “well,” “not well,” and “not at all.” All those who were reported as speaking English less than “very well” were considered to have difficulty speaking English. This presentation of the data is consistent with analyses conducted by the Census Bureau and other agencies, as well as those of the National Center for Education Statistics (see, for example, Shin and Bruno 2003; Federal Interagency Forum on Child and Family Statistics 2008; and U.S. Department of Education 2008). Analysis conducted in support of the presentation found substantial differences between those who responded they spoke English “very well” and those who spoke English less than “very well” (Clark, Raines, and Jackson 2003).

Figure 5.4a. Percentage of children ages 5–17 who spoke a language other than English at home and who spoke English with difficulty, by race/ethnicity: 2006



NOTE: These percentages represent the percent of the total population for that particular subgroup. For example, 20 percent of all American Indians/Alaska Natives spoke a language other than English at home and 3 percent of all American Indians/Alaska Natives spoke a language other than English at home, and spoke English with difficulty. To determine whether respondents spoke English with difficulty they were asked if each child in the household spoke a language other than English at home. If they answered “yes,” they were asked how well each child could speak English. Categories used for reporting were “very well,” “well,” “not well,” and “not at all.” All those who were reported as speaking English less than “very well” were considered to have difficulty speaking English. This presentation of the data is consistent with analyses conducted by the Census Bureau and other agencies, as well as those of the National Center for Education Statistics (see, for example, Shin and Bruno 2003; Federal Interagency Forum on Child and Family Statistics 2008; and U.S. Department of Education 2008). Analysis conducted in support of the presentation found substantial differences between those who responded they spoke English “very well” and those who spoke English less than “very well” (Clark, Raines, and Jackson 2003). Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics. *The Condition of Education 2008* (NCES 2008-031), based on U.S. Department of Commerce, Census Bureau, American Community Survey, 2006.

In 2006, the percentage of American Indian/Alaska Native students who qualified for limited-English-proficient (LEP) services (9 percent) was smaller than the percentage for Hispanic (36 percent) and Asian/

Pacific Islander students (22 percent), but higher than the percentage for White (1 percent) and Black (2 percent) students.

Table 5.4b. Percentage of students who qualify for limited-English-proficient (LEP) services, by LEP enrollment status and race/ethnicity: 2006

Race/ethnicity	Total	Enrolled in LEP services	Not enrolled in LEP
Total qualified for LEP services	9.4	8.6	0.8
White	0.9	0.7	0.1
Black	1.8	1.6	0.2
Hispanic	36.3	33.4	2.9
Asian/Pacific Islander	22.5	19.9	2.6
American Indian/Alaska Native	8.5	7.2	1.3

NOTE: Students who qualify for LEP services are defined as: (1) individuals who were not born in the United States or whose native language is a language other than English; (2) individuals who come from environments where a language other than English is dominant; and (3) individuals who are American Indian/Alaska Native and who come from environments where a language other than English has had a significant impact on their level of English language proficiency, and who, by reason thereof, have sufficient difficulty speaking, reading, writing, or understanding the English language. Race categories exclude persons of Hispanic ethnicity. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection, 2006, retrieved July 2, 2008, from <http://ocrdata.ed.gov/ocr2006rv30/>.

American Indian/Alaska Native students who speak a language other than English may speak a tribal language. There are now about 200 American Indian/Alaska Native tribal languages, many of which are disappearing as speaking communities (Krauss 2007). Twenty-seven percent of American Indian/Alaska Native children in the 4th grade and 29 percent in the 8th grade reported use of a traditional language at home at least half of the time in 2007. Use of a traditional language at home at least half the time was more common for students in schools with a high density of American Indian/Alaska

Native children enrolled, compared to those with a low density.¹⁹ For example, higher percentages of 4th- and 8th-graders in high-density schools (36 and 45 percent, respectively) reported using a traditional language at home at least half of the time than did 4th- and 8th-graders in low-density schools (19 percent and 15 percent, respectively). In addition, smaller percentages of 4th- and 8th-graders in high-density schools (34 and 29 percent, respectively) than those in low-density schools (54 and 60 percent, respectively) reported they never used a traditional language at home.

Table 5.4c. Percentage distribution of 4th- and 8th-grade American Indian/Alaska Native students reporting use of traditional languages within families, by school density: 2007

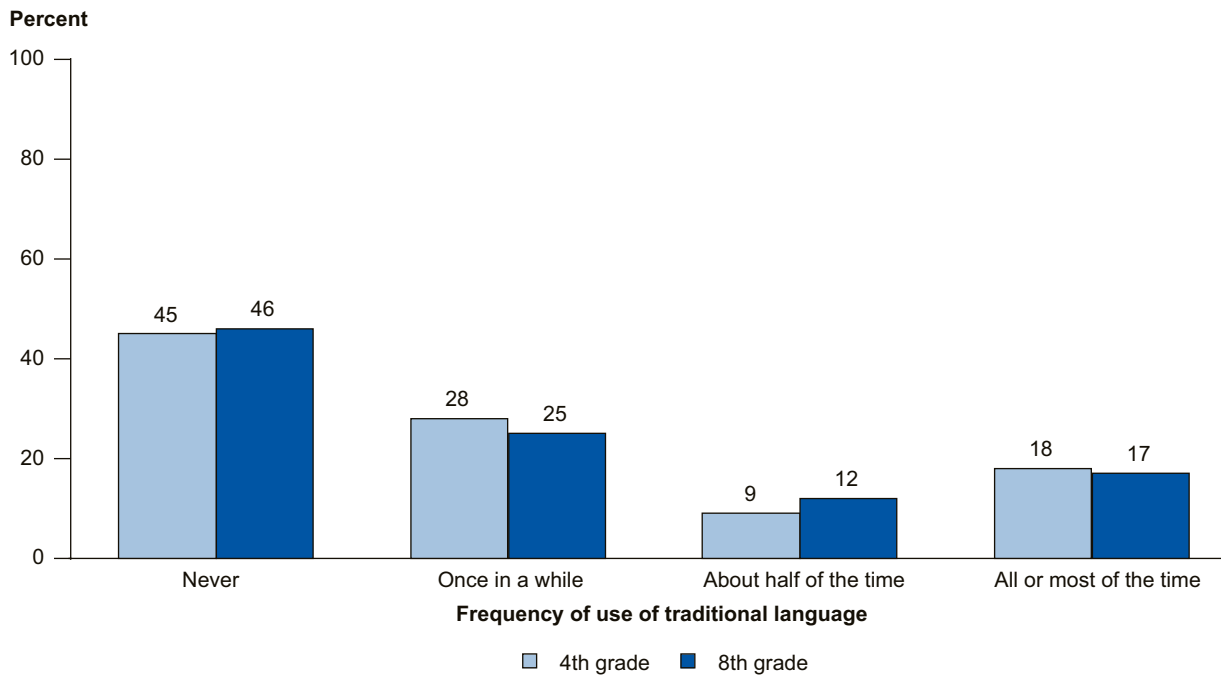
Grade and frequency of use of traditional language	Total	School density	
		High	Low
Grade 4			
Never	45	34	54
Once in a while	28	30	27
About half of the time	9	10	7
All or most of the time	18	26	12
Grade 8			
Never	46	29	60
Once in a while	25	26	25
About half of the time	12	17	8
All or most of the time	17	28	7

NOTE: School density indicates the percentage of American Indian/Alaska Native students enrolled. Low-density schools are schools where American Indians/Alaska Natives account for less than 25 percent of the total enrollment. High-density schools are schools where American Indians/Alaska Natives account for 25 percent or more of the total enrollment.

SOURCE: U.S. Department of Education, National Center for Education Statistics. *The Educational Experiences of American Indian and Alaska Native Students in Grades 4 and 8* (NCES 2008-458). National Assessment of Educational Progress (NAEP), National Indian Education Study (NIES), 2007.

¹⁹ School density indicates the percentage of American Indian/Alaska Native students enrolled. High-density schools are schools where American Indians/Alaska Natives account for 25 percent or more of the total enrollment. Low-density schools are schools where American Indians/Alaska Natives account for less than 25 percent of the total enrollment.

Figure 5.4b. Percentage distribution of 4th- and 8th-grade American Indian/Alaska Native students reporting use of traditional languages within families, by grade: 2007



SOURCE: U.S. Department of Education, National Center for Education Statistics. *The Educational Experiences of American Indian and Alaska Native Students in Grades 4 and 8* (NCES 2008-458). National Assessment of Educational Progress (NAEP), National Indian Education Study (NIES), 2007.

In 2007, some 33 percent of American Indian/Alaska Native children in the 4th grade reported that they attended American Indian/Alaska Native ceremonies or gatherings several times a year. The reported frequency of attendance by 4th-grade students at these ceremonies did not differ significantly between students attending schools with high and low densities of American Indian/Alaska Native students. Thirty-five

percent of American Indian/Alaska Native children in the 8th grade reported that they attended American Indian/Alaska Native ceremonies or gatherings several times a year. In grade 8, a higher percentage of students in high-density schools (44 percent) than in low-density schools (27 percent) reported attendance at such ceremonies several times a year.

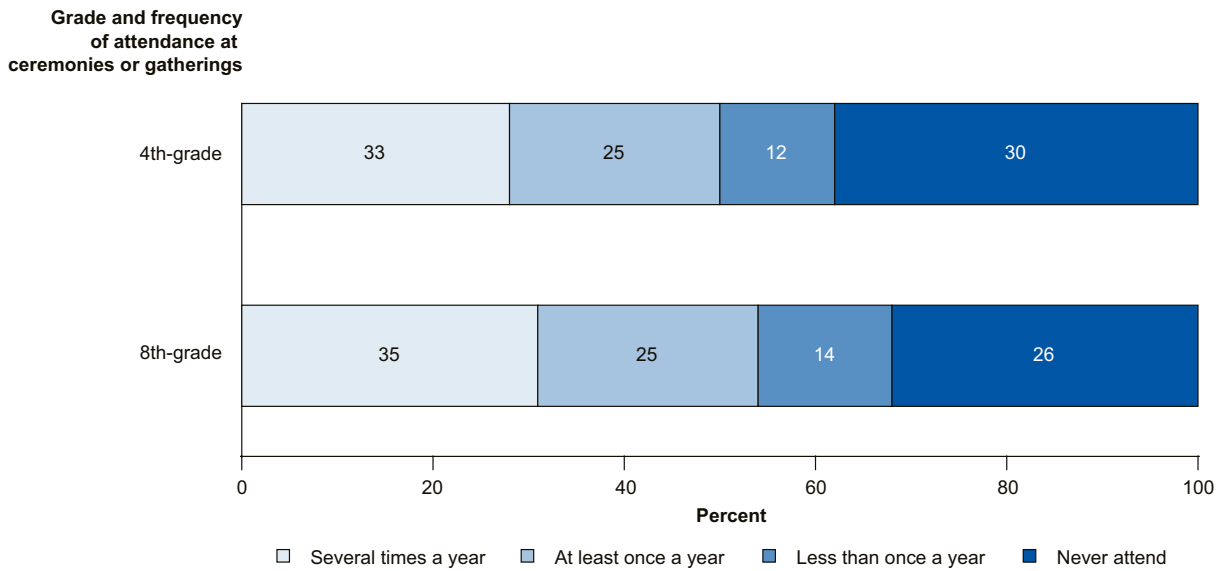
Table 5.4d. Percentage distribution of 4th- and 8th-grade American Indian/Alaska Native students reporting attendance at American Indian/Alaska Native ceremonies and gatherings, by school density: 2007

Grade and frequency of attendance	Total	School density	
		High	Low
Grade 4			
Attend several times a year	33	35	32
Attend at least once a year	25	23	26
Attend less than once a year	12	12	13
Never attend	30	31	30
Grade 8			
Attend several times a year	35	44	27
Attend at least once a year	25	26	24
Attend less than once a year	14	11	16
Never attend	26	19	33

NOTE: School density is based on the percentage of American Indian/Alaska Native students enrolled in the school. Low-density schools are schools in which American Indians/Alaska Natives account for less than 25 percent of the total enrollment. High-density schools are schools in which American Indians/Alaska Natives account for 25 percent or more of the total enrollment.

SOURCE: U.S. Department of Education, National Center for Education Statistics. *The Educational Experiences of American Indian and Alaska Native Students in Grades 4 and 8* (NCES 2008-458). National Assessment of Educational Progress (NAEP), National Indian Education Study (NIES), 2007.

Figure 5.4c. Percentage distribution of 4th- and 8th-grade American Indian/Alaska Native students reporting attendance at American Indian/Alaska Native ceremonies and gatherings: 2007



SOURCE: U.S. Department of Education, National Center for Education Statistics. *The Educational Experiences of American Indian and Alaska Native Students in Grades 4 and 8* (NCES 2008-458). National Assessment of Educational Progress (NAEP), National Indian Education Study (NIES), 2007.

5.5. Traditions and Culture in School

When compared to 4th- and 8th-grade American Indian/Alaska Native students attending low-density schools, higher percentages of students attending high-density schools had teachers who reported that they integrated American Indian/Alaska Native culture and history into their curriculum and principals who reported visits from American Indian/Alaska Native community representatives.

To gather information about school climate in the 2007 National Indian Education Study (NIES), school teachers and principals were asked questions about school curriculum and activities. These included the extent to which American Indian/Alaska Native traditions and culture were integrated into the academic curriculum and the frequency of visits by community representatives to share such traditions and culture.

In this indicator, school density refers to the percentage of American Indian/Alaska Native students enrolled. Low-density schools are schools in which American Indians/Alaska Natives account for less

than 25 percent of the total enrollment. High-density schools are schools in which American Indians/Alaska Natives account for 25 percent or more of the total enrollment.

Teachers were asked about the extent to which they integrated American Indian/Alaska Native culture and history into their curriculum. When compared to 4th- and 8th-grade American Indian/Alaska Native students attending low-density schools, higher percentages of students attending high-density schools had teachers who reported that they integrated American Indian/Alaska Native culture and history into their curriculum at least once a week.

Table 5.5a. Percentage of American Indian/Alaska Native students whose teachers integrated American Indian/Alaska Native culture and history into their curriculum, by school density, grade, curriculum, and frequency: 2007

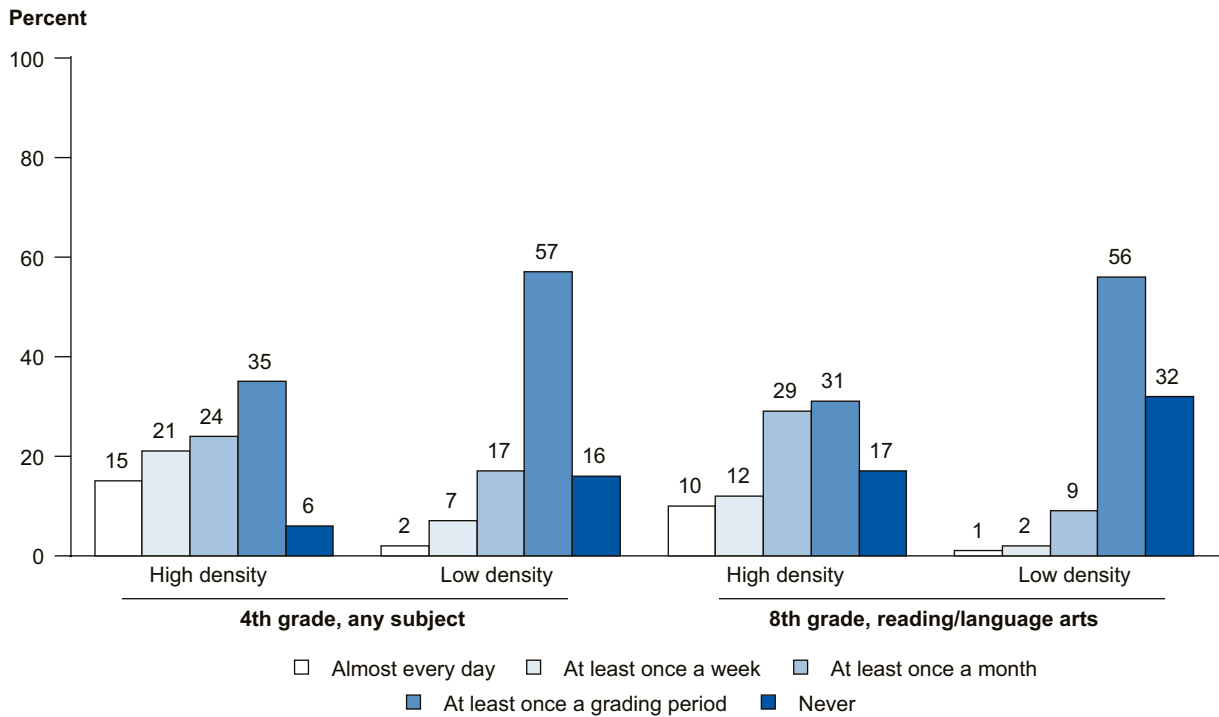
Grade, curriculum, and frequency	Total	School density	
		High	Low
Grade 4 any subject area			
Almost every day	8	15	2
At least once a week	13	21	7
At least once a month	20	24	17
At least once a grading period	47	35	57
Never	11	6	16
Grade 8 reading/language arts			
Almost every day	5	10	1
At least once a week	7	12	2
At least once a month	19	29	9
At least once a grading period	44	31	56
Never	25	17	32
Grade 8 mathematics			
Almost every day	1	3	#
At least once a week	8	16	1
At least once a month	6	11	1
At least once a grading period	17	20	14
Never	68	50	84

Rounds to zero.

NOTE: School density is based on the percent of American Indian/Alaska Native students enrolled in the school. Low-density schools are schools in which American Indians/Alaska Natives account for less than 25 percent of the total enrollment. High-density schools are schools in which American Indians/Alaska Natives account for 25 percent or more of the total enrollment. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics. *The Educational Experiences of American Indian and Alaska Native Students in Grades 4 and 8* (NCES 2008-458). National Assessment of Educational Progress (NAEP), National Indian Education Study (NIES), 2007.

Figure 5.5. Percentage of American Indian/Alaska Native students whose teachers integrated American Indian/Alaska Native culture and history into their curriculum, by grade, curriculum, and frequency: 2007



NOTE: School density is based on the percent of American Indian/Alaska Native students enrolled in the school. Low-density schools are schools in which American Indians/Alaska Natives account for less than 25 percent of the total enrollment. High-density schools are schools in which American Indians/Alaska Natives account for 25 percent or more of the total enrollment. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics. *The Educational Experiences of American Indian and Alaska Native Students in Grades 4 and 8* (NCES 2008-458). National Assessment of Educational Progress (NAEP), National Indian Education Study (NIES), 2007.

At grade 4, school administrators of 31 percent of students attending high-density schools reported that representatives from the American Indian/Alaska Native community visited their schools to share traditions and culture three or more times in the school year, compared to 9 percent in low-density schools. A similar pattern between high-density

schools and low-density schools was seen at grade 8. Administrators of 26 percent of 8th-grade students attending high-density schools reported that opportunities for tribal or community representatives to share traditions or culture occurred three or more times in the school year, compared to 7 percent for low-density schools.

Table 5.5b. Percentage of American Indian/Alaska Native school administrators reporting annual American Indian/Alaska Native community representative involvement in their school, by school density, grade, and frequency: 2007

Grade and frequency of community representative involvement	Total	School density	
		High	Low
Grade 4			
3 or more times	18	31	9
1 or 2 times	32	41	25
Never	45	23	62
Grade 8			
3 or more times	15	26	7
1 or 2 times	28	40	19
Never	51	29	68

NOTE: School density is based on the percent of American Indian/Alaska Native students enrolled in the school. Low-density schools are schools in which American Indians/Alaska Natives account for less than 25 percent of the total enrollment. High-density schools are schools in which American Indians/Alaska Natives account for 25 percent or more of the total enrollment. Detail may not sum to totals because the response choice "I don't know" is not shown.

SOURCE: U.S. Department of Education, National Center for Education Statistics. *The Educational Experiences of American Indian and Alaska Native Students in Grades 4 and 8* (NCES 2008-458). National Assessment of Educational Progress (NAEP), National Indian Education Study (NIES), 2007.

5.6. Principal Perceptions of School Climate

In 2007, schools with a relatively large percentage of American Indian/Alaska Native students had a higher percentage of 4th- and 8th-grade students for whom administrators indicated serious problems with student absenteeism, student tardiness, lack of family involvement, and low expectations than schools with a lower percentage of American Indian/Alaska Native students.

Principals were also asked whether specific conditions, such as student absenteeism, tardiness, health problems, misbehavior, physical conflicts, and drug or alcohol use were problems in their schools. Other school conditions, such as lack of family involvement and low student expectations, were also explored.

In this indicator, school density refers to the percentage of American Indian/Alaska Native students enrolled. Low-density schools are schools in which American Indians/Alaska Natives account for less than 25 percent of the total enrollment. High-density schools are schools in which American Indians/Alaska Natives account for 25 percent or more of the total enrollment.

A higher percentage of American Indian/Alaska Native students in high-density schools had school

administrators who reported specific problems as serious, compared to their peers in low-density schools. The specific problems more frequently reported as serious by administrators of high-density schools included student absenteeism, student tardiness, lack of family involvement, and low expectations. In 2007, administrators of 22 percent of 8th-graders in high-density schools reported student absenteeism as a serious problem, compared to administrators of 5 percent of 8th-graders in low-density schools. Administrators of 35 percent of 8th-graders in high-density schools reported lack of family involvement in school as a serious problem, compared to administrators of 12 percent of 8th-graders in low-density schools. Student misbehavior was also identified as a serious problem by a larger percentage of administrators of 8th-graders in high density schools (11 percent) than low density schools (1 percent).

Table 5.6. Percentage of American Indian/Alaska Native students, by the severity of problems reported by school administrators, density of the American Indian/Alaska Native schools, grade, and types of problems in school: 2007

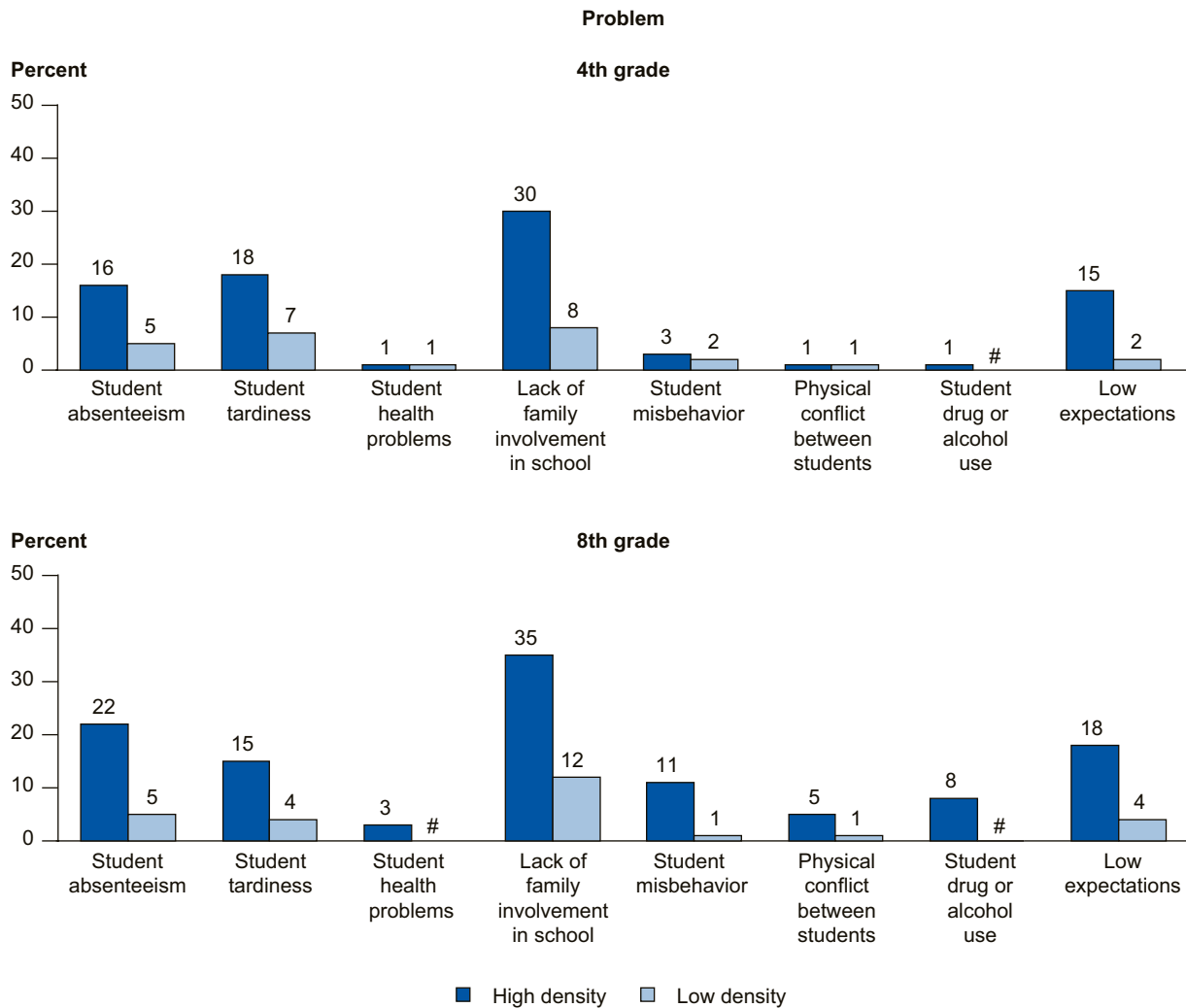
Grade and problem	Moderate problem			Serious problem		
	Total	School density		Total	School density	
		High	Low		High	Low
Grade 4						
Student absenteeism	24	34	17	9	16	5
Student tardiness	29	37	24	12	18	7
Student health problems	17	29	8	1	1	1
Lack of family involvement in school	38	42	35	17	30	8
Student misbehavior	17	22	13	2	3	2
Physical conflict between students	8	11	6	1	1	1
Student drug or alcohol use	3	6	1	1	1	#
Low expectations	21	31	14	8	15	2
Grade 8						
Student absenteeism	31	40	24	12	22	5
Student tardiness	30	37	24	9	15	4
Student health problems	15	23	8	1	3	#
Lack of family involvement in school	44	47	41	23	35	12
Student misbehavior	30	35	26	6	11	1
Physical conflict between students	12	13	12	3	5	1
Student drug or alcohol use	16	25	9	4	8	#
Low expectations	32	39	26	10	18	4

Rounds to zero.

NOTE: School density indicates the percent of American Indian/Alaska Native students enrolled. Low-density schools are schools where American Indians/Alaska Natives account for less than 25 percent of the total population. High-density schools are schools where American Indians/Alaska Natives account for 25 percent or more of the total population. Percentages do not sum to 100 percent because the "Not a problem" and "Minor problem" categories are not shown.

SOURCE: U.S. Department of Education, National Center for Education Statistics. *The Educational Experiences of American Indian and Alaska Native Students in Grades 4 and 8* (NCES 2008-458). National Assessment of Educational Progress (NAEP), National Indian Education Study (NIES), 2007.

Figure 5.6. Percentage of American Indian/Alaska Native 4th- and 8th-grade students whose school administrators indicated specific issues were serious problems, by grade and density of American Indian/Alaska Native schools: 2007



NOTE: School density indicates the percent of American Indian/Alaska Native students enrolled. Low-density schools are schools where American Indians/Alaska Natives account for less than 25 percent of the total enrollment. High-density schools are schools where American Indians/Alaska Natives account for 25 percent or more of the total enrollment. Percentages do not sum to 100 percent because the “Not a problem”, “Minor problem” and “Moderate problem” categories are not shown. SOURCE: U.S. Department of Education, National Center for Education Statistics. *The Educational Experiences of American Indian and Alaska Native Students in Grades 4 and 8* (NCES 2008-458). National Assessment of Educational Progress (NAEP), National Indian Education Study (NIES), 2007.

5.7. Alcohol, Tobacco, and Drug Use

In 2006, some 21 percent of American Indian/Alaska Native children between the ages of 12 and 17 had used alcohol in the past month. A higher percentage of American Indian/Alaska Native children had smoked cigarettes in the past month than children of any other racial/ethnic group.

In 2006, 21 percent of American Indian/Alaska Native children between the ages of 12 and 17 reported the use of alcohol in the past month. A higher percentage of American Indian/Alaska Native children reported use of alcohol in the past month compared to the percentage reported by Black (11 percent) and Asian (8 percent) children.

A higher percentage of American Indians/Alaska Natives between the ages of 12 and 17 smoked cigarettes in the past month (21 percent), compared to their White, Black, Hispanic, and Asian peers (12 percent, 6 percent, 8 percent, and 5 percent, respectively). Among 12- to 17-year olds, a higher percentage of American Indians/Alaska Natives (11 percent) than Hispanics (6 percent) and Asians (3 percent) had used marijuana in the past month.

Table 5.7. Percentage of children ages 12–17 who used alcohol, smoked cigarettes, or used marijuana, by selected time period and race/ethnicity: 2006

Race/ethnicity	Alcohol		Cigarettes		Marijuana	
	Lifetime ¹	Past month	Lifetime ¹	Past month	Lifetime ¹	Past month
Total²	40.4	16.6	25.8	10.4	17.3	6.7
White	43.1	19.2	28.5	12.4	17.8	7.1
Black	34.4	10.5	20.0	6.0	16.6	6.5
Hispanic	39.5	15.3	24.3	8.2	17.1	5.8
Asian	27.4	7.6	14.7	5.2	9.3	3.2
American Indian/Alaska Native	47.3	20.5	40.2	21.2	‡	11.3

‡ Reporting standards not met.

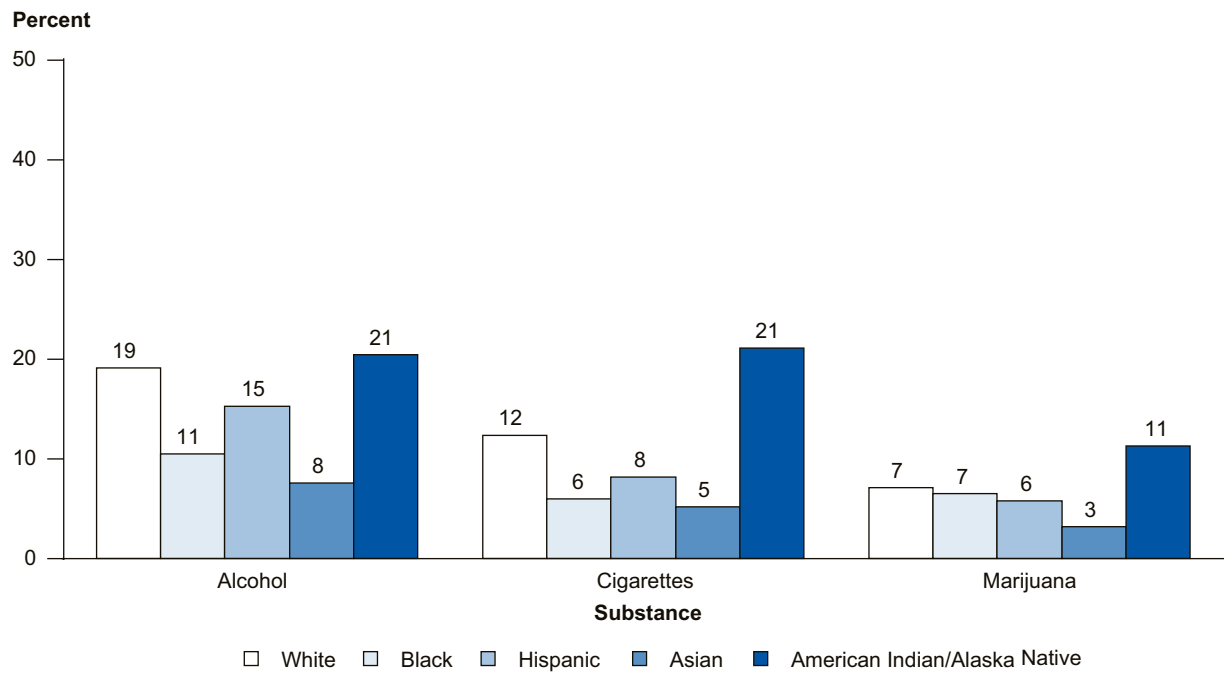
¹ Lifetime use indicates use at least once in the respondent's lifetime.

² Total includes race/ethnicity categories not separately shown.

NOTE: Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies, National Survey on Drug Use and Health, 2006.

Figure 5.7. Percentage of children ages 12–17 who used alcohol, smoked cigarettes, or used marijuana in the past month, by race/ethnicity: 2006



NOTE: Race categories exclude persons of Hispanic ethnicity. Data are graphed using unrounded estimates while the value labels are rounded.

SOURCE: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies, National Survey on Drug Use and Health, 2006.

5.8. Violence on School Grounds

In 2005, twenty-two percent of American Indian/Alaska Native students in grades 9–12 reported having been in a physical fight on school property in the past 12 months.

In 2005, a higher percentage of American Indian/Alaska Native students in grades 9–12 (22 percent) reported being in a fight on school property than their White (12 percent) and Asian peers (6 percent) in the past 12 months. However, there was no measurable difference between the percentage of American Indian/Alaska Native students who reported being in a fight and the percentage of Black (17 percent) and Hispanic students (18 percent) who reported doing so over the same period in 2005.

There were no measurable differences between the percentage of American Indian/Alaska Native students who reported being threatened or injured

with a weapon in the past 12 months and the percentages of White, Black, Hispanic, and Asian students who reported being threatened or injured with a weapon over the same period.

In addition, there were no measurable differences in the percentages of students who reported that they carried a weapon to school on at least 1 day during the previous 30 days for American Indians/Alaska Natives and their White, Black, and Hispanic peers. However, a higher percentage of American Indian/Alaska Native students (7 percent) than Asian students (3 percent) reported carrying a weapon to school in the previous 30 days.

Table 5.8. Percentage of students in grades 9–12 who reported that they were threatened or injured with a weapon on school property, engaged in a physical fight on school property, or carried a weapon to school, by race/ethnicity: 2005

Race/ethnicity	Engaged in a physical fight ¹	Were threatened or injured with a weapon ¹	Carried a weapon ²
Total	13.6	7.9	6.5
White	11.6	7.2	6.1
Black	16.9	8.1	5.1
Hispanic	18.3	9.8	8.2
Asian	5.9	4.6	2.8!
Native Hawaiian/Pacific Islander	24.5	14.5!	15.4!
American Indian/Alaska Native	22.0	9.8	7.2
More than one race	15.8	10.7	11.9

! Interpret data with caution.

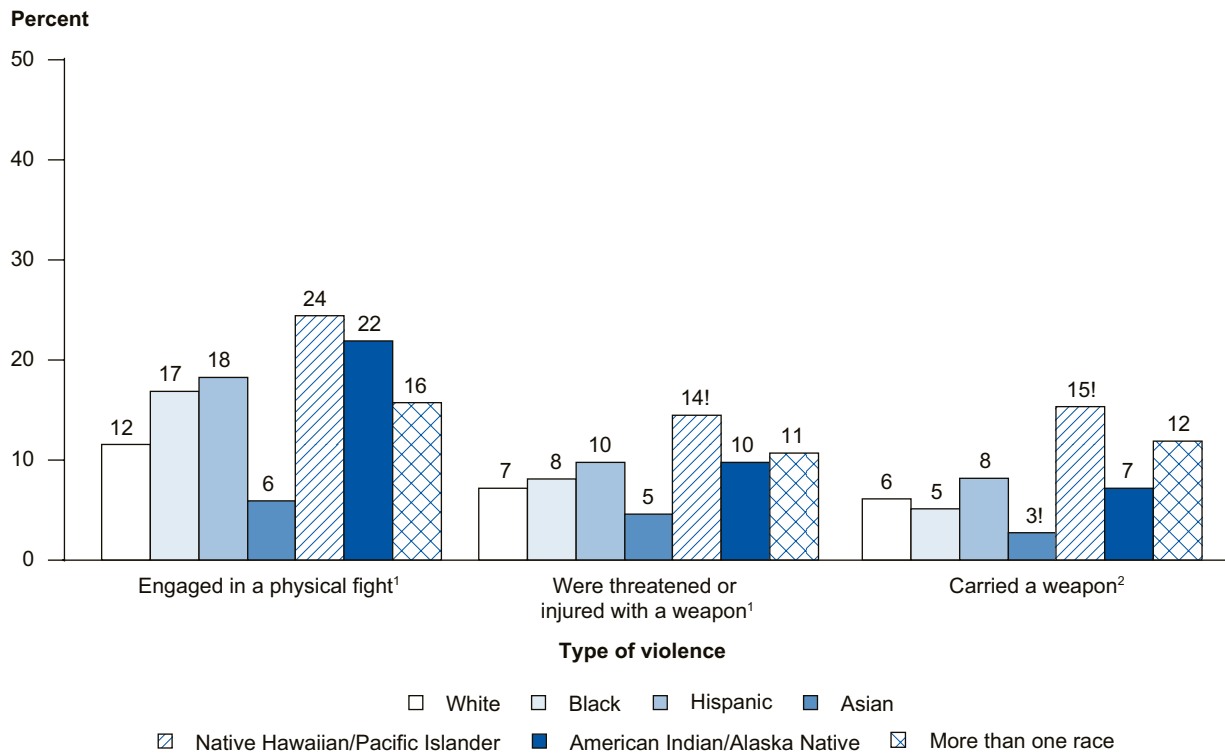
¹ In the past 12 months.

² At least 1 day during the previous 30 days.

NOTE: Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Youth Risk Behavior Surveillance System (YRBSS), 2005.

Figure 5.8. Percentage of students in grades 9–12 who reported that they engaged in a physical fight on school property, were threatened or injured with a weapon on school property, or carried a weapon to school, by race/ethnicity: 2005



! Interpret data with caution.

¹ In the past 12 months.

² At least 1 day during the previous 30 days.

NOTE: Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Youth Risk Behavior Surveillance System (YRBSS), 2005.

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CHAPTER III

Postsecondary Education

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6 Postsecondary Education

This section contains indicators that examine the postsecondary education of American Indians/Alaska Natives; indicators on college access, college completion, types of degrees earned, and faculty composition are presented. College access is measured by indicators on enrollment in 2- and 4-year institutions, as well as by attendance at tribal colleges. College completion is measured by degrees

earned at the associate's, bachelor's, master's, and doctoral levels. Comparative information is also presented on the fields of study in which degrees are earned. Data on the distribution of faculty by race/ethnicity provide some additional information about the social context of American Indian/Alaska Native college education.

6.1. Enrollment in Colleges and Universities

Enrollment of American Indian/Alaska Native students in colleges and universities more than doubled in the past 30 years. In 2006, American Indian/Alaska Native students accounted for 1 percent of total enrollment in colleges and universities.

American Indian/Alaska Native enrollment in public and private degree-granting institutions more than doubled between 1976 and 2006.²⁰ In 1976, about 76,100 American Indians/Alaska Natives were enrolled in colleges and universities. Enrollment grew steadily from 1976, reaching 102,800 in 1990 and 151,200 in 2000. Enrollments continued to increase after 2000, and by 2006, 181,100 American Indian/Alaska Native students were enrolled in higher education (*appendix table A-6.1a*).

Of American Indian/Alaska Native students enrolled in public and private degree-granting institutions in 2006, more than half were enrolled in 4-year institutions. In contrast, between 1976 and 1994, more American Indians/Alaska Natives were enrolled in 2-year postsecondary institutions than in 4-year postsecondary institutions (*appendix table A-6.1a*). During the late 1990s, the number of American

Indian/Alaska Native students enrolled in 4-year institutions began to surpass the number in 2-year institutions. In 2006, a smaller percentage of American Indians/Alaska Natives between the ages of 18 and 24 were enrolled in colleges or universities than their White and Asian peers. Twenty-six percent of American Indian/Alaska Native 18- to 24-year olds were enrolled in college or universities, compared with 41 percent of Whites, 33 percent of Blacks, 27 percent of Hispanics, and 58 percent of Asians.

American Indians/Alaska Natives comprised 1.1 percent of the total college and university enrollment in 2006, an increase from 0.7 percent in 1976. College and university enrollment became much more diverse over these years. Minorities, including American Indians/Alaska Natives, represented 16 percent of the total enrollment in 1976, whereas they represented 33 percent of the total enrollment in 2006.

Table 6.1a. Percentage distribution of students enrolled in public and private degree-granting institutions, by type of institution and race/ethnicity: Selected years, 1976 through 2006

Race/ethnicity	1976			1980			1990			2000			2006		
	Total	2-year	4-year	Total	2-year	4-year	Total	2-year	4-year	Total	2-year	4-year	Total	2-year	4-year
White	84.3	80.2	86.6	83.5	79.8	85.7	79.9	76.4	82.0	70.8	64.9	74.6	67.4	61.8	70.8
Total minority	15.7	19.8	13.4	16.5	20.2	14.3	20.1	23.6	18.0	29.2	35.1	25.4	32.6	38.2	29.2
Black	9.6	11.2	8.7	9.4	10.6	8.7	9.3	10.1	8.8	11.7	12.5	11.2	13.3	14.3	12.7
Hispanic	3.6	5.5	2.5	4.0	5.7	3.0	5.8	8.2	4.3	9.9	14.4	6.9	11.4	15.8	8.8
Asian/Pacific Islander	1.8	2.1	1.7	2.4	2.8	2.2	4.3	4.2	4.3	6.6	6.9	6.5	6.8	6.9	6.7
American Indian/Alaska Native	0.7	1.1	0.5	0.7	1.1	0.5	0.8	1.1	0.6	1.0	1.3	0.9	1.1	1.3	0.9

NOTE: Race categories exclude persons of Hispanic ethnicity. Data from 1976 to 1996 are for institutions of higher education that were accredited by an agency or association that was recognized by the U.S. Department of Education, or recognized directly by the Secretary of Education. Data from 1996 and later years are for degree-granting institutions. The new degree-granting classification is very similar to the earlier higher education classification, except that it includes some additional institutions, primarily 2-year colleges, and excludes a few higher education institutions that did not award associate's or higher degrees. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics*, 2007, based on Higher Education General Information Survey (HEGIS), "Fall Enrollment in Colleges and Universities," 1976 and 1980; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment Survey," 1990, Spring 2001, and Spring 2007.

²⁰ Data from 1976 to 1996 are for institutions of higher education that were accredited by an agency or association that was recognized by the U.S. Department of Education, or recognized directly by the Secretary of Education. Data from 1996 and later years are for degree-granting institutions. The new degree-granting classification is very similar to the earlier higher education classification, except that it includes some additional institutions, primarily 2-year colleges, and excludes a few higher education institutions that did not award associate's or higher degrees.

In 2006, a smaller percentage of American Indians/Alaska Natives between the ages of 18 and 24 were enrolled in colleges or universities than their White and Asian peers. Twenty-six percent of American Indian/Alaska Native 18- to 24-year olds were enrolled in college or universities, compared with 41 percent of Whites, 33 percent of Blacks, 27 percent of Hispanics, and 58 percent of Asians.

Although the percentages of American Indians/Alaska Natives enrolled in colleges or universities appear to fluctuate between 1996 and 2006, the differences in these percentages are not measurably different.

Table 6.1b. Percentage of 18- to 24-year-olds enrolled in colleges or universities, by race/ethnicity: Selected years, October 1996 to 2006

Race/ethnicity	1996	2004	2005	2006
Total¹	35.5	38.0	38.9	37.3
White	39.5	41.7	42.8	41.0
Black	27.4	31.8	33.1	32.6
Hispanic	20.1	24.7	24.8	23.6
Asian ²	53.9	60.6	61.0	58.3
Native Hawaiian/Pacific Islander	—	55.8	50.6	39.1
American Indian/Alaska Native	30.3	24.4	27.8	26.2

— Not available.

¹ Total includes other race/ethnicity categories not separately shown. Race categories exclude persons of Hispanic ethnicity.

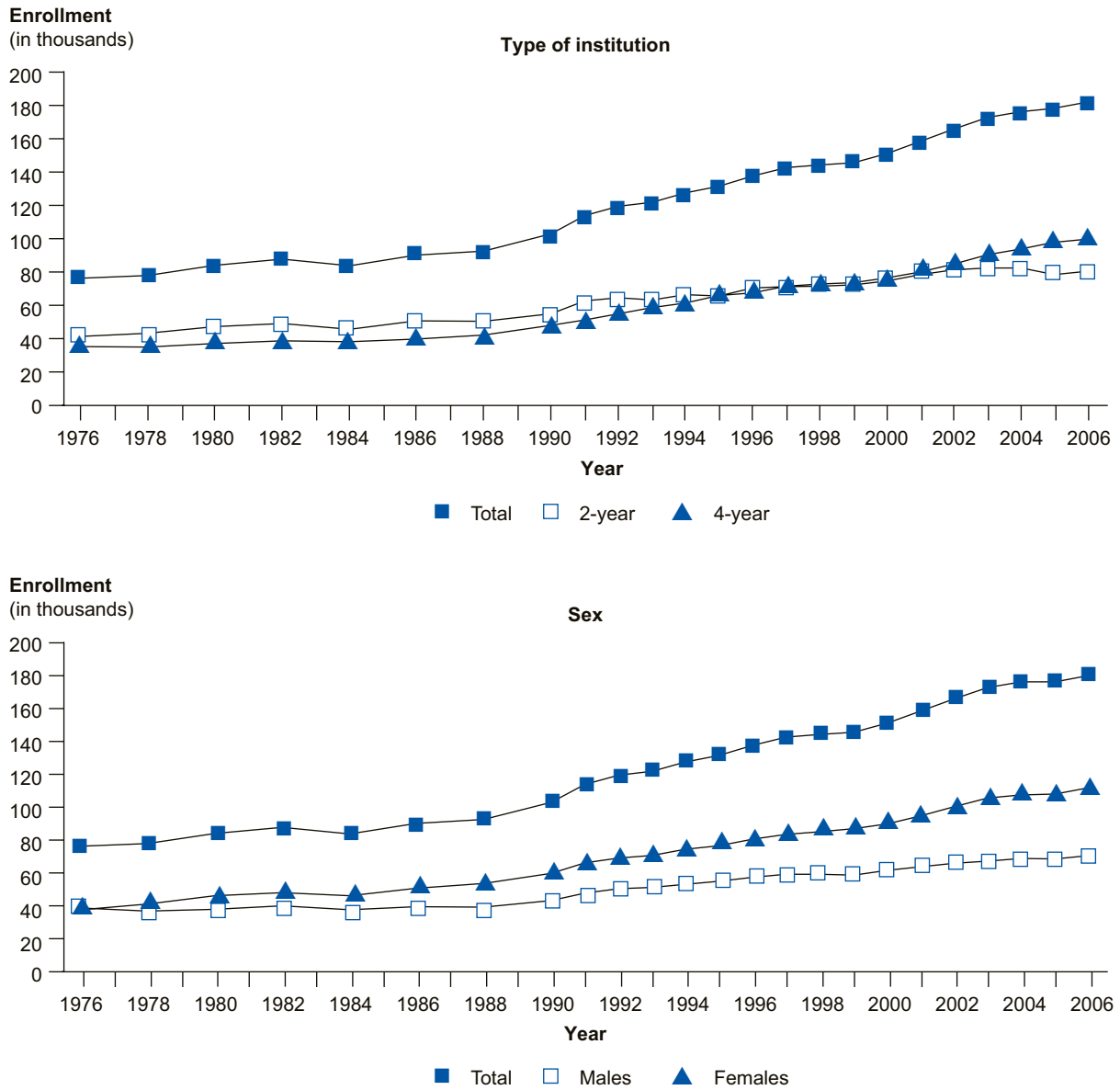
² Data for 1996 includes Pacific Islanders.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey, Selected years, October 1996 to 2006.

Between 1976 and 2006, college and university enrollment of male and female American Indians/Alaska Natives grew at different rates. In 1976, there was near parity in the number of American Indian/Alaska Native males and females enrolled in degree-granting colleges and universities (38,500 and 37,600, respectively). By 1978, the number of American Indian/Alaska Native females enrolled in colleges and universities exceeded the number of American Indian/Alaska Native males enrolled.

In 2006, 111,000 American Indian/Alaska Native females (61 percent) and 71,200 males (39 percent) were enrolled in colleges and universities, a difference of 21 percentage points. Only among Blacks was there a gender gap larger than that among American Indians/Alaska Natives: 30 percentage points separated the percentages of enrollment for Black females (65 percent) and males (35 percent) in 2006 (*appendix table A-6.1b*).

Figure 6.1. American Indian/Alaska Native enrollment in public and private degree-granting institutions, by type of institution and sex: Selected years, 1976 through 2006



NOTE: Race categories exclude persons of Hispanic ethnicity. Data from 1976 to 1996 are for institutions of higher education that were accredited by an agency or association that was recognized by the U.S. Department of Education, or recognized directly by the Secretary of Education. Data from 1996 and later years are for degree-granting institutions. The new degree-granting classification is very similar to the earlier higher education classification, except that it includes some additional institutions, primarily 2-year colleges, and excludes a few higher education institutions that did not award associate's or higher degrees. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2007*, based on Higher Education General Information Survey (HEGIS), "Fall Enrollment in Colleges and Universities," 1976 through 1986; and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment Survey," 1987 through 1999, and Spring 2001 through Spring 2007.

6.2. Tribally Controlled Colleges

Total enrollment in tribally controlled colleges was over 17,000 in fall 2006.

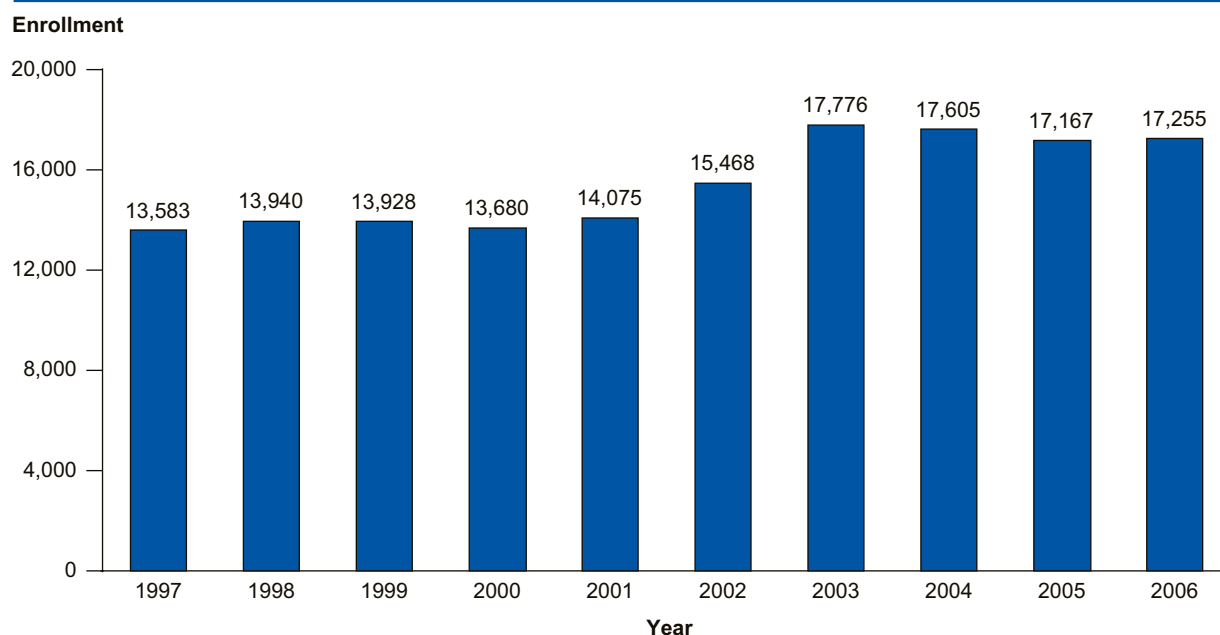
In 2006, there were 32 tribally controlled colleges and universities. They were located in 12 states; the majority were scattered across the West and Midwest, and one was located in Alaska. Seven of these colleges and universities were 4-year institutions, and 25 were 2-year institutions.

Tribally controlled colleges and universities share many characteristics with each other that differentiate them from most colleges and universities. Tribally controlled colleges and universities are designed to foster environments focused on American Indian culture in order to preserve, enhance, and promote American Indian languages and traditions (Cahalan et al. 1998). They are intended to create learning opportunities for students with unique needs. For example, students at these institutions are generally older than 24 years of age. Also, tribally controlled colleges may function as community

resources, providing social services to reservations in isolated areas (American Indian Higher Education Consortium 2005).

The total enrollment in tribally controlled colleges and universities increased by 23 percent, from 14,100 in fall 2001 to 17,300 in fall 2006 (*appendix table A-6.2*). In 2006, some 13,600 students in tribally controlled colleges and universities were American Indian/Alaska Native, representing 79 percent of total enrollment. Eight percent of all American Indian/Alaska Native college students were enrolled in tribally controlled colleges and universities.²¹ American Indian/Alaska Native enrollment in tribally controlled colleges and universities increased at a faster rate between 2001 and 2006 than did American Indian/Alaska Native college and university enrollment generally (17 percent vs. 15 percent; data not shown).

Figure 6.2. Enrollment in tribally controlled colleges: Fall 1997 through fall 2006



SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2007*, based on Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment Survey," 1997 through 1999, and Spring 2001 through Spring 2007.

²¹ 181,100 American Indian/Alaska Natives were enrolled in degree-granting institutions (Table A-6.1a) of which 13,600 were enrolled in tribally controlled colleges and universities (Table 6.2).

Table 6.2. Enrollment in tribally controlled colleges and number and percentage of students who are American Indians/Alaska Natives: Fall 2006

Tribally controlled college	Location	Type of college	Total	Number American Indian/Alaska Native	Percent American Indian/Alaska Native
Total			17,255	13,635	79.0
Bay Mills Community College	Brimlay, MI	2 year	550	325	59.1
Blackfeet Community College	Browning, MT	2 year	467	442	94.6
Cankdeska Cikana Community College	Fort Totten, ND	2 year	233	219	94.0
Chief Dull Knife College ¹	Lame Deer, MT	2 year	359	285	79.4
College of the Menominee Nation	Kashena, WI	2 year	513	427	83.2
Diné College	Tsaile, AZ	2 year	1,669	1,635	98.0
Fond du Lac Tribal and Community College	Cloquet, MN	2 year	2,181	310	14.2
Fort Belknap College	Harlem, MT	2 year	161	148	91.9
Fort Berthold Community College	New Town, ND	2 year	196	190	96.9
Fort Peck Community College	Poplar, MT	2 year	441	369	83.7
Haskell Indian Nations University	Lawrence, KS	4 year	889	889	100.0
Ilisagvik College	Barrow, AK	2 year	203	138	68.0
Institute of American Indian Arts ²	Santa Fe, NM	4 year	192	174	90.6
Lac Courte Oreilles Ojibwa Community College	Hayward, WI	2 year	574	454	79.1
Leech Lake Tribal College	Cass Lake, MN	2 year	198	172	86.9
Little Big Horn College	Crow Agency, MT	2 year	312	290	92.9
Little Priest Tribal College	Winnebago, NE	2 year	95	82	86.3
Navajo Technical College ³	Crownpoint, NM	2 year	392	388	99.0
Nebraska Indian Community College	Macy, NE	2 year	115	105	91.3
Northwest Indian College	Bellingham, WA	2 year	623	506	81.2
Oglala Lakota College	Kyle, SD	4 year	1,485	1,355	91.2
Saginaw Chippewa Tribal College	Mount Pleasant, MI	2 year	125	108	86.4
Salish Kootenai College	Pablo, MT	4 year	1,092	866	79.3
Sinte Gleska University	Rosebud, SD	4 year	969	778	80.3
Sisseton Wahpeton Community College	Sisseton, SD	2 year	279	251	90.0
Sitting Bull College	Fort Yates, ND	4 year	286	254	88.8
Southwestern Indian Polytechnic Institute	Albuquerque, NM	2 year	561	561	100.0
Stone Child College	Box Elder, MT	2 year	397	370	93.2
Tohono O'odham Community College	Sells, AZ	2 year	198	195	98.5
Turtle Mountain Community College	Belcourt, ND	4 year	788	739	93.8
United Tribes Technical College	Bismarck, ND	2 year	606	543	89.6
White Earth Tribal and Community College	Mahnomen, MN	2 year	106	67	63.2

¹ Previously named Dull Knife Memorial College.

² Congressionally chartered under the name Institute of American Indian and Alaska Native Culture.

³ Previously named Crownpoint Institute of Technology.

NOTE: These colleges are, with few exceptions, tribally controlled and located on reservations. They are all members of the American Indian Higher Education Consortium. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Totals include persons of other racial/ethnic categories not separately shown. SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2007*, based on Integrated Postsecondary Education Data System (IPEDS), Fall 2006.

6.3. Financial Aid

In the 2003–04 school year, 82 percent of American Indian/Alaska Native full-time, full-year undergraduates received financial aid.

In the 2003–04 school year, 82 percent of American Indian/Alaska Native full-time, full-year undergraduates received financial aid of some kind.²² During that school year, a smaller percentage of Whites (74 percent), Asians/Pacific Islanders (66 percent), and Hispanics (81 percent) than American Indians/Alaska Natives received financial aid. A larger percentage of Black (89 percent) students received financial aid than did American Indian/Alaska Native students.

American Indians/Alaska Natives receiving financial aid were awarded, on average, \$9,500 for the 2003–04 school year. During that school year, generally, the average amount of financial aid received by American Indian/Alaska Native students was not measurably different from the average amount of aid received by students in all other racial/ethnic groups.

Table 6.3a. Percentage of full-time, full-year undergraduates receiving financial aid from any source, by race/ethnicity: 2003–04

Race/ethnicity	Percent
Total¹	76.1
White	74.0
Black	89.2
Hispanic	80.7
Asian/Pacific Islander	66.1
American Indian/Alaska Native	81.9

¹ Total includes other race/ethnicity categories not separately shown.

NOTE: Students may receive aid from multiple sources. Financial aid includes assistance in the form of grants, loans, work study, or any other type of aid, including PLUS loans (loans to parents). Data include undergraduates in degree-granting and non-degree-granting institutions. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

²² Financial aid includes assistance in the form of grants, loans, workstudy, or any other type of aid.

Table 6.3b. Average amount of financial aid awarded from any source per full-time, full-year undergraduate student, by type of aid and race/ethnicity: 2003–04

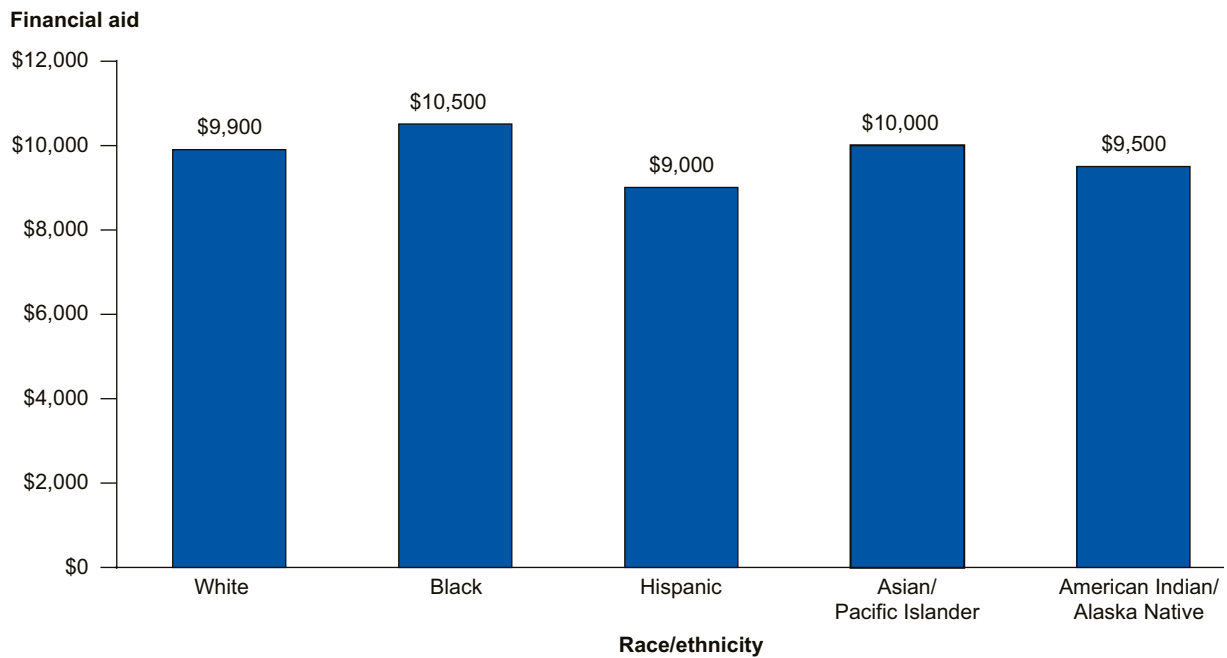
Type of aid and race/ethnicity	Average per student
Any aid	
Total¹	\$9,900
White	9,900
Black	10,500
Hispanic	9,000
Asian/Pacific Islander	10,000
American Indian/Alaska Native	9,500
Grants	
Total¹	\$5,600
White	5,500
Black	5,700
Hispanic	5,400
Asian/Pacific Islander	6,700
American Indian/Alaska Native	5,400
Loans	
Total¹	\$7,300
White	7,400
Black	7,100
Hispanic	7,000
Asian/Pacific Islander	7,100
American Indian/Alaska Native	6,900

¹ Total includes other race/ethnicity categories not separately shown.

NOTE: All dollar values are in 2003–04 dollars. Students may receive aid from multiple sources. Financial aid includes assistance in the form of grants, loans, work study, or any other type of aid, including PLUS loans (loans to parents). Data include undergraduates in degree-granting and non-degree-granting institutions. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

Figure 6.3. Average amount of financial aid awarded from any source per full-time, full-year undergraduate student, by race/ethnicity: 2003–04



NOTE: All dollar values are in 2003–04 dollars. Students may receive aid from multiple sources. Financial aid includes assistance in the form of grants, loans, work study, or any other type of aid, including PLUS loans (loans to parents). Data include undergraduates in degree-granting and non-degree-granting institutions. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

6.4. Degrees Conferred by Degree-Granting Institutions

The number of American Indians/Alaska Natives earning degrees has more than doubled for each degree level since 1976.

Between the 1976–77 and 2005–06 school years, the number of degrees awarded by colleges and universities to American Indians/Alaska Natives more than doubled for each degree level. In 1976–77, 2,500 associate’s degrees were conferred to American Indians/Alaska Natives. The number steadily increased to 5,600 by 1995–96. The number of associate’s degrees awarded to American Indians/Alaska Natives rose 53 percent between 1995–96 and 2005–06, reaching 8,600 in 2005–06. By comparison, the number of associate’s degrees awarded to all students rose by 28 percent during this time (U.S. Department of Education 2008).

This was also the pattern for the number of bachelor’s degrees earned by American Indians/Alaska Natives. In 1976–77, around 3,300 bachelor’s degrees were awarded to American Indians/Alaska Natives; by 1995–96, the number increased to 7,000, and in 2005–06, the number reached 11,000 bachelor’s degrees (*appendix table A-6.4*). The percentage increase for the number of bachelor’s degrees awarded to American Indians/Alaska Natives between 1995–96 and 2005–06 was 57 percent, compared to 28 percent for the total population (U.S. Department of Education 2008).

The number of post-baccalaureate degrees awarded to American Indians/Alaska Natives also increased between 1976–77 and 2005–06: from 970 to 3,500 for master’s degrees, from 100 to 230 for doctoral degrees, and from 200 to 710 for first-professional degrees²³ (*appendix table A-6.4*).

Between 1976–77 and 2005–06, American Indians/Alaska Natives earned a slightly increasing share of the degrees at every level. In 1976–77, American Indians/Alaska Natives received 0.6 percent of all the associate’s degrees awarded, 0.4 percent of all bachelor’s degrees, and 0.3 percent each of all master’s, doctoral, and first-professional degrees. These percentages increased to 1.2 percent of associate’s degrees, 0.8 percent of bachelor’s degrees, 0.7 percent of master’s degrees, 0.6 percent of doctoral degrees, and 0.8 percent of first-professional degrees awarded in 2005–06 (*appendix table A-6.4*).

In the 2005–06 school year, American Indians/Alaska Natives earned a higher percentage of bachelor’s degrees than associate’s degrees. Of the total number of American Indians/Alaska Natives awarded degrees, 46 percent earned bachelor’s degrees and 36 percent earned associate’s degrees. Of American Indian/Alaska Native degree earners, 49 percent of males earned bachelor’s degrees and 32 percent earned associate’s degrees, while 44 percent of females earned bachelor’s degrees and 38 percent earned associate’s degrees.

Since the 1980–81 school year, the number of associate’s, bachelor’s, and master’s degrees awarded each year to American Indian/Alaska Native females has exceeded the number of degrees awarded to American Indian/Alaska Native males. In 2005–06, more degrees were awarded at all levels to American Indian/Alaska Native females (15,300) than American Indian/Alaska Native males (8,700).

²³ A degree that signifies both completion of the academic requirements for beginning practice in a given profession and a level of professional skill beyond that normally required for a bachelor’s degree. This degree usually is based on a program requiring at least 2 academic years of work prior to entrance and a total of at least 6 academic years of work to complete the degree program, including both prior required college work and the professional program itself. First-professional degrees are awarded in the fields of dentistry, medicine, optometry, osteopathic medicine, pharmacy, podiatric medicine, veterinary medicine, chiropractic, law, and theological professions.

Table 6.4. Number and percentage distribution of degrees conferred by degree-granting institutions, by level of degree, race/ethnicity, and sex: 2005–06

Race/ethnicity, sex, and level of degree	Total	Associate's	Bachelor's	Master's	Doctoral	First-professional ¹
Number of degrees						
Total degrees conferred²	2,936,095	713,066	1,485,242	594,065	56,067	87,655
White	2,049,406	485,297	1,075,561	393,357	31,601	63,590
Male	856,763	190,139	467,467	150,954	14,659	33,544
Female	1,192,643	295,158	608,094	242,403	16,942	30,046
Black	300,525	89,784	142,420	58,976	3,122	6,223
Male	96,028	27,619	48,079	16,959	1,081	2,290
Female	204,497	62,165	94,341	42,017	2,041	3,933
Hispanic	227,208	80,854	107,588	32,438	1,882	4,446
Male	86,440	30,040	41,814	11,637	826	2,123
Female	140,768	50,814	65,774	20,801	1,056	2,323
Asian/Pacific Islander	185,508	35,201	102,376	34,029	3,257	10,645
Male	82,032	14,224	45,809	15,803	1,555	4,641
Female	103,476	20,977	56,567	18,226	1,702	6,004
American Indian/Alaska Native	23,936	8,552	10,940	3,504	230	710
Male	8,658	2,774	4,203	1,244	105	332
Female	15,278	5,778	6,737	2,260	125	378
Percentage distribution						
Total degrees conferred²	100.0	24.3	50.6	20.2	1.9	3.0
White	100.0	23.7	52.5	19.2	1.5	3.1
Male	100.0	22.2	54.6	17.6	1.7	3.9
Female	100.0	24.7	51.0	20.3	1.4	2.5
Black	100.0	29.9	47.4	19.6	1.0	2.1
Male	100.0	28.8	50.1	17.7	1.1	2.4
Female	100.0	30.4	46.1	20.5	1.0	1.9
Hispanic	100.0	35.6	47.4	14.3	0.8	2.0
Male	100.0	34.8	48.4	13.5	1.0	2.5
Female	100.0	36.1	46.7	14.8	0.8	1.7
Asian/Pacific Islander	100.0	19.0	55.2	18.3	1.8	5.7
Male	100.0	17.3	55.8	19.3	1.9	5.7
Female	100.0	20.3	54.7	17.6	1.6	5.8
American Indian/Alaska Native	100.0	35.7	45.7	14.6	1.0	3.0
Male	100.0	32.0	48.5	14.4	1.2	3.8
Female	100.0	37.8	44.1	14.8	0.8	2.5

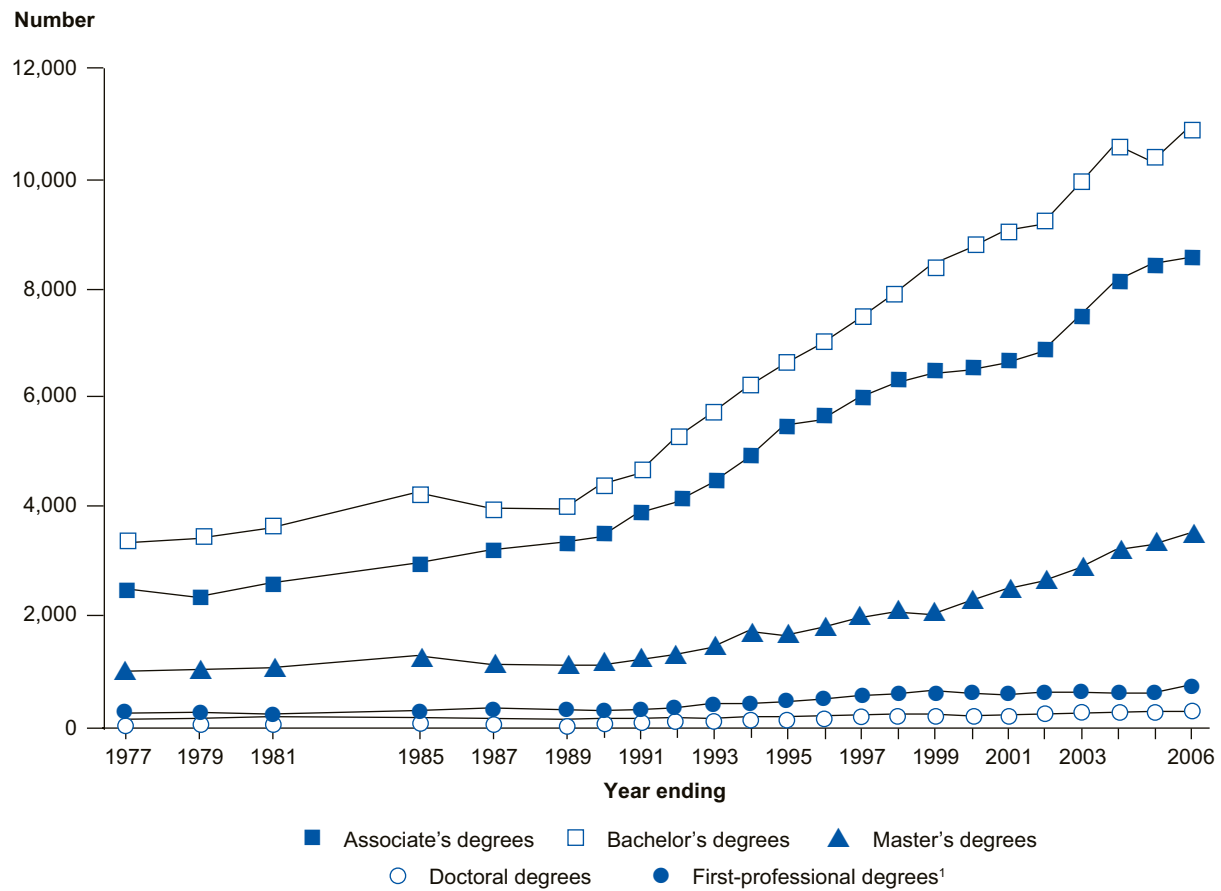
¹ A degree that signifies both completion of the academic requirements for beginning practice in a given profession and a level of professional skill beyond that normally required for a bachelor's degree. This degree usually is based on a program requiring at least 2 academic years of work prior to entrance and a total of at least 6 academic years of work to complete the degree program, including both prior required college work and the professional program itself. First-professional degrees are awarded in the fields of dentistry, medicine, optometry, osteopathic medicine, pharmacy, podiatric medicine, veterinary medicine, chiropractic, law, and theological professions.

² Totals include degrees conferred to nonresident aliens who are not shown in the table.

NOTE: Race categories exclude persons of Hispanic ethnicity. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2007*, based on 2005–06 Integrated Postsecondary Education Data System (IPEDS), Fall 2006.

Figure 6.4. Number of degrees awarded to American Indian/Alaska Native students, by level of degree: 1976–77 to 2005–06



¹ A degree that signifies both completion of the academic requirements for beginning practice in a given profession and a level of professional skill beyond that normally required for a bachelor's degree. This degree usually is based on a program requiring at least 2 academic years of work prior to entrance and a total of at least 6 academic years of work to complete the degree program, including both prior required college work and the professional program itself. First-professional degrees are awarded in the fields of dentistry, medicine, optometry, osteopathic medicine, pharmacy, podiatric medicine, veterinary medicine, chiropractic, law, and theological professions.

NOTE: For the years 1984–85 to 2005–06, reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to impute race/ethnicity for students whose race/ethnicity was not reported. Some data may have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2007*, based on Higher Education General Information Survey (HEGIS), "Degrees and Other Formal Awards Conferred," 1976–77 through 1984–85; and 1986–87 through 2005–06 Integrated Postsecondary Education Data System, "Completions Survey" (IPEDS-C:87–99), and Fall 2000 through Fall 2006.

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6.5. Bachelor's Degrees Earned by Field

While a greater percentage of American Indian/Alaska Native students earned their bachelor's degrees in business than in other fields in the 2005–06 school year, the percentage who earned their degrees in business was smaller than that of all students.

In the 2005–06 school year, business, education, and social sciences were the most popular majors among American Indians/Alaska Natives earning bachelor's degrees. Nineteen percent of American Indian/Alaska Native college and university graduates studied business, while 12 percent studied a social science or history and 8 percent studied education. Compared with 2005–06 graduates in general, American Indians/Alaska Natives earned a smaller percentage

of business and communications degrees and a larger percentage of education and social science degrees. There was a difference of less than 0.5 percent between the percentage of American Indians/Alaska Natives and the percentage of the total population earning degrees in visual and performing arts, health professions and related clinical sciences, biological and biomedical sciences, and psychology.

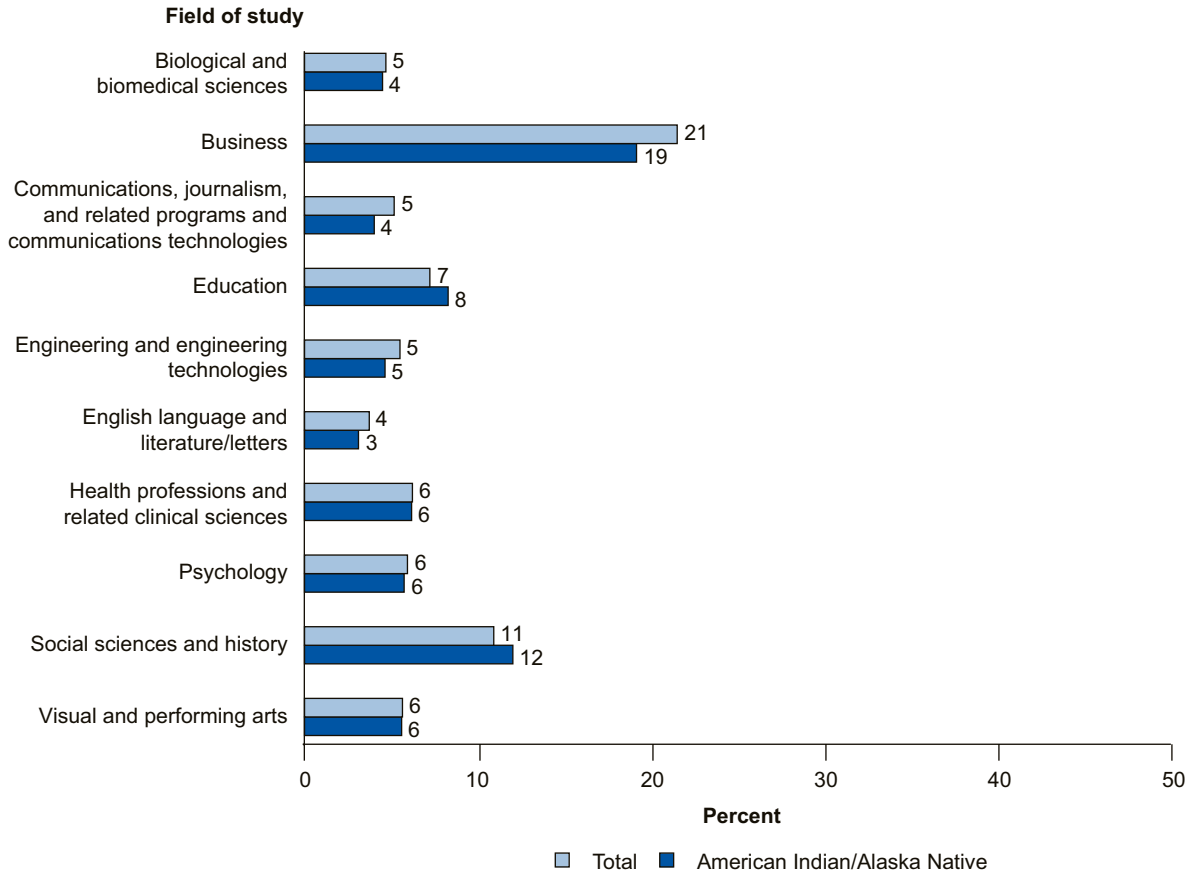
Table 6.5. Percentage of bachelor's degrees conferred in total and to American Indians/Alaska Natives by degree-granting institutions, by the 10 most popular fields of study: 2005–06

Field of study	All students	American Indian/ Alaska Native
Biological and biomedical sciences	4.7	4.5
Business	21.4	19.1
Communications, journalism, and related programs and communications technologies	5.2	4.0
Education	7.2	8.2
Engineering and engineering technologies	5.5	4.6
English language and literature/letters	3.7	3.1
Health professions and related clinical sciences	6.2	6.2
Psychology	5.9	5.7
Social sciences and history	10.9	11.9
Visual and performing arts	5.6	5.6

NOTE: Detail do not sum to totals because colleges and universities conferred degrees in many other fields not shown separately. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2007*, based on 2005–06 Integrated Postsecondary Education Data System (IPEDS), Fall 2006.

Figure 6.5. Percentage of bachelor's degrees conferred in total and to American Indians/Alaska Natives by degree-granting institutions in the 10 most popular fields of study: 2005–06



NOTE: Detail do not sum to totals because colleges and universities conferred degrees in many other fields not shown separately. Data are graphed using unrounded estimates while the value labels are rounded. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2007*, based on 2005–06 Integrated Postsecondary Education Data System (IPEDS), Fall 2006.

6.6. Master's and Doctoral Degrees Earned by Field

In 2005–06, more than half of the master's degrees awarded to American Indians/Alaska Natives were in the fields of education or business. Nearly half of the doctoral degrees awarded to American Indians/Alaska Natives were in the fields of education, psychology, and social sciences and history.

Out of the master's degrees awarded to American Indians/Alaska Natives during the 2005–06 school year, 32 percent were conferred in the field of education and 20 percent were in business. These two fields were also the most frequently studied among master's candidates in the general population: 28 percent of the general population's master's degrees were awarded for education and 23 percent were awarded for business.

In 2005–06, the distribution of doctoral degrees awarded differed between American Indians/Alaska Natives and the total population. For example, 22 percent of doctoral degrees awarded to American

Indians/Alaska Natives were in education, compared to 12 percent of the total population. Sixteen percent of doctoral degrees awarded to American Indians/Alaska Natives were in the field of psychology, compared to 8 percent of the total population. Nine percent of doctoral degrees awarded to American Indians/Alaska Natives were in social sciences and history, compared to 6 percent of the total population. Conversely, only 3 percent of doctoral degrees awarded to American Indians/Alaska Natives were in the field of engineering and engineering-related technologies, compared to 12 percent of the total population.

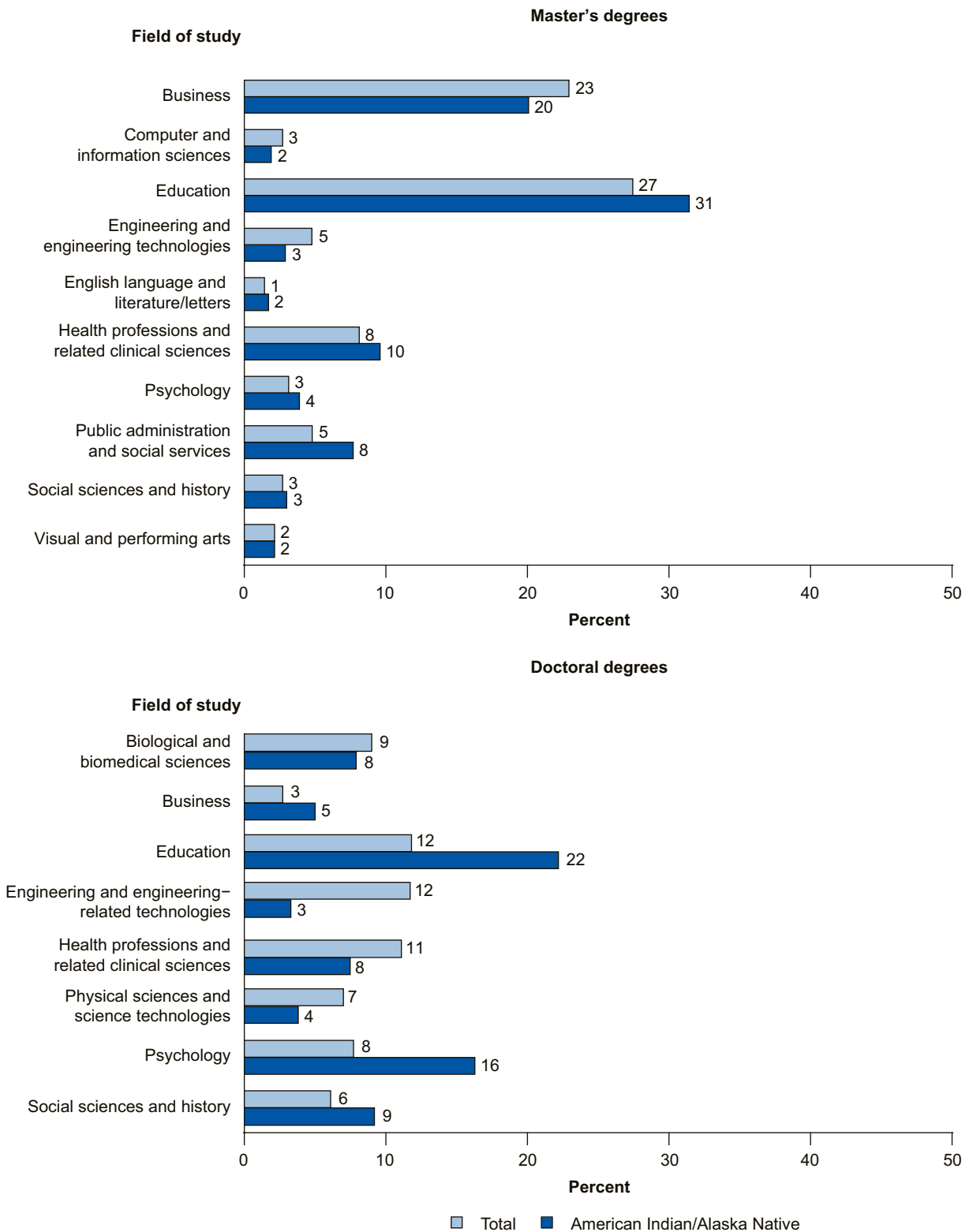
Table 6.6. Percentage of master's and doctoral degrees conferred in total and to American Indians/Alaska Natives by degree-granting institutions, by the most popular fields of study: 2005–06

Degree type and field of study	Total	American Indian/ Alaska Native
Master's degrees		
Business	23.0	20.1
Computer and information sciences	2.7	1.9
Education	27.5	31.5
Engineering and engineering technologies	5.3	2.9
English language and literature/letters	1.4	1.7
Health professions and related clinical sciences	8.1	9.6
Psychology	3.1	3.9
Public administration and social services	4.8	7.7
Social sciences and history	2.7	3.0
Visual and performing arts	2.1	2.1
Doctoral degrees		
Biological and biomedical sciences	9.0	7.9
Business	2.7	5.0
Education	11.8	22.2
Engineering and engineering-related technologies	11.7	3.3
Health professions and related clinical sciences	11.1	7.5
Physical sciences and science technologies	7.0	3.8
Psychology	7.7	16.3
Social sciences and history	6.1	9.2

NOTE: Detail do not sum to totals because colleges and universities conferred degrees in many other fields not shown separately. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2007*, based on 2005–06 Integrated Postsecondary Education Data System (IPEDS), Fall 2006.

Figure 6.6. Percentage of master's and doctoral degrees conferred in total and to American Indians/Alaska Natives by degree-granting institutions in the most popular fields of study: 2005–06



NOTE: Detail do not sum to totals because colleges and universities conferred degrees in many other fields not shown separately. Data are graphed using unrounded estimates while the value labels are rounded. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2007*, based on 2005–06 Integrated Postsecondary Education Data System (IPEDS), Fall 2006.

6.7. Faculty in Degree-Granting Institutions

American Indians/Alaska Natives constitute less than 1 percent of faculty in degree-granting institutions in 2005.

In 2005, American Indians/Alaska Natives accounted for 0.5 percent of faculty in degree-granting institutions. Differences by level of faculty are apparent. American Indians/Alaska Natives constituted 1.0 percent of instructors, but 0.3 percent of professors

and 0.4 percent of associate professors. As a point of comparison, in 2006 American Indian/Alaska Native students made up 1.1 percent of the total enrollment in degree-granting institutions (indicator 6.1).

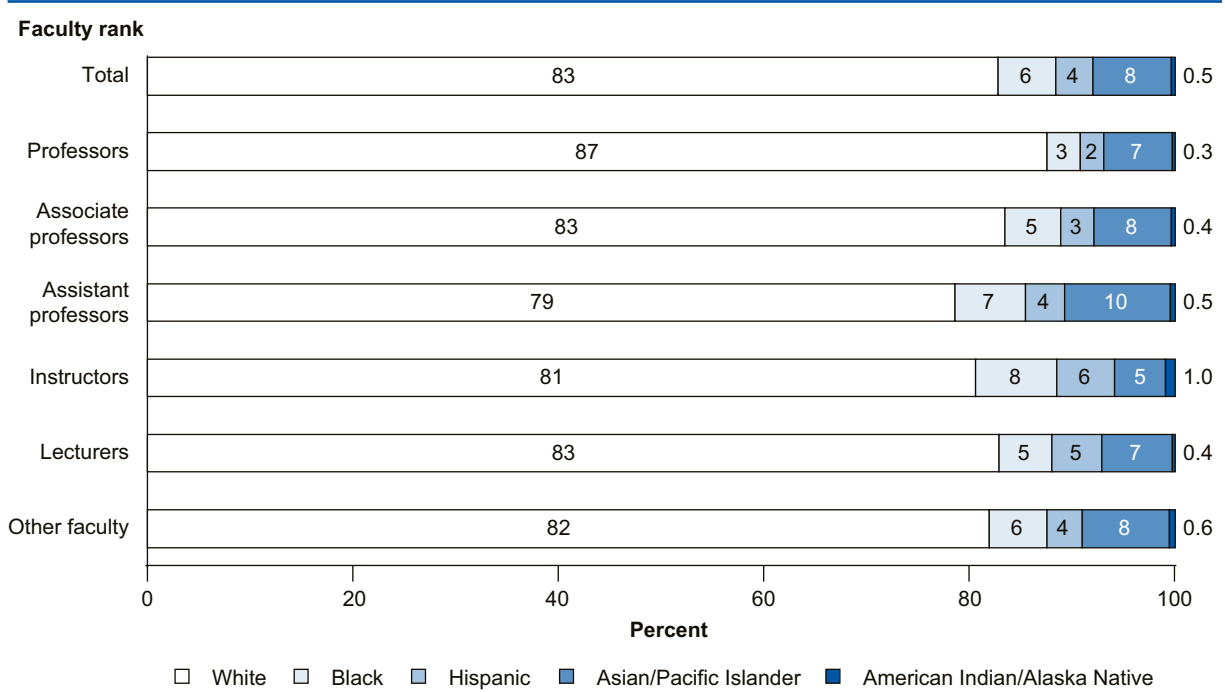
Table 6.7. Percentage distribution of full-time instructional faculty in degree-granting institutions, by race/ethnicity and academic rank: 2005

Faculty/rank	White	Total minority faculty	Black	Hispanic	Asian/Pacific Islander	American Indian/Alaska Native
Total	82.8	17.2	5.6	3.6	7.6	0.5
Professors	87.5	12.5	3.3	2.3	6.6	0.3
Associate professors	83.4	16.6	5.5	3.2	7.5	0.4
Assistant professors	78.6	21.4	6.8	3.9	10.2	0.5
Instructors	80.6	19.4	7.9	5.6	5.0	1.0
Lecturers	82.9	17.1	5.1	4.9	6.8	0.4
Other faculty	81.9	18.1	5.6	3.5	8.4	0.6

NOTE: Detail may not sum to totals because of rounding. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2007*, based on 2005–06 Integrated Postsecondary Education Data System (IPEDS), Winter 2005–06.

Figure 6.7. Percentage distribution of full-time instructional faculty in degree-granting institutions, by race/ethnicity and academic rank: 2005



NOTE: Detail may not sum to totals because of rounding. Race categories exclude persons of Hispanic ethnicity.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2007*, based on 2005–06 Integrated Postsecondary Education Data System (IPEDS), Winter 2005–06.

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