

Enrollment/  
Attendance

**Achievement/  
Proficiency**

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Related  
Behaviors and  
Characteristics

## EA 2.1 Reading Proficiency for Youth Ages 9, 13, and 17

In order to monitor progress in the reading achievement of students in the United States, the National Assessment of Educational Progress (NAEP) has conducted national assessments of the reading performance of 9-, 13-, and 17-year-olds. There are five levels of reading proficiency reported by NAEP, ranging from Level 150 (completing simple, discrete reading tasks) to Level 350 (learning from specialized reading materials). The following tables report the average reading proficiency scores of students in the three age groups between 1971 and 1999.

**Differences by Age.** Among 9-year-olds, average reading proficiency scores improved between 1971 and 1980, declined between 1980 and 1984, and remained steady until 1999, so that the average score in 1999 was similar to the score in 1975 (Table EA 2.1.A). Among 13-year-olds, average reading proficiency scores varied from year to year and were similar in 1999 and 1971 (Table EA 2.1.B). Among 17-year-olds, average scores increased between 1971 and 1988, remained stable between 1988 and 1992, and then showed a slight decline through 1999, so that the average score in 1999 was similar to the score in 1975 (Table EA 2.1.C).

**Differences by Sex.** Females have scored consistently higher than males over time and for all ages. For example, among 17-year-olds in 1999, females had an average score of 295, compared with an average score of 282 for males (Table EA 2.1.C).

**Differences by Race and Hispanic Origin.**<sup>1</sup> There are large and consistent differences in reading proficiency by race and Hispanic origin among all age groups; for example, among 17-year-olds in 1999, Whites, non-Hispanic had higher average reading proficiency scores than either Blacks, non-Hispanic or Hispanics (Table EA 2.1.C). However, the gaps in reading proficiency scores between Whites, non-Hispanic and Blacks, non-Hispanic have narrowed since the mid-1970s among 17-year-olds (Figure EA 2.1).

**Differences by Parents' Education Level.**<sup>2</sup> Average reading proficiency levels vary dramatically by parents' education level; for example, among 13-year-olds and 17-year-olds in 1999, the lowest average reading proficiency scores were among youth whose better-educated parent did not have a high school education, while the highest scores were among youth who had a parent with post-high school education (Tables EA 2.1.B and EA 2.1.C).

**Differences by Type of School.** Average reading proficiency scores have been consistently higher among youth attending nonpublic schools than among youth attending public schools. This is true for every age group and every year reported (Tables EA 2.1.A, EA 2.1.B, and EA 2.1.C).

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<sup>1</sup> Persons of Hispanic origin may be of any race.

<sup>2</sup> Parents' education level refers to the highest level of education completed by either parent. It is not reported at age 9 because approximately one-third of these students did not know their parents' education level.

**Table EA 2.1.A**

Average reading proficiency for 9-year-olds, by sex, race and Hispanic origin, and type of school:  
Selected years, 1971-1999

	1971	1975	1980	1984	1988	1990	1992	1994	1996	1999
<b>All 9-year-olds</b>	208	210	215	211	212	209	211	211	212	212
Sex										
Male	201	204	210	208	208	204	206	207	207	209
Female	214	216	220	214	216	215	215	215	218	215
Race and Hispanic origin <sup>a</sup>										
White, non-Hispanic	214	217	221	218	218	217	218	218	220	221
Black, non-Hispanic	170	181	189	186	189	182	185	185	191	186
Hispanic	—	183	190	187	194	189	192	186	195	193
Type of school										
Public	—	—	214	209	210	208	209	209	210	210
Nonpublic	—	—	227	223	223	228	225	225	227	226

<sup>a</sup> Persons of Hispanic origin may be of any race.

— Data not available.

Note: The reading proficiency scale ranges from 0 to 350:

Level 150: Simple, discrete reading tasks

Level 200: Partial skills and understanding

Level 250: Interrelates ideas and makes generalizations

Level 300: Understands complicated information

Level 350: Learns from specialized reading materials

Source: U.S. Department of Education, National Center for Education Statistics. (2000). *National Assessment of Educational Progress, 1999. Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education.

## Achievement/Proficiency

**Table EA 2.1.B**

Average reading proficiency for 13-year-olds, by sex, race and Hispanic origin, parents' education level, and type of school: Selected years, 1971-1999

	1971	1975	1980	1984	1988	1990	1992	1994	1996	1999
<b>All 13-year-olds</b>	255	256	259	257	258	257	260	258	258	259
Sex										
Male	250	250	254	253	252	251	254	251	251	254
Female	261	262	263	262	263	263	265	266	264	265
Race and Hispanic origin <sup>a</sup>										
White, non-Hispanic	261	262	264	263	261	262	266	265	266	267
Black, non-Hispanic	222	226	233	236	243	242	238	234	234	238
Hispanic	—	233	237	240	240	238	239	235	238	244
Parents' highest education <sup>b</sup>										
Less than high school	238	239	239	240	247	241	239	237	239	240
High school	256	255	254	253	253	251	252	251	251	251
Some college	270	270	271	268	265	267	270	269	269	270
Type of school										
Public	—	—	257	255	256	255	257	256	256	257
Nonpublic	—	—	271	271	268	270	276	276	273	276

<sup>a</sup> Persons of Hispanic origin may be of any race.

<sup>b</sup> Parents' education level refers to the highest level of education completed by either parent.

— Data not available.

Note: The reading proficiency scale ranges from 0 to 350:

Level 150: Simple, discrete reading tasks

Level 200: Partial skills and understanding

Level 250: Interrelates ideas and makes generalizations

Level 300: Understands complicated information

Level 350: Learns from specialized reading materials

Source: U.S. Department of Education, National Center for Education Statistics. (2000). *National Assessment of Educational Progress, 1999. Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education.

**Table EA 2.1.C**

Average reading proficiency for 17-year-olds, by sex, race and Hispanic origin, parents' education level, and type of school: Selected years, 1971-1999

	1971	1975	1980	1984	1988	1990	1992	1994	1996	1999
<b>All 17-year-olds</b>	285	286	286	289	290	290	290	288	288	288
Sex										
Male	279	280	282	284	286	284	284	282	281	282
Female	291	291	289	294	294	297	296	295	295	295
Race and Hispanic origin <sup>a</sup>										
White, non-Hispanic	291	293	293	295	295	297	297	296	295	295
Black, non-Hispanic	239	241	243	264	274	267	261	266	266	264
Hispanic	—	252	261	268	271	275	271	263	265	271
Parents' highest education <sup>b</sup>										
Less than high school	261	263	262	269	267	270	271	268	267	265
High school	283	281	278	281	282	283	281	276	273	274
Some college	302	301	299	301	300	300	299	299	298	298
Type of school										
Public	—	—	284	287	289	289	288	286	287	286
Nonpublic	—	—	298	303	300	311	310	306	294	307

<sup>a</sup> Persons of Hispanic origin may be of any race.

<sup>b</sup> Parents' education level refers to the highest level of education completed by either parent.

— Data not available.

Note: The reading proficiency scale ranges from 0 to 350:

Level 150: Simple, discrete reading tasks

Level 200: Partial skills and understanding

Level 250: Interrelates ideas and makes generalizations

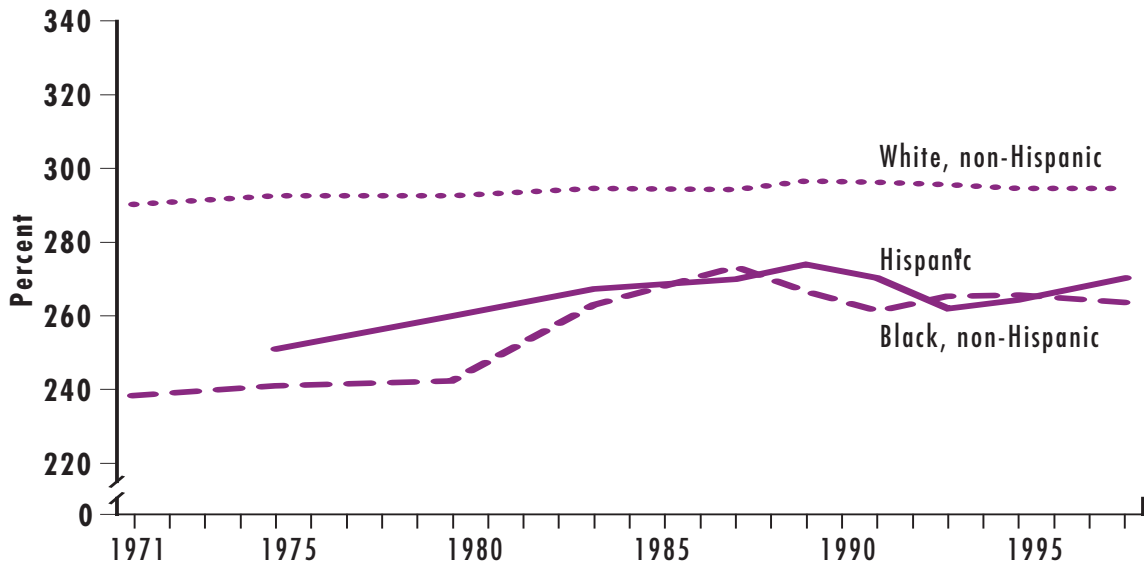
Level 300: Understands complicated information

Level 350: Learns from specialized reading materials

Source: U.S. Department of Education, National Center for Education Statistics. (2000). *National Assessment of Educational Progress, 1999. Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education.

Figure EA 2.1

Average reading proficiency for 17-year-olds, by race and Hispanic origin: 1971-1999



<sup>a</sup> Persons of Hispanic origin may be of any race.

Source: U.S. Department of Education, National Center for Education Statistics. (2000). *National Assessment of Educational Progress, 1999. Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education.



## EA 2.2 Mathematics Proficiency for Youth Ages 9, 13, and 17

In order to monitor progress in the mathematics achievement of youth in the United States, the National Assessment of Educational Progress (NAEP) has conducted national assessments of the mathematics performance of 9-, 13-, and 17-year-olds. There are five levels of mathematics proficiency reported by NAEP, ranging from Level 150 (understanding simple arithmetic facts) to Level 350 (multistep problem solving and algebra). The following tables report the average mathematics proficiency scores of youth in the three age groups between 1973 and 1999.

**Differences by Age.** Among 9-year-olds, average mathematics proficiency scores remained the same between 1973 and 1982 and then increased substantially to 231 in 1994; scores remained stable from 1994 to 1999 (Table EA 2.2.A). Among 13-year-olds, mathematics proficiency scores have slowly increased between 1978 and 1999 (Table EA 2.2.B). Among 17-year-olds, average proficiency scores declined between 1973 and 1982, after which they increased and stabilized at a level slightly higher than that obtained in 1973 (Table EA 2.2.C).

**Differences by Sex.** Proficiency scores in 1999 were higher for males by an average of 2 points for 9-year-olds and 13-year-olds, and 3 points for 17-year-olds.

**Differences by Race and Hispanic Origin.**<sup>1</sup> There are consistently large differences in mathematics proficiency by race and Hispanic origin. For example, among 17-year-olds in 1999, Blacks, non-Hispanic, and Hispanics had lower proficiency scores than Whites, non-Hispanic (Table EA 2.2.C); however, Black, non-Hispanic and Hispanic 17-year-olds have shown greater gains in achievement between 1973 and 1999 than their White, non-Hispanic counterparts (Figure EA 2.2).

**Differences by Parents' Education Level.**<sup>2</sup> There are large variations in average mathematics proficiency levels by level of parental education for 13- and 17-year-olds (Tables EA 2.2.B and EA 2.2.C). For example, in 1999, 13-year-olds whose better-educated parent did not have a high school education had the lowest average proficiency scores, while those whose parent(s) had graduated from college had the highest scores (Table EA 2.2.B).

**Differences by Type of School.** Average mathematics proficiency scores among youth in public schools have been consistently lower than average scores among youth attending nonpublic schools. This is true for every age group and every year reported (Tables EA 2.2.A, EA 2.2.B, and EA 2.2.C).

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<sup>1</sup> Persons of Hispanic origin may be of any race.

<sup>2</sup> Parents' education level refers to the highest level of education completed by either parent. It is not reported at age 9 because approximately one-third of these students did not know their parents' education level.



**Table EA 2.2.A**

Average mathematics proficiency for 9-year-olds, by sex, race and Hispanic origin, and type of school: Selected years, 1973-1999

	1973	1978	1982	1986	1990	1992	1994	1996	1999
<b>All 9-year-olds</b>	219	219	219	222	230	230	231	231	232
<b>Sex</b>									
Male	218	217	217	222	229	231	232	233	233
Female	220	220	221	222	230	228	230	229	231
<b>Race and Hispanic origin<sup>a</sup></b>									
White, non-Hispanic	225	224	224	227	235	235	237	237	239
Black, non-Hispanic	190	192	195	202	208	208	212	212	211
Hispanic	202	203	204	205	214	212	210	215	213
<b>Type of school</b>									
Public	—	217	217	220	229	228	229	230	231
Nonpublic	—	231	232	230	238	242	245	239	242

<sup>a</sup> Persons of Hispanic origin may be of any race.

— Data not available.

Note: The mathematics proficiency scale ranges from 0 to 350:

Level 150: Simple arithmetic facts

Level 200: Beginning skills and understanding

Level 250: Numerical operations and beginning problem solving

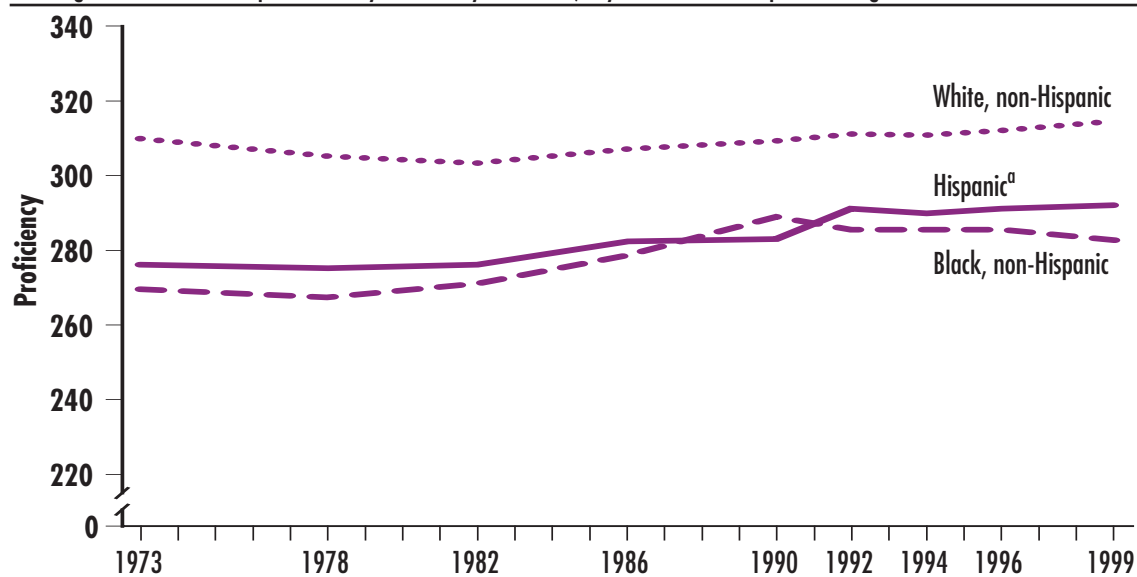
Level 300: Moderately complex procedures and reasoning

Level 350: Multistep problem solving and algebra

Source: U.S. Department of Education, National Center for Education Statistics. (2000). *National Assessment of Educational Progress, 1999. Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education.

**Figure EA 2.2**

Average mathematics proficiency for 17-year-olds, by race and Hispanic origin: 1973-1999



<sup>a</sup> Persons of Hispanic origin may be of any race.

Source: U.S. Department of Education, National Center for Education Statistics. (2000). *National Assessment of Educational Progress, 1999. Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education.

## Achievement/Proficiency

**Table EA 2.2.B**

Average mathematics proficiency for 13-year-olds, by sex, race and Hispanic origin, parents' education level, and type of school: Selected years, 1973-1999

	1973	1978	1982	1986	1990	1992	1994	1996	1999
<b>All 13-year-olds</b>	266	264	269	269	270	273	274	274	276
Sex									
Male	265	264	269	270	271	274	276	276	277
Female	267	265	268	268	270	272	273	272	275
Race and Hispanic origin <sup>a</sup>									
White, non-Hispanic	274	272	274	274	276	279	281	281	283
Black, non-Hispanic	228	230	240	249	249	250	252	252	251
Hispanic	239	238	252	254	255	259	256	256	259
Parents' highest education <sup>b</sup>									
Less than high school	—	245	251	252	253	256	255	254	256
High school	—	263	263	263	263	263	266	267	264
Some college	—	273	275	274	277	278	277	278	279
College degree	—	284	282	280	280	283	285	283	286
Type of school									
Public	—	263	267	269	269	272	273	273	274
Nonpublic	—	279	281	276	280	283	285	286	289

<sup>a</sup> Persons of Hispanic origin may be of any race.

<sup>b</sup> Parents' education level refers to the highest level of education completed by either parent.

— Data not available.

Note: The mathematics proficiency scale ranges from 0 to 350:

Level 150: Simple arithmetic facts

Level 200: Beginning skills and understanding

Level 250: Numerical operations and beginning problem solving

Level 300: Moderately complex procedures and reasoning

Level 350: Multistep problem solving and algebra

Source: U.S. Department of Education, National Center for Education Statistics. (2000). *National Assessment of Educational Progress, 1999. Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education.

**Table EA 2.2.C**

Average mathematics proficiency for 17-year-olds, by sex, race and Hispanic origin, parents' education level, and type of school: Selected years, 1973-1999

	1973	1978	1982	1986	1990	1992	1994	1996	1999
<b>All 17-year-olds</b>	304	300	299	302	305	307	306	307	308
Sex									
Male	309	304	302	305	306	309	309	310	310
Female	301	297	296	299	303	305	304	305	307
Race and Hispanic origin <sup>a</sup>									
White, non-Hispanic	310	306	304	308	310	312	312	313	315
Black, non Hispanic	270	268	272	279	289	286	286	286	283
Hispanic	277	276	277	283	284	292	291	292	293
Parents' highest education <sup>b</sup>									
Less than high school	—	280	279	279	285	286	284	281	289
High school	—	294	293	293	294	298	295	297	299
Some college	—	305	304	305	308	308	305	307	308
College degree	—	317	312	314	316	316	318	317	317
Type of school									
Public	—	300	297	301	304	305	304	306	307
Nonpublic	—	314	311	320	318	320	319	316	321

<sup>a</sup> Persons of Hispanic origin may be of any race.

<sup>b</sup> Parents' education level refers to the highest level of education completed by either parent.

— Data not available.

Note: The mathematics proficiency scale ranges from 0 to 350:

Level 150: Simple arithmetic facts

Level 200: Beginning skills and understanding

Level 250: Numerical operations and beginning problem solving

Level 300: Moderately complex procedures and reasoning

Level 350: Multistep problem solving and algebra

Source: U.S. Department of Education, National Center for Education Statistics (2000). *NAEP 1999 Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education.

## EA 2.3 Science Proficiency for Youth Ages 9, 13, and 17

In order to measure youths' proficiency in science over time, the National Assessment of Educational Progress (NAEP) has conducted national assessments and reported five different proficiency levels, ranging from Level 150 (knows everyday science facts) to Level 350 (integrates specialized scientific information). The following tables report the average science proficiency scores of youth in the three age groups between 1970 and 1999.

**Differences by Age.** Average science proficiency scores have increased among all age groups over the past three decades. Among 9- and 13-year-olds, average science proficiency scores increased between 1977 and 1992 before declining slightly in the latter half of the 1990s (Tables EA 2.3.A and EA 2.3.B). Among 17-year-olds, average science proficiency scores declined between 1969 and 1982, after which they rebounded somewhat, but are still below their 1969 high (Table EA 2.3.C).

**Differences by Sex.** Average science proficiency scores have been consistently higher for males than females over time and for all age groups, though differences are smaller among 9-year-olds. Among 13-year-olds in 1999, males scored on average 6 points higher than females; among 17-year-olds, the average difference was 9 points; and among 9-year-olds, males scored on average 3 points higher than females.

**Differences by Race and Hispanic Origin.**<sup>1</sup> There are large differences in science proficiency scores by race and Hispanic origin among all age groups. For example, among 17-year-olds in 1999, Whites, non-Hispanic had higher average science proficiency scores than Blacks, non-Hispanic or Hispanics (306 versus 254 and 276, respectively) (Table EA 2.3.C and Figure EA 2.3).

**Differences by Parents' Education Level.**<sup>2</sup> Average science proficiency levels vary dramatically by level of parents' education. For example, among 13-year-olds and 17-year-olds in 1999, the lowest average science proficiency scores were among youth whose better-educated parent did not have a high school education, while the highest scores were among youth who had a parent who had graduated from college (Tables EA 2.3.B and EA 2.3.C).

**Differences by Type of School.** Average science proficiency scores have been consistently higher among students attending nonpublic schools than among students attending public schools. This is true for every age group and every year reported (Tables EA 2.3.A, EA 2.3.B, and EA 2.3.C).

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<sup>1</sup> Persons of Hispanic origin may be of any race.

<sup>2</sup> Parents' education level refers to the highest level of education completed by either parent. It is not reported at age 9 because approximately one-third of these students did not know their parents' education level.

**Table EA 2.3.A**

Average science proficiency for 9-year-olds, by sex, race and Hispanic origin, and type of school: Selected years, 1970-1999

	1970	1973	1977	1982	1986	1990	1992	1994	1996	1999
<b>All 9-year-olds</b>	225	220	220	221	224	229	231	231	230	229
<b>Sex</b>										
Male	228	222	222	221	227	230	235	232	231	231
Female	223	218	218	221	221	227	227	230	228	228
<b>Race and Hispanic origin<sup>a</sup></b>										
White, non-Hispanic	236	231	230	229	232	238	239	240	239	240
Black, non-Hispanic	179	177	175	187	196	196	200	201	202	199
Hispanic	—	—	192	189	199	206	205	201	207	206
<b>Type of school</b>										
Public	—	—	218	220	223	228	229	230	228	228
Nonpublic	—	—	235	232	233	237	240	242	238	239

<sup>a</sup> Persons of Hispanic origin may be of any race.

— Data not available.

Note: The science proficiency scale ranges from 0 to 350:

Level 150: Knows everyday science facts

Level 200: Understands simple scientific principles

Level 250: Applies general scientific information

Level 300: Analyzes scientific procedures and data

Level 350: Integrates specialized scientific information

Source: U.S. Department of Education, National Center for Education Statistics. (2000). *National Assessment of Educational Progress, 1999. Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education.

## Achievement/Proficiency

**Table EA 2.3.B**

Average science proficiency for 13-year-olds, by sex, race and Hispanic origin, parents' education level, and type of school: Selected years, 1970-1999

	1970	1973	1977	1982	1986	1990	1992	1994	1996	1999
<b>All 13-year-olds</b>	255	250	247	250	251	255	258	257	256	256
Sex										
Male	257	252	251	256	256	259	260	259	260	259
Female	253	247	244	245	247	252	256	254	252	253
Race and Hispanic origin <sup>a</sup>										
White, non-Hispanic	263	259	256	257	259	264	267	267	266	266
Black, non-Hispanic	215	205	208	217	222	226	224	224	226	227
Hispanic	—	—	213	226	226	232	238	232	232	227
Parents' highest education <sup>b</sup>										
Less than high school	—	—	224	225	229	233	234	234	230	229
High school	—	—	245	243	245	247	246	247	248	243
Some college	—	—	260	259	258	263	266	260	261	261
College degree	—	—	266	264	264	268	269	269	266	268
Type of school										
Public	—	—	245	249	251	254	257	255	254	254
Nonpublic	—	—	268	264	263	269	265	268	268	269

<sup>a</sup> Persons of Hispanic origin may be of any race.

<sup>b</sup> Parents' education level refers to the highest level of education completed by either parent.

— Data not available.

Note: The science proficiency scale ranges from 0 to 350:

Level 150: Knows everyday science facts

Level 200: Understands simple scientific principles

Level 250: Applies general scientific information

Level 300: Analyzes scientific procedures and data

Level 350: Integrates specialized scientific information

Source: U.S. Department of Education, National Center for Education Statistics. (2000). *National Assessment of Educational Progress, 1999. Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education.

**Table EA 2.3.C**

Average science proficiency for 17-year-olds, by sex, race and Hispanic origin, parents' education level, and type of school: Selected years, 1969-1999

	1969	1973	1977	1982	1986	1990	1992	1994	1996	1999
<b>All 17-year-olds</b>	305	296	290	283	289	290	294	294	296	295
Sex										
Male	314	304	297	292	295	296	299	300	300	300
Female	297	288	282	275	282	285	289	289	292	291
Race and Hispanic origin <sup>a</sup>										
White, non-Hispanic	312	304	298	293	298	301	304	306	307	306
Black, non-Hispanic	258	250	240	235	253	253	256	257	260	254
Hispanic	—	—	262	249	259	262	270	261	269	276
Parents' highest education <sup>b</sup>										
Less than high school	—	—	265	259	258	261	262	256	259	264
High school	—	—	284	275	277	276	280	279	282	281
Some college	—	—	296	290	295	297	296	295	297	297
College degree	—	—	309	300	304	306	308	311	308	307
Type of school										
Public	—	—	288	282	287	289	292	292	295	293
Nonpublic	—	—	308	292	321	308	312	310	304	311

<sup>a</sup> Persons of Hispanic origin may be of any race.

<sup>b</sup> Parents' education level refers to the highest level of education completed by either parent.

— Data not available.

Note: The science proficiency scale ranges from 0 to 350:

Level 150: Knows everyday science facts

Level 200: Understands simple scientific principles

Level 250: Applies general scientific information

Level 300: Analyzes scientific procedures and data

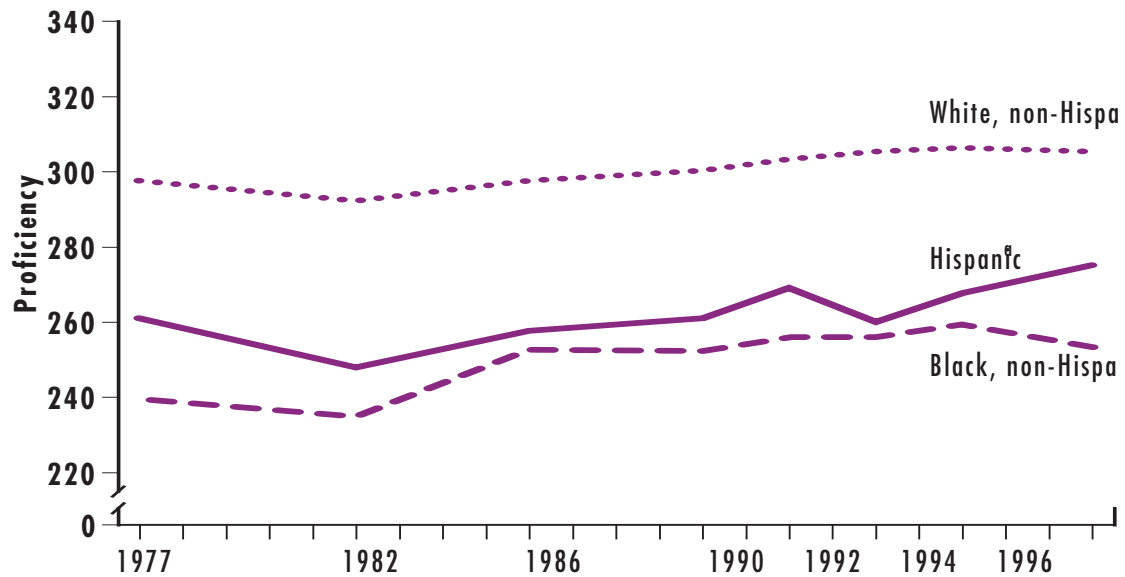
Level 350: Integrates specialized scientific information

Source: U.S. Department of Education, National Center for Education Statistics. (2000). *National Assessment of Educational Progress, 1999. Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education.

## Achievement/Proficiency

**Figure EA 2.3**

Average science proficiency for 17-year-olds, by race and Hispanic origin: 1977-1999



<sup>a</sup> Persons of Hispanic origin may be of any race.

Source: U.S. Department of Education, National Center for Education Statistics. (2000). *National Assessment of Educational Progress, 1999. Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education.





## EA 2.4 Arts Proficiency for 8th Graders

Artistic expression is one of the key vehicles for individual creativity and for the reflection and transmission of cultural messages. An understanding and appreciation of the arts, therefore, helps to nurture human creativity and fosters the celebration of a diverse cultural heritage. Recent research suggests that arts education can improve student performance in other intellectual and academic areas, including math and science.<sup>1</sup> College Board data show that youth who have participated in sequential arts programs outperform their peers who have not had arts training on both the verbal and math components of the SAT.<sup>2</sup>

The National Assessment of Educational Progress (NAEP) completed assessments of 8th graders' music and visual arts skills in 1997.<sup>3</sup> For the music and visual arts assessments, data were collected on youths' ability to respond to, analyze, or evaluate musical pieces or works of art.<sup>4</sup> Average scores were coded on a scale of 0 to 300. Because ability scores had different ranges across music and the visual arts, comparisons should not be made between results across disciplines. In other words, a score of 100 in the visual arts is not necessarily "better" than a score of 90 in music.

**Differences by Sex.** Females outperformed males in responding to and analyzing musical pieces (Figure EA 2.4.A). For example, 8th-grade females had an average music score of 160, whereas males had an average score of 140. For evaluating visual artwork, females' scores were 8 points higher than males' scores (Table EA 2.4).

**Differences by Race and Hispanic Origin.**<sup>5</sup> There are significant differences in youths' artistic evaluation skills by race and Hispanic origin. White, non-Hispanic and Asian youth had higher average music scores than did Black, non-Hispanic and Hispanic students. A similar pattern is seen for the visual arts (Table EA 2.4).

**Differences by Parents' Education Level.**<sup>6</sup> Consistent with other NAEP assessments, higher levels of parental education were associated with higher levels of student performance in both music and the visual arts. For example, 8th graders whose better-educated parent had graduated from college had higher music and arts scores than youth whose parent(s) graduated high school and youth whose better-educated parent did not finish high school (Figure EA 2.4.B).

**Differences by Type of School.** Youth attending nonpublic schools had higher scores for the visual arts than did youth attending public schools. The same pattern held true for music scores (Table EA 2.4).

<sup>1</sup> Kane, E. & Frankonis, E. (1998). Arts Education in the New Millennium. *Education New York*, 2(5).

<sup>2</sup> Childress, J. (1998). Art Education Pays Off. *New York Education*, 2(5).

<sup>3</sup> Unlike other NAEP assessments that are typically conducted on nationally representative samples of youth in grades 4, 8, and 12, the 1997 arts assessments were conducted on 8th graders only. Although NAEP conducted an arts assessment in music and visual arts in 1974 and 1978, considerable changes were made to the 1997 assessment such that comparable data for trends analyses are not possible. Therefore, only results from the 1997 NAEP music and visual arts assessments are presented here.

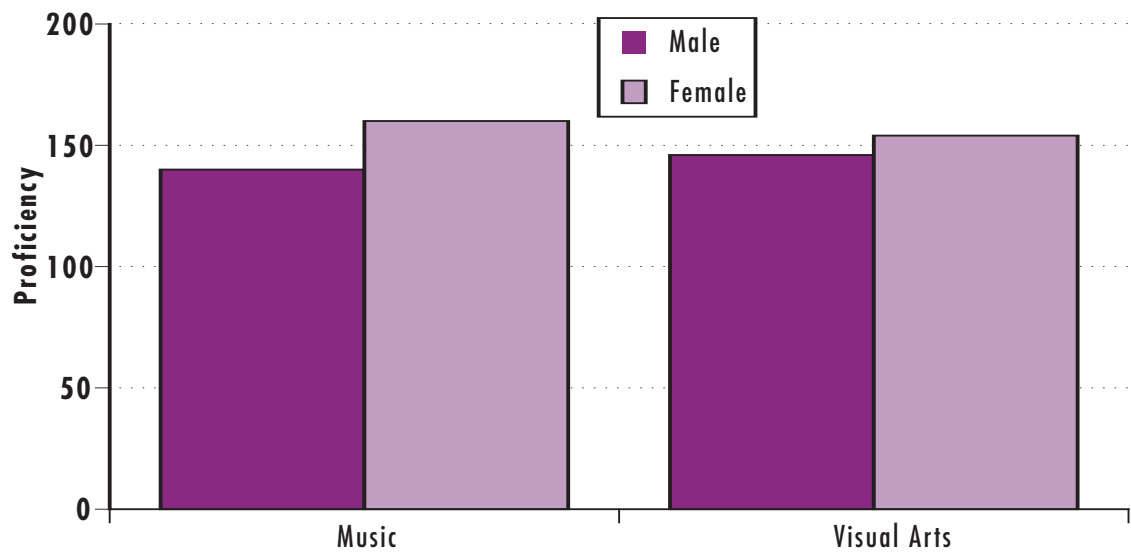
<sup>4</sup> Youth also were scored on their ability to create and perform works of art; however, only youths' ability to respond to art will be discussed here.

<sup>5</sup> Persons of Hispanic origin may be of any race.

<sup>6</sup> Parent's education level refers to the highest level of education completed by either parent.

**Figure EA 2.4.A**

Average music and visual arts proficiency for 8th graders, by sex: 1997



Source: U.S. Department of Education, National Center for Education Statistics. (1998). The NAEP 1997 Arts Report Card: Eighth-Grade Findings from the *National Assessment of Educational Progress*. Washington, DC: U.S. Department of Education.

## Achievement/Proficiency

**Table EA 2.4**

Average music and visual arts proficiency for 8th graders, by sex, race and Hispanic origin, parents' education level, and type of school: 1997

	Music	Visual Arts
<b>All 8th graders</b>	150	150
<b>Sex</b>		
Male	140	146
Female	160	154
<b>Race and Hispanic origin<sup>a</sup></b>		
White	158	159
Black, non-Hispanic	130	124
Hispanic	127	128
Asian	152	153
<b>Parents' highest education<sup>b</sup></b>		
Less than high school	129	125
High school	139	138
Some college	150	153
College degree	159	158
<b>Type of school</b>		
Public	149	148
Nonpublic	158	167

<sup>a</sup> Persons of Hispanic origin may be of any race.

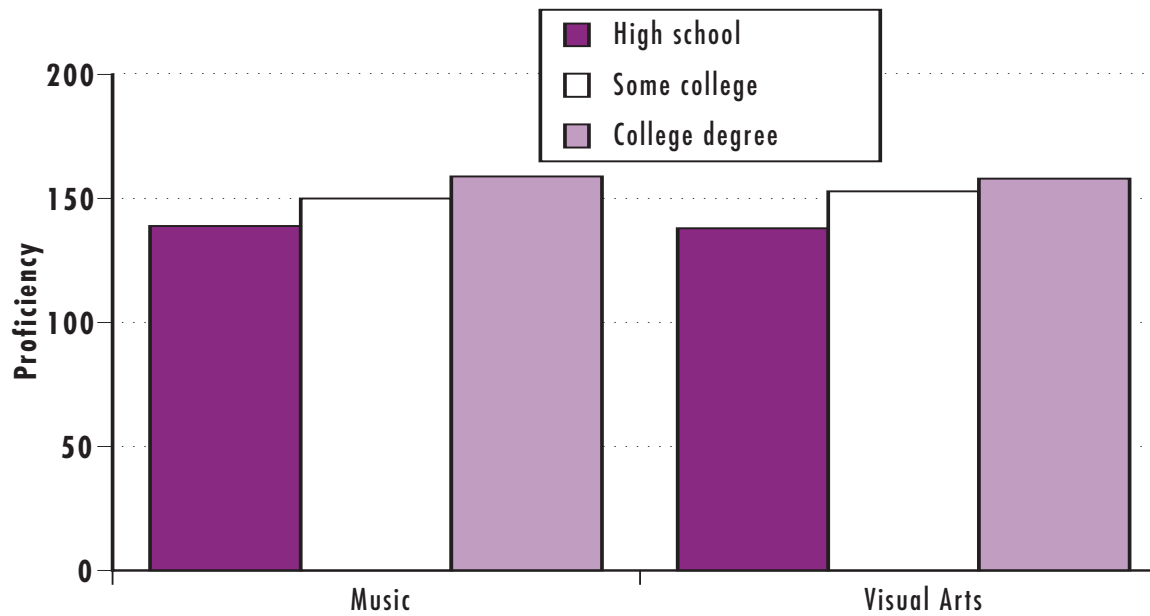
<sup>b</sup> Parents' education level refers to the highest level of education completed by either parent.

Note: The music and visual arts scale scores range from 0 to 300.

Source: U.S. Department of Education, National Center for Education Statistics. (1998). The NAEP 1997 Arts Report Card: Eighth-Grade Findings from the *National Assessment of Educational Progress*. Washington, DC: U.S. Department of Education.

Figure EA 2.4.B

Average music and visual arts proficiency for 8th graders, by parents' education level: 1997



Source: U.S. Department of Education, National Center for Education Statistics. (1998). The NAEP 1997 Arts Report Card: Eighth-Grade Findings from the *National Assessment of Educational Progress*. Washington, DC: U.S. Department of Education.