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# NATIONAL CENTER FOR EDUCATION STATISTICS

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E.D. TABS

July 1990

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*DRAFT*

National Education Longitudinal Study  
of 1988

**Eight Graders' Reports  
of Courses Taken During  
the 1988 Academic Year  
by Selected Student  
Characteristics**



Data Series:  
DR-NELS88-88-1.5

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U.S. Department of Education  
Office of Educational Research and Improvement

NCES 90-459

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## **Eight Graders' Reports of Courses Taken During the 1988 Academic Year by Selected Student Characteristics**



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Data Series:  
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**U.S. Department of Education**

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July 1990

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## Introduction

This set of tables examines self-reports of coursework taken by a national probability sample of eighth graders in public and private schools in the United States. Statistics were obtained from the base year student survey of the National Education Longitudinal Study of 1988 (NELS:88). NELS:88 is the latest in the longitudinal education surveys sponsored by the U.S. Department of Education's National Center for Education Statistics (NCES). NELS:88 begins with eighth graders to provide a baseline for assessing progress in high school. It is broader in scope than its predecessors, and provides extensive information from parents, teachers, and school administrators for the vast majority of students in the survey.

The estimates in the tables are based on a sample of 24,599 students in 1,052 schools nationwide. The estimates project to about 3,008,080 eligible eighth graders in about 38,774 eligible schools with eighth grades during the 1988 school year. Students attending public, Catholic, and other types of private schools are represented in the sample. Various exclusions to this sample are discussed in the Technical Notes section following the tables. Technical information concerning the survey design, response rates, variables used in the tables, and methods for estimating standard errors is also included in the Technical Notes section.

There are three basic sets of tables on self-reported course taking, covering three general groupings of courses. Within each set of tables, the first table shows reports of course taking across all schools. Subsequent tables show course taking separately for four different types of schools (public, Catholic, independent private, and other private schools). Within each table, reports of course taking are presented across all students and for a number of subgroups based upon student and school characteristics.

Tables 1.1 to 1.5 contain self-reports of course taking in mathematics, science, and computer education. Mathematics is divided into Algebra or other advanced mathematics, regular math, and remedial math. A separate category is provided for those who report taking no mathematics courses during the eighth grade. Science courses are divided into those with and without a laboratory component. As with mathematics, a separate category is provided for those who report taking no science courses during the eighth grade.

Tables 2.1 to 2.5 contain self-reports of course taking in English, foreign language, history, social studies, and religion. In these tables, English is divided into regular and remedial English. A separate category is provided for those who report taking no English courses in the eighth grade. For history and social studies, categories are provided to capture students' reports of taking courses in one or the other of these areas, or in both of the areas. Tables 3.1 to 3.5 contain self-reports of course taking in a number of arts, vocational education, and personal development courses.

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**Table 1.1--Percent of 1988 eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics**

Student characteristics <sup>1</sup>	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	32.2	58.4	5.2	2.5	21.5	74.1	4.4	34.8
Sex								
Male . . . . .	31.8	57.3	6.2	2.7	22.1	73.4	4.4	36.9
Female . . . . .	32.7	59.5	4.3	2.3	20.9	74.9	4.3	32.8
Race/ethnicity								
Asian . . . . .	46.8	41.0	5.3	4.4	25.5	66.4	8.1	34.6
Hispanic . . . . .	24.4	61.7	7.8	3.8	19.1	72.6	8.2	38.8
Black . . . . .	26.3	60.5	7.3	3.2	19.6	74.4	6.0	38.5
White . . . . .	33.9	58.4	4.4	2.0	22.0	74.8	3.2	33.6
Native American . . . . .	25.7	57.3	9.4	4.1	22.0	72.9	5.1	37.1
Family income								
Under \$15,000 . . . . .	20.5	67.0	7.1	3.5	17.4	76.9	5.7	34.3
\$15,000-\$24,999 . . . . .	26.6	62.9	5.8	2.7	19.3	76.5	4.2	33.1
\$25,000-\$34,999 . . . . .	32.2	59.4	4.9	2.0	20.1	75.7	4.2	34.2
\$35,000-\$49,999 . . . . .	35.4	57.2	4.0	2.0	22.7	73.7	3.6	34.3
\$50,000 or more . . . . .	46.8	46.9	3.4	1.8	27.5	69.1	3.4	36.1
Parent education								
Less than high school . . . . .	18.1	67.0	9.2	3.8	17.0	76.9	6.1	35.5
High school graduate/GED . . . . .	23.5	65.1	6.6	2.8	18.4	77.1	4.5	32.9
Some college . . . . .	30.0	60.9	5.0	2.4	20.8	74.8	4.4	34.8
College graduate . . . . .	43.0	50.3	3.4	1.8	24.4	72.0	3.6	35.0
M.A. or equivalent . . . . .	52.7	42.8	2.2	1.6	28.4	67.9	3.7	37.1
Ph.D./M.D./other professional . . . . .	59.0	36.6	2.0	1.0	32.8	65.1	2.0	36.9
Don't know . . . . .	21.4	63.1	9.6	4.7	19.6	73.3	7.1	37.3
Socioeconomic status								
Lowest quartile . . . . .	18.8	68.1	7.5	3.6	17.2	77.4	5.4	34.0
Second quartile . . . . .	26.7	63.0	6.1	2.6	19.7	75.9	4.4	34.0
Third quartile . . . . .	33.3	58.3	4.4	2.2	21.4	74.3	4.3	34.2
Highest quartile . . . . .	49.3	45.1	2.9	1.5	27.7	69.0	3.2	36.9
Family composition								
Mother & father . . . . .	35.2	56.4	4.6	2.1	22.1	74.1	3.8	35.0
Mother & male guardian . . . . .	27.0	62.7	6.0	2.9	21.4	73.8	4.8	35.2
Father & female guardian . . . . .	25.2	65.0	5.7	3.8	18.1	76.3	5.6	30.1
Mother only . . . . .	27.2	61.4	6.4	3.2	19.9	74.8	5.3	33.9
Father only . . . . .	30.1	57.9	7.4	3.0	23.5	69.7	6.8	36.3
Other relative/non-relative . . . . .	23.4	66.3	6.1	2.1	16.3	77.5	6.1	34.2
Limited English proficient								
Yes . . . . .	20.0	57.8	12.9	4.7	24.3	66.0	9.7	38.4
No . . . . .	32.5	58.4	5.0	2.4	21.5	74.3	4.2	34.8
Language minority								
Yes . . . . .	27.0	58.8	7.8	3.7	20.2	72.4	7.5	40.9
No . . . . .	32.9	58.4	4.9	2.3	21.7	74.4	4.0	34.1
Grades composite								
Lowest quartile . . . . .	12.5	71.9	9.7	3.6	18.5	75.4	6.1	32.6
Second quartile . . . . .	20.7	68.7	6.1	2.7	21.0	73.9	5.2	35.1
Third quartile . . . . .	32.8	59.2	4.0	2.2	21.0	75.3	3.7	34.2
Highest quartile . . . . .	57.4	38.6	1.6	1.4	24.8	72.5	2.6	37.0
Science test								
Lowest quartile . . . . .	15.6	67.0	9.9	4.3	19.1	74.0	6.9	35.2
Second quartile . . . . .	23.5	66.1	5.8	2.9	18.9	76.7	4.4	34.2
Third quartile . . . . .	34.7	59.0	3.5	1.8	21.1	75.7	3.2	35.0
Highest quartile . . . . .	54.0	42.6	1.6	1.1	25.6	72.4	2.0	34.4



**Table 1.1--Percent of 1988 eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	32.2	58.4	5.2	2.5	21.5	74.1	4.4	34.8
Test composite								
Lowest quartile . . . . .	11.8	68.0	11.8	4.8	18.6	74.1	7.3	36.5
Second quartile . . . . .	19.0	71.2	5.8	2.7	18.4	76.7	4.9	31.8
Third quartile . . . . .	33.3	61.4	2.6	1.6	21.3	75.7	3.0	35.7
Highest quartile . . . . .	62.2	35.0	1.0	1.0	26.1	71.4	2.5	34.8
Reading proficiency <sup>5</sup>								
Below level 1 . . . . .	15.6	64.1	11.2	4.8	21.5	70.7	7.8	35.8
At level 1 . . . . .	25.6	64.5	5.7	2.6	19.8	75.7	4.5	34.9
At level 2 . . . . .	49.1	47.0	1.8	1.2	23.6	73.7	2.7	34.1
Math proficiency <sup>6</sup>								
Below level 1 . . . . .	13.2	67.3	11.9	4.3	20.2	73.4	6.4	36.5
At level 1 . . . . .	19.9	70.2	5.5	2.7	18.5	76.8	4.8	33.7
At level 2 . . . . .	34.5	59.3	3.0	1.9	22.2	74.7	3.2	35.9
At level 3 . . . . .	71.5	26.5	0.6	0.8	27.4	70.1	2.4	34.5
Math ability group								
Low . . . . .	7.7	65.9	20.0	4.8	20.8	73.0	6.2	35.7
Middle . . . . .	16.9	74.5	4.9	2.2	22.4	73.5	4.2	35.0
High . . . . .	69.7	25.1	2.2	1.2	25.5	71.1	3.4	36.2
Not grouped . . . . .	17.1	73.2	4.1	4.0	14.1	81.2	4.7	32.0
Don't know . . . . .	11.4	74.6	7.8	4.2	14.5	78.2	7.4	31.8
Science ability group								
Low . . . . .	12.8	67.2	13.9	3.5	20.9	73.9	5.2	36.2
Middle . . . . .	23.6	66.9	5.8	2.2	21.8	75.3	2.9	35.2
High . . . . .	55.0	38.3	3.3	1.8	29.3	68.5	2.2	38.4
Not grouped . . . . .	32.8	59.2	3.8	2.8	16.8	78.5	4.7	32.6
Don't know . . . . .	17.3	70.0	7.0	4.0	15.0	70.4	14.6	29.5
English ability group								
Low . . . . .	12.0	66.4	15.8	3.0	24.2	69.9	5.9	34.4
Middle . . . . .	23.0	67.4	5.8	2.3	21.6	74.0	4.4	34.3
High . . . . .	55.0	39.2	2.8	1.5	25.9	70.4	3.6	36.8
Not grouped . . . . .	31.1	60.2	3.9	3.2	17.2	78.8	4.0	34.3
Don't know . . . . .	15.2	71.8	7.0	4.0	16.1	76.7	7.2	31.7
Social studies ability group								
Low . . . . .	10.4	70.1	13.3	3.4	21.7	71.9	6.4	30.9
Middle . . . . .	23.9	66.7	5.6	2.2	21.6	74.0	4.3	35.2
High . . . . .	52.0	40.8	3.8	1.9	26.6	69.5	3.9	38.6
Not grouped . . . . .	34.5	57.4	3.7	2.7	18.4	77.9	3.7	33.1
Don't know . . . . .	18.1	69.1	7.0	3.7	17.3	75.8	6.9	30.7
Locus of control								
Lowest (external) . . . . .	21.4	64.7	8.2	3.3	21.1	73.5	5.3	34.5
Middle . . . . .	33.6	58.1	4.5	2.3	21.4	74.2	4.4	35.0
Highest (internal) . . . . .	41.2	52.7	3.0	1.9	21.9	74.7	3.4	34.9
Self concept								
Low . . . . .	28.2	62.4	5.4	2.4	20.1	75.5	4.4	32.2
Medium . . . . .	32.7	58.0	5.4	2.3	21.4	74.5	4.1	35.2
High . . . . .	36.3	54.5	4.8	2.7	23.1	72.5	4.5	37.3
Postsecondary education plans . . . . .								
Won't finish high school . . . . .	9.8	60.5	18.3	6.9	21.3	72.1	6.6	31.7
High school only . . . . .	11.1	72.6	9.6	4.6	15.5	77.6	6.9	31.7
Vocational/technical . . . . .	18.2	69.2	7.7	3.3	18.2	76.6	5.2	35.4
Attend college . . . . .	20.4	68.6	6.8	2.4	18.4	77.3	4.2	33.7
Graduate college . . . . .	35.7	57.0	3.9	2.1	21.5	74.6	3.9	34.7
Postgraduate/professional . . . . .	49.1	44.4	3.1	1.7	27.4	69.0	3.6	36.9

**Table 1.1--Percent of 1988 eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	32.2	58.4	5.2	2.5	21.5	74.1	4.4	34.8
Geographic region								
Northeast . . . . .	36.3	53.1	5.4	3.0	25.5	71.5	3.0	42.0
North central . . . . .	28.8	63.4	4.5	1.9	21.8	75.7	2.4	32.4
South . . . . .	29.5	61.2	5.2	2.5	19.1	76.7	4.2	36.8
West . . . . .	37.5	52.2	6.0	2.6	21.6	69.8	8.6	27.6
Urbanicity								
Urban . . . . .	32.5	55.7	6.1	3.2	20.6	72.3	7.1	38.8
Suburban . . . . .	35.1	56.0	5.3	2.2	24.0	72.1	3.9	35.0
Rural . . . . .	28.1	64.0	4.4	2.3	18.8	78.3	2.8	31.5
School type								
Public . . . . .	31.2	59.8	5.2	2.5	21.5	73.9	4.6	32.5
Catholic . . . . .	31.7	53.3	7.0	2.5	18.6	79.1	2.3	58.7
Independent private . . . . .	69.6	25.3	2.6	1.2	48.0	48.1	3.9	42.1
Other private . . . . .	47.9	45.7	1.9	2.0	21.5	76.1	2.4	38.4
Total enrollment								
1-99 . . . . .	48.5	43.7	1.7	1.8	8.3	89.2	2.5	33.0
100-299 . . . . .	30.2	59.7	4.5	2.7	20.6	76.6	2.8	40.0
300-499 . . . . .	30.8	59.5	5.3	2.4	21.8	74.8	3.4	34.4
500-749 . . . . .	32.8	58.5	5.4	2.1	21.9	74.8	3.3	37.4
750-999 . . . . .	32.8	57.6	5.8	2.5	22.2	72.7	5.1	31.6
1000 + . . . . .	32.9	57.9	4.8	3.1	21.0	70.8	8.1	29.5

<sup>1</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>2</sup> Mathematics course-taking categories were created to be mutually exclusive and exhaustive. They do not sum to 100% across categories of classification variables because one mathematics category formed by a very small percentage of students who reported taking both algebra and remedial math was not included in the tables. A complete description of the mathematics categories and their method of creation is in the "Variables Used" section following the tables.

<sup>3</sup> Because of the way the question was worded, the algebra category can include other advanced math courses.

<sup>4</sup> Science course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the science course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>5</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>6</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

NOTE: Because of rounding error, details may not always add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

**Table 1.2.--Percent of 1988 public school eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics**

Student <sup>1</sup> characteristics	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	31.2	59.8	5.2	2.5	21.5	73.9	4.6	32.5
Sex								
Male . . . . .	30.7	58.6	6.2	2.8	22.4	72.9	4.7	34.9
Female . . . . .	31.7	61.0	4.2	2.2	20.7	74.7	4.6	30.2
Race/ethnicity								
Asian . . . . .	46.2	41.8	5.6	4.1	26.9	64.0	9.1	30.3
Hispanic . . . . .	24.5	62.1	7.6	3.9	19.6	71.5	8.9	36.8
Black . . . . .	25.8	61.5	7.4	3.2	19.6	74.2	6.2	36.7
White . . . . .	32.7	59.9	4.4	2.0	21.9	74.7	3.4	31.0
Native American . . . . .	25.6	57.3	9.8	3.9	22.2	72.6	5.2	36.8
Family income								
Under \$15,000 . . . . .	20.0	67.6	7.0	3.5	17.3	76.8	5.9	33.1
\$15,000-\$24,999 . . . . .	26.4	63.3	6.0	2.8	19.5	76.0	4.5	31.5
\$25,000-\$34,999 . . . . .	31.9	60.3	4.6	1.9	20.6	74.9	4.5	31.9
\$35,000-\$49,999 . . . . .	35.3	57.9	3.9	2.0	23.3	73.0	3.7	31.3
\$50,000 or more . . . . .	45.8	48.5	3.3	1.8	27.6	68.8	3.6	33.5
Parent education								
Less than high school . . . . .	18.2	67.2	9.1	3.8	17.1	76.9	6.1	34.9
High school graduate/GED . . . . .	23.1	65.9	6.4	2.9	18.7	76.5	4.7	31.1
Some college . . . . .	29.6	61.8	4.9	2.4	21.2	74.2	4.6	32.5
College graduate . . . . .	42.9	51.4	3.0	1.9	24.4	71.7	4.0	31.8
M.A. or equivalent . . . . .	52.0	44.0	2.1	1.5	28.7	67.3	4.0	35.0
Ph.D./M.D./other professional . . . . .	59.1	37.5	1.4	1.0	33.2	65.1	1.8	30.4
Don't know . . . . .	21.4	62.2	10.6	5.0	20.1	71.5	8.4	32.1
Socioeconomic status								
Lowest quartile . . . . .	18.6	68.4	7.5	3.6	17.2	77.3	5.5	32.8
Second quartile . . . . .	26.2	63.8	6.0	2.6	20.1	75.1	4.7	32.0
Third quartile . . . . .	33.3	59.1	4.2	2.3	21.9	73.4	4.7	31.6
Highest quartile . . . . .	49.1	46.1	2.8	1.4	27.9	68.7	3.4	33.7
Family composition								
Mother & father . . . . .	34.2	57.8	4.6	2.2	22.2	73.8	4.0	32.2
Mother & male guardian . . . . .	26.4	63.5	5.9	3.0	21.7	73.3	5.0	33.7
Father & female guardian . . . . .	25.5	65.9	5.3	3.1	18.5	75.9	5.6	28.8
Mother only . . . . .	26.2	62.7	6.5	3.2	19.8	74.7	5.5	32.2
Father only . . . . .	29.0	59.4	7.6	3.1	23.5	69.2	7.4	34.9
Other relative/non-relative . . . . .	23.3	66.8	6.3	1.9	16.1	77.7	6.2	33.2
Limited English proficient								
Yes . . . . .	19.6	58.2	13.1	4.6	24.6	65.5	10.0	38.3
No . . . . .	31.5	59.8	5.0	2.5	21.5	74.0	4.5	32.4
Language minority								
Yes . . . . .	26.4	59.8	7.8	3.7	20.1	72.1	7.8	38.6
No . . . . .	31.8	59.8	4.9	2.3	21.7	74.1	4.2	31.7
Grades composite								
Lowest quartile . . . . .	12.0	72.7	9.7	3.7	18.3	75.2	6.5	31.0
Second quartile . . . . .	20.5	69.7	6.0	2.6	21.2	73.5	5.3	32.8
Third quartile . . . . .	32.1	60.7	3.8	2.3	20.9	75.2	3.9	31.2
Highest quartile . . . . .	57.3	39.1	1.5	1.4	25.2	71.9	2.8	34.5
Science test								
Lowest quartile . . . . .	14.8	68.0	9.8	4.3	19.2	73.6	7.2	33.7
Second quartile . . . . .	22.7	67.5	5.7	3.0	18.9	76.4	4.6	31.4
Third quartile . . . . .	33.9	60.5	3.3	1.7	21.2	75.4	3.4	32.2
Highest quartile . . . . .	53.8	43.2	1.5	1.0	25.5	72.4	2.1	31.7

**Table 1.2.--Percent of 1988 public school eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics--Continued**

Student <sup>1</sup> characteristics	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	31.2	59.8	5.2	2.5	21.5	73.9	4.6	32.5
Test composite								
Lowest quartile . . . . .	11.5	68.8	11.8	4.8	18.8	73.8	7.4	35.1
Second quartile . . . . .	18.6	72.1	5.5	2.8	18.8	76.0	5.2	29.3
Third quartile . . . . .	33.0	62.7	2.2	1.5	21.3	75.4	3.3	32.8
Highest quartile . . . . .	62.9	35.0	0.8	0.9	25.8	71.5	2.7	31.9
Reading proficiency <sup>5</sup>								
Below level 1 . . . . .	14.9	65.4	11.1	4.9	21.8	70.2	8.0	34.6
At level 1 . . . . .	24.9	65.6	5.6	2.7	19.9	75.2	4.8	32.4
At level 2 . . . . .	48.9	48.1	1.6	1.2	23.3	73.9	2.8	31.2
Math proficiency <sup>6</sup>								
Below level 1 . . . . .	12.5	68.2	11.9	4.4	20.6	72.7	6.7	34.8
At level 1 . . . . .	19.3	71.4	5.3	2.7	18.5	76.5	5.0	31.1
At level 2 . . . . .	34.1	60.4	2.8	2.1	22.1	74.4	3.5	32.8
At level 3 . . . . .	72.3	26.3	0.5	0.7	27.2	70.3	2.5	32.5
Math ability group								
Low . . . . .	5.8	67.2	20.8	4.9	20.3	73.0	6.7	33.5
Middle . . . . .	16.0	75.8	4.6	2.3	22.2	73.4	4.4	33.1
High . . . . .	69.5	25.6	2.2	1.2	25.5	70.8	3.7	33.6
Not grouped . . . . .	14.6	76.5	4.1	4.2	14.1	80.8	5.1	27.6
Don't know . . . . .	10.9	75.2	7.9	4.2	14.1	78.4	7.5	30.4
Science ability group								
Low . . . . .	11.1	68.6	13.9	3.7	20.6	74.0	5.4	35.4
Middle . . . . .	22.9	67.9	5.7	2.2	21.7	75.4	2.9	34.0
High . . . . .	55.1	38.6	3.2	1.8	29.2	68.5	2.3	36.1
Not grouped . . . . .	30.3	62.2	3.8	3.0	16.4	78.2	5.5	27.1
Don't know . . . . .	17.0	70.4	7.0	4.2	14.7	70.3	15.0	28.1
English ability group								
Low . . . . .	11.2	67.2	16.3	3.0	24.8	69.1	6.1	33.3
Middle . . . . .	22.3	68.4	5.6	2.3	21.6	73.8	4.6	32.9
High . . . . .	55.4	39.3	2.6	1.6	25.9	70.1	3.9	34.8
Not grouped . . . . .	27.1	64.7	3.9	3.5	16.1	79.4	4.5	28.4
Don't know . . . . .	14.8	72.3	7.0	4.1	15.8	76.8	7.3	30.4
Social studies ability group								
Low . . . . .	10.0	71.0	13.1	3.5	21.6	71.8	6.6	30.0
Middle . . . . .	23.4	67.6	5.5	2.2	21.8	73.8	4.4	34.0
High . . . . .	52.3	40.9	3.7	1.9	26.8	69.1	4.1	36.7
Not grouped . . . . .	32.1	60.6	3.7	2.9	17.4	78.4	4.1	27.3
Don't know . . . . .	17.7	69.4	7.1	3.8	17.1	76.0	6.9	29.5
Locus of control								
Lowest (external) . . . . .	20.7	65.5	8.3	3.3	21.1	73.3	5.6	32.7
Middle . . . . .	32.8	59.5	4.3	2.3	21.4	73.9	4.7	32.7
Highest (internal) . . . . .	40.3	54.3	2.9	1.9	22.0	74.4	3.6	32.0
Self concept								
Low . . . . .	27.4	63.4	5.4	2.4	19.9	75.4	4.7	30.0
Medium . . . . .	31.5	59.5	5.4	2.4	21.3	74.2	4.4	32.9
High . . . . .	35.2	56.0	4.8	2.7	23.5	71.8	4.7	34.7
Postsecondary education plans								
Won't finish high school . . . . .	9.7	60.6	18.3	7.1	21.3	71.9	6.8	30.1
High school only . . . . .	10.9	72.9	9.7	4.6	15.5	77.4	7.0	30.9
Vocational/technical . . . . .	17.8	69.9	7.5	3.3	18.3	76.2	5.5	34.0
Attend college . . . . .	19.6	69.8	6.8	2.4	18.6	76.9	4.5	31.6
Graduate college . . . . .	35.1	58.1	3.7	2.1	21.6	74.3	4.1	32.2
Postgraduate/professional . . . . .	49.2	45.2	3.0	1.6	28.0	68.0	4.0	33.4

**Table 1.2.--Percent of 1988 public school eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics--Continued**

Student <sup>1</sup> characteristics	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	31.2	59.8	5.2	2.5	21.5	73.9	4.6	32.5
Geographic region								
Northeast . . . . .	35.2	55.3	5.1	2.8	26.0	70.8	3.1	37.9
North central . . . . .	27.6	64.7	4.7	2.0	21.8	75.5	2.7	29.8
South . . . . .	28.3	62.6	5.2	2.6	18.6	77.1	4.3	35.6
West . . . . .	37.3	52.6	6.1	2.7	22.4	68.4	9.2	25.5
Urbanicity								
Urban . . . . .	29.4	58.9	6.3	3.6	19.6	71.7	8.7	33.5
Suburban . . . . .	34.7	56.8	5.3	2.1	24.7	71.3	4.0	32.8
Rural . . . . .	27.9	64.1	4.4	2.3	18.8	78.3	2.8	31.4
Total enrollment								
1-99 . . . . .	52.5	40.4	3.3	2.6	14.2	81.9	3.9	35.3
100-299 . . . . .	24.7	66.4	4.2	2.8	20.8	76.5	2.7	35.7
300-499 . . . . .	29.1	61.8	5.4	2.4	21.9	74.3	3.8	29.9
500-749 . . . . .	32.5	58.9	5.3	2.1	21.8	74.8	3.5	35.7
750-999 . . . . .	32.1	58.3	5.8	2.5	21.9	73.0	5.1	31.2
1000 + . . . . .	32.7	58.1	4.8	3.1	20.8	71.0	8.2	29.6

<sup>1</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>2</sup> Mathematics course-taking categories were created to be mutually exclusive and exhaustive. They do not sum to 100% across categories of classification variables because one mathematics category formed by a very small percentage of students who reported taking both algebra and remedial math was not included in the tables. A complete description of the mathematics categories and their method of creation is in the "Variables Used" section following the tables.

<sup>3</sup> Because of the way the question was worded, the algebra category can include other advanced math courses.

<sup>4</sup> Science course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the science course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>5</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>6</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

NOTE: Because of rounding error, details may not always add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."

**Table 1.3.--Percent of 1988 Catholic school eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics**

Student <sup>1</sup> characteristics	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	31.7	53.3	7.0	2.5	18.6	79.1	2.3	58.7
Sex								
Male . . . . .	31.8	52.3	7.7	2.3	17.4	80.2	2.4	57.4
Female . . . . .	31.6	54.2	6.3	2.7	19.8	78.1	2.1	59.9
Race/ethnicity								
Asian . . . . .	40.1	45.0	4.7	5.0	14.2	83.5	2.4	65.6
Hispanic . . . . .	19.4	61.1	10.4	3.4	10.8	86.5	2.6	56.1
Black . . . . .	30.3	48.2	7.7	4.3	18.8	76.5	4.7	68.3
White . . . . .	33.4	53.4	6.4	1.9	19.9	78.2	1.9	57.3
Native American . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Family income								
Under \$15,000 . . . . .	29.6	52.5	9.0	2.8	14.5	82.0	3.5	62.7
\$15,000-\$24,999 . . . . .	25.1	60.0	5.4	2.3	15.0	83.3	1.7	66.0
\$25,000-\$34,999 . . . . .	28.2	53.4	9.5	3.0	15.2	82.5	2.3	61.8
\$35,000-\$49,999 . . . . .	32.0	55.1	5.0	2.4	18.7	78.6	2.8	58.9
\$50,000 or more . . . . .	41.6	46.4	5.5	1.6	24.6	73.6	1.8	52.8
Parent education								
Less than high school . . . . .	14.1	57.7	10.8	4.0	13.7	79.5	6.8	62.0
High school graduate/GED . . . . .	26.9	55.3	10.3	2.4	15.7	82.3	1.9	61.6
Some college . . . . .	29.7	55.4	6.1	2.7	17.8	79.8	2.4	61.5
College graduate . . . . .	35.6	50.6	6.5	2.2	19.5	78.2	2.3	52.6
M.A. or equivalent . . . . .	43.8	45.8	4.8	1.8	21.9	75.9	2.2	52.4
Ph.D./M.D./Other professional . . . . .	43.0	43.5	6.9	1.9	31.6	67.4	0.9	58.4
Don't know . . . . .	14.8	71.6	6.6	4.1	8.9	90.0	1.1	62.6
Socioeconomic status								
Lowest quartile . . . . .	21.9	58.8	7.8	3.3	15.8	79.9	4.3	70.9
Second quartile . . . . .	28.9	55.2	8.1	2.8	16.4	81.8	1.7	61.4
Third quartile . . . . .	28.3	56.0	7.5	2.2	16.7	81.9	1.4	58.0
Highest quartile . . . . .	39.2	48.1	5.5	2.4	22.6	74.5	2.8	54.0
Family composition								
Mother & father . . . . .	32.8	53.4	6.7	2.0	19.3	78.7	2.0	58.7
Mother & male guardian . . . . .	28.4	54.9	8.9	3.0	14.5	84.4	1.1	63.3
Father & female guardian . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Mother only . . . . .	30.1	53.2	6.2	3.3	17.3	79.8	2.9	56.4
Father only . . . . .	39.1	39.8	7.4	0.6	24.3	75.0	0.6	56.6
Other relative/non-relative . . . . .	26.8	59.0	2.7	1.4	19.8	76.8	3.3	57.1
Limited English proficient								
Yes . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
No . . . . .	31.8	53.2	7.0	2.4	18.8	79.0	2.3	58.7
Language minority								
Yes . . . . .	24.9	55.2	8.9	4.2	14.0	81.7	4.3	60.0
No . . . . .	32.6	53.0	6.7	2.3	19.2	78.8	2.0	58.5
Grades composite								
Lowest quartile . . . . .	16.2	63.6	12.7	2.7	15.8	81.8	2.4	62.9
Second quartile . . . . .	17.5	63.6	8.1	3.4	17.9	79.0	3.1	59.5
Third quartile . . . . .	30.5	53.4	7.8	2.2	19.3	78.3	2.4	57.7
Highest quartile . . . . .	48.0	42.5	2.9	2.1	19.7	78.7	1.5	57.3
Science test								
Lowest quartile . . . . .	23.0	52.3	13.6	4.3	17.3	79.2	3.5	61.8
Second quartile . . . . .	23.7	58.9	8.3	2.5	16.4	81.1	2.5	61.8
Third quartile . . . . .	33.8	52.3	5.6	2.3	18.2	79.7	2.0	58.1
Highest quartile . . . . .	42.2	49.5	3.2	1.5	21.6	77.3	1.2	54.4

**Table 1.3.--Percent of 1988 Catholic school eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics--Continued**

Student <sup>1</sup> characteristics	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	31.7	53.3	7.0	2.5	18.6	79.1	2.3	58.7
Test composite								
Lowest quartile . . . . .	16.4	53.9	13.8	6.7	14.0	79.8	6.2	61.5
Second quartile . . . . .	21.2	60.8	10.3	1.8	14.8	83.6	1.6	60.8
Third quartile . . . . .	30.2	55.6	6.0	2.1	20.6	77.7	1.7	59.3
Highest quartile . . . . .	47.1	45.1	2.7	1.4	21.1	77.6	1.4	55.3
Reading proficiency <sup>5</sup>								
Below level 1 . . . . .	21.0	49.5	16.3	4.0	19.3	75.7	5.0	54.9
At level . . . . .	26.2	56.9	8.0	2.4	17.2	80.9	2.0	63.2
At level 2 . . . . .	40.2	49.4	4.0	1.7	20.7	77.8	1.4	54.4
Math proficiency <sup>6</sup>								
Below level 1 . . . . .	18.9	56.1	13.5	3.7	16.0	81.7	2.2	63.5
At level 1 . . . . .	23.1	59.6	7.8	3.2	16.8	80.4	2.8	61.9
At level 2 . . . . .	31.1	55.8	5.8	1.5	21.0	77.5	1.4	60.1
At level 3 . . . . .	57.1	36.5	1.7	1.4	21.4	77.0	1.6	47.1
Math ability group								
Low . . . . .	15.5	62.4	15.1	2.7	16.4	81.6	2.0	59.5
Middle . . . . .	19.2	63.1	10.3	2.0	22.0	75.8	2.2	58.4
High . . . . .	60.3	29.1	3.5	1.8	21.5	77.1	1.4	62.0
Not grouped . . . . .	22.8	62.6	4.9	3.5	14.0	83.1	2.9	55.7
Don't know . . . . .	16.0	66.2	8.3	2.9	16.2	77.9	6.0	59.8
Science ability group								
Low . . . . .	17.7	56.4	22.2	0.0	15.3	80.9	3.7	48.7
Middle . . . . .	26.0	54.3	9.4	3.4	20.3	77.3	2.3	59.2
High . . . . .	41.7	42.7	6.7	2.8	24.4	74.3	1.4	70.5
Not grouped . . . . .	32.6	54.8	5.2	2.3	16.9	80.9	2.2	56.2
Don't know . . . . .	15.9	68.2	7.7	1.7	18.6	73.4	8.0	61.7
English ability group								
Low . . . . .	14.8	56.8	14.7	3.7	18.4	78.5	3.1	47.7
Middle . . . . .	24.3	56.4	10.7	3.5	22.8	75.0	2.2	57.2
High . . . . .	40.9	46.3	5.0	1.1	23.3	75.5	1.2	62.6
Not grouped . . . . .	33.5	53.6	5.3	2.5	15.3	82.2	2.5	59.0
Don't know . . . . .	20.0	65.8	6.4	1.9	19.5	73.8	6.8	60.1
Social studies ability group								
Low . . . . .	13.3	55.2	19.3	0.0	23.9	72.6	3.5	53.0
Middle . . . . .	24.4	56.2	10.2	3.9	19.9	77.8	2.3	58.3
High . . . . .	41.7	44.0	6.4	2.1	21.5	77.1	1.4	67.6
Not grouped . . . . .	33.0	53.8	5.5	2.3	17.5	80.3	2.2	57.3
Don't know . . . . .	16.2	69.5	6.7	1.6	18.3	74.2	7.5	53.9
Locus of control								
Lowest (external) . . . . .	25.1	56.6	9.0	3.3	19.6	78.3	2.1	60.7
Middle . . . . .	32.2	53.4	7.7	1.9	19.2	78.5	2.3	58.7
Highest (internal) . . . . .	35.5	50.9	5.1	2.6	17.4	80.3	2.3	57.5
Self concept								
Low . . . . .	27.4	58.0	7.4	2.7	19.1	78.5	2.4	57.4
Medium . . . . .	33.3	52.5	7.1	2.0	19.4	79.0	1.6	57.3
High . . . . .	34.5	49.5	6.5	2.7	17.5	79.8	2.7	60.9
Postsecondary education plans								
Won't finish high school . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school only . . . . .	13.7	70.1	10.0	3.8	16.8	80.1	3.1	56.3
Vocational/technical . . . . .	24.5	56.4	14.4	1.7	14.9	83.9	1.1	68.9
Attend college . . . . .	23.9	60.5	7.4	2.6	16.5	81.6	1.9	62.5
Graduate college . . . . .	31.5	54.2	7.0	2.4	18.4	78.8	2.8	56.8
Postgraduate/professional . . . . .	39.4	45.7	4.9	2.6	20.6	77.9	1.6	59.0

**Table 1.3.--Percent of 1988 Catholic school eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics--Continued**

Student <sup>1</sup> characteristics	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No Math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	31.7	53.3	7.0	2.5	18.6	79.1	2.3	58.7
Geographic region								
Northeast . . . . .	31.1	50.9	8.2	3.8	13.5	84.1	2.4	64.0
North central . . . . .	30.4	59.3	4.3	1.6	23.1	75.5	1.4	54.9
South . . . . .	36.7	46.7	9.1	1.4	27.0	70.9	2.0	65.0
West . . . . .	28.9	53.1	7.6	3.3	6.7	88.6	4.7	45.7
Urbanicity								
Urban . . . . .	26.8	57.1	8.0	1.9	18.0	80.4	1.6	58.4
Suburban . . . . .	35.3	49.8	6.2	3.3	18.2	78.6	3.2	59.6
Rural . . . . .	42.5	50.4	4.5	1.0	27.4	72.6	0.0	53.2
Total enrollment								
1-99 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
100-299 . . . . .	33.5	51.7	6.6	2.1	16.7	79.9	3.5	50.5
300-499 . . . . .	31.9	52.6	6.4	3.4	19.0	79.1	2.0	62.8
500-749 . . . . .	24.9	57.7	9.8	2.9	23.2	75.9	0.9	72.4
750-999 . . . . .	48.8	38.6	6.7	0.0	23.1	75.8	1.2	73.4
1000+ . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n

<sup>1</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>2</sup> Mathematics course-taking categories were created to be mutually exclusive and exhaustive. They do not sum to 100% across categories of classification variables because one mathematics category formed by a very small percentage of students who reported taking both algebra and remedial math was not included in the tables. A complete description of the mathematics categories and their method of creation is in the "Variables Used" section following the tables.

<sup>3</sup> Because of the way the question was worded, the algebra category can include other advanced math courses.

<sup>4</sup> Science course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the science course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>5</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>6</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

NOTE: Estimates based on fewer than 30 respondents are likely to be unstable and are indicated by "Low n". Because of rounding error, details may not always add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."



**Table 1.4.--Percent of 1988 independent private school eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics**

Student characteristics <sup>1</sup>	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	69.6	25.3	2.6	1.2	48.0	48.1	3.9	42.1
Sex								
Male . . . . .	72.4	22.0	2.7	1.3	47.4	48.3	4.2	44.8
Female . . . . .	66.5	29.1	2.5	1.1	48.7	47.8	3.5	39.1
Race/ethnicity								
Asian . . . . .	76.7	18.8	0.8	3.4	36.9	59.8	3.3	37.4
Hispanic . . . . .	56.8	36.3	5.5	0.0	46.0	53.3	0.8	50.9
Black . . . . .	51.2	36.5	6.9	2.2	43.4	53.7	2.9	36.4
White . . . . .	70.6	25.0	2.5	0.9	50.3	45.5	4.2	42.5
Native American . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Family income								
Under \$15,000 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
\$15,000-\$24,999 . . . . .	73.0	18.9	0.0	2.6	49.7	46.6	3.7	35.1
\$25,000-\$34,999 . . . . .	58.9	31.7	5.7	2.7	39.1	52.1	8.8	28.4
\$35,000-\$49,999 . . . . .	63.1	29.2	2.1	2.9	39.1	56.5	4.4	32.0
\$50,000 or more . . . . .	70.2	24.9	2.7	1.1	49.0	47.1	3.8	43.0
Parent education								
Less than high school . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school graduate/GED . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Some college . . . . .	65.9	26.0	4.6	1.6	45.2	53.6	1.1	42.0
College graduate . . . . .	67.5	26.7	3.4	0.8	51.4	45.1	3.5	42.6
M.A. or equivalent . . . . .	68.5	27.3	2.2	1.3	47.7	49.0	3.2	41.7
Ph.D./M.D./other professional . . . . .	75.1	21.0	1.5	1.2	47.4	46.1	6.5	42.3
Don't know . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Socioeconomic status								
Lowest quartile . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Second quartile . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Third quartile . . . . .	60.9	33.1	2.4	2.3	44.3	55.1	0.6	35.5
Highest quartile . . . . .	70.9	24.4	2.6	1.1	48.5	47.1	4.4	42.4
Family composition								
Mother & father . . . . .	70.6	24.6	2.7	1.1	49.6	46.3	4.1	41.7
Mother & male guardian . . . . .	64.5	29.4	4.7	1.4	42.9	53.9	3.2	44.6
Father & female guardian . . . . .	73.2	22.2	2.6	0.0	Low n	Low n	Low n	Low n
Mother only . . . . .	64.3	29.1	2.5	1.1	45.0	51.6	3.4	45.0
Father only . . . . .	72.2	21.3	0.0	6.5	39.2	58.6	2.1	36.6
Other relative/non-relative . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Limited English proficient								
Yes . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
No . . . . .	69.9	25.2	2.5	1.2	48.1	48.1	3.8	41.8
Language minority								
Yes . . . . .	67.2	26.4	3.4	2.7	47.7	50.0	2.3	50.7
No . . . . .	69.9	25.2	2.6	1.1	48.1	47.9	4.1	41.2
Grades composite								
Lowest quartile . . . . .	50.5	42.8	4.7	1.2	37.9	58.7	3.4	43.0
Second quartile . . . . .	54.2	37.6	5.4	0.6	40.1	56.4	3.4	41.6
Third quartile . . . . .	67.1	27.7	2.4	1.7	47.3	48.4	4.3	43.0
Highest quartile . . . . .	83.5	13.5	0.9	1.2	54.1	41.9	4.1	42.3
Science test								
Lowest quartile . . . . .	46.7	38.3	11.5	2.0	41.0	57.6	1.4	43.7
Second quartile . . . . .	55.1	36.9	5.5	2.0	38.9	57.8	3.3	35.2
Third quartile . . . . .	64.6	30.4	1.9	1.0	47.7	48.5	3.8	41.5
Highest quartile . . . . .	77.4	19.4	1.2	1.1	51.2	44.2	4.6	42.3

**Table 1.4.--Percent of 1988 independent private eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics--Continued**

Student <sup>1</sup> characteristics	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	69.6	25.3	2.6	1.2	48.0	48.1	3.9	42.1
Test composite								
Lowest quartile . . . . .	33.4	44.0	17.1	3.8	34.0	63.3	2.7	36.3
Second quartile . . . . .	53.2	36.7	7.6	0.0	42.3	54.9	2.8	44.1
Third quartile . . . . .	51.0	42.7	3.3	1.5	40.6	56.4	3.0	41.9
Highest quartile . . . . .	78.1	18.8	1.1	1.2	51.8	43.7	4.5	41.1
Reading proficiency <sup>5</sup>								
Below level 1 . . . . .	64.6	19.6	11.9	0.8	50.3	47.6	2.1	32.8
At level 1 . . . . .	59.9	34.7	2.8	1.4	43.3	53.6	3.0	44.2
At level 2 . . . . .	74.3	21.9	1.5	1.2	49.9	45.4	4.7	41.0
Math proficiency <sup>6</sup>								
Below level 1 . . . . .	37.9	43.9	15.3	0.0	28.7	66.1	5.2	38.8
At level 1 . . . . .	45.9	42.7	6.1	1.8	44.9	52.8	2.3	40.5
At level 2 . . . . .	52.6	42.5	3.1	1.2	47.5	49.9	2.6	45.4
At level 3 . . . . .	82.3	14.8	0.8	1.2	50.8	44.2	5.0	39.9
Math ability group								
Low . . . . .	46.1	42.1	9.2	1.0	38.7	55.9	5.3	45.6
Middle . . . . .	51.1	44.6	2.2	1.4	46.3	49.1	4.7	45.2
High . . . . .	93.1	4.1	1.1	0.4	51.3	45.8	2.9	41.6
Not grouped . . . . .	66.2	23.6	3.4	4.0	53.0	43.8	3.2	32.9
Don't know . . . . .	53.6	41.2	5.1	0.0	35.3	58.2	6.6	26.8
Science ability group								
Low . . . . .	49.8	38.9	8.7	2.7	37.0	57.3	5.7	44.5
Middle . . . . .	60.2	34.1	4.3	0.8	44.2	52.7	3.1	45.7
High . . . . .	77.0	19.1	1.2	0.9	52.4	46.7	1.0	45.4
Not grouped . . . . .	72.5	22.6	2.0	1.6	50.1	45.7	4.2	39.7
Don't know . . . . .	63.4	32.4	2.9	0.0	28.0	55.7	16.3	29.9
English ability group								
Low . . . . .	55.4	32.6	9.2	2.9	37.5	54.2	8.3	43.2
Middle . . . . .	59.7	35.5	2.8	1.1	41.1	54.0	4.8	44.2
High . . . . .	78.2	17.7	2.3	0.1	53.3	44.8	1.8	49.6
Not grouped . . . . .	72.8	22.4	2.0	1.7	50.8	44.8	4.4	37.3
Don't know . . . . .	55.0	36.9	3.8	2.3	28.4	67.9	3.7	33.7
Social studies ability group								
Low . . . . .	52.3	37.9	9.7	0.0	28.4	66.5	5.1	43.3
Middle . . . . .	56.1	37.6	4.2	1.3	44.4	50.5	5.1	47.7
High . . . . .	76.0	20.3	1.7	0.2	49.1	48.8	2.1	47.8
Not grouped . . . . .	73.7	21.1	2.0	1.9	51.6	44.3	4.1	37.7
Don't know . . . . .	64.9	33.8	1.3	0.0	31.5	62.6	6.0	34.4
Locus of control								
Lowest (external) . . . . .	57.4	33.0	5.1	1.8	43.8	54.3	2.0	43.7
Middle . . . . .	71.0	24.3	2.4	1.2	49.7	45.3	5.0	40.5
Highest (internal) . . . . .	73.4	23.0	1.9	1.0	48.4	47.7	3.9	42.5
Self concept								
Low . . . . .	66.7	28.3	3.6	1.2	43.0	53.8	3.1	41.8
Medium . . . . .	70.7	25.3	1.9	0.2	53.1	42.7	4.2	44.4
High . . . . .	71.4	22.8	2.4	1.9	48.4	47.3	4.3	40.6
Postsecondary education plans								
Won't finish high school . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school only . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Vocational/technical . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Attend college . . . . .	65.3	30.2	1.7	0.0	38.0	57.5	4.5	20.4
Graduate college . . . . .	65.4	28.5	3.4	1.6	44.6	52.0	3.4	44.1
Postgraduate/professional . . . . .	74.2	22.1	1.9	0.8	51.5	44.1	4.4	41.8

**Table 1.4.--Percent of 1988 independent private school eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics--Continued**

Student <sup>1</sup> characteristics	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	69.6	25.3	2.6	1.2	48.0	48.1	3.9	42.1
Geographic region								
Northeast . . . . .	79.5	15.4	2.4	0.9	43.3	55.1	1.6	51.8
North central . . . . .	64.3	31.5	1.8	1.7	66.2	33.8	0.0	29.8
South . . . . .	60.4	33.9	3.7	1.4	41.2	50.9	7.9	39.0
West . . . . .	76.2	20.0	1.1	1.4	64.4	33.7	1.9	39.5
Urbanicity								
Urban . . . . .	71.7	23.7	2.0	1.2	48.7	46.1	5.1	44.7
Suburban . . . . .	64.4	29.4	3.6	1.3	50.7	46.9	2.4	32.0
Rural . . . . .	85.4	12.0	2.6	0.0	23.7	76.3	0.0	89.2
Total enrollment								
1-99 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
100-299 . . . . .	69.6	23.8	2.9	1.0	41.1	57.3	1.6	58.1
300-499 . . . . .	71.5	23.9	2.7	1.0	56.8	41.9	1.3	44.2
500-749 . . . . .	64.6	27.3	3.3	2.9	45.8	49.3	4.9	36.5
750-999 . . . . .	70.9	25.0	3.2	0.9	38.3	46.5	15.2	30.1
1000 + . . . . .	66.8	33.2	0.0	0.0	57.5	42.5	0.0	36.7

<sup>1</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>2</sup> Mathematics course-taking categories were created to be mutually exclusive and exhaustive. They do not sum to 100% across categories of classification variables because one mathematics category formed by a very small percentage of students who reported taking both algebra and remedial math was not included in the tables. A complete description of the mathematics categories and their method of creation is in the "Variables Used" section following the tables.

<sup>3</sup> Because of the way the question was worded, the algebra category can include other advanced math courses.

<sup>4</sup> Science course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the science course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>5</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>6</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

NOTE: Estimates based on fewer than 30 respondents are likely to be unstable and are indicated by "Low n". Because of rounding error, details may not always add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."

**Table 1.5.--Percent of 1988 other private school eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics**

Student characteristics <sup>1</sup>	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	47.9	45.7	1.9	2.0	21.5	76.1	2.4	38.4
Sex								
Male . . . . .	45.3	47.9	2.1	1.8	20.9	76.3	2.9	40.9
Female . . . . .	50.4	43.6	1.8	2.2	22.2	76.0	1.9	36.1
Race/ethnicity								
Asian . . . . .	50.5	32.8	5.5	10.0	16.4	78.0	5.7	49.7
Hispanic . . . . .	41.4	41.6	6.2	3.5	34.2	65.8	0.0	63.5
Black . . . . .	38.8	47.2	1.6	4.9	10.4	89.6	0.0	17.2
White . . . . .	48.8	46.0	1.6	1.4	21.9	75.8	2.3	37.8
Native American . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Family income								
Under \$15,000 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
\$15,000-\$24,999 . . . . .	34.4	56.2	2.3	1.3	16.1	83.9	0.0	26.3
\$25,000-\$34,999 . . . . .	46.3	50.8	0.0	0.4	17.7	80.9	1.4	30.8
\$35,000-\$49,999 . . . . .	42.7	50.5	3.3	1.7	18.0	79.6	2.4	38.0
\$50,000 or more . . . . .	54.0	40.4	1.8	2.6	21.8	75.0	3.2	40.0
Parent education								
Less than high school . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school graduate/GED . . . . .	29.0	62.4	3.7	3.2	13.6	85.0	1.4	24.2
Some college . . . . .	40.1	52.5	2.5	2.5	15.1	80.9	4.1	33.9
College graduate . . . . .	49.8	42.5	2.2	1.0	27.0	72.0	1.0	40.8
M.A. or equivalent . . . . .	63.5	32.8	0.0	3.2	25.6	72.5	1.9	41.1
Ph.D./M.D./other professional . . . . .	62.2	35.5	1.0	0.7	25.4	72.1	2.5	49.5
Don't know . . . . .	27.1	64.7	4.3	1.8	38.5	59.6	1.9	54.8
Socioeconomic status								
Lowest quartile . . . . .	21.8	69.3	5.3	0.8	17.8	81.4	0.8	35.9
Second quartile . . . . .	37.2	54.8	1.7	3.7	10.9	86.4	2.8	22.5
Third quartile . . . . .	42.7	48.9	2.2	1.4	19.7	77.6	2.7	37.5
Highest quartile . . . . .	55.2	40.0	1.6	1.9	25.6	72.2	2.2	43.1
Family composition								
Mother & father . . . . .	49.3	45.2	1.6	1.5	21.1	77.2	1.7	38.2
Mother & male guardian . . . . .	44.3	50.8	1.4	1.4	15.6	78.0	6.3	44.7
Father & female guardian . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Mother only . . . . .	46.9	42.8	5.5	1.7	26.6	70.0	3.5	29.6
Father only . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Other relative/non-relative . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Limited English proficient								
Yes . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
No . . . . .	47.5	46.2	2.0	2.1	21.7	75.8	2.4	38.7
Language minority								
Yes . . . . .	45.4	37.3	7.6	3.1	41.2	54.1	4.7	71.1
No . . . . .	48.1	46.2	1.6	1.9	20.4	77.4	2.2	36.6
Grades composite								
Lowest quartile . . . . .	21.3	65.7	7.2	3.0	28.4	70.2	1.4	27.9
Second quartile . . . . .	25.3	60.8	3.8	4.5	18.0	76.1	6.0	39.3
Third quartile . . . . .	44.1	50.9	0.4	2.4	20.1	77.5	2.4	41.0
Highest quartile . . . . .	68.2	30.0	0.4	0.4	21.5	77.4	1.1	39.1
Science test								
Lowest quartile . . . . .	26.3	60.1	2.8	4.4	16.9	77.5	5.6	29.4
Second quartile . . . . .	38.2	52.5	2.2	3.2	19.7	77.0	3.2	40.0
Third quartile . . . . .	44.1	51.1	2.5	1.7	21.4	77.0	1.6	37.8
Highest quartile . . . . .	65.4	31.0	1.0	0.8	25.7	73.2	1.1	41.4

**Table 1.5.--Percent of 1988 other private school eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	47.9	45.7	1.9	2.0	21.5	76.1	2.4	38.4
Test composite								
Lowest quartile . . . . .	19.3	60.4	3.8	4.0	18.8	75.1	6.2	44.6
Second quartile . . . . .	19.7	71.8	4.1	2.5	13.1	83.4	3.5	35.4
Third quartile . . . . .	42.2	52.0	2.2	2.5	18.7	79.9	1.4	38.6
Highest quartile . . . . .	69.7	27.2	0.5	1.0	28.7	69.7	1.6	38.3
Reading proficiency <sup>5</sup>								
Below level 1 . . . . .	31.5	47.6	2.5	4.3	11.0	83.7	5.3	42.0
At level 1 . . . . .	37.7	55.7	2.6	2.3	18.5	79.2	2.3	38.1
At level 2 . . . . .	59.1	36.8	1.1	1.5	26.4	71.8	1.9	38.1
Math proficiency <sup>6</sup>								
Below level 1 . . . . .	28.1	57.0	4.1	3.0	13.5	82.9	3.6	39.9
At level 1 . . . . .	27.2	62.7	2.8	2.4	20.4	76.7	2.9	38.2
At level 2 . . . . .	47.2	50.1	1.5	1.0	20.2	77.6	2.2	34.6
At level 3 . . . . .	73.2	23.5	0.7	1.7	29.3	69.5	1.3	41.5
Math ability group								
Low . . . . .	24.9	49.3	12.7	10.4	40.3	56.7	3.0	35.3
Middle . . . . .	34.3	59.1	2.0	1.1	22.1	75.5	2.4	47.1
High . . . . .	83.0	14.3	0.3	0.4	26.1	73.4	0.4	45.0
Not grouped . . . . .	27.2	66.9	1.3	3.0	11.3	84.2	4.5	20.4
Don't know . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Science ability group								
Low . . . . .	49.3	45.8	2.1	2.8	Low n	Low n	Low n	Low n
Middle . . . . .	35.9	51.9	3.7	3.1	22.3	74.7	3.0	42.7
High . . . . .	67.1	28.5	1.2	0.7	35.9	63.5	0.6	51.8
Not grouped . . . . .	48.2	47.5	1.1	1.8	15.2	82.0	2.8	32.4
Don't know . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
English ability group								
Low . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Middle . . . . .	40.9	53.1	3.8	0.5	12.6	85.5	1.9	44.5
High . . . . .	60.9	32.9	2.3	0.3	22.7	76.8	0.5	48.3
Not grouped . . . . .	49.1	45.3	1.1	2.7	25.5	71.7	2.8	32.2
Don't know . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Social studies ability group								
Low . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Middle . . . . .	40.1	55.1	2.6	0.2	11.7	86.1	2.2	43.0
High . . . . .	55.7	38.6	1.6	0.9	23.0	76.3	0.7	39.7
Not grouped . . . . .	51.3	43.1	1.3	2.4	24.0	73.3	2.6	36.7
Don't know . . . . .	23.7	63.4	4.9	3.4	22.4	74.0	3.6	Low n
Locus of control								
Lowest (external) . . . . .	28.9	62.1	4.4	2.2	20.0	75.1	5.0	33.1
Middle . . . . .	47.0	45.6	2.0	2.3	20.6	77.4	2.0	38.2
Highest (internal) . . . . .	57.9	37.7	0.7	1.7	23.0	75.7	1.3	41.1
Self concept								
Low . . . . .	40.5	52.5	2.1	1.5	23.1	75.1	1.7	36.9
Medium . . . . .	48.7	44.3	1.9	2.9	20.4	77.2	2.4	37.4
High . . . . .	54.0	40.6	1.8	1.9	21.0	76.1	2.9	40.5
Postsecondary education plans								
Won't finish high school . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school only . . . . .	24.7	61.2	5.4	4.7	Low n	Low n	Low n	Low n
Vocational/technical . . . . .	29.5	59.0	2.6	7.6	18.8	81.2	0.0	24.9
Attend college . . . . .	33.3	55.0	4.6	2.7	16.2	80.6	3.2	24.6
Graduate college . . . . .	49.2	44.7	1.4	2.0	22.3	75.3	2.5	37.1
Postgraduate/professional . . . . .	54.8	41.3	1.5	0.8	23.4	75.1	1.5	45.6

**Table 1.5.--Percent of 1988 other private school eighth graders who report taking specified mathematics, science, and computer education courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	Mathematics <sup>2</sup>				Science <sup>4</sup>			Computer education
	Algebra <sup>3</sup>	Regular math	Remedial math	No math	Science with lab	Science without lab	No science	
1	2	3	4	5	6	7	8	9
Total . . . . .	47.9	45.7	1.9	2.0	21.5	76.1	2.4	38.4
Geographic region								
Northeast . . . . .	68.7	18.5	2.4	4.6	61.5	36.7	1.8	55.8
North central . . . . .	46.3	49.1	0.3	1.3	13.4	86.1	0.5	31.5
South . . . . .	42.1	52.2	2.2	2.2	14.8	81.3	3.9	32.2
West . . . . .	46.8	47.7	3.0	0.9	16.7	81.2	2.1	45.5
Urbanicity								
Urban . . . . .	66.5	26.9	1.5	2.2	30.9	67.8	1.3	52.9
Suburban . . . . .	37.5	55.7	2.4	1.6	16.1	81.5	2.3	31.0
Rural . . . . .	21.9	73.8	1.9	2.2	10.3	84.5	5.2	14.3
Total enrollment								
1-99 . . . . .	48.1	41.5	0.0	1.2	1.2	97.7	1.1	22.8
100-299 . . . . .	49.4	42.6	2.0	3.7	25.3	72.3	2.4	38.8
300-499 . . . . .	49.7	47.8	1.7	0.0	14.5	84.1	1.4	36.7
500-749 . . . . .	42.9	53.3	1.7	1.2	20.6	76.4	3.1	42.0
750-999 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
1000 + . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n

<sup>1</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>2</sup> Mathematics course-taking categories were created to be mutually exclusive and exhaustive. They do not sum to 100% across categories of classification variables because one mathematics category formed by a very small percentage of students who reported taking both algebra and remedial math was not included in the tables. A complete description of the mathematics categories and their method of creation is in the "Variables Used" section following the tables.

<sup>3</sup> Because of the way the question was worded, the algebra category can include other advanced math courses.

<sup>4</sup> Science course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the science course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>5</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>6</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

NOTE: Estimates based on fewer than 30 respondents are likely to be unstable and are indicated by "Low n". Because of rounding error, details may not always add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."

**Table 2.1.--Percent of 1988 eighth graders who report taking  
specified humanities courses by selected student characteristics**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/ social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	83.7	12.1	4.2	24.1	25.6	23.0	47.2	4.3	17.6
Sex									
Male . . . . .	81.6	13.8	4.6	23.8	25.1	21.8	48.3	4.8	16.5
Female . . . . .	85.8	10.4	3.8	24.4	26.1	24.0	46.1	3.8	18.6
Race/ethnicity									
Asian . . . . .	81.3	14.2	4.4	37.5	18.4	17.4	58.0	6.1	19.3
Hispanic . . . . .	76.4	17.3	6.3	19.5	24.0	18.6	51.4	6.0	16.4
Black . . . . .	80.7	11.3	8.0	21.5	23.5	25.7	43.0	7.8	12.1
White . . . . .	85.6	11.3	3.1	24.7	26.7	23.4	46.7	3.2	18.7
Native American . . . . .	75.1	15.7	9.2	19.6	17.6	22.6	52.7	7.1	13.3
Family income									
Under \$15,000 . . . . .	80.1	12.6	7.2	16.3	26.6	23.4	43.9	6.1	9.8
\$15,000-\$24,999 . . . . .	83.5	11.9	4.6	18.6	25.6	23.8	45.9	4.7	12.4
\$25,000-\$34,999 . . . . .	83.9	12.1	4.1	19.7	26.6	23.7	45.6	4.1	17.5
\$35,000-\$49,999 . . . . .	85.4	11.7	2.9	24.5	25.1	22.9	49.1	2.9	20.9
\$50,000 or more . . . . .	86.8	11.1	2.1	37.2	25.6	21.9	49.4	3.1	23.7
Parent education									
Less than high school . . . . .	79.3	13.5	7.2	15.7	25.0	24.8	43.1	7.1	7.8
High school graduate/GED . . . . .	81.9	12.8	5.3	18.7	25.2	25.1	44.6	5.1	13.5
Some college . . . . .	83.2	12.5	4.3	20.9	26.6	22.2	47.2	4.0	16.6
College graduate . . . . .	86.4	11.2	2.4	30.1	26.0	21.2	49.4	3.4	25.4
M.A. or equivalent . . . . .	89.9	8.7	1.4	40.5	23.8	23.0	51.0	2.2	23.5
Ph.D./M.D./ other professional . . . . .	89.0	10.0	1.0	48.2	23.0	21.5	53.4	2.1	30.3
Don't know . . . . .	76.8	15.0	8.2	27.3	22.7	23.7	46.7	6.9	20.0
Socioeconomic status									
Lowest quartile . . . . .	80.5	12.4	7.1	16.2	25.8	23.8	43.7	6.6	8.6
Second quartile . . . . .	82.4	13.0	4.5	18.9	26.2	24.1	45.6	4.0	15.7
Third quartile . . . . .	83.3	13.0	3.7	23.7	25.5	22.2	48.7	3.7	19.2
Highest quartile . . . . .	88.4	10.0	1.6	36.8	25.0	21.8	50.4	2.8	26.0
Family composition									
Mother & father . . . . .	84.3	12.1	3.6	26.4	25.4	22.6	48.1	3.8	20.5
Mother & male guardian . . . . .	83.3	11.7	5.1	18.1	27.2	21.9	46.3	4.7	11.2
Father & female guardian . . . . .	86.1	9.2	4.7	18.7	25.6	26.2	43.5	4.7	9.6
Mother only . . . . .	82.8	12.2	5.0	21.4	25.7	24.1	45.2	5.0	13.6
Father only . . . . .	81.4	14.4	4.2	23.2	21.7	26.4	46.4	5.5	12.3
Other relative/non-relative . . . . .	79.7	12.2	8.1	17.1	28.1	25.0	41.2	5.7	9.7
Limited English proficient									
Yes . . . . .	69.5	20.6	10.0	22.8	25.5	21.0	43.7	9.8	10.2
No . . . . .	84.0	12.0	4.0	24.2	25.6	23.0	47.3	4.1	17.7
Language minority									
Yes . . . . .	76.8	16.6	6.6	24.8	22.7	19.1	51.4	6.8	16.5
No . . . . .	84.6	11.5	3.9	24.0	26.0	23.5	46.6	3.9	17.7
Grades composite									
Lowest quartile . . . . .	78.4	15.1	6.5	17.2	26.4	24.0	43.2	6.4	11.4
Second quartile . . . . .	81.4	13.4	5.2	21.3	24.9	23.2	47.1	4.8	15.2
Third quartile . . . . .	85.5	10.7	3.8	25.5	25.8	22.5	47.9	3.9	19.3
Highest quartile . . . . .	88.9	9.6	1.6	30.5	25.5	22.2	50.1	2.2	22.7
History test									
Lowest quartile . . . . .	74.4	16.8	8.7	17.5	24.8	23.6	43.1	8.5	12.2
Second quartile . . . . .	82.3	12.6	5.0	18.5	25.8	23.4	46.1	4.8	14.7
Third quartile . . . . .	86.6	11.0	2.3	25.1	26.0	23.0	48.3	2.6	19.6
Highest quartile . . . . .	90.1	8.7	1.2	34.5	26.7	22.3	49.3	1.7	23.7

**Table 2.1.--Percent of 1988 eighth graders who report taking  
specified humanities courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/ social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	83.7	12.1	4.2	24.1	25.6	23.0	47.2	4.3	17.6
Test composite									
Lowest quartile . . . . .	72.0	18.0	10.0	17.3	24.7	22.4	43.9	9.0	11.5
Second quartile . . . . .	82.6	12.8	4.7	17.4	25.5	23.6	46.5	4.4	14.4
Third quartile . . . . .	86.8	11.2	2.0	24.1	26.1	22.7	48.7	2.6	19.8
Highest quartile . . . . .	92.0	7.3	0.7	36.0	26.8	23.4	48.1	1.7	24.2
Reading proficiency <sup>5</sup>									
Below level 1 . . . . .	73.1	17.7	9.2	19.1	24.0	21.3	45.7	9.0	15.3
At level 1 . . . . .	82.7	12.7	4.5	20.8	25.8	22.9	47.0	4.2	15.2
At level 2 . . . . .	89.4	8.9	1.7	30.9	26.8	23.4	47.5	2.3	22.5
Math proficiency <sup>6</sup>									
Below level 1 . . . . .	74.9	16.8	8.3	19.7	23.8	21.7	46.1	8.3	13.8
At level 1 . . . . .	81.8	13.2	4.9	18.1	26.1	24.0	45.7	4.3	15.0
At level 2 . . . . .	86.5	11.1	2.3	24.8	27.1	22.1	48.4	2.5	20.4
At level 3 . . . . .	91.8	7.5	0.8	39.1	25.7	23.1	49.0	2.2	23.3
Math ability group									
Low . . . . .	72.6	20.4	7.0	18.0	24.5	24.9	43.6	6.9	16.2
Middle . . . . .	83.2	12.4	4.5	23.6	24.3	23.6	47.6	4.6	14.8
High . . . . .	87.8	10.2	2.0	31.4	26.3	21.6	49.4	2.7	19.5
Not grouped . . . . .	83.7	11.1	5.2	15.5	26.6	22.5	46.7	4.3	24.3
Don't know . . . . .	80.2	12.0	7.9	16.8	30.3	25.7	37.6	6.5	9.7
Science ability group									
Low . . . . .	70.1	22.5	7.4	20.5	25.6	23.1	43.2	8.2	15.1
Middle . . . . .	83.4	12.3	4.3	22.5	25.1	23.4	46.9	4.6	13.2
High . . . . .	87.4	10.2	2.4	31.9	26.2	21.3	49.8	2.6	16.1
Not grouped . . . . .	84.7	11.4	3.9	21.7	24.9	23.6	47.9	3.6	27.0
Don't know . . . . .	80.2	11.8	8.0	18.4	29.9	23.8	39.5	6.8	8.8
English ability group									
Low . . . . .	68.5	23.9	7.6	17.5	26.8	21.8	43.7	7.7	12.8
Middle . . . . .	83.2	12.2	4.6	22.7	25.3	23.5	46.6	4.6	13.5
High . . . . .	88.4	9.7	1.9	31.0	25.7	21.8	49.5	3.1	16.8
Not grouped . . . . .	84.1	11.7	4.1	21.4	25.3	23.1	48.2	3.4	28.2
Don't know . . . . .	80.5	11.4	8.2	18.5	27.9	25.6	39.9	6.7	8.9
Social studies ability group									
Low . . . . .	72.0	20.3	7.7	16.7	24.2	24.9	42.5	8.4	12.7
Middle . . . . .	83.3	12.0	4.7	23.3	25.7	23.5	46.9	3.9	12.7
High . . . . .	86.8	10.7	2.5	29.8	25.5	20.8	51.7	2.0	16.5
Not grouped . . . . .	84.9	11.5	3.6	22.8	24.9	23.9	47.5	3.7	27.3
Don't know . . . . .	80.3	12.8	7.0	20.2	29.4	22.4	37.2	11.0	8.7
Locus of control									
Lowest (external) . . . .	79.2	14.8	6.0	20.8	26.4	22.5	44.9	6.1	14.1
Middle . . . . .	85.1	11.3	3.6	24.5	25.4	22.8	48.1	3.7	17.9
Highest (internal) . . . .	86.6	10.3	3.0	26.8	25.1	23.5	48.4	3.0	20.4
Self concept									
Low . . . . .	83.6	11.9	4.5	23.4	27.5	23.2	44.8	4.5	16.3
Medium . . . . .	84.0	12.1	3.9	23.8	25.5	23.5	46.9	4.1	17.4
High . . . . .	83.7	12.3	4.0	25.1	23.7	22.3	50.0	4.1	19.0
Postsecondary education plans									
Won't finish high school	72.9	18.9	8.2	18.3	27.9	24.0	38.5	9.6	12.0
High school only . . . .	76.7	14.8	8.5	13.0	27.9	25.3	38.6	8.2	8.1
Vocational/technical . .	79.5	14.2	6.3	17.0	24.1	22.8	47.3	5.8	11.2
Attend college . . . . .	81.5	13.3	5.3	18.9	25.7	23.9	45.5	4.9	14.8
Graduate college . . . .	85.9	10.9	3.1	25.3	26.1	23.0	47.6	3.3	19.1
Postgraduate/professional	86.4	11.1	2.5	32.7	24.2	21.3	51.5	3.0	23.1



**Table 2.1.--Percent of 1988 eighth graders who report taking  
specified humanities courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	83.7	12.1	4.2	24.1	25.6	23.0	47.2	4.3	17.6
Geographic region									
Northeast . . . . .	84.5	12.3	3.1	49.6	14.9	31.2	50.9	2.9	23.5
North central . . . . .	84.3	12.2	3.5	19.5	25.9	24.6	47.1	2.3	21.3
South . . . . .	85.0	9.9	5.1	15.4	32.1	18.8	43.1	6.0	12.1
West . . . . .	79.7	15.8	4.5	20.1	24.3	19.9	50.8	5.1	16.3
Urbanicity									
Urban . . . . .	81.4	13.7	4.9	29.6	23.6	23.6	47.0	5.8	24.6
Suburban . . . . .	83.9	12.4	3.7	27.2	25.5	21.5	49.6	3.4	19.2
Rural . . . . .	85.3	10.4	4.3	15.6	27.3	24.5	44.0	4.2	9.9
School type									
Public . . . . .	84.6	11.0	4.4	23.5	26.4	23.5	45.4	4.6	8.6
Catholic . . . . .	73.4	23.4	3.2	16.2	12.7	19.3	65.7	2.3	92.5
Independent private . .	85.4	13.7	0.9	87.8	33.7	20.0	44.1	2.2	22.1
Other private . . . . .	83.2	15.0	1.8	37.0	31.1	17.4	50.2	1.3	69.1
Total enrollment									
1-99 . . . . .	80.9	14.6	4.5	11.4	27.6	18.3	52.6	1.6	48.9
100-299 . . . . .	82.3	14.4	3.3	18.6	21.1	25.1	51.1	2.6	36.7
300-499 . . . . .	82.2	13.9	3.9	22.1	23.5	22.3	51.0	3.2	21.3
500-749 . . . . .	84.3	11.5	4.2	25.0	27.7	22.5	46.1	3.7	13.9
750-999 . . . . .	84.8	10.7	4.5	23.4	25.4	24.6	44.5	5.4	9.9
1000+ . . . . .	84.9	10.2	4.9	29.2	28.9	21.6	42.6	6.9	8.2

<sup>1</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>2</sup> English course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the English course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>3</sup> History/Social studies course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the History/Social studies course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>4</sup> This category includes students who reported taking separate history and social studies courses.

<sup>5</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>6</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

NOTE: Because of rounding error, details may not always add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."

**Table 2.2. Percent of 1988 public school eighth graders who report taking specified humanities courses by selected student characteristics**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	84.6	11.0	4.4	23.5	26.4	23.5	45.4	4.6	8.6
Sex . . . . .									
Male . . . . .	82.4	12.7	4.9	23.1	25.9	22.3	46.7	5.1	7.7
Female . . . . .	86.8	9.3	4.0	23.9	27.0	24.7	44.2	4.1	9.5
Race/ethnicity . . . . .									
Asian . . . . .	81.5	13.6	4.8	36.3	17.9	18.0	57.4	6.7	8.6
Hispanic . . . . .	77.2	16.1	6.7	20.1	25.3	18.9	49.3	6.5	8.8
Black . . . . .	81.6	10.3	8.1	21.4	24.4	25.7	42.0	7.9	6.1
White . . . . .	86.7	10.1	3.2	24.0	27.5	24.1	44.9	3.5	9.1
Native American . . . . .	75.1	15.2	9.7	18.8	17.8	22.9	51.9	7.4	6.4
Family income . . . . .									
Under \$15,000 . . . . .	80.5	12.2	7.4	16.4	27.4	23.5	42.8	6.3	6.3
\$15,000-\$24,999 . . . . .	84.1	11.2	4.7	18.7	26.4	23.9	44.7	5.0	6.8
\$25,000-\$34,999 . . . . .	84.6	11.2	4.2	20.1	27.8	24.1	43.8	4.3	8.6
\$35,000-\$49,999 . . . . .	87.2	9.9	3.0	25.1	25.7	23.9	47.3	3.1	9.9
\$50,000 or more . . . . .	88.5	9.4	2.1	36.7	25.7	22.8	48.1	3.4	12.3
Parent education . . . . .									
Less than high school . . . . .	79.6	13.3	7.1	15.7	25.4	24.9	42.7	7.0	6.0
High school graduate/GED . . . . .	82.6	11.9	5.5	18.8	26.1	25.6	42.9	5.4	6.9
Some college . . . . .	84.3	11.4	4.3	21.4	27.6	22.5	45.7	4.2	8.2
College graduate . . . . .	88.7	8.8	2.5	29.9	26.6	22.7	46.8	3.8	11.9
M.A. or equivalent . . . . .	91.3	7.3	1.4	39.4	24.4	23.3	50.0	2.3	12.3
Ph.D./M.D./other professional . . . . .	90.5	8.0	1.5	43.5	22.3	22.5	52.6	2.6	13.4
Don't know . . . . .	76.6	13.9	9.6	23.1	25.9	23.8	42.3	7.9	5.1
Socioeconomic status . . . . .									
Lowest quartile . . . . .	80.7	12.1	7.2	16.1	26.4	24.0	42.8	6.7	5.6
Second quartile . . . . .	83.2	12.2	4.6	19.3	27.4	24.5	43.9	4.2	7.9
Third quartile . . . . .	84.9	11.1	4.0	24.1	26.4	22.7	46.9	4.0	9.1
Highest quartile . . . . .	90.4	8.1	1.5	35.8	25.4	22.9	48.5	3.1	12.3
Family composition . . . . .									
Mother & father . . . . .	85.3	10.8	3.8	25.9	26.2	23.4	46.2	4.2	10.1
Mother & male guardian . . . . .	83.6	11.1	5.2	17.7	27.8	22.0	45.4	4.8	6.4
Father & female guardian . . . . .	86.7	8.5	4.9	18.5	26.0	26.4	42.8	4.8	5.6
Mother only . . . . .	84.0	10.9	5.1	20.9	26.6	24.3	43.8	5.3	6.2
Father only . . . . .	81.5	14.1	4.4	22.4	22.7	26.5	44.8	5.9	5.5
Other relative/non-relative . . . . .	80.2	11.7	8.1	16.5	28.7	25.6	40.1	5.6	6.2
Limited English proficient . . . . .									
Yes . . . . .	69.3	20.6	10.2	22.8	25.7	21.2	42.9	10.2	8.4
No . . . . .	85.0	10.8	4.3	23.6	26.4	23.6	45.6	4.4	8.6
Language minority . . . . .									
Yes . . . . .	77.5	15.5	7.0	24.4	24.0	19.6	49.2	7.2	8.9
No . . . . .	85.6	10.4	4.1	23.4	26.8	24.1	44.9	4.2	8.6
Grades composite . . . . .									
Lowest quartile . . . . .	78.8	14.5	6.7	16.9	26.9	24.6	41.9	6.7	6.1
Second quartile . . . . .	82.3	12.3	5.4	20.6	25.3	23.7	46.0	5.0	7.1
Third quartile . . . . .	87.2	8.9	3.9	25.0	26.9	22.9	46.0	4.1	9.3
Highest quartile . . . . .	90.2	8.2	1.7	30.2	26.7	22.9	47.9	2.4	11.2
History test . . . . .									
Lowest quartile . . . . .	74.6	16.5	9.0	17.2	25.1	23.9	42.2	8.8	7.9
Second quartile . . . . .	83.2	11.7	5.1	18.3	26.4	23.8	44.8	5.0	6.9
Third quartile . . . . .	88.5	9.2	2.3	24.5	27.2	23.9	46.2	2.7	9.1
Highest quartile . . . . .	92.2	6.5	1.3	34.6	28.2	23.3	46.6	1.9	10.9

**Table 2.2.--Percent of 1988 public school eighth graders who report taking specified humanities courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	84.6	11.0	4.4	23.5	26.4	23.5	45.4	4.6	8.6
Test composite									
Lowest quartile . . . . .	72.3	17.5	10.2	17.1	25.2	22.7	43.0	9.2	7.3
Second quartile . . . . .	83.6	11.6	4.8	17.2	26.2	23.9	45.3	4.6	6.9
Third quartile . . . . .	88.6	9.4	2.0	23.9	27.4	23.5	46.3	2.8	8.8
Highest quartile . . . . .	94.0	5.4	0.7	35.5	27.9	24.6	45.6	1.9	11.9
Reading proficiency <sup>5</sup>									
Below level 1 . . . . .	73.2	17.4	9.4	18.8	24.5	21.4	45.0	9.2	10.3
At level 1 . . . . .	83.7	11.6	4.7	20.4	26.6	23.4	45.5	4.5	7.5
At level 2 . . . . .	91.2	7.1	1.7	30.4	28.1	24.5	44.8	2.5	10.2
Math proficiency <sup>6</sup>									
Below level 1 . . . . .	75.2	16.3	8.5	19.1	24.5	21.7	45.0	8.7	8.5
At level 1 . . . . .	83.0	12.0	5.0	18.1	27.0	24.5	43.9	4.5	6.9
At level 2 . . . . .	88.0	9.6	2.4	25.0	28.3	23.1	45.8	2.8	8.5
At level 3 . . . . .	93.6	5.6	0.8	37.5	26.3	24.1	47.2	2.4	12.6
Math ability group									
Low . . . . .	72.7	19.9	7.4	15.4	25.5	25.5	41.5	7.5	7.5
Middle . . . . .	84.0	11.3	4.7	22.9	24.9	23.9	46.2	4.9	8.4
High . . . . .	88.7	9.2	2.1	30.9	27.2	22.0	47.9	2.9	10.7
Not grouped . . . . .	85.7	8.5	5.8	15.0	28.0	24.2	42.9	4.9	6.1
Don't know . . . . .	80.7	11.3	8.0	16.1	31.0	25.5	36.9	6.6	5.3
Science ability group									
Low . . . . .	70.4	21.9	7.7	19.5	25.8	23.9	41.5	8.8	9.2
Middle . . . . .	84.0	11.6	4.4	22.0	25.4	23.8	46.0	4.8	8.7
High . . . . .	88.4	9.1	2.5	31.3	27.1	21.7	48.4	2.8	9.8
Not grouped . . . . .	86.7	8.9	4.4	20.5	26.6	24.9	44.2	4.3	7.9
Don't know . . . . .	80.6	11.2	8.2	17.7	30.3	23.8	39.0	6.8	5.2
English ability group									
Low . . . . .	68.7	23.4	7.9	16.7	27.2	22.1	42.5	8.2	7.6
Middle . . . . .	83.7	11.6	4.7	22.4	25.8	23.7	45.7	4.8	8.5
High . . . . .	89.2	8.8	2.0	30.7	26.6	22.0	48.2	3.2	10.4
Not grouped . . . . .	86.5	8.8	4.8	18.9	26.8	25.1	43.9	4.1	7.4
Don't know . . . . .	80.8	10.8	8.4	17.9	27.9	25.7	39.5	6.9	5.1
Social studies ability group									
Low . . . . .	72.0	20.1	7.9	16.5	24.8	25.4	41.2	8.7	8.3
Middle . . . . .	83.8	11.4	4.7	23.1	26.1	23.9	46.1	4.0	8.3
High . . . . .	87.8	9.7	2.6	29.5	26.3	21.0	50.6	2.1	10.3
Not grouped . . . . .	87.1	8.8	4.0	21.1	26.6	25.6	43.4	4.4	8.4
Don't know . . . . .	80.6	12.3	7.2	19.3	29.6	22.4	36.8	11.2	5.3
Locus of control									
Lowest (external) . . . .	79.7	14.1	6.2	20.3	27.0	22.7	43.8	6.4	7.8
Middle . . . . .	86.3	9.9	3.8	24.1	26.3	23.7	46.0	4.0	8.8
Highest (internal) . . . .	88.0	8.9	3.2	26.0	26.0	24.2	46.6	3.2	9.1
Self concept									
Low . . . . .	84.2	11.0	4.8	23.0	28.3	23.7	43.2	4.8	8.5
Medium . . . . .	84.9	11.0	4.2	23.2	26.4	23.9	45.1	4.5	8.1
High . . . . .	84.9	11.0	4.1	24.3	24.4	23.0	48.2	4.3	9.2
Postsecondary education plans									
Won't finish high school	73.2	18.3	8.5	17.5	28.1	24.4	37.6	9.9	10.0
High school only . . . .	76.8	14.6	8.6	12.8	28.5	25.5	37.7	8.3	4.5
Vocational/technical . .	79.9	13.6	6.5	17.3	24.5	23.2	46.1	6.1	6.4
Attend college . . . . .	82.3	12.2	5.5	19.0	26.6	24.4	43.7	5.3	7.2
Graduate college . . . .	87.2	9.6	3.2	25.2	27.0	23.5	46.1	3.5	9.1
Postgraduate/professional	88.2	9.2	2.6	31.5	25.1	22.1	49.5	3.3	11.5

**Table 2.2.--Percent of 1988 public school eighth graders who report taking specified humanities courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	84.6	11.0	4.4	23.5	26.4	23.5	45.4	4.6	8.6
Geographic region									
Northeast . . . . .	86.1	10.8	3.2	51.0	15.5	34.6	46.8	3.1	10.3
North central . . . . .	85.4	10.9	3.8	19.9	27.0	25.6	44.8	2.6	10.4
South . . . . .	85.5	9.1	5.4	14.1	32.4	18.6	42.7	6.3	6.3
West . . . . .	80.8	14.5	4.7	19.5	25.0	19.7	49.9	5.4	8.8
Urbanicity									
Urban . . . . .	82.6	11.7	5.7	28.6	25.5	24.0	43.5	7.0	7.5
Suburban . . . . .	85.1	11.1	3.8	27.4	26.4	22.5	47.5	3.6	9.5
Rural . . . . .	85.3	10.4	4.3	15.5	27.1	24.6	44.1	4.3	8.1
Total enrollment									
1-99 . . . . .	80.6	15.6	3.8	9.0	30.5	10.4	56.9	2.2	15.8
100-299 . . . . .	85.6	10.8	3.7	17.4	22.6	30.0	44.5	2.9	8.7
300-499 . . . . .	83.6	12.3	4.1	21.9	24.6	22.5	49.5	3.4	9.3
500-749 . . . . .	84.8	10.8	4.4	24.0	27.8	23.2	45.0	3.9	8.5
750-999 . . . . .	84.9	10.5	4.6	22.8	25.6	24.4	44.4	5.6	8.5
1000 + . . . . .	84.8	10.2	5.0	28.9	29.0	21.5	42.8	6.8	7.9

<sup>1</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>2</sup> English course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the English course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>3</sup> History/Social studies course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the History/Social studies course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>4</sup> This category includes students who reported taking separate history and social studies courses.

<sup>5</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>6</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

NOTE: Because of rounding error, details may not always add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."

**Table 2.3.--Percent of 1988 Catholic eighth graders who report taking  
specified humanities courses by selected student characteristics**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/ social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	73.4	23.4	3.2	16.2	12.7	19.3	65.7	2.3	92.5
Sex . . . . .									
Male . . . . .	70.8	26.0	3.2	17.9	12.9	18.7	65.6	2.8	91.5
Female . . . . .	75.9	21.0	3.1	14.6	12.5	20.0	65.7	1.8	93.4
Race/ethnicity . . . . .									
Asian . . . . .	76.6	21.8	1.6	9.7	11.9	12.4	73.4	2.4	92.7
Hispanic . . . . .	68.4	28.4	3.2	8.9	11.7	15.0	71.4	1.9	88.2
Black . . . . .	65.6	27.3	7.2	14.0	9.5	26.5	57.3	6.7	88.0
White . . . . .	75.4	22.0	2.7	17.7	13.3	19.3	65.6	1.7	93.7
Native American . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Family income . . . . .									
Under \$15,000 . . . . .	75.6	21.3	3.1	11.2	7.8	17.4	72.7	2.0	90.0
\$15,000-\$24,999 . . . . .	70.7	25.4	3.9	12.1	10.6	19.8	67.6	2.0	91.9
\$25,000-\$34,999 . . . . .	74.9	21.0	4.1	11.9	13.1	19.0	65.0	2.9	93.3
\$35,000-\$49,999 . . . . .	73.3	23.7	3.0	13.1	15.8	17.3	64.7	2.2	92.1
\$50,000 or more . . . . .	73.1	24.6	2.4	14.8	13.4	20.3	64.8	1.5	93.8
Parent education . . . . .									
Less than high school . . . . .	62.6	26.7	10.7	12.7	9.9	20.2	60.2	9.7	76.2
High school graduate/GED . . . . .	71.1	25.7	3.2	17.0	10.6	19.7	68.7	1.1	91.2
Some college . . . . .	72.2	24.2	3.6	12.4	13.2	19.4	64.9	2.5	92.1
College graduate . . . . .	74.6	22.5	2.8	16.0	15.5	17.2	65.4	2.0	94.5
M.A. or equivalent . . . . .	80.6	18.4	1.1	20.0	10.7	22.7	64.8	1.8	92.9
Ph.D./M.D./ other professional . . . . .	77.7	22.3	0.0	27.8	13.6	19.1	65.3	1.9	97.5
Don't know . . . . .	76.6	19.5	3.9	39.6	2.7	23.0	70.9	3.4	93.9
Socioeconomic status . . . . .									
Lowest quartile . . . . .	71.8	22.4	5.8	16.8	9.3	18.8	67.6	4.3	86.4
Second quartile . . . . .	74.1	22.1	3.7	14.0	11.0	22.0	65.3	1.8	91.6
Third quartile . . . . .	70.2	27.5	2.3	15.2	13.9	17.8	66.2	2.1	92.7
Highest quartile . . . . .	76.2	21.1	2.7	18.4	13.8	19.0	64.9	2.3	94.4
Family composition . . . . .									
Mother & father . . . . .	73.8	23.2	3.0	16.9	13.3	18.6	66.0	2.1	92.9
Mother & male guardian . . . . .	76.5	21.4	2.2	14.0	13.3	17.5	66.7	2.5	94.6
Father & female guardian . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Mother only . . . . .	70.3	25.5	4.2	13.8	11.0	22.4	63.7	2.9	91.9
Father only . . . . .	76.5	21.3	2.1	21.2	6.0	23.4	69.2	1.3	88.8
Other relative/non-relative . . . . .	71.9	23.0	5.1	11.4	14.6	19.8	62.2	3.3	86.5
Limited English proficient . . . . .									
Yes . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
No . . . . .	73.4	23.5	3.1	16.3	12.6	19.5	65.6	2.3	92.7
Language minority . . . . .									
Yes . . . . .	70.2	26.5	3.3	17.1	8.4	14.8	73.9	2.8	87.5
No . . . . .	73.8	23.0	3.1	16.1	13.2	19.9	64.6	2.2	93.1
Grades composite . . . . .									
Lowest quartile . . . . .	71.6	23.4	5.0	13.2	12.9	19.8	64.0	3.4	86.4
Second quartile . . . . .	70.3	25.3	4.5	17.7	14.7	21.6	60.9	2.9	90.5
Third quartile . . . . .	70.4	26.5	3.2	14.6	11.8	18.8	67.1	2.3	92.6
Highest quartile . . . . .	78.9	19.8	1.3	17.7	12.0	18.5	68.0	1.4	96.2
History test . . . . .									
Lowest quartile . . . . .	71.0	23.4	5.6	17.4	11.6	24.0	59.8	4.5	84.0
Second quartile . . . . .	71.3	23.5	5.2	15.4	12.0	19.5	65.3	3.2	91.1
Third quartile . . . . .	70.7	26.1	3.2	16.8	12.6	18.2	66.6	2.6	93.3
Highest quartile . . . . .	77.6	21.3	1.1	14.5	13.1	18.8	67.3	0.8	95.3

**Table 2.3.--Percent of 1988 Catholic school eighth graders who report taking specified humanities courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	73.4	23.4	3.2	16.2	12.7	19.3	65.7	2.3	92.5
Test composite									
Lowest quartile . . . . .	65.3	26.2	8.5	18.2	13.9	18.7	60.7	6.6	82.0
Second quartile . . . . .	70.6	25.4	4.0	14.7	13.8	20.5	63.3	2.4	90.3
Third quartile . . . . .	72.5	25.5	2.0	15.7	11.4	19.2	67.7	1.6	93.6
Highest quartile . . . . .	79.4	19.1	1.5	15.5	12.1	18.9	67.8	1.2	97.0
Reading proficiency <sup>5</sup>									
Below level 1 . . . . .	69.3	23.4	7.3	16.2	12.2	22.6	57.7	7.5	84.6
At level 1 . . . . .	70.3	26.1	3.6	14.9	12.1	18.6	67.3	2.0	91.3
At level 2 . . . . .	78.0	20.4	1.7	16.5	12.3	20.0	66.4	1.3	95.3
Math proficiency <sup>6</sup>									
Below level 1 . . . . .	68.6	25.2	6.3	24.8	13.7	21.7	60.7	3.8	84.8
At level 1 . . . . .	70.5	25.1	4.4	13.3	13.1	18.8	65.7	2.4	90.4
At level 2 . . . . .	73.6	24.6	1.9	14.2	11.1	18.5	69.3	1.1	96.1
At level 3 . . . . .	79.6	19.4	1.0	17.5	13.1	19.7	65.2	2.0	96.2
Math ability group									
Low . . . . .	69.4	25.7	5.0	18.5	14.3	20.9	61.9	2.9	89.5
Middle . . . . .	72.1	25.8	2.1	18.3	12.0	19.4	67.7	0.8	92.7
High . . . . .	77.4	20.8	1.8	16.7	12.8	17.8	66.6	2.8	94.7
Not grouped . . . . .	72.4	23.2	4.4	12.8	12.5	19.4	65.5	2.7	91.7
Don't know . . . . .	69.3	23.8	6.9	20.8	17.4	31.2	46.5	4.9	83.9
Science ability group									
Low . . . . .	59.4	37.8	2.8	15.3	16.0	15.3	66.6	2.1	85.9
Middle . . . . .	71.6	24.1	4.2	19.0	14.1	17.0	66.8	2.1	90.5
High . . . . .	73.0	26.0	1.0	20.0	13.5	17.2	67.2	2.1	94.6
Not grouped . . . . .	75.2	21.5	3.3	14.1	11.8	20.4	65.6	2.2	93.4
Don't know . . . . .	71.1	23.1	5.8	20.7	14.0	32.2	45.7	8.1	83.5
English ability group									
Low . . . . .	59.8	36.1	4.1	18.3	14.4	18.6	65.7	1.3	86.7
Middle . . . . .	72.1	24.5	3.4	17.5	12.7	18.9	66.0	2.4	90.2
High . . . . .	76.1	22.0	1.9	19.1	10.9	19.4	66.9	2.8	94.9
Not grouped . . . . .	74.3	22.3	3.4	14.4	12.6	19.4	65.9	2.1	93.5
Don't know . . . . .	72.7	21.9	5.4	16.3	21.9	27.1	46.4	4.6	84.4
Social studies ability group									
Low . . . . .	69.6	25.3	5.0	13.4	5.5	19.9	69.5	5.1	91.1
Middle . . . . .	71.6	24.5	3.9	16.8	16.2	16.2	65.6	1.9	90.0
High . . . . .	71.8	26.4	1.8	18.7	12.4	17.7	68.6	1.3	94.1
Not grouped . . . . .	74.9	21.9	3.2	14.9	11.7	20.3	65.8	2.2	93.4
Don't know . . . . .	72.8	22.7	4.5	24.8	18.6	27.8	44.9	8.7	80.6
Locus of control									
Lowest (external) . . . .	71.1	24.9	4.1	16.7	12.1	22.2	62.8	2.8	88.3
Middle . . . . .	72.4	25.4	2.2	15.4	12.6	17.0	68.6	1.8	94.2
Highest (internal) . . . .	75.7	20.9	3.4	16.6	13.0	19.6	65.0	2.4	93.4
Self concept									
Low . . . . .	75.2	22.4	2.5	15.9	12.4	20.7	64.9	2.0	92.0
Medium . . . . .	74.6	22.5	2.9	16.6	13.2	19.9	65.0	2.0	93.3
High . . . . .	70.9	25.1	3.9	16.2	12.5	17.8	66.9	2.8	92.2
Postsecondary education plans									
Won't finish high school	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school only . . . .	72.5	21.7	5.8	15.1	11.6	25.2	58.1	5.0	89.3
Vocational/technical . .	68.1	29.0	2.8	10.5	9.6	18.0	71.7	0.7	93.5
Attend college . . . . .	72.6	24.5	2.9	14.3	9.8	21.3	67.6	1.3	88.9
Graduate college . . . .	74.4	22.5	3.2	16.0	14.1	19.0	64.6	2.2	93.0
Postgraduate/professional	73.4	23.7	2.9	18.3	12.0	18.5	66.9	2.6	93.5

**Table 2.3.--Percent of 1988 Catholic school eighth graders who report taking specified humanities courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	73.4	23.4	3.2	16.2	12.7	19.3	65.7	2.3	92.5
Geographic region									
Northeast . . . . .	76.5	19.6	3.9	28.7	9.1	16.9	71.6	2.4	92.8
North central . . . . .	73.8	23.9	2.3	11.4	14.7	20.7	63.4	1.2	93.0
South . . . . .	75.5	21.1	3.4	12.6	15.9	23.5	56.5	4.1	91.2
West . . . . .	61.4	35.4	3.2	3.2	11.3	15.7	70.7	2.3	92.2
Urbanicity									
Urban . . . . .	74.3	22.5	3.2	18.4	12.5	20.6	64.5	2.5	90.7
Suburban . . . . .	72.1	24.8	3.1	14.0	12.1	17.2	68.4	2.2	93.6
Rural . . . . .	77.3	19.7	2.9	15.7	19.1	27.0	52.5	1.4	97.6
Total enrollment									
1-99 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
100-299 . . . . .	73.5	23.5	3.1	14.8	11.9	19.2	66.9	2.0	92.5
300-499 . . . . .	72.4	24.0	3.7	8.6	13.1	19.5	65.2	2.3	90.7
500-749 . . . . .	73.0	24.3	2.7	16.8	13.0	15.5	69.9	1.5	95.3
750-999 . . . . .	73.8	25.1	1.1	2.5	20.8	16.6	61.5	1.1	97.9
1000+ . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n

<sup>1</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>2</sup> English course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the English course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>3</sup> History/Social studies course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the History/Social studies course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>4</sup> This category includes students who reported taking separate history and social studies courses.

<sup>5</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>6</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

NOTE: Estimates based on fewer than 30 respondents are likely to be unstable and are indicated by "Low n". Because of rounding error, details may not always add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."

**Table 2.4.--Percent of 1988 independent private school eighth graders  
who report taking specified humanities courses by selected student characteristics**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	85.4	13.7	0.9	87.8	33.7	20.0	44.1	2.2	22.1
Sex									
Male . . . . .	84.6	14.0	1.3	85.7	31.8	20.7	45.7	1.8	24.7
Female . . . . .	86.2	13.3	0.5	90.3	35.9	19.1	42.4	2.7	19.3
Race/ethnicity									
Asian . . . . .	89.3	9.8	0.9	90.5	22.2	31.8	42.9	3.1	34.2
Hispanic . . . . .	74.5	25.5	0.0	82.4	28.2	11.3	56.6	3.9	18.8
Black . . . . .	82.2	12.9	4.9	71.0	30.1	15.1	48.8	6.0	15.3
White . . . . .	85.6	13.8	0.7	89.1	35.7	19.2	43.5	1.6	20.8
Native American . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Family income									
Under \$15,000 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
\$15,000-\$24,999 . . . .	89.2	7.0	3.8	87.8	35.0	15.3	44.5	5.2	21.0
\$25,000-\$34,999 . . . .	83.8	14.5	1.7	85.1	25.0	27.4	45.8	1.7	28.7
\$35,000-\$49,999 . . . .	84.7	13.4	1.9	81.8	29.1	27.4	40.6	2.9	22.0
\$50,000 or more . . . .	85.0	14.3	0.6	90.4	34.6	20.3	42.8	2.2	20.0
Parent education									
Less than high school .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school graduate/GED	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Some college . . . . .	77.8	20.6	1.7	82.2	35.9	21.3	40.2	2.6	24.8
College graduate . . . .	84.6	14.3	1.1	86.4	32.0	18.5	47.5	1.9	17.4
M.A. or equivalent . . .	86.7	12.2	1.2	89.4	33.7	22.3	40.8	3.2	22.8
Ph.D./M.D./other professional . . . . .	87.4	12.4	0.2	92.2	34.0	18.7	45.8	1.5	25.5
Don't know . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Socioeconomic status									
Lowest quartile . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Second quartile . . . . .	Low n	Low n	Low n	Low n	41.3	22.3	30.1	6.4	26.3
Third quartile . . . . .	86.4	12.3	1.3	79.2	33.5	23.7	40.3	2.5	23.7
Highest quartile . . . .	85.5	13.8	0.7	89.2	33.5	19.7	44.8	2.1	22.1
Family composition									
Mother & father . . . .	86.8	12.7	0.5	89.3	34.0	18.8	45.0	2.1	21.9
Mother & male guardian	79.4	19.6	0.9	78.6	32.0	24.5	40.4	3.1	30.0
Father & female guardian	75.8	24.2	0.0	Low n	16.2	31.6	48.8	3.5	5.8
Mother only . . . . .	83.1	13.9	3.0	86.2	36.1	21.0	40.8	2.1	22.5
Father only . . . . .	78.9	19.0	2.1	86.5	30.5	29.3	40.3	0.0	17.0
Other relative/non-relative	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Limited English proficient									
Yes . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
No . . . . .	85.6	13.5	0.9	88.2	33.9	19.7	44.2	2.2	22.2
Language minority									
Yes . . . . .	83.9	14.9	1.1	83.6	25.8	19.6	53.0	1.6	22.2
No . . . . .	85.5	13.6	0.9	88.3	34.6	20.0	43.2	2.2	22.1
Grades composite									
Lowest quartile . . . . .	85.4	12.7	1.8	67.1	36.8	16.5	45.0	1.7	28.3
Second quartile . . . . .	83.5	14.3	2.1	81.4	37.4	17.1	44.0	1.5	18.2
Third quartile . . . . .	84.8	14.5	0.7	88.1	37.4	17.2	42.8	2.7	22.5
Highest quartile . . . .	86.3	13.3	0.4	95.8	28.9	22.7	46.1	2.2	21.5
History test									
Lowest quartile . . . . .	82.4	13.6	4.1	47.8	27.1	23.1	47.3	2.4	19.2
Second quartile . . . . .	82.7	15.4	1.9	72.5	33.2	14.6	47.4	4.8	27.0
Third quartile . . . . .	83.1	15.4	1.5	87.9	33.1	21.5	42.6	2.8	22.6
Highest quartile . . . .	87.4	12.3	0.3	92.7	34.2	21.0	43.3	1.5	21.2



**Table 2.4 --Percent of 1988 independent private school eighth graders  
who report taking specified humanities courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	85.4	13.7	0.9	87.8	33.7	20.0	44.1	2.2	22.1
Test composite									
Lowest quartile . . . . .	80.0	13.6	6.4	38.9	30.7	14.7	48.5	6.2	21.7
Second quartile . . . . .	82.1	14.8	3.2	71.1	41.0	18.1	37.6	3.3	38.3
Third quartile . . . . .	80.7	17.8	1.5	79.4	26.3	18.9	53.0	1.8	22.1
Highest quartile . . . . .	87.5	12.2	0.3	93.7	34.8	21.5	41.7	2.0	20.2
Reading proficiency <sup>5</sup>									
Below level 1 . . . . .	85.8	12.8	1.4	64.8	29.5	28.2	38.5	3.7	16.7
At level 1 . . . . .	83.4	15.6	1.1	80.8	30.6	19.2	47.6	2.6	26.1
At level 2 . . . . .	86.6	12.6	0.8	92.1	35.1	20.7	42.2	2.0	20.8
Math proficiency <sup>6</sup>									
Below level 1 . . . . .	87.5	11.0	1.5	55.4	33.6	15.7	47.1	3.6	27.7
At level 1 . . . . .	75.1	20.6	4.3	70.2	30.1	14.3	51.3	4.3	34.4
At level 2 . . . . .	80.9	18.6	0.5	83.0	33.0	20.0	46.2	0.8	22.0
At level 3 . . . . .	88.7	10.9	0.4	94.3	33.2	22.9	41.8	2.2	19.3
Math ability group									
Low . . . . .	81.7	15.6	2.8	80.2	28.6	17.4	52.8	1.2	35.4
Middle . . . . .	82.4	17.0	0.6	87.9	33.3	16.7	47.2	2.8	18.7
High . . . . .	87.4	11.9	0.7	90.9	34.2	23.3	40.6	1.8	22.5
Not grouped . . . . .	89.6	9.5	0.9	84.3	40.8	17.5	38.5	3.2	20.2
Don't know . . . . .	90.1	7.8	2.1	78.8	27.5	25.8	46.7	0.0	19.2
Science ability group									
Low . . . . .	78.8	18.3	2.8	70.4	34.1	5.9	57.1	2.8	34.4
Middle . . . . .	83.8	15.2	1.0	80.8	30.1	22.2	44.1	3.7	17.8
High . . . . .	84.7	14.1	1.3	88.9	27.0	20.6	50.0	2.3	27.9
Not grouped . . . . .	86.9	12.6	0.5	92.1	37.9	19.3	41.1	1.6	20.2
Don't know . . . . .	87.1	11.3	1.6	82.0	42.1	21.6	36.2	0.0	17.1
English ability group									
Low . . . . .	78.3	20.4	1.3	78.3	41.6	13.9	43.1	1.4	23.3
Middle . . . . .	82.5	16.3	1.2	78.7	30.6	19.6	46.4	3.4	23.1
High . . . . .	85.6	14.0	0.4	89.7	31.0	19.5	48.1	1.5	24.8
Not grouped . . . . .	87.5	11.6	0.9	92.7	36.6	20.4	40.9	2.1	20.6
Don't know . . . . .	85.6	11.9	2.5	81.4	31.2	23.4	43.4	1.9	10.8
Social studies ability group									
Low . . . . .	80.4	18.0	1.6	72.0	37.8	12.6	47.9	1.6	27.8
Middle . . . . .	82.1	17.0	0.9	78.4	32.9	16.5	47.8	2.8	23.9
High . . . . .	85.0	13.9	1.1	87.3	26.9	20.1	51.9	1.1	25.2
Not grouped . . . . .	87.0	12.2	0.8	92.6	36.9	20.9	40.5	1.6	20.1
Don't know . . . . .	87.9	10.8	1.3	86.6	34.5	27.5	27.3	10.7	12.7
Locus of control									
Lowest (external) . . . . .	83.8	13.7	2.5	80.0	35.7	23.7	37.5	3.1	23.2
Middle . . . . .	87.8	11.3	0.9	90.1	30.5	19.9	47.0	2.7	19.4
Highest (internal) . . . . .	84.6	15.2	0.3	89.1	35.3	18.7	44.6	1.5	23.9
Self concept									
Low . . . . .	85.1	13.3	1.6	87.3	36.7	21.8	39.9	1.6	22.2
Medium . . . . .	86.1	13.9	0.0	88.2	34.7	18.2	45.2	2.0	20.4
High . . . . .	85.5	13.5	1.0	88.0	30.6	19.9	46.8	2.8	23.4
Postsecondary education plans									
Won't finish high school	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school only . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Vocational/technical . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Attend college . . . . .	81.6	18.4	0.0	79.3	38.5	13.4	47.0	1.2	22.0
Graduate college . . . . .	85.9	13.3	0.8	86.8	35.0	19.3	43.0	2.7	19.1
Postgraduate/professional	85.6	13.4	0.9	89.9	32.7	21.2	44.3	1.9	23.8

**Table 2.4.--Percent of 1988 independent private school eighth graders  
who report taking specified humanities courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	85.4	13.7	0.9	87.8	33.7	20.0	44.1	2.2	22.1
Geographic region									
Northeast . . . . .	87.8	11.4	0.8	88.2	35.5	15.7	44.3	4.5	22.9
North central . . . . .	86.3	12.7	0.9	92.3	32.5	18.9	48.7	0.0	7.2
South . . . . .	84.0	14.9	1.1	84.3	37.9	20.3	40.5	1.3	21.1
West . . . . .	81.5	17.7	0.8	94.3	20.7	24.9	53.3	1.0	35.5
Urbanicity									
Urban . . . . .	87.1	12.4	0.4	89.7	33.5	20.5	44.4	1.7	18.0
Suburban . . . . .	82.4	15.8	1.8	85.8	36.4	18.2	43.3	2.0	24.5
Rural . . . . .	87.0	13.0	0.0	79.5	14.6	27.6	47.1	10.7	58.1
Total enrollment									
1-99 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
100-299 . . . . .	86.3	13.2	0.5	83.2	36.1	7.4	54.7	1.8	32.0
300-499 . . . . .	84.5	14.1	1.5	89.3	33.1	24.5	39.8	2.7	17.0
500-749 . . . . .	79.4	19.8	0.7	87.4	32.7	13.8	51.0	2.5	10.6
750-999 . . . . .	92.5	6.7	0.7	90.1	29.0	25.6	42.9	2.4	44.3
1000+ . . . . .	87.6	12.4	0.0	85.0	35.1	32.1	32.8	0.0	6.8

<sup>1</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>2</sup> English course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the English course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>3</sup> History/Social studies course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the History/Social studies course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>4</sup> This category includes students who reported taking separate history and social studies courses.

<sup>5</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>6</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

NOTE: Estimates based on fewer than 30 respondents are likely to be unstable and are indicated by "Low n". Because of rounding error, details may not always add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."

**Table 2.5.--Percent of 1988 other private school eighth graders  
who report taking specified humanities courses by selected student characteristics**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	83.2	15.0	1.8	37.0	31.1	17.4	50.2	1.3	69.1
Sex . . . . .									
Male . . . . .	82.7	15.1	2.2	35.6	30.8	17.3	50.1	1.8	64.6
Female . . . . .	83.7	14.9	1.4	38.3	31.4	17.5	50.2	0.9	73.4
Race/ethnicity . . . . .									
Asian . . . . .	81.7	13.0	5.3	75.4	40.3	4.8	49.6	5.3	56.0
Hispanic . . . . .	77.1	22.9	0.0	28.1	10.6	20.2	69.2	0.0	75.8
Black . . . . .	91.3	5.1	3.6	47.2	25.5	22.8	48.1	3.6	82.9
White . . . . .	83.3	15.1	1.7	35.3	31.9	17.7	49.3	1.1	68.8
Native American . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Family income . . . . .									
Under \$15,000 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
\$15,000-\$24,999 . . . . .	84.4	15.0	0.5	20.2	26.7	26.5	46.8	0.0	60.2
\$25,000-\$34,999 . . . . .	85.7	12.6	1.7	22.9	27.2	24.6	46.3	1.9	72.4
\$35,000-\$49,999 . . . . .	76.9	22.2	0.8	32.3	35.2	14.3	49.9	0.5	76.8
\$50,000 or more . . . . .	87.4	10.7	1.9	45.8	37.2	14.2	47.0	1.7	61.3
Parent education . . . . .									
Less than high school . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school graduate/GED . . . . .	84.7	13.9	1.4	16.1	32.5	17.2	48.1	2.2	69.9
Some college . . . . .	80.7	15.8	3.5	20.3	31.5	19.2	47.0	2.3	71.1
College graduate . . . . .	78.9	19.8	1.3	39.6	35.0	10.8	53.5	0.8	68.9
M.A. or equivalent . . . . .	86.6	11.9	1.5	54.9	27.6	20.8	50.8	0.8	68.7
Ph.D./M.D./other professional . . . . .	91.5	8.5	0.0	62.5	27.9	20.1	52.1	0.0	65.5
Don't know . . . . .	76.2	23.8	0.0	52.6	19.5	25.2	53.4	1.8	66.9
Socioeconomic status . . . . .									
Lowest quartile . . . . .	83.2	10.8	6.0	18.8	18.3	28.9	51.2	1.5	69.7
Second quartile . . . . .	81.5	15.1	3.4	16.0	30.8	16.2	49.6	3.4	74.3
Third quartile . . . . .	78.0	20.6	1.4	28.9	32.4	19.3	47.0	1.4	69.5
Highest quartile . . . . .	86.0	12.6	1.3	47.7	31.6	15.9	51.7	0.8	67.6
Family composition . . . . .									
Mother & father . . . . .	85.1	13.7	1.1	37.0	33.2	16.0	49.9	0.9	68.9
Mother & male guardian . . . . .	80.6	14.1	5.3	28.2	24.7	23.6	48.1	3.5	67.4
Father & female guardian . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Mother only . . . . .	71.0	24.8	4.2	39.2	25.8	24.5	48.5	1.2	77.5
Father only . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Other relative/non-relative . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Limited English proficient . . . . .									
Yes . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
No . . . . .	83.2	14.9	1.8	37.0	31.2	17.3	50.1	1.4	68.9
Language minority . . . . .									
Yes . . . . .	65.3	28.6	6.1	46.8	19.7	12.6	61.6	6.1	81.9
No . . . . .	84.2	14.2	1.6	36.5	31.8	17.7	49.5	1.1	68.4
Grades composite . . . . .									
Lowest quartile . . . . .	74.7	23.5	1.8	29.4	38.7	11.9	48.1	1.3	61.3
Second quartile . . . . .	82.3	14.7	3.0	34.3	35.7	14.3	47.0	2.9	65.1
Third quartile . . . . .	83.4	13.4	3.2	39.5	28.7	22.9	46.3	2.1	67.7
Highest quartile . . . . .	86.1	13.2	0.6	39.1	28.6	17.6	53.5	0.3	73.8
History test . . . . .									
Lowest quartile . . . . .	76.1	20.2	3.7	28.6	35.0	12.6	48.5	3.9	61.4
Second quartile . . . . .	81.2	14.6	4.2	26.1	36.3	21.4	40.2	2.1	69.6
Third quartile . . . . .	85.2	13.4	1.4	39.2	30.5	16.0	52.4	1.1	66.4
Highest quartile . . . . .	84.8	14.9	0.3	46.1	29.1	14.9	55.7	0.3	71.4

**Table 2.5 --Percent of 1988 other private school eighth graders  
who report taking specified humanities courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/ social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	83.2	15.0	1.8	37.0	31.1	17.4	50.2	1.3	69.1
Test composite									
Lowest quartile . . . . .	71.8	24.6	3.6	22.8	29.4	19.2	47.8	3.6	59.4
Second quartile . . . . .	79.1	17.4	3.5	25.2	32.1	21.6	43.2	3.1	57.6
Third quartile . . . . .	83.1	14.9	1.9	35.7	32.5	14.6	51.6	1.2	70.5
Highest quartile . . . . .	87.1	12.2	0.8	47.2	31.2	14.6	54.0	0.3	73.3
Reading proficiency <sup>5</sup>									
Below level 1 . . . . .	76.4	18.1	5.5	33.7	30.2	13.4	51.9	4.6	60.0
At level 1 . . . . .	83.1	15.4	1.5	34.0	35.4	19.6	44.2	0.9	62.9
At level 2 . . . . .	84.8	14.3	0.8	41.7	29.4	13.6	56.1	0.9	74.5
Math proficiency <sup>6</sup>									
Below level 1 . . . . .	76.8	18.0	5.2	31.1	17.9	23.3	55.1	3.8	60.1
At level 1 . . . . .	76.1	20.9	3.0	26.4	29.4	21.9	46.7	2.0	68.8
At level 2 . . . . .	91.0	7.8	1.2	31.5	40.4	10.3	48.8	0.5	70.9
At level 3 . . . . .	84.4	15.1	0.5	56.5	30.0	14.1	55.2	0.7	71.8
Math ability group									
Low . . . . .	71.8	24.2	4.0	57.3	20.1	22.8	53.0	4.0	67.6
Middle . . . . .	77.5	19.2	3.2	36.7	24.3	21.7	52.3	1.7	74.7
High . . . . .	86.4	13.1	0.6	46.7	27.1	18.3	54.2	0.4	72.3
Not grouped . . . . .	88.1	10.6	1.2	21.8	45.2	10.6	43.1	1.2	61.5
Don't know . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Science ability group									
Low . . . . .	78.2	17.6	4.2	Low n	31.5	12.4	53.3	2.8	Low n
Middle . . . . .	79.8	17.3	2.9	35.8	28.4	18.1	50.7	2.8	68.8
High . . . . .	81.5	17.0	1.5	53.0	20.8	17.2	62.1	0.0	72.2
Not grouped . . . . .	85.7	13.0	1.3	32.2	35.2	18.1	45.8	1.0	68.7
Don't know . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
English ability group									
Low . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Middle . . . . .	82.3	14.4	3.3	30.9	28.7	23.4	45.6	2.3	69.5
High . . . . .	83.9	15.7	0.4	42.9	21.0	20.5	58.5	0.0	74.9
Not grouped . . . . .	84.0	14.8	1.3	38.1	35.1	14.3	49.6	1.0	68.2
Don't know . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Social studies ability group									
Low . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Middle . . . . .	84.6	11.6	3.7	31.5	28.6	19.4	49.5	2.4	66.3
High . . . . .	82.8	16.3	1.0	41.5	23.9	21.1	55.1	0.0	75.0
Not grouped . . . . .	83.6	15.3	1.1	38.8	33.2	16.6	49.3	0.9	69.4
Don't know . . . . .	75.3	21.2	3.5	Low n	37.4	12.4	46.7	3.5	52.0
Locus of control									
Lowest (external) . . . . .	81.6	14.9	3.5	33.6	38.1	16.2	43.4	2.3	61.0
Middle . . . . .	82.0	16.1	1.9	34.1	30.0	13.1	55.1	1.8	66.7
Highest (internal) . . . . .	84.6	14.5	1.0	40.5	28.5	20.9	50.1	0.6	74.4
Self concept									
Low . . . . .	83.8	14.9	1.4	33.0	35.8	15.5	47.1	1.6	64.2
Medium . . . . .	84.3	14.7	1.0	35.8	29.3	21.7	48.4	0.7	69.1
High . . . . .	81.8	15.4	2.8	41.2	28.3	16.4	53.8	1.5	73.2
Postsecondary education plans									
Won't finish high school . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school only . . . . .	77.6	12.2	10.2	Low n	25.9	8.0	55.5	10.7	66.0
Vocational/technical . . . . .	82.6	12.8	4.6	14.8	36.0	8.4	53.0	2.6	73.3
Attend college . . . . .	77.3	20.0	2.7	23.9	37.2	16.1	45.1	1.5	67.9
Graduate college . . . . .	83.9	14.3	1.7	32.7	31.2	20.5	46.9	1.4	72.0
Postgraduate/professional . . . . .	84.7	14.7	0.7	51.0	29.4	15.1	55.3	0.2	65.3

**Table 2.5 --Percent of 1988 other private school eighth graders  
who report taking specified humanities courses by selected student characteristics--Continued**

Student characteristics <sup>1</sup>	English <sup>2</sup>			Foreign language	History/social studies <sup>3</sup>				Religion
	Regular English	Remedial English	No English		History only	Social studies only	History & social studies <sup>4</sup>	No history/social studies	
1	2	3	4	5	6	7	8	9	10
Total . . . . .	83.2	15.0	1.8	37.0	31.1	17.4	50.2	1.3	69.1
Geographic region									
Northeast . . . . .	72.2	27.0	0.8	81.6	10.7	7.5	81.3	0.5	88.7
North central . . . . .	89.4	10.2	0.3	23.8	30.9	14.3	54.8	0.0	76.0
South central . . . . .	85.0	12.3	2.6	27.6	42.6	16.7	38.4	2.2	52.3
West . . . . .	79.4	17.7	2.9	40.2	24.9	28.1	45.0	1.9	76.5
Urbanicity									
Urban . . . . .	80.5	18.4	1.1	43.1	23.5	26.8	49.1	0.6	70.2
Suburban . . . . .	82.7	15.3	2.0	37.6	33.2	7.6	57.7	1.5	83.1
Rural . . . . .	91.8	4.7	3.5	18.2	47.3	15.0	34.8	2.9	32.0
Total enrollment									
1-99 . . . . .	81.4	13.9	4.7	5.2	27.1	18.4	53.3	1.2	87.1
100-299 . . . . .	82.4	15.5	2.1	24.5	30.7	12.1	54.6	2.5	76.3
300-499 . . . . .	82.4	16.4	1.2	37.9	28.6	29.1	41.7	0.7	70.9
500-749 . . . . .	86.9	11.8	1.3	50.2	41.2	13.3	45.1	0.4	57.9
750-999 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
1000+ . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n

<sup>1</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>2</sup> English course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the English course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>3</sup> History/Social studies course-taking categories were created to be mutually exclusive and exhaustive. A complete description of the History/Social studies course-taking categories and their method of creation is in the "Variables Used" section following the tables.

<sup>4</sup> This category includes students who reported taking separate history and social studies courses.

<sup>5</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>6</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

NOTE: Estimates based on fewer than 30 respondents are likely to be unstable and are indicated by "Low n". Because of rounding error, details may not always add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."

**Table 3.1.--Percent of 1988 eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics <sup>1</sup>**

Student characteristics <sup>2</sup>	Art	Music	Drama/speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total . . . . .	44.7	47.9	10.2	31.0	4.2	31.7	13.6	84.8	18.0	6.6
Sex										
Male . . . . .	47.1	43.5	9.6	26.7	5.6	40.3	13.6	85.3	19.4	7.1
Female . . . . .	42.5	52.1	10.9	35.1	2.8	23.4	13.6	84.3	16.6	6.1
Race/ethnicity										
Asian . . . . .	42.5	44.2	13.4	26.6	4.3	30.0	17.4	84.8	18.9	7.3
Hispanic . . . . .	37.1	33.4	11.9	23.8	5.8	26.2	16.5	76.2	18.6	7.4
Black . . . . .	37.9	43.0	10.1	27.1	6.2	25.5	17.0	82.7	21.8	9.9
White . . . . .	46.9	50.9	9.8	32.8	3.5	33.6	12.3	86.7	17.1	5.8
Native American . . . .	44.9	42.2	13.3	33.1	9.1	31.5	14.6	75.7	24.1	10.0
Family income										
Under \$15,000 . . . . .	42.4	41.5	8.6	31.1	6.2	29.6	14.9	79.1	17.9	8.6
\$15,000-\$24,999 . . . .	41.7	45.8	8.4	32.1	4.9	31.8	13.7	83.5	16.4	6.2
\$25,000-\$34,999 . . . .	44.7	49.8	9.2	31.1	4.5	32.8	13.0	84.8	17.3	5.8
\$35,000-\$49,999 . . . .	47.8	51.1	10.8	32.5	3.2	33.0	12.5	87.3	17.6	6.1
\$50,000 or more . . . .	46.3	51.9	12.8	30.6	1.9	31.8	13.0	89.4	20.1	5.7
Parent education										
Less than high school .	40.5	38.5	8.6	29.4	6.2	30.7	15.0	77.3	18.2	8.8
High school graduate/GED	45.5	46.5	7.8	32.4	5.6	33.9	13.3	84.1	17.1	6.2
Some college . . . . .	43.6	47.4	9.7	31.3	4.4	31.4	13.6	84.1	18.0	6.6
College graduate . . . .	46.9	51.7	12.0	30.4	2.4	31.6	12.4	88.4	17.6	5.9
M.A. or equivalent . . .	47.6	55.8	14.3	31.2	1.7	31.8	14.4	89.9	18.6	6.2
Ph.D./M.D./										
other professional . . .	50.1	55.5	17.2	28.3	1.1	28.1	14.7	90.8	22.4	5.0
Don't know . . . . .	40.2	42.9	8.9	26.4	5.1	30.5	10.4	82.7	14.5	6.9
Socioeconomic status										
Lowest quartile . . . .	42.0	41.1	8.2	31.7	6.4	32.2	14.5	79.3	17.3	8.0
Second quartile . . . .	44.9	47.8	9.2	32.5	5.3	32.1	13.7	84.2	17.7	6.4
Third quartile . . . . .	44.5	48.8	9.8	29.5	3.5	31.4	12.9	85.9	17.3	6.2
Highest quartile . . . .	47.2	53.6	13.5	30.5	1.7	31.3	13.2	89.5	19.5	5.6
Family composition										
Mother & father . . . .	46.1	50.5	10.3	31.3	3.9	32.0	13.5	85.7	17.8	6.2
Mother & male guardian	43.7	43.4	10.5	31.3	4.6	30.9	13.3	83.1	18.8	7.4
Father & female guardian	38.8	39.0	10.7	30.5	4.1	36.0	11.5	84.1	13.5	3.8
Mother only . . . . .	41.8	44.5	9.1	30.6	4.4	30.2	14.0	83.7	18.9	7.6
Father only . . . . .	44.7	41.0	13.0	29.5	5.5	33.7	11.8	86.3	18.6	6.9
Other relative/non-relative	39.0	41.0	10.6	27.9	5.9	34.3	17.6	78.2	17.8	8.2
Limited English proficient										
Yes . . . . .	44.3	37.6	11.8	30.9	10.2	32.0	21.9	73.1	18.0	12.7
No . . . . .	44.8	48.2	10.2	31.1	4.1	31.8	13.4	85.1	18.0	6.5
Language minority										
Yes . . . . .	39.7	36.6	11.1	26.0	6.0	28.0	17.5	77.8	19.2	8.0
No . . . . .	45.4	49.4	10.1	31.6	4.0	32.2	13.1	85.7	17.8	6.4
Grades composite										
Lowest quartile . . . .	44.0	40.7	8.7	32.8	5.5	35.2	14.5	81.0	17.9	6.7
Second quartile . . . .	44.3	46.1	9.5	31.7	4.9	33.0	14.1	84.3	18.4	7.5
Third quartile . . . . .	45.3	49.2	10.6	30.4	3.7	30.6	12.7	85.3	17.9	6.5
Highest quartile . . . .	45.1	54.2	11.6	29.6	2.8	28.8	13.0	88.2	17.6	5.6
Test composite										
Lowest quartile . . . .	41.7	39.3	10.2	31.6	8.6	33.2	16.8	76.5	20.1	9.9
Second quartile . . . .	43.1	45.2	8.6	30.6	4.5	30.6	12.9	83.0	16.3	6.6
Third quartile . . . . .	47.0	50.2	9.6	30.0	2.6	30.9	12.6	87.5	17.6	5.1
Highest quartile . . . .	46.6	56.2	12.2	30.7	1.6	31.2	12.0	90.6	16.7	4.9

**Table 3.1.--Percent of 1988 eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics<sup>1</sup>--Continued**

Student characteristics <sup>2</sup>	Art	Music	Drama/speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total . . . . .	44.7	47.9	10.2	31.0	4.2	31.7	13.6	84.8	18.0	6.6
Reading proficiency <sup>3</sup>										
Below level 1 . . . . .	43.9	42.5	11.3	33.6	9.6	35.1	17.6	78.8	21.9	10.2
At level 1 . . . . .	43.9	46.1	9.2	30.9	4.2	31.2	13.4	83.6	17.1	6.9
At level 2 . . . . .	46.6	53.3	11.1	29.6	2.1	30.5	11.9	88.7	16.6	4.8
Math proficiency <sup>4</sup>										
Below level 1 . . . . .	45.2	43.1	11.0	33.5	8.1	33.5	17.0	77.0	20.0	9.7
At level 1 . . . . .	42.4	45.4	9.1	30.2	4.3	30.7	12.6	83.1	16.6	6.2
At level 2 . . . . .	48.6	51.0	9.4	30.2	3.1	31.1	12.7	87.5	17.3	5.9
At level 3 . . . . .	46.2	55.0	12.1	30.0	1.7	32.1	13.0	91.4	17.8	5.1
Math ability group										
Low . . . . .	46.5	41.4	10.5	32.6	4.9	32.7	16.1	79.7	19.2	7.4
Middle . . . . .	44.4	46.3	10.7	33.3	4.6	34.7	13.8	84.5	18.8	7.1
High . . . . .	44.1	51.3	11.5	30.3	3.7	31.7	13.8	88.3	18.5	6.5
Not grouped . . . . .	47.3	51.1	7.2	25.7	3.4	23.8	12.3	83.8	14.7	5.3
Don't know . . . . .	40.9	40.5	6.3	29.9	4.8	29.1	10.3	76.5	15.7	4.6
Science ability group										
Low . . . . .	45.3	39.7	10.7	32.9	7.9	37.6	16.9	78.8	21.2	9.1
Middle . . . . .	43.1	44.5	10.2	33.4	4.7	35.3	14.1	83.8	18.1	6.9
High . . . . .	44.8	50.8	11.2	30.2	3.9	33.4	13.9	87.3	19.3	7.2
Not grouped . . . . .	47.9	53.3	9.2	27.6	3.0	25.2	12.0	86.4	16.4	5.3
Don't know . . . . .	41.0	41.9	9.1	31.6	4.3	27.7	12.3	79.4	16.7	5.2
English ability group										
Low . . . . .	46.5	41.0	10.4	33.4	7.6	36.9	15.6	80.2	21.2	9.0
Middle . . . . .	44.1	44.3	10.0	33.0	4.4	35.8	14.3	83.9	18.0	6.9
High . . . . .	43.1	51.6	12.0	30.7	3.8	30.3	13.9	87.0	18.8	7.1
Not grouped . . . . .	47.6	52.5	8.9	27.2	3.2	25.6	11.8	86.4	16.3	5.0
Don't know . . . . .	41.9	42.7	7.4	30.6	4.5	29.6	11.8	78.4	16.8	4.7
Social studies ability group										
Low . . . . .	46.6	41.7	9.9	33.2	7.4	35.6	16.8	78.5	22.0	8.8
Middle . . . . .	43.0	44.2	10.2	33.6	4.3	35.1	14.4	83.8	18.6	6.8
High . . . . .	45.5	51.0	11.6	30.4	4.4	34.0	14.3	87.0	18.8	7.5
Not grouped . . . . .	47.1	53.0	9.6	28.2	2.9	25.5	11.7	86.7	16.4	5.2
Don't know . . . . .	39.9	41.5	7.8	28.8	5.1	28.5	11.9	79.8	15.1	5.5
Locus of control										
Lowest (external) . . . .	42.6	43.7	10.3	31.6	6.1	32.0	14.9	81.3	18.6	8.0
Middle . . . . .	46.1	48.3	9.8	31.1	3.3	32.4	12.8	85.5	17.0	5.8
Highest (internal) . . . .	45.4	51.4	10.5	30.2	3.2	30.9	12.9	87.4	18.2	5.9
Self concept										
Low . . . . .	44.3	47.5	10.0	33.3	3.7	31.6	13.4	83.9	16.8	6.1
Medium . . . . .	44.7	48.9	10.1	31.3	4.2	31.7	13.1	85.2	17.9	6.6
High . . . . .	45.2	47.6	10.5	28.3	4.7	31.9	14.0	85.5	19.3	7.0
Postsecondary education plans										
Won't finish high school	42.5	40.0	12.0	29.4	12.3	38.4	16.8	76.9	19.6	9.5
High school only . . . .	41.7	37.9	7.3	30.4	6.1	36.1	12.3	77.7	17.0	6.8
Vocational/technical . .	45.6	43.7	9.0	33.1	5.7	37.1	14.1	82.9	17.2	8.1
Attend college . . . . .	43.9	41.6	7.6	31.2	4.6	30.9	13.9	82.9	18.7	6.6
Graduate college . . . .	45.3	50.3	9.9	31.4	3.4	31.2	13.0	86.6	17.1	5.7
Postgraduate/professional	45.1	53.3	13.9	29.7	3.6	28.7	14.6	86.9	19.6	7.2

**Table 3.1.--Percent of 1988 eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics <sup>1</sup>--Continued**

Student characteristics <sup>2</sup>	Art	Music	Drama/speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total . . . . .	44.7	47.9	10.2	31.0	4.2	31.7	13.6	84.8	18.0	6.6
Geographic region										
Northeast . . . . .	65.1	65.3	8.1	48.6	2.8	52.3	9.1	93.6	25.0	7.3
North central . . . . .	52.5	56.9	10.3	36.1	4.6	34.8	13.7	86.9	19.6	5.9
South . . . . .	34.4	39.4	9.7	21.0	5.0	19.9	14.1	78.6	13.1	7.1
West . . . . .	32.1	33.3	13.2	24.3	3.5	28.2	16.9	84.2	17.5	5.7
Urbanicity										
Urban . . . . .	45.6	47.2	12.5	22.3	4.0	26.5	14.8	85.0	19.6	7.6
Suburban . . . . .	45.5	46.6	10.1	34.1	3.1	34.8	13.3	85.9	18.7	6.2
Rural . . . . .	43.0	50.4	8.7	33.6	5.8	31.7	12.9	83.2	15.6	6.3
School type										
Public . . . . .	41.3	45.4	9.8	34.3	4.5	35.5	14.1	83.7	18.2	6.7
Catholic . . . . .	79.8	71.3	8.8	5.4	2.7	3.6	8.3	93.9	17.2	6.0
Independent private . . . . .	70.7	65.2	33.8	2.8	1.0	9.7	10.3	90.9	24.7	2.0
Other private . . . . .	43.9	52.5	16.8	14.1	1.5	8.1	11.7	90.7	11.0	4.6
Total enrollment										
1-99 . . . . .	70.2	51.6	8.7	21.7	11.4	9.0	10.5	86.9	21.2	3.0
100-299 . . . . .	53.5	59.1	9.2	21.0	3.3	23.8	12.3	89.1	18.9	6.2
300-499 . . . . .	51.8	53.9	8.4	34.8	4.7	30.5	12.8	86.0	20.9	6.2
500-749 . . . . .	43.5	48.2	11.3	32.5	4.0	33.9	12.9	83.7	17.3	7.0
750-999 . . . . .	38.4	41.8	11.1	33.8	4.5	35.6	15.8	82.9	16.2	7.3
1000+ . . . . .	35.8	36.3	10.6	29.3	3.7	33.6	14.9	83.5	16.7	6.1

<sup>1</sup> Course-taking variables used in this table come directly from the student questionnaire. Details are reported in the "Variables Used" section following the tables.

<sup>2</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>3</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>4</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."



**Table 3.2.--Percent of 1988 public school eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics <sup>1</sup>**

Student Characteristics <sup>2</sup>	Art	Music	Drama/ speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total . . . . .	41.3	45.4	9.8	34.3	4.5	35.5	14.1	83.7	18.2	6.7
Sex										
Male . . . . .	44.2	40.9	9.1	29.5	6.0	45.0	14.0	84.4	19.7	7.3
Female . . . . .	38.5	49.8	10.4	38.9	3.0	26.2	14.3	83.0	16.9	6.2
Race/ethnicity										
Asian . . . . .	36.4	40.7	11.9	30.3	4.8	34.7	19.1	83.0	19.3	7.8
Hispanic . . . . .	33.1	30.7	12.1	25.8	5.9	28.7	17.0	74.6	19.3	7.7
Black . . . . .	34.9	40.3	9.8	28.6	6.2	27.0	17.2	81.9	21.8	10.0
White . . . . .	43.7	48.7	9.3	36.6	3.8	38.0	12.9	85.7	17.2	5.9
Native American . . . . .	42.6	39.1	14.3	35.7	9.1	33.8	14.6	75.0	26.1	9.9
Family income										
Under \$15,000 . . . . .	40.6	40.0	8.6	32.3	6.2	30.8	15.1	78.7	18.1	8.5
\$15,000-\$24,999 . . . . .	39.1	43.9	8.2	33.8	5.1	33.6	13.9	82.7	16.5	6.3
\$25,000-\$34,999 . . . . .	40.7	46.8	9.3	34.0	4.8	36.2	13.5	83.9	17.6	5.9
\$35,000-\$49,999 . . . . .	43.5	48.5	10.6	36.6	3.6	37.8	13.2	86.2	17.9	6.4
\$50,000 or more . . . . .	42.9	50.8	11.7	36.1	2.0	38.3	13.7	88.5	20.6	5.9
Parent education										
Less than high school . . . . .	39.5	37.6	8.5	30.0	6.1	31.3	15.2	77.1	18.3	8.8
High school graduate/GED . . . . .	42.8	44.0	7.9	34.7	5.8	36.4	13.8	83.3	17.2	6.2
Some college . . . . .	40.1	44.8	9.7	34.1	4.6	34.6	13.9	83.2	18.2	6.7
College graduate . . . . .	42.4	50.4	11.4	36.2	2.7	38.1	13.3	87.2	18.1	6.3
M.A. or equivalent . . . . .	44.4	55.1	12.8	36.5	2.0	38.0	15.8	88.8	19.0	6.7
Ph.D./M.D./ other professional . . . . .	45.0	51.1	14.9	37.4	1.2	37.6	16.9	89.6	24.2	6.2
Don't know . . . . .	33.7	35.2	8.5	30.8	5.5	36.4	11.7	80.7	15.5	7.8
Socioeconomic status										
Lowest quartile . . . . .	40.4	39.7	8.1	32.7	6.4	33.2	14.8	78.9	17.5	8.0
Second quartile . . . . .	41.5	44.8	9.4	35.1	5.6	35.0	14.0	83.4	17.7	6.5
Third quartile . . . . .	40.5	46.0	9.7	32.8	3.6	35.5	13.3	84.8	17.8	6.2
Highest percentile . . . . .	43.0	52.1	12.3	36.8	1.8	38.6	14.5	88.4	20.2	6.2
Family composition										
Mother & father . . . . .	42.3	48.1	9.8	35.4	4.3	36.5	14.2	84.5	18.2	6.4
Mother & male guardian . . . . .	41.8	41.6	10.1	32.8	4.7	32.8	13.5	82.4	18.6	7.4
Father & female guardian . . . . .	37.1	37.4	10.9	31.6	4.3	37.6	11.6	83.5	13.6	3.8
Mother only . . . . .	38.4	42.1	8.8	33.0	4.6	32.7	14.4	82.5	19.0	7.8
Father only . . . . .	41.0	38.1	12.9	31.9	5.6	36.2	12.7	85.3	18.6	6.7
Other relative/non-relative . . . . .	36.8	38.5	10.6	29.0	5.8	36.3	17.9	78.3	17.8	8.5
Limited English proficient										
Yes . . . . .	42.7	36.2	11.5	31.8	10.4	32.5	22.4	72.5	18.2	13.0
No . . . . .	41.3	45.7	9.8	34.4	4.3	35.6	14.0	84.0	18.3	6.6
Language minority										
Yes . . . . .	35.7	33.8	10.6	28.1	6.2	30.5	18.6	76.2	19.5	8.4
No . . . . .	42.1	47.0	9.7	35.1	4.2	36.1	13.6	84.7	18.1	6.5
Grades composite										
Lowest quartile . . . . .	42.0	39.0	8.8	34.6	5.7	37.5	15.0	80.4	18.2	6.9
Second quartile . . . . .	41.3	43.6	9.2	34.6	5.2	36.4	14.5	83.4	18.5	7.7
Third quartile . . . . .	41.3	46.5	10.3	34.2	4.0	34.8	13.2	83.9	18.0	6.7
Highest quartile . . . . .	40.8	51.9	10.7	33.9	3.0	33.2	13.9	87.0	18.0	5.8
Test composite										
Lowest quartile . . . . .	39.8	37.7	10.2	33.2	8.8	34.8	17.2	75.8	20.2	10.1
Second quartile . . . . .	40.2	42.3	8.5	32.9	4.6	33.4	13.0	82.1	16.6	6.6
Third quartile . . . . .	43.3	47.7	9.4	33.8	2.8	35.5	12.8	86.8	17.8	5.0
Highest quartile . . . . .	41.7	54.2	11.0	36.2	1.7	37.1	13.2	89.5	16.9	5.2

**Table 3.2.--Percent of 1988 public school eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics <sup>1</sup>--Continued**

Student characteristics <sup>2</sup>	Art	Music	Drama/speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total . . . . .	41.3	45.4	9.8	34.3	4.5	35.5	14.1	83.7	18.2	6.7
Reading proficiency <sup>3</sup>										
Below level 1 . . . . .	41.6	40.7	11.4	35.6	9.9	37.1	18.0	77.9	22.2	10.5
At level 1 . . . . .	41.0	43.9	8.9	33.5	4.4	34.2	13.7	82.7	17.3	6.9
At level 2 . . . . .	41.8	50.5	10.3	34.5	2.3	36.0	12.8	87.5	16.8	5.0
Math proficiency <sup>4</sup>										
Below level 1 . . . . .	42.8	41.0	11.2	35.4	8.3	35.6	17.5	76.1	20.2	10.0
At level 1 . . . . .	39.2	42.8	8.8	32.9	4.5	33.7	13.0	82.1	17.1	6.3
At level 2 . . . . .	44.3	48.2	8.9	34.5	3.4	35.9	13.2	86.5	17.1	5.9
At level 3 . . . . .	42.1	53.6	10.8	34.8	1.9	37.8	14.0	90.5	18.0	5.4
Math ability group										
Low . . . . .	42.9	39.2	10.3	35.9	5.3	36.5	17.6	78.4	19.5	8.0
Middle . . . . .	42.1	44.5	10.2	35.5	4.7	37.3	13.9	83.7	18.9	7.3
High . . . . .	41.0	49.6	10.7	33.5	4.0	35.4	14.6	87.3	18.8	6.7
Not grouped . . . . .	39.3	44.7	7.2	32.3	3.9	30.5	13.7	81.6	15.0	5.2
Don't know . . . . .	39.0	38.9	5.9	31.6	4.8	30.9	10.0	75.5	15.9	4.4
Science ability group										
Low . . . . .	43.1	38.5	10.3	35.3	8.4	40.6	18.1	77.9	21.1	9.3
Middle . . . . .	41.1	43.0	9.9	35.0	4.8	37.3	14.4	83.4	18.2	7.0
High . . . . .	42.6	49.6	10.4	32.5	4.0	35.9	14.3	86.6	19.4	7.4
Not grouped . . . . .	40.5	48.5	8.6	34.7	3.5	32.4	13.0	84.0	16.8	5.3
Don't know . . . . .	39.4	40.6	8.8	33.0	4.3	29.0	12.3	78.5	16.8	5.1
English ability group										
Low . . . . .	44.5	39.3	10.2	35.8	8.0	39.4	15.6	80.0	21.6	9.3
Middle . . . . .	41.9	42.2	9.7	34.8	4.4	37.9	14.5	83.4	18.0	7.0
High . . . . .	40.6	49.8	11.3	33.0	4.0	32.8	14.4	86.2	19.0	7.2
Not grouped . . . . .	40.0	48.9	8.0	34.8	3.9	33.7	13.2	83.7	16.8	5.1
Don't know . . . . .	40.3	41.5	7.2	32.0	4.5	31.1	11.7	77.6	17.0	4.7
Social studies ability group										
Low . . . . .	45.1	40.9	9.6	34.8	7.6	37.6	17.1	77.6	22.5	9.2
Middle . . . . .	41.1	42.5	10.0	35.3	4.3	37.1	14.6	83.4	18.6	6.9
High . . . . .	43.1	49.6	11.0	32.8	4.6	36.7	14.8	86.3	19.1	7.7
Not grouped . . . . .	39.9	48.8	8.7	35.1	3.5	32.6	12.7	84.4	16.6	5.2
Don't know . . . . .	38.3	40.3	7.4	30.0	5.1	29.8	11.9	79.1	15.0	5.4
Locus of control										
Lowest (external) . . . . .	39.9	41.5	10.2	33.8	6.3	34.5	15.4	80.5	18.9	8.2
Middle . . . . .	42.4	45.7	9.5	34.6	3.5	36.4	13.6	84.3	17.2	5.9
Highest (internal) . . . . .	41.6	49.0	9.7	34.4	3.5	35.5	13.3	86.3	18.6	6.0
Self concept										
Low . . . . .	41.2	45.0	10.1	36.4	3.8	35.0	13.9	82.9	17.1	6.3
Medium . . . . .	40.9	46.3	9.4	34.5	4.6	35.4	13.6	84.0	18.2	6.7
High . . . . .	41.7	45.2	9.7	31.7	5.0	36.0	14.7	84.3	19.4	7.2
Postsecondary education plans										
Won't finish high school . . . . .	41.6	38.6	12.3	29.8	12.6	39.2	16.9	76.5	20.0	9.5
High school only . . . . .	39.9	36.2	7.3	31.4	6.3	37.5	12.4	77.2	17.1	6.9
Vocational/technical . . . . .	43.5	41.7	9.1	34.7	5.8	38.9	14.2	82.5	17.4	8.1
Attend college . . . . .	40.9	38.8	7.6	33.7	4.7	33.7	14.7	82.0	19.2	6.9
Graduate college . . . . .	41.7	48.2	9.7	35.0	3.6	35.3	13.5	85.6	17.3	5.8
Postgraduate/professional . . . . .	40.4	50.7	12.8	34.7	3.9	33.9	15.7	85.4	20.2	7.6
Geographic region										
Northeast . . . . .	63.3	64.3	7.3	57.2	2.9	61.5	10.0	93.9	27.4	7.7
North central . . . . .	47.3	52.4	9.9	40.3	5.0	39.5	14.5	85.6	19.7	6.0
South . . . . .	32.4	38.3	9.6	22.8	5.4	21.7	14.6	77.4	12.7	7.4
West . . . . .	29.4	31.7	12.4	26.1	3.6	30.8	16.8	83.0	17.9	5.8

**Table 3.2.--Percent of 1988 public school eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics <sup>1</sup>--Continued**

Student characteristics <sup>2</sup>	Art	Music	Drama/speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total . . . . .	41.3	45.4	9.8	34.3	4.5	35.5	14.1	83.7	18.2	6.7
Urbanicity										
Urban . . . . .	36.5	40.2	11.5	26.9	4.4	32.6	16.1	82.5	20.8	8.3
Suburban . . . . .	42.6	44.1	9.9	38.0	3.3	39.2	14.0	84.7	18.9	6.3
Rural . . . . .	42.7	50.3	8.6	34.2	5.9	32.5	13.1	83.1	15.9	6.4
Total enrollment										
1-99 . . . . .	67.7	54.8	10.4	39.0	16.5	14.6	6.5	90.0	12.1	3.1
100-299 . . . . .	45.6	54.1	6.9	27.6	4.0	33.6	15.1	86.5	18.7	6.0
300-499 . . . . .	47.2	52.2	8.1	40.5	5.3	36.0	13.2	84.8	22.5	6.6
500-749 . . . . .	41.0	46.3	10.5	34.6	4.2	36.3	12.9	82.9	17.5	7.1
750-999 . . . . .	37.9	41.4	11.0	34.6	4.6	36.5	16.1	82.5	16.4	7.3
1000+ . . . . .	35.9	36.4	10.5	29.5	3.7	33.8	15.0	83.4	16.8	6.1

<sup>1</sup> Course-taking variables used in this table come directly from the student questionnaire. Details are reported in the "Variables Used" section following the tables.

<sup>2</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>3</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>4</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."

**Table 3.3.--Percent of 1988 Catholic school eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics<sup>1</sup>**

Student characteristics <sup>2</sup>	Art	Music	Drama/speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total .....	79.8	71.3	8.8	5.4	2.7	3.6	8.3	93.9	17.2	6.0
Sex										
Male .....	76.9	67.0	8.6	5.7	3.4	4.2	8.9	93.8	17.9	6.2
Female .....	82.5	75.4	8.9	5.1	2.1	3.1	7.8	94.1	16.5	5.8
Race/ethnicity										
Asian .....	78.9	59.5	14.7	3.8	2.1	2.8	8.6	92.7	13.8	6.4
Hispanic .....	77.6	57.6	7.7	4.4	4.1	0.9	8.3	92.3	9.8	3.5
Black .....	71.9	74.2	12.6	3.1	6.5	3.2	16.7	93.3	20.5	9.8
White .....	81.2	73.7	8.2	6.0	2.0	4.0	7.2	94.6	18.0	5.8
Native American .....	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Family income										
Under \$15,000 .....	86.0	79.2	7.5	4.9	5.3	3.3	9.3	89.5	14.1	9.1
\$15,000-\$24,999 .....	83.6	75.2	8.8	6.6	1.9	7.4	11.6	94.3	16.5	4.5
\$25,000-\$34,999 .....	83.8	75.9	6.4	5.5	2.7	5.5	9.0	92.7	16.4	6.4
\$35,000-\$49,999 .....	81.6	70.4	9.8	5.1	1.1	3.3	8.4	95.3	18.4	5.0
\$50,000 or more .....	75.0	61.3	7.6	6.2	2.6	2.1	7.3	95.5	20.1	6.5
Parent education										
Less than high school .....	75.5	70.2	9.3	5.5	3.5	4.6	3.9	84.5	11.9	4.9
High school graduate/GED .....	85.5	78.7	6.5	6.1	3.3	5.4	8.7	94.5	18.7	7.1
Some college .....	81.8	73.9	8.5	5.0	3.1	4.1	9.3	93.1	16.7	7.2
College graduate .....	75.9	62.1	8.2	5.1	2.3	2.3	8.1	95.0	16.6	4.7
M.A. or equivalent .....	73.3	61.0	13.5	7.8	1.2	2.3	5.2	97.6	20.4	3.9
Ph.D./M.D./other professional .....	78.0	75.0	10.6	5.3	2.4	2.1	9.3	93.4	20.1	4.2
Don't know .....	73.7	86.3	10.3	0.9	2.4	1.9	4.1	92.8	7.0	3.5
Socioeconomic status										
Lowest quartile .....	85.9	78.7	9.1	4.6	5.9	6.2	8.8	88.2	14.8	6.9
Second quartile .....	82.1	77.5	7.7	5.9	2.8	5.0	9.8	94.4	20.5	6.5
Third quartile .....	83.2	72.5	8.6	4.4	2.5	3.8	8.4	94.0	14.3	7.3
Highest quartile .....	73.6	64.0	9.5	6.0	2.0	1.8	7.1	95.1	17.9	4.3
Family composition										
Mother & father .....	79.4	70.3	8.3	5.2	2.4	3.8	8.3	94.3	16.9	5.9
Mother & male guardian .....	82.2	73.0	10.2	4.4	5.4	3.3	10.4	93.5	27.2	7.5
Father & female guardian .....	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Mother only .....	80.5	73.3	7.2	4.9	2.3	3.0	8.3	93.6	15.0	5.4
Father only .....	81.6	69.8	8.4	4.6	5.7	6.0	3.0	95.9	15.4	11.7
Other relative/non-relative .....	80.1	88.1	7.2	2.3	7.0	1.4	11.2	85.0	16.3	2.8
Limited English proficient										
Yes .....	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
No .....	79.7	71.3	8.8	5.4	2.7	3.6	8.3	94.0	17.1	6.0
Language minority										
Yes .....	79.4	62.4	10.4	5.1	4.1	2.8	5.5	91.5	14.5	5.8
No .....	79.9	72.5	8.6	5.4	2.6	3.7	8.7	94.2	17.5	6.0
Grades composite										
Lowest quartile .....	79.4	67.8	4.5	6.4	3.5	4.6	9.7	88.7	13.5	5.3
Second quartile .....	78.9	72.3	8.5	4.8	3.7	4.6	11.1	93.7	19.6	6.5
Third quartile .....	79.8	72.6	7.7	4.9	2.5	2.5	8.1	94.7	18.1	6.4
Highest quartile .....	80.7	71.1	11.6	5.7	2.0	3.5	6.1	95.7	16.5	5.7
Test composite										
Lowest quartile .....	79.1	68.8	9.4	5.8	6.4	6.5	8.3	87.3	17.6	6.4
Second quartile .....	80.2	74.8	7.3	5.3	3.8	4.9	10.0	91.9	15.4	7.0
Third quartile .....	81.0	71.9	8.1	5.8	1.5	2.8	9.6	94.2	16.7	6.1
Highest quartile .....	80.1	69.7	10.4	5.0	1.4	2.3	6.0	97.5	17.3	4.4

**Table 3.3.--Percent of 1988 Catholic school eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics <sup>1</sup>--Continued**

Student characteristics <sup>2</sup>	Art	Music	Drama/ speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total . . . . .	79.8	71.3	8.8	5.4	2.7	3.6	8.3	93.9	17.2	6.0
Reading proficiency <sup>3</sup>										
At level 1 . . . . .	83.0	72.0	9.3	5.0	5.9	8.4	10.6	87.4	15.6	8.8
At level 1 . . . . .	80.3	71.4	9.2	6.5	2.7	4.1	9.4	93.0	15.9	6.8
At level 2 . . . . .	81.1	71.9	8.6	4.4	1.9	2.2	6.3	96.1	18.0	4.2
Math proficiency <sup>4</sup>										
Below level 1 . . . . .	81.0	74.2	7.0	8.5	6.0	6.4	8.2	89.7	16.6	6.4
At level 1 . . . . .	80.8	73.9	8.2	4.0	2.8	3.9	7.6	91.9	13.6	5.3
At level 2 . . . . .	83.4	72.0	9.3	5.0	2.1	3.2	10.4	95.6	20.1	6.8
At level 3 . . . . .	75.5	65.1	10.3	6.0	1.2	1.6	6.2	98.3	18.3	4.6
Math ability group										
Low . . . . .	79.0	64.6	7.2	7.7	3.2	4.6	5.5	90.0	18.0	5.9
Middle . . . . .	80.0	69.5	10.3	7.2	3.5	5.5	11.2	94.2	18.1	5.9
High . . . . .	77.1	66.6	10.8	6.3	2.7	3.5	6.6	94.7	18.7	5.7
Not grouped . . . . .	82.8	78.9	5.9	2.6	2.0	1.7	7.5	94.2	15.1	6.2
Don't know . . . . .	76.1	68.5	6.8	2.0	3.1	1.2	13.8	88.4	13.7	6.1
Science ability group										
Low . . . . .	65.7	61.1	13.7	3.7	3.8	1.0	4.6	89.8	24.5	8.8
Middle . . . . .	81.6	72.3	9.8	8.0	3.7	4.8	8.7	92.6	18.0	5.4
High . . . . .	77.7	70.8	13.0	5.7	5.3	4.2	7.7	95.1	19.9	5.7
Not grouped . . . . .	80.8	71.8	7.0	4.5	1.7	3.0	8.4	94.4	15.9	6.1
Don't know . . . . .	74.9	69.4	8.9	6.0	3.0	3.9	10.0	93.5	14.7	4.9
English ability group										
Low . . . . .	82.7	67.3	9.0	5.3	3.2	6.1	13.9	82.9	18.2	6.0
Middle . . . . .	83.0	75.7	10.7	6.3	5.4	5.6	8.7	93.1	18.2	5.9
High . . . . .	81.5	75.4	13.8	4.0	2.2	2.3	6.9	96.0	19.3	5.8
Not grouped . . . . .	78.0	68.5	6.3	5.5	1.7	3.0	8.0	94.8	16.2	6.1
Don't know . . . . .	73.9	69.7	5.1	4.5	3.3	2.2	11.2	86.8	12.4	4.4
Social studies ability group										
Low . . . . .	87.0	68.1	8.5	5.8	7.0	2.8	10.9	97.5	16.8	3.2
Middle . . . . .	81.2	73.6	10.3	5.9	4.0	4.3	9.3	91.3	19.4	5.1
High . . . . .	82.3	70.7	12.3	3.6	3.5	3.7	6.3	95.7	16.1	5.3
Not grouped . . . . .	78.9	71.3	7.3	5.7	1.9	3.1	8.4	94.4	17.1	6.4
Don't know . . . . .	75.2	68.3	9.8	5.5	4.0	4.9	8.6	90.2	14.1	4.9
Locus of control										
Lowest (external) . . .	81.6	72.9	8.0	5.6	3.9	5.5	9.7	91.1	16.0	6.9
Middle . . . . .	82.4	72.8	7.9	4.3	2.7	2.5	6.2	95.3	17.1	5.8
Highest (internal) . . .	76.5	69.1	10.0	6.2	2.1	3.5	9.3	94.5	17.8	5.6
Self concept										
Low . . . . .	82.7	75.8	6.2	4.9	2.6	3.1	8.2	93.4	14.2	6.1
Medium . . . . .	80.6	70.2	8.4	6.5	2.3	3.9	7.5	95.4	16.8	6.4
High . . . . .	76.5	68.2	11.3	5.0	3.2	3.9	9.1	93.3	20.1	5.5
Postsecondary education plans										
Won't finish high school	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school only . . . .	85.6	77.3	7.3	3.8	2.1	6.6	8.0	89.8	18.0	5.8
Vocational/technical . .	91.3	80.6	7.1	6.8	5.1	8.6	13.8	95.5	16.1	8.5
Attend college . . . . .	82.0	74.4	7.7	6.4	3.2	4.9	5.3	92.2	15.5	4.2
Graduate college . . . .	79.9	70.3	7.1	5.5	2.4	3.7	8.7	94.0	17.3	5.8
Postgraduate/professional	76.3	69.5	12.3	4.5	2.8	1.5	7.7	94.9	17.8	6.6

**Table 3.3.--Percent of 1988 Catholic school eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics<sup>1</sup>--Continued**

Student characteristics <sup>2</sup>	Art	Music	Drama/speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total . . . . .	79.8	71.3	8.8	5.4	2.7	3.6	8.3	93.9	17.2	6.0
Geographic region										
Northeast . . . . .	76.5	78.2	8.5	8.3	3.0	7.4	4.7	92.3	13.5	7.0
North central . . . . .	87.4	82.0	8.2	5.2	2.8	2.0	10.7	95.3	20.9	6.5
South . . . . .	79.0	65.2	8.0	1.2	2.0	1.3	8.9	92.7	14.6	4.1
West . . . . .	69.1	34.5	12.1	4.9	3.0	2.0	10.0	96.3	20.0	5.1
Urbanicity										
Urban . . . . .	86.1	72.6	8.3	3.0	3.4	3.1	9.1	92.0	14.1	5.6
Suburban . . . . .	75.2	70.0	7.7	6.2	1.7	3.4	7.9	95.3	21.6	6.7
Rural . . . . .	66.5	72.1	21.9	18.1	5.9	9.6	4.8	98.0	6.3	3.2
Total enrollment										
1-99 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
100-299 . . . . .	74.8	72.8	12.1	7.9	2.6	6.2	6.2	95.5	23.1	7.5
300-499 . . . . .	84.0	61.9	4.4	4.5	2.0	2.4	10.9	90.9	12.2	3.9
500-749 . . . . .	93.0	89.1	10.1	4.7	3.4	1.3	11.9	95.4	14.1	7.9
750-999 . . . . .	74.2	71.4	1.2	0.0	2.3	0.0	4.7	96.8	4.7	6.3
1000 + . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n

<sup>1</sup> Course-taking variables used in this table come directly from the student questionnaire. Details are reported in the "Variables Used" section following the tables.

<sup>2</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>3</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>4</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

NOTE: Estimates based on fewer than 30 respondents are likely to be unstable and are indicated by "Low n".

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."

**Table 3.4.--Percent of 1988 independent private school eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics<sup>1</sup>**

Student Characteristics <sup>2</sup>	Art	Music	Drama/ speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total . . . . .	70.7	65.2	33.8	2.8	1.0	9.7	10.3	90.9	24.7	2.0
Sex										
Male . . . . .	69.4	60.8	27.9	3.7	1.3	13.2	10.0	88.1	24.8	2.9
Female . . . . .	72.2	70.0	40.3	1.8	0.8	5.7	10.6	94.0	24.7	1.0
Race/ethnicity										
Asian . . . . .	68.0	69.5	34.6	5.8	2.3	13.5	10.1	94.4	23.8	3.3
Hispanic . . . . .	62.7	65.2	51.2	5.7	2.4	22.4	15.8	86.4	25.0	5.1
Black . . . . .	71.2	75.2	38.8	6.9	0.0	26.8	7.2	88.9	27.0	2.8
White . . . . .	71.3	63.6	32.7	1.8	0.9	7.0	10.4	90.7	24.5	1.6
Native American . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Family income										
Under \$15,000 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
\$15,000-\$24,999 . . . .	64.9	62.8	34.0	4.9	3.6	15.6	6.9	85.9	24.7	0.0
\$25,000-\$34,999 . . . .	75.0	66.8	45.7	8.5	2.3	16.9	5.3	95.6	24.2	2.9
\$35,000-\$49,999 . . . .	74.8	65.6	35.6	2.5	0.4	13.0	9.4	92.9	20.7	0.9
\$50,000 or more . . . .	68.5	63.0	33.8	2.7	0.9	7.8	11.6	90.6	23.8	1.7
Parent education										
Less than high school .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school graduate/GED	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Some college . . . . .	75.8	66.8	35.7	2.8	3.4	12.9	10.4	91.0	21.7	3.4
College graduate . . . .	70.9	60.4	31.1	1.7	0.6	9.7	12.1	86.6	25.0	2.5
M.A. or equivalent . . .	70.5	65.6	36.5	3.5	1.1	9.9	10.8	91.4	25.8	1.5
Ph.D./M.D./ other professional . . .	67.4	68.3	33.2	2.8	0.4	7.6	8.4	93.5	24.5	1.6
Don't know . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Socioeconomic status										
Lowest quartile . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Second quartile . . . .	Low n	Low n	23.6	0.0	0.0	26.1	4.8	97.7	21.5	8.3
Third quartile . . . . .	81.2	71.3	32.5	5.8	3.2	12.9	11.4	87.6	22.2	5.7
Highest quartile . . . .	69.4	64.5	33.7	2.5	0.8	8.8	10.4	91.0	25.0	1.4
Family composition										
Mother & father . . . .	70.4	65.8	33.3	2.7	0.9	8.3	10.4	90.3	24.2	1.6
Mother & male guardian	70.7	59.1	29.3	1.5	0.0	9.3	11.3	94.1	30.3	1.9
Father & female guardian	72.0	Low n	37.5	0.0	0.0	9.7	6.2	98.4	24.9	0.0
Mother only . . . . .	72.5	65.3	39.0	4.8	2.9	17.6	9.4	90.4	25.0	4.9
Father only . . . . .	72.4	65.4	31.1	1.6	0.0	12.2	8.3	96.0	27.1	0.0
Other relative/non-relative	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Limited English proficient										
Yes . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
No . . . . .	70.5	65.2	33.5	2.6	0.8	9.3	10.0	90.7	24.4	1.9
Language minority										
Yes . . . . .	67.5	64.0	46.7	8.7	2.1	16.8	14.0	89.6	25.9	5.6
No . . . . .	71.1	65.3	32.4	2.2	0.9	9.0	9.9	91.0	24.6	1.6
Grades composite										
Lowest quartile . . . .	76.4	61.0	24.9	4.7	2.0	9.0	8.7	85.5	22.6	1.7
Second quartile . . . .	71.9	66.9	35.9	3.6	1.0	12.2	8.3	89.0	23.5	3.6
Third quartile . . . . .	70.6	62.5	34.7	2.6	0.8	10.1	8.2	91.7	26.3	2.2
Highest quartile . . . .	67.9	67.3	34.2	1.7	0.8	8.8	13.5	92.1	24.9	1.3
Test composite										
Lowest quartile . . . .	64.1	50.9	25.3	8.1	1.9	21.3	3.8	87.2	28.7	3.2
Second quartile . . . .	70.7	60.0	31.6	5.4	1.7	10.9	10.3	83.2	36.1	6.8
Third quartile . . . . .	73.6	64.1	37.8	4.1	1.5	11.1	12.6	86.7	25.2	1.7
Highest quartile . . . .	70.9	66.4	33.1	1.9	0.7	8.1	10.2	92.8	22.4	1.6

**Table 3.4.--Percent of 1988 independent private eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics <sup>1</sup>--Continued**

Student characteristics <sup>2</sup>	Art	Music	Drama/speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total . . . . .	70.7	65.2	33.8	2.8	1.0	9.7	10.3	90.9	24.7	2.0
Reading proficiency <sup>3</sup>										
Below level 1 . . . . .	58.3	37.4	21.5	1.6	0.0	8.7	16.6	91.7	33.7	1.1
At level 1 . . . . .	73.7	65.8	36.2	3.8	1.9	13.2	10.3	88.1	26.0	4.6
At level 2 . . . . .	70.6	66.5	33.4	2.4	0.6	7.3	10.3	91.8	22.9	1.1
Math proficiency <sup>4</sup>										
Below level 1 . . . . .	78.9	70.3	35.0	6.2	3.2	14.9	6.3	84.3	33.2	5.8
At level 1 . . . . .	69.8	67.2	32.7	3.0	0.0	9.6	8.8	84.7	28.6	4.1
At level 2 . . . . .	68.5	63.6	35.2	2.3	1.4	9.6	9.0	90.0	23.9	1.5
At level 3 . . . . .	72.2	66.0	33.2	2.2	0.7	8.8	11.1	92.0	23.0	1.4
Math ability group										
Low . . . . .	73.7	66.0	26.5	0.9	1.2	6.1	9.5	86.1	23.6	0.8
Middle . . . . .	71.4	64.6	34.9	2.8	0.6	9.7	10.8	92.3	25.1	1.9
High . . . . .	69.1	64.3	32.5	2.4	1.6	11.1	11.1	91.3	23.7	2.6
Not grouped . . . . .	74.0	70.5	39.6	6.7	0.0	6.8	5.7	86.9	29.1	0.9
Don't know . . . . .	64.5	65.7	40.2	0.0	0.0	7.3	9.0	96.8	23.0	0.0
Science ability group										
Low . . . . .	67.3	61.3	28.0	4.9	0.0	16.9	5.4	79.0	21.2	0.0
Middle . . . . .	67.1	63.7	30.6	2.2	1.1	12.3	11.9	87.0	22.8	1.9
High . . . . .	72.9	70.3	30.3	3.3	1.6	15.2	12.0	90.4	27.0	4.1
Not grouped . . . . .	72.0	64.0	37.6	2.9	0.8	5.5	9.3	93.7	25.7	1.2
Don't know . . . . .	62.7	63.8	31.2	0.0	0.0	4.7	9.0	88.8	13.9	0.7
English ability group										
Low . . . . .	62.0	50.6	20.9	4.1	0.0	9.3	7.2	85.0	12.2	0.0
Middle . . . . .	63.6	61.7	28.5	1.9	1.5	12.9	12.5	87.6	23.6	3.4
High . . . . .	74.2	67.8	32.8	3.3	2.2	14.6	13.4	90.2	25.7	2.0
Not grouped . . . . .	73.6	66.9	38.7	2.9	0.3	5.1	7.9	93.4	26.7	1.5
Don't know . . . . .	61.1	63.0	27.8	1.5	0.0	9.5	8.7	90.5	15.2	0.7
Social studies ability group										
Low . . . . .	70.8	64.4	18.2	0.0	0.0	10.2	12.3	85.7	18.5	0.0
Middle . . . . .	67.7	63.0	30.5	3.0	1.6	15.1	10.5	88.7	23.7	3.1
High . . . . .	73.7	72.8	34.4	3.3	1.4	13.5	12.7	88.9	27.9	2.9
Not grouped . . . . .	71.5	63.3	36.2	2.8	0.8	5.5	8.9	93.2	24.8	1.4
Don't know . . . . .	59.5	57.5	33.5	1.3	0.0	9.3	11.3	87.1	17.7	0.8
Locus of control										
Lowest (external) . . .	71.7	57.3	34.4	5.0	1.1	11.2	9.1	90.0	25.7	4.5
Middle . . . . .	70.5	63.3	32.1	2.4	1.0	9.2	10.0	90.2	24.9	0.7
Highest (internal) . . .	70.4	69.5	34.9	2.2	1.0	9.5	11.0	91.7	24.2	2.0
Self concept										
Low . . . . .	69.8	60.4	31.4	1.7	1.3	6.4	8.5	89.9	22.8	1.1
Medium . . . . .	72.0	68.0	36.6	3.3	0.6	12.3	12.6	91.2	23.7	1.3
High . . . . .	70.4	67.0	33.9	3.4	1.1	10.6	10.2	91.3	27.0	3.2
Postsecondary education plans										
Won't finish high school	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school only . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Vocational/technical . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Attend college . . . . .	67.5	59.3	29.1	5.5	0.0	10.8	3.4	86.4	19.0	0.0
Graduate college . . . .	70.0	62.0	30.0	2.1	0.5	9.1	9.8	89.8	23.7	1.8
Postgraduate/professional	71.5	68.0	36.9	2.9	1.1	10.0	11.0	92.1	25.6	2.1



**Table 3.4.--Percent of 1988 independent private eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics <sup>1</sup>--Continued**

Student characteristics <sup>2</sup>	Art	Music	Drama/ speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total . . . . .	70.7	65.2	33.8	2.8	1.0	9.7	10.3	90.9	24.7	2.0
Geographic region										
Northeast . . . . .	81.1	77.7	33.0	1.5	0.6	13.0	8.8	85.8	23.4	2.4
North central . . . . .	82.4	76.5	48.9	6.5	0.9	7.0	17.3	96.8	17.8	1.0
South . . . . .	58.6	51.6	27.0	1.9	0.9	5.1	11.0	91.5	29.8	2.0
West . . . . .	71.5	64.7	43.7	5.4	2.5	17.7	4.5	95.7	20.0	2.2
Urbanicity										
Urban . . . . .	71.9	66.2	37.1	3.5	1.3	9.5	13.5	93.3	26.1	1.7
Suburban . . . . .	67.8	64.2	32.2	2.0	0.5	9.3	1.6	88.5	20.3	1.5
Rural . . . . .	79.9	59.5	2.0	0.0	1.9	15.9	39.3	77.9	44.5	10.7
Total enrollment										
1-99 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
100-299 . . . . .	81.8	75.8	44.5	4.3	1.4	18.8	9.1	84.1	25.4	3.9
300-499 . . . . .	69.4	65.2	31.4	3.8	0.8	9.5	11.3	91.8	32.5	2.1
500-749 . . . . .	68.8	61.2	36.0	1.4	1.1	6.6	13.2	91.1	18.7	1.7
750-999 . . . . .	66.2	62.2	34.1	0.5	1.8	4.5	4.9	95.8	19.2	0.9
1000 + . . . . .	46.2	38.1	17.2	1.9	0.0	0.0	15.6	89.5	8.0	0.0

<sup>1</sup> Course-taking variables used in this table come directly from the student questionnaire. Details are reported in the "Variables Used" section following the tables.

<sup>2</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>3</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>4</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

NOTE: Estimates based on fewer than 30 respondents are likely to be unstable and are indicated by "Low n".

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."

**Table 3.5. Percent of 1988 other private school eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics<sup>1</sup>**

Student characteristics <sup>2</sup>	Art	Music	Drama/ speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total . . . . .	43.9	52.5	16.8	14.1	1.5	8.1	11.7	90.7	11.0	4.6
Sex										
Male . . . . .	44.9	52.3	16.5	9.8	1.6	11.3	13.4	89.1	13.6	5.2
Female . . . . .	43.0	52.8	17.2	18.1	1.3	5.1	10.2	92.2	8.6	4.0
Race/ethnicity										
Asian . . . . .	59.6	57.8	22.5	19.1	0.8	10.7	10.0	93.6	18.0	1.4
Hispanic . . . . .	38.5	49.5	19.6	Low n	11.1	13.0	39.9	76.2	19.0	Low n
Black . . . . .	74.9	77.8	11.7	34.3	1.8	14.5	11.9	91.6	24.6	3.6
White . . . . .	41.6	50.8	17.1	13.2	0.9	7.3	10.7	91.2	10.1	4.5
Native American . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Family income										
Under \$15,000 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
\$15,000-\$24,999 . . . . .	51.1	55.4	15.6	22.0	4.9	13.1	13.4	90.6	10.4	6.7
\$25,000-\$34,999 . . . . .	54.6	66.6	11.2	15.3	0.9	7.1	9.8	90.5	10.4	2.4
\$35,000-\$49,999 . . . . .	50.5	56.1	13.2	15.7	0.6	5.3	8.7	90.8	8.8	4.3
\$50,000 or more . . . . .	34.1	45.7	22.5	12.2	0.3	7.4	13.5	91.3	12.5	3.8
Parent education										
Less than high school . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school graduate/GED . . . . .	39.8	58.2	5.1	11.8	3.9	9.3	6.8	88.4	6.6	4.8
Some college . . . . .	44.9	55.2	11.2	17.0	1.3	5.4	15.5	88.8	12.3	4.5
College graduate . . . . .	44.1	46.4	20.9	12.6	0.2	9.9	9.2	91.5	11.0	4.7
M.A. or equivalent . . . . .	42.8	52.3	21.9	11.0	0.0	5.2	11.1	93.4	8.5	5.6
Ph.D./M.D./ other professional . . . . .	43.0	54.3	25.7	13.8	0.0	12.1	11.2	93.1	13.0	1.3
Don't know . . . . .	44.6	41.7	7.6	29.4	6.5	13.5	8.0	85.0	11.8	1.9
Socioeconomic status										
Lowest quartile . . . . .	54.3	49.7	5.0	20.1	13.4	18.9	12.0	93.0	7.1	13.7
Second quartile . . . . .	56.6	66.9	6.5	13.3	0.8	5.2	13.0	83.4	8.2	3.5
Third quartile . . . . .	38.2	53.9	12.6	16.0	2.1	6.1	14.1	90.3	12.1	5.2
Highest quartile . . . . .	42.5	48.4	22.4	13.0	0.3	8.8	10.3	92.5	11.6	3.8
Family composition										
Mother & father . . . . .	43.2	52.5	17.4	13.5	0.8	7.8	11.4	90.1	10.0	3.7
Mother & male guardian . . . . .	44.4	62.5	26.8	20.7	0.0	0.0	12.0	92.3	9.6	11.8
Father & female guardian . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Mother only . . . . .	51.5	50.3	13.6	16.4	6.1	11.0	16.9	98.8	21.4	8.6
Father only . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Other relative/non-relative . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Limited English proficient										
Yes . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
No . . . . .	43.4	52.2	16.2	14.4	1.2	8.3	11.3	90.5	11.0	4.5
Language minority										
Yes . . . . .	53.0	47.0	26.4	21.0	7.7	16.6	18.0	88.6	22.6	1.2
No . . . . .	43.4	52.8	16.3	13.8	1.1	7.6	11.4	90.8	10.4	4.7
Grades composite										
Lowest quartile . . . . .	41.0	47.0	10.7	19.9	4.1	7.9	4.2	88.9	11.7	2.9
Second quartile . . . . .	41.9	48.3	13.4	18.0	1.3	6.8	12.7	87.0	10.6	5.0
Third quartile . . . . .	44.4	47.1	18.2	11.9	1.2	6.7	15.1	91.9	10.8	4.4
Highest quartile . . . . .	44.9	58.4	19.3	11.9	0.9	8.7	11.8	92.2	11.0	5.0
Test composite										
Lowest quartile . . . . .	46.9	43.5	15.3	15.0	7.4	15.5	19.4	87.5	19.5	5.7
Second quartile . . . . .	36.2	58.7	12.0	24.6	3.5	8.3	16.0	89.0	4.7	5.8
Third quartile . . . . .	41.5	47.5	13.4	13.4	0.8	6.0	13.8	87.9	13.5	4.9
Highest quartile . . . . .	47.4	56.5	21.9	11.1	0.0	7.8	7.0	93.8	9.9	3.9

**Table 3.5.--Percent of 1988 other private school eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics<sup>1</sup>--Continued**

Student characteristics <sup>2</sup>	Art	Music	Drama/speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total .....	43.9	52.5	16.8	14.1	1.5	8.1	11.7	90.7	11.0	4.6
Reading proficiency <sup>3</sup>										
Below level 1 .....	43.5	47.8	11.7	19.0	5.6	12.6	18.9	93.3	18.9	1.9
At level 1 .....	38.9	49.6	13.3	16.1	1.9	8.4	14.2	88.6	11.8	5.5
At level 2 .....	47.5	56.7	19.9	12.8	0.5	6.9	8.8	91.6	8.6	4.7
Math proficiency <sup>4</sup>										
Below level 1 .....	51.6	52.6	9.2	16.4	5.1	8.8	17.9	86.6	17.3	7.5
At level 1 .....	39.3	51.2	17.1	17.1	2.9	9.4	14.7	90.5	9.4	4.5
At level 2 .....	42.6	53.0	13.8	12.4	0.4	7.1	9.3	86.7	11.9	5.3
At level 3 .....	49.2	54.5	20.8	11.9	0.4	7.4	9.4	95.0	11.2	3.5
Math ability group										
Low .....	54.9	34.8	16.7	16.2	0.5	5.1	3.8	88.6	12.0	0.5
Middle .....	42.1	54.4	19.5	19.0	2.1	11.0	16.6	92.0	11.5	4.5
High .....	42.3	55.9	22.1	14.1	0.0	9.0	10.3	96.4	11.8	5.9
Not grouped .....	45.0	50.6	7.7	9.0	1.8	4.3	9.8	82.3	9.4	3.5
Don't know .....	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Science ability group										
Low .....	Low n	Low n	Low n	Low n	Low n	Low n	Low n	87.9	Low n	Low n
Middle .....	47.6	52.3	18.3	18.3	1.5	8.7	13.2	87.8	8.4	3.7
High .....	43.0	46.6	26.0	11.2	0.8	10.2	12.8	95.5	11.8	4.6
Not grouped .....	40.5	56.1	13.6	13.7	1.0	7.1	10.7	90.0	10.8	4.6
Don't know .....	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
English ability group										
Low .....	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Middle .....	48.1	64.6	16.4	17.7	2.1	7.4	18.5	88.5	13.4	4.6
High .....	43.6	58.1	24.1	15.0	0.9	5.3	9.9	94.4	9.7	6.7
Not grouped .....	42.7	47.1	14.6	12.8	1.0	9.1	8.9	90.5	10.1	3.6
Don't know .....	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Social studies ability group										
Low .....	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
Middle .....	46.9	62.3	11.5	14.9	3.2	7.5	16.8	87.9	12.0	4.8
High .....	40.6	49.4	23.8	8.3	2.1	4.7	14.1	92.7	9.9	7.7
Not grouped .....	44.1	52.1	16.5	15.0	0.4	8.9	9.3	91.2	10.4	3.6
Don't know .....	54.3	Low n	17.4	18.9	Low n	13.2	20.7	94.6	17.3	9.4
Locus of control										
Lowest (external) .....	37.8	47.9	13.0	20.9	2.9	9.4	12.0	84.8	12.1	3.5
Middle .....	47.1	53.6	16.3	12.8	0.8	7.9	8.8	91.6	11.0	5.4
Highest (internal) .....	44.8	54.0	18.9	11.7	1.2	7.4	13.3	92.8	10.5	4.6
Self concept										
Low .....	39.6	51.4	11.9	18.2	1.5	6.3	11.6	90.1	10.9	2.8
Medium .....	47.2	56.8	20.7	14.2	1.6	10.6	12.7	89.0	10.6	5.8
High .....	45.5	50.7	18.4	10.4	1.3	7.7	11.0	92.2	11.4	5.3
Postsecondary education plans										
Won't finish high school	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
High school only .....	Low n	Low n	9.3	25.1	1.2	12.9	19.0	84.4	5.8	1.2
Vocational/technical .....	48.1	60.2	8.8	7.5	2.0	7.5	7.3	76.4	11.7	5.5
Attend college .....	38.1	43.8	7.8	14.8	4.8	5.8	8.4	86.2	11.7	4.2
Graduate college .....	42.4	50.0	15.9	14.6	0.1	7.2	11.6	91.6	11.4	5.0
Postgraduate/professional	45.6	55.7	22.8	13.4	2.5	9.3	13.0	93.1	10.7	4.4

**Table 3.5.--Percent of 1988 other private school eighth graders who report taking specified arts, vocational, and personal development courses by selected student characteristics <sup>1</sup>--Continued**

Student characteristics <sup>2</sup>	Art	Music	Drama/ speech	Home economics	Agriculture	Shop	Typing	Physical education	Sex education	Consumer education
1	2	3	4	5	6	7	8	9	10	11
Total . . . . .	43.9	52.5	16.8	14.1	1.5	8.1	11.7	90.7	11.0	4.6
Geographic region										
Northeast . . . . .	52.1	24.3	15.9	5.3	1.3	5.0	2.0	96.5	7.3	2.6
North central . . . . .	73.1	86.7	19.5	27.8	1.8	18.7	4.8	92.8	12.7	4.7
South . . . . .	22.9	32.5	8.3	8.0	0.9	2.0	10.7	86.7	14.3	4.3
West . . . . .	38.0	60.4	28.1	13.2	2.1	7.1	27.8	91.1	5.9	6.2
Urbanicity										
Urban . . . . .	48.2	62.0	23.6	19.0	1.5	13.4	14.0	95.1	15.7	6.0
Suburban . . . . .	40.8	48.4	14.2	8.0	1.6	3.0	11.9	92.3	7.3	3.3
Rural . . . . .	39.2	35.0	4.0	15.1	1.0	5.0	5.1	74.1	6.7	3.7
Total enrollment										
1-99 . . . . .	65.4	57.3	5.6	2.5	5.1	1.2	20.6	78.4	16.7	3.8
100-299 . . . . .	47.7	55.4	11.2	13.3	1.3	5.6	10.1	91.2	10.4	4.5
300-499 . . . . .	32.5	63.0	18.0	21.8	1.8	6.8	11.9	95.6	3.4	8.4
500-749 . . . . .	43.4	47.7	29.5	15.5	0.2	13.9	13.0	89.4	14.6	3.2
750-999 . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n
1000+ . . . . .	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n	Low n

<sup>1</sup> Course-taking variables used in this table come directly from the student questionnaire. Details are reported in the "Variables Used" section following the tables.

<sup>2</sup> A description of each classification variable can be found in the "Variables Used" section following the tables.

<sup>3</sup> Reading proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

<sup>4</sup> Mathematics proficiency levels are hierarchical. Mastery at one level assumes mastery at all lower levels.

NOTE: Estimates based on fewer than 30 respondents are likely to be unstable and are indicated by "Low n".

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey."

# Technical Notes

## Data Source

This report is based upon data from the National Education Longitudinal Study of 1988 (NELS:88) base year survey. The NELS:88 study is a survey of 24,599 eighth grade students, their parents, teachers, and school administrators. The students were selected from a total of 1,052 schools sampled from each of the fifty states and the District of Columbia. The sample includes students from both public and private schools. Asian and Hispanic students were over-sampled for this survey. Sample data can be used to make inferences to the population of about 3,008,080 eligible students, from about 38,774 eligible schools containing an eighth grade during the 1988 academic year. A complete description of the sample design can be found in the *NELS:88 Base Year Sample Design Report*.<sup>1</sup>

Table A shows sample sizes and completion rates for each of the components of the NELS:88 base year study.

Table A.--Summary of NELS:88 base year sample sizes and completion rates

Component	Sample size	Completion rates	
		Weighted	Unweighted
Student questionnaires	24,599	93.4%	93.0%
Student tests	23,701	96.5% <sup>a</sup>	96.4% <sup>a</sup>
Parent questionnaires	22,651	93.7% <sup>a</sup>	92.1% <sup>a</sup>
Teacher ratings of students	23,188 <sup>b</sup>	95.9% <sup>a</sup>	94.3% <sup>a</sup>
School administrator questionnaires	1,035	98.9% <sup>c</sup>	98.4% <sup>c</sup>

<sup>a</sup> The base for this percentage is the number of students who completed a student questionnaire.

<sup>b</sup> This figure represents the number of students who completed a student questionnaire for which at least one teacher rating was completed.

<sup>c</sup> The base for this percentage is the number of schools for which student questionnaire data was obtained.

## Data Limitations

The population of schools in the NELS:88 base year survey was restricted to "regular" public and private schools in the United States. Excluded from the sample were Bureau of Indian Affairs (BIA) schools, special education schools for the handicapped, area vocational schools that do not enroll students directly, and schools for dependents of U.S. personnel overseas. Students who are educated at home or in private tutorial settings, and those who have dropped out of school prior to reaching eighth grade, also fall outside of the NELS:88 base year sample. The exclusions have implications for national inferences based on NELS:88 data, although their impact is believed to be small. For certain groups, (for example, American Indians) the impact of

1 Spencer, B. D., Frankel, M., Ingels, S., Rasinski, K. A., and Tourangeau, R., National Education Longitudinal Study of 1988(NELS:88) Base Year Sample Design Report (Chicago: NORC, 1990).

these exclusions may be substantial, and the users of the NELS:88 data should take this into account. Information from various sources suggests that approximately 10 percent of American Indian school children attend schools that are affiliated with the BIA, including schools directly operated by the BIA and those operated by American Indian communities under contract to the BIA. Other sources suggest that less than 10,000 eighth graders attend Department of Defense Dependent Schools (DODDS) serving dependents of U.S. personnel overseas.

Exclusions were also made within schools. The population of students was defined to exclude those who had substantial language difficulties, who had disabilities that would make participation in the survey difficult, or who were chronic truants or dropouts. Seven ineligibility codes were employed at the time of student sample selection:

- A attends this school only on a part-time basis, primary enrollment at another school.
- B physical disability precludes filling out questionnaire and taking test.
- C mental disability precludes filling out questionnaire and taking test.
- D dropout: absent or truant for 20 consecutive days, and is not expected to return to school.
- E does not have English as the mother tongue and has insufficient command of English to complete the NELS:88 questionnaire and test.
- F has transferred out of the school since roster was compiled.
- G is deceased.

An analysis of eighth graders in the 1,052 schools included in the NELS:88 base year sample shows that of the 202,996 eighth grade students in these schools, 10,853 (5.37 percent) of them were excluded because they were judged to fall into one of the previously mentioned ineligibility categories. The majority of exclusions were made by a school administrator prior to sampling from the school roster. A small number of students who were missed in this process were designated as excluded by the survey administrator on the day that survey data was collected in the child's school.

Information on course taking was obtained from students' self-reports. Student transcripts were not examined in the NELS:88 base year survey. To assess and improve the accuracy of students' responses to the course-taking questions, various consistency checks were performed. For example crosstabular analyses of students' responses to questions about taking mathematics courses revealed that some students reported taking both algebra and remedial math. Based on this and similar findings, it seems likely that reports of course taking were inflated as they were in High School and Beyond.<sup>2</sup> To address this problem, transcripts will be collected as a part of the Second Follow-up of NELS:88.

## Variables Used

This section provides definitions for the variables used in the tables.

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2 Fetters, W., Stowe, P. S., & Owings, J. (1984). *Quality of Responses of High School Students to Questionnaire Items*. Washington, D. C.: National Center for Education Statistics, U. S. Department of Education.

## Classification Variables:

SEX was taken first from the student questionnaire (Q. 12). If this source was missing or not available, then the sex variable from school rosters was used. Any records with this variable still missing had sex imputed from the respondent's name. In the small number of cases where this imputation was impossible the value for SEX was randomly assigned.

RACE was also constructed from several sources of information. The first source was the student's self-report (student questionnaire Q. 31A through 31D). Secondly, if the student information was missing, data from the parent questionnaire (Q. 10 through 10C) were used. A small percentage of students who wrongly used the American Indian/Alaskan Native category, but whose parents responded "white, not Hispanic" were recoded to "white, not Hispanic" after a subsample of the parents were interviewed to verify the students' error. Although membership status in different Hispanic and Asian/Pacific Islander subgroups was collected, the subgroup categories are not used in this report.

FAMILY INCOME was taken from Q. 80 on the parent questionnaire which asks for total family income from all sources in 1987. Categories were collapsed for this report.

PARENT EDUCATION is the highest level of education reported by either of the eighth grader's parents/guardians. It was constructed from Q. 30 and 31 on the parent questionnaire, or if these were missing, from Q. 34A and 34B on the student questionnaire.

SOCIOECONOMIC STATUS (SES) was constructed using the following data from the NELS:88 parent questionnaire: father/male guardian's education level, mother/female guardian's education level, father/male guardian's occupation, mother/female guardian's occupation, and family income (Q.30, Q.31, Q.34B, Q.37B, and Q.80). Occupational data were assigned values using the Duncan SEI. Each nonmissing component was standardized, and nonmissing components were averaged to yield the SES composite. For cases where all parent data components were missing (8.1 percent of the participants), student data were used. The first four components from the student data are the same as those from the parent data. The family income component was replaced by an index created from a list of household items (student questionnaire Q. 35A-P). Student data were used to construct SES if all components based on parent data were missing and at least one component based on student data was not missing. Otherwise SES was set to missing. The range for SES is -2.97 through 2.56. For this report, SES is divided into quartiles using weighted percents.

FAMILY COMPOSITION was created to specify the adult structure of the eighth grader's household. It is derived from Q. 8 in the student questionnaire where students indicated which of a list of people live with them.

LIMITED ENGLISH PROFICIENT defines whether a student is limited in his or her ability to read, write or understand the English language. It was constructed from the student self-evaluation and the teacher evaluations for proficiency in using the English language. The variable was set to 1 if the student responded to any of the questions about understanding, speaking, reading, and writing English (Q.27A, Q.27B, Q.27C, or Q.27D from the student questionnaire) with "not very well", or if either teacher marked "yes" to a question asking if the student is a Limited English Proficient student (Q.12, Part 1 from the teacher questionnaire). It was set to 0 otherwise. If both the student and teachers responses were missing, this variable was set to missing. It should be kept in mind that students who did not have English as their mother tongue and had insufficient command of English to complete the NELS:88 questionnaire and test were declared ineligible for inclusion into the sample and were excluded from the NELS:88 survey.

LANGUAGE MINORITY means that the student is from a home in which a language other than English is typically spoken. The classification is based on teacher (teacher questionnaire part I, Q. 11) or student (Q. 22) reports.

GRADE COMPOSITE is an average, with all nonmissing elements equally weighted, of the student's self-report of grades from sixth grade to eighth grade in four subject areas (English, math, social studies/history, and science). The source is student questionnaire Q. 81. GRADE COMPOSITE is recoded to quartiles based upon weighted percents.

SCIENCE TEST QUARTILE was constructed from students' scores on the science test which included 25 items that measured students' abilities to reproduce detail, comprehend, and make inferences and evaluations of text in four areas of science (earth sciences, life sciences, chemistry, and scientific methodology). The sample was divided into quartiles based upon weighted percents. Detailed information about the construction and psychometric properties of this test and other tests referenced in this report can be found in the *Psychometric Report for the NELS:88 Base Year Test Battery*.<sup>3</sup>

HISTORY TEST QUARTILE was constructed from students' scores on a history/citizenship test. This test consisted of 30 items, 10 on U.S. History, 15 on government and citizenship, and 5 on economic development. The sample was divided into quartiles based upon weighted percents.

TEST COMPOSITE is a combination of students' scores on the reading and mathematics tests. The reading test included 21 items that measured students' abilities to reproduce detail, comprehend, and make inferences and evaluations of text in four areas (literature, science, poetry, and biology). The mathematics test included 40 items measuring skills in simple arithmetic operations, in using decimals, fractions, and percentages, in understanding the relationship among these operations, and in logically solving problems. Students' scores were standardized and summed across the two tests. The sample was divided into quartiles based upon weighted percents.

MATHEMATICS and READING PROFICIENCY scores were created from the mathematics and reading tests to measure hierarchically ordered cognitive skills, termed proficiency levels. Students were scored as proficient or not proficient at each level. The definitions of the MATH PROFICIENCY levels are as follows:

- Level 1: Able to perform simple arithmetical operations on whole numbers.
- Level 2: Able to perform simple operations with decimals, fractions, and roots.
- Level 3: Able to perform simple problem solving, requiring conceptual understanding and/or the development of a solution strategy.

The definitions of the READING PROFICIENCY levels are as follows:

- Level 1: Demonstrates simple reading comprehension including reproduction of detail and/or the author's main thought.

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3 Rock, Donald A. and Pollack, Judith M. *Psychometric Report for the NELS:88 Base Year Test Battery*, Educational Testing Service, 1990.



Level 2: Demonstrates ability to make inferences beyond the author's main thought and/or understand and evaluate relatively abstract concepts.

Each proficiency score level was marked by four items, which were chosen as having similar difficulty and content. Success, or "passing" a level, was defined as answering at least three of the four items correctly. Assigning students to one of three proficiency categories for Reading (below Level 1, proficient at Level 1 but not Level 2, and proficient at Level 3) and four analogous categories for Mathematics was a straightforward process for the majority of students. In some cases, when a student had omitted one or more items in a 4-item cluster, a pass/fail determination could be made from the remaining items. For example, if the student only answered three items but gave correct answers to the three, he or she met the "pass" criterion. Similarly, if the student answered only two items but failed them both it would be impossible for the student to meet the "pass" criterion regardless of how he or she fared on the other two items.

Assigning a student to a proficiency category was a problem when the student either did not answer enough items to determine a proficiency level, or a "reversal" pattern occurred. A "reversal" pattern is one in which a student passed a more difficult level after failing an easier one. For reading, proficiency scores could be directly determined for 96% of the students who took the test (or 92.2 percent of the total number of students in the sample). Only about 3% of the test-taking students answered too few items to be classified, and 1% had a reversal pattern. For mathematics, proficiency scores could be directly determined for only 86% of the test-taking students. About 8.5% had omitted too many items to be categorized, and another 5.5% had reversals.

A classification scheme was devised to provide estimates of the proficiency levels for mathematics. Item Response Theory (IRT) parameters were used to estimate the proficiency classification of students with insufficient data. Details of the estimation process are presented in the *Psychometric Report for the NELS:88 Base Year Test Battery*, Appendix G. The result was an estimated proficiency score for about half of the students who could not be classified through the direct method. Students who exhibited the "reversal" pattern were not reclassified through estimation. Rather, as in the case of reading proficiency, these students were placed in the missing category.

MATH, SCIENCE, ENGLISH, and SOCIAL STUDIES ABILITY GROUP were taken from Q. 60a through d in the student questionnaire.

LOCUS OF CONTROL measures the degree of influence eighth graders feel they have over events in their lives and over their own destinies. It was constructed from Q. 44C, 44F, and 44G from the student questionnaire. Each of the items was standardized and all nonmissing items were averaged. Any student missing all items was assigned a missing value. The range is -3.01 (low internal/high external locus of control) through 1.52 (high internal/low external locus of control). For this report, LOCUS OF CONTROL is divided into tertiles using weighted percents.

SELF CONCEPT is a measure of the general view eighth graders have about themselves. It was constructed from Q. 44A, 44D, 44E, and 44H. Each of the items was standardized, and nonmissing items were averaged. Any student missing all components was assigned a missing value. The range for SELF CONCEPT is -3.61 (low self concept) through 1.15 (high self concept). For this report, SELF CONCEPT is divided into tertiles using weighted percents.

POSTSECONDARY EDUCATION PLANS uses categories taken directly from Q.45 in the student questionnaire. The question reads, "As things stand now, how far in school do you think you will get?".

GEOGRAPHIC REGION indicates in which of the four U.S. Census regions the school is located. It was created by recoding the sampled state of the eighth grade school into the four Census Bureau regions. For confidentiality reasons, this value was set to missing in rare instances.

The values for this variable are:

- 1 = Northwest -- New England and Middle Atlantic states
- 2 = North Central -- East North Central and West North Central States
- 3 = South -- South Atlantic, East South Central, and West South Central states
- 4 = West -- Mountain and Pacific states

URBANICITY classifies the location of the student's school. It was created directly from QED (Quality Education Data) data (position 199-199). The classifications are the Federal Information Processing Standards as used by the U.S. Census.

The values for this variable are:

- 1 = Urban -- central city
- 2 = Suburban -- area surrounding a central city within a county constituting the MSA (Metropolitan Statistical Area)
- 3 = Rural -- outside MSA

TOTAL ENROLLMENT categorizes the entire school enrollment as reported by the school administrator. The values found in the tables were created by collapsing the data from Q.2 of the school administrator questionnaire. Missing data were imputed from enrollment figures contained in the QED file.

### **Course-taking Variables:**

Information about course taking was obtained from Part 8 of the student questionnaire which asked the eighth grader about his or her schoolwork. Information about course taking in mathematics and science was drawn from responses to Q. 67 and 67B. Information about course taking in the humanities was drawn from responses to Q. 67B. Information about course taking in the specialized courses was drawn from Q. 67B, 67C, and 67D. For each of the items students were asked whether they had attended the course at least once a week during this school year. For the mathematics, science, English, and social studies course taking, composite variables were created to reduce inconsistencies in students' reports.

To assess and improve the accuracy of students' responses to course taking in mathematics, science, history, and social studies, various consistency checks were performed. For example, crosstabular analyses revealed that some students reported taking both algebra and remedial mathematics. This result raised the concern that responses to certain questions about mathematics course taking were inflated, perhaps by students reporting brief coverage of material in a regular math course as a year-long course covering the material (e.g, a short algebra segment in a general math course reported as an algebra course). Therefore, to improve the interpretability of course taking, composite variables were formed which attempted to purify students' reports of course taking. This was done for reports of course taking in mathematics, science, English, and

social studies, and the table percentages are based upon these composites. The following mutually exclusive and exhaustive course-taking categories were created as the result of this exercise.

**MATHEMATICS:**

(Algebra)--Taking algebra only or algebra and regular mathematics

(Regular math)--Taking regular mathematics only

(Remedial math)--Taking regular and remedial mathematics or remedial mathematics only

(No math)--Taking no mathematics

**SCIENCE:**

(Science with lab)--Taking science with a laboratory component

(Science without lab)--Taking science without a laboratory component

(No science)--Taking no science

**ENGLISH:**

(Regular English)--Taking regular English only

(Remedial English)--Taking regular English and remedial English or remedial English only

(No English)--Taking no English

**HISTORY/SOCIAL STUDIES**

(History only)--Taking history only

(Social studies only)--Taking social studies only

(History and social studies)--Taking both a history and a social studies course

(No history/social studies)--Taking neither history nor social studies

**Standard Errors and Key Statistics**

All percents reported in the tables are weighted to population estimates that compensate for oversampling of certain types of schools and students and that adjust for the small amount of nonresponse. Complex sample designs, such as the one used in the NELS:88 survey, often employ stratification, clustering, and unequal selection probabilities. These designs require procedures for estimating sampling variability that are markedly different from the ones that apply when the data are from a simple random sample. In general, such complex designs yield statistics with larger sampling errors than those from a simple random sample. The impact of the sample design on the sampling error of a given statistic is often assessed by the design effect, which is the ratio of the actual error variance of the statistic to the variance that would have been obtained for the statistic had it been based on a simple random sample. Standard errors and design effects were calculated for 30 means and proportions selected randomly from the NELS:88 student questionnaire. The average design effect across these 30 items is 2.54. The average root design effect is 1.56. The minimum root design effect for the 30 items is 1.16, the maximum is 2.24, and the standard deviation across the 30 root design effects is 0.33. Further details are presented in the *NELS:88 Base Year Sample Design Report*.

Three main approaches to the computation of standard errors from complex samples are balanced repeated replication, jackknife repeated replication, and Taylor residual techniques. The three approaches give similar results. Table B gives estimates, standard errors, unweighted sample sizes and estimated population sizes (weighted n's) for several key items. The standard errors were calculated using Taylor residual techniques. The standard errors presented in the table are for the overall sample. Larger standard errors will be found for estimates from the various sub-populations (e.g., independent private school children) reported in the tables.

Estimates of standard errors for other percents reported in the tables may be approximated by using the following formula:

$$SEp = DEFT * [(P*(100-P))/n]^{1/2}$$

where p is the weighted percent reported in the table and n is the number of cases on which the percent is based (see the appendix). DEFT is the root design effect. For the NELS:88 base year survey student data the average root design effect of 1.56 may be used to estimate the effect of the sample design on standard errors calculated under the assumption of simple random sampling.

Tables in this report contain point estimates of population percentages. The estimates with their standard errors may be used to construct confidence intervals, or interval estimates, which are ranges that are estimated to include the population percentage with a specified probability or level of confidence. For example, using the sample percent and its standard error, a confidence interval could be constructed that would have a 95 percent probability of including a population percentage within its bounds. Readers who are interested in obtaining standard error estimates calculated using Taylor residual techniques for all estimates presented in the tables should contact NCES<sup>4</sup>. Also available from NCES are diskettes containing comma-separated files with estimates, unweighted and weighted sample sizes, and Taylor residual techniques standard errors calculated for each of the classification cells presented in the tables.

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4 For more information, contact the Longitudinal and Household Studies Branch of the National Center for Education Statistics, 555 New Jersey Avenue N.W., Washington, D.C., 20208.

**Table B.--Estimated percentages, standard errors, and unweighted  
and weighted n's for key table items**

<b>Student characteristics</b>	<b>Algebra</b>	<b>Science with lab</b>	<b>English</b>	<b>Foreign language</b>	<b>Social studies</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Total</b>					
estimate	32.2	21.5	83.7	24.1	23.0
s.e.	0.60	0.39	0.29	0.60	0.60
unwt n	23392	21489	23242	22364	23150
wt n/1000	2859	2653	2840	2730	2828
<b>Sex</b>					
<b>Male</b>					
estimate	31.8	22.1	81.6	23.8	21.8
s.e.	0.73	0.45	0.31	0.67	0.63
unwt n	11480	10533	11396	10844	11321
wt n/1000	1411	1309	1401	1329	1390
<b>Female</b>					
estimate	32.7	20.9	85.8	24.4	24.0
s.e.	0.62	0.42	0.41	0.59	0.64
unwt n	11912	10956	11846	11520	11829
wt n/1000	1448	1345	1439	1400	1437
<b>Race/ethnicity</b>					
<b>Asian</b>					
estimate	46.8	25.5	81.3	37.5	17.4
s.e.	1.26	1.29	0.82	1.77	1.16
unwt n	1436	1323	1429	1394	1424
wt n/1000	98	91	97	95	97
<b>Hispanic</b>					
estimate	24.4	19.1	76.4	19.5	18.6
s.e.	1.05	0.83	0.77	1.05	0.77
unwt n	2937	2756	2896	2770	2874
wt n/1000	286	269	282	270	280
<b>Black</b>					
estimate	26.3	19.6	80.7	21.5	25.7
s.e.	1.01	0.91	0.67	1.00	0.88
unwt n	2717	2527	2655	2477	2632
wt n/1000	352	327	343	320	339
<b>White</b>					
estimate	33.9	22.0	85.6	24.7	23.4
s.e.	0.58	0.43	0.32	0.66	0.74
unwt n	15770	14380	15742	15237	15704
wt n/1000	2053	1900	2048	1982	2043

**Table B.--Estimated percentages, standard errors, and unweighted  
and weighted n's for key table items--Continued**

<b>Student characteristics</b>	<b>Algebra</b>	<b>Science with lab</b>	<b>English</b>	<b>Foreign language</b>	<b>Social studies</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Race/ethnicity (continued)</b>					
Native American estimate	25.7	22.0	75.1	19.6	22.6
s.e.	1.20	1.87	2.06	1.32	1.21
unwt n	287	274	280	265	280
wt n/1000	37	35	36	34	36
<b>Socioeconomic status</b>					
<b>Lowest quartile</b>					
estimate	18.8	17.2	80.5	16.2	23.8
s.e.	0.66	0.58	0.58	0.45	0.69
unwt n	5443	5165	5380	5123	5327
wt n/1000	689	653	680	647	673
<b>Second quartile</b>					
estimate	26.7	19.7	82.4	18.9	24.1
s.e.	0.72	0.45	0.54	0.49	1.06
unwt n	5482	5152	5443	5224	5424
wt n/1000	714	669	710	680	707
<b>Third quartile</b>					
estimate	33.3	21.4	83.3	23.7	22.2
s.e.	0.67	0.47	0.39	0.70	0.62
unwt n	5609	5204	5581	5385	5571
wt n/1000	724	672	720	695	718
<b>Highest quartile</b>					
estimate	49.3	27.7	88.4	36.8	21.8
s.e.	0.72	0.68	0.32	1.07	0.69
unwt n	6853	5962	6833	6627	6822
wt n/1000	732	659	730	707	729
<b>Urbanicity</b>					
<b>Urban</b>					
estimate	32.5	20.6	81.4	29.6	23.6
s.e.	1.09	0.82	0.65	1.21	0.76
unwt n	7221	6600	7165	6865	7131
wt n/1000	712	665	705	672	701
<b>Suburban</b>					
estimate	35.1	24.0	83.9	27.2	21.5
s.e.	0.80	0.57	0.37	0.84	0.68
unwt n	9724	8851	9688	9332	9657
wt n/1000	1245	1142	1241	1195	12

**Table B.--Estimated percentages, standard errors, and unweighted and weighted n's for key table items--Continued**

Student characteristics	Algebra	Science with lab	English	Foreign language	Social studies
1	2	3	4	5	6
Urbanicity (continued)					
Rural					
estimate	28.1	18.8	85.3	15.6	24.5
s.e.	0.75	0.65	0.54	0.78	1.35
unwt n	6447	6038	6389	6167	6362
wt n/1000	901	847	893	863	889
School type					
Public					
estimate	31.2	21.5	84.6	23.5	23.5
s.e.	0.60	0.41	0.29	0.61	0.67
unwt n	18321	16991	18170	17467	18078
wt n/1000	2506	2322	2487	2391	2475
Catholic					
estimate	31.7	18.6	73.4	16.2	19.3
s.e.	3.17	1.25	1.43	2.02	1.41
unwt n	2495	2432	2496	2390	2498
wt n/1000	219	214	219	210	219
Independent private					
estimate	69.6	48.0	85.4	87.8	20.0
s.e.	3.93	3.88	0.88	2.85	3.75
unwt n	1596	1161	1599	1569	1598
wt n/1000	29	22	30	29	30
Other private					
estimate	47.9	21.5	83.2	37.0	17.4
s.e.	3.39	3.41	1.26	3.57	2.95
unwt n	980	905	977	938	976
wt n/1000	104	96	104	100	104

## **Appendix**

### **Unweighted Sample Sizes for Levels of Classification Variables**



# Unweighted sample sizes for levels of classification variables

Student characteristics	Total	Public schools	Catholic schools	Independent private schools	Other private schools
1	2	3	4	5	6
Total	24599	19372	2578	1635	1014
Sex					
Male	12241	9620	1241	873	507
Female	12358	9752	1337	762	507
Race/ethnicity					
Asian	1527	1231	119	129	48
Hispanic	3171	2772	309	53	37
Black	3009	2565	294	109	41
White	16317	12324	1808	1325	860
Native American	299	253	21	5	20
Missing	276	227	27	14	8
Family income					
Under \$15,000	4429	4171	210	20	28
\$15,000-\$24,999	3812	3401	266	54	91
\$25,000-\$34,999	3815	3173	418	86	138
\$35,000-\$49,999	4301	3388	572	159	182
\$50,000 or more	5237	3246	565	1076	350
Missing	3005	1993	547	240	225
Parent education					
Less than high school	2537	2433	88	3	13
High school graduate/GED	4625	4058	438	25	104
Some college	9586	8072	1034	188	292
College graduate	3654	2447	515	442	250
M.A. or equivalent	2254	1408	232	450	164
Ph.D./M.D./					
other professional	1432	613	162	504	153
Don't know	478	314	104	23	37
Missing	33	27	5	0	1
Socioeconomic status					
Lowest quartile	5934	5592	279	8	55
Second quartile	5788	4975	642	33	138
Third quartile	5836	4467	754	160	255
Highest quartile	7030	4128	902	1434	566
Missing	11	10	1	0	0
Family composition					
Mother & father	15808	11901	1888	1246	773
Mother & male guardian	2580	2279	158	92	51
Father & female guardian	577	505	29	31	12
Mother only	3923	3275	361	197	90
Father only	619	506	60	43	10
Other relative/non-relative	756	671	49	15	21
Missing	336	235	33	11	57

**Unweighted sample sizes for levels of classification variables--Continued**

<b>Student characteristics</b>	<b>Total</b>	<b>Public schools</b>	<b>Catholic schools</b>	<b>Independent private schools</b>	<b>Other private schools</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Total	24599	19372	2578	1635	1014
Limited English proficient					
Yes	642	602	17	18	5
No	23687	18560	2541	1614	972
Missing	270	210	20	3	37
Language minority					
Yes	3715	3162	352	118	83
No	20876	16202	2226	1517	931
Missing	8	8	0	0	0
Grades composite					
Lowest quartile	5817	5079	396	205	137
Second quartile	5264	4262	541	268	193
Third quartile	6113	4599	749	525	240
Highest quartile	7098	5196	874	599	429
Missing	307	236	18	38	15
Science test quartile					
Lowest quartile	5804	5158	431	86	129
Second quartile	5667	4598	651	188	230
Third quartile	6044	4563	789	400	292
Highest quartile	6101	4219	641	903	338
Missing	983	834	66	58	25
History test quartile					
Lowest quartile	5655	5134	325	67	129
Second quartile	5572	4667	556	153	196
Third quartile	6014	4532	784	413	285
Highest quartile	6284	4141	843	942	358
Missing	1074	898	70	60	46
Composite test quartile					
Lowest quartile	5647	5127	366	54	100
Second quartile	5606	4732	576	114	184
Third quartile	5963	4562	793	307	301
Highest quartile	6481	4194	779	1102	406
Missing	902	757	64	58	23
Reading proficiency					
Below level 1	3000	2673	202	59	66
At level 1	11529	9528	1159	425	417
At level 2	8147	5578	1038	1060	471
Missing	1923	1593	179	91	60

# Unweighted sample sizes for levels of classification variables--Continued

Student characteristics	Total	Public schools	Catholic schools	Independent private schools	Other private schools
1	2	3	4	5	6
Total	24599	19372	2578	1635	1014
Math proficiency					
Below level 1	3898	3447	301	65	85
At level 1	8413	7061	904	164	284
At level 2	4864	3648	666	321	229
At level 3	4733	3056	449	923	305
Missing	2691	2160	258	162	111
Math ability group					
Low	1789	1399	174	161	55
Middle	9723	8084	748	605	286
High	7430	5677	730	662	361
Not grouped	3704	2492	812	143	257
Don't know	1194	1041	75	48	30
Missing	759	679	39	16	25
Science ability group					
Low	1194	1038	78	48	30
Middle	8558	7478	510	374	196
High	5304	4338	424	373	169
Not grouped	7110	4360	1440	743	567
Don't know	1472	1303	74	67	28
Missing	961	855	52	30	24
English ability group					
Low	1337	1158	94	57	28
Middle	8762	7589	604	375	194
High	6186	5081	516	384	205
Not grouped	6086	3574	1250	729	533
Don't know	1328	1169	65	66	28
Missing	900	801	49	24	26
Social studies ability group					
Low	1188	1055	59	49	25
Middle	8102	7111	498	326	167
High	5339	4384	447	354	154
Not grouped	7390	4556	1439	789	606
Don't know	1621	1422	81	82	36
Missing	959	844	54	35	26
Locus of control					
Lowest (external)	7986	6780	650	317	239
Middle	7987	6248	872	559	308
Highest (internal)	8425	6164	1043	756	462
Missing	201	180	13	3	5

# Unweighted sample sizes for levels of classification variables--Continued

Student characteristics	Total	Public schools	Catholic schools	Independent private schools	Other private schools
1	2	3	4	5	6
Total	24599	19372	2578	1635	1014
Self concept					
Low	9034	7286	862	548	338
Medium	6669	5230	727	448	264
High	8720	6700	977	636	407
Missing	176	156	12	3	5
Postsecondary education plans					
Won't finish high school	346	324	12	7	3
High school only	2339	2177	116	12	34
Vocational/technical	2102	1920	124	8	50
Attend college	3078	2633	306	47	92
Graduate college	10251	7924	1207	655	465
Postgraduate/professional	6268	4199	801	904	364
Missing	215	195	12	2	6
Geographic region					
Northeast	4933	3093	1012	624	204
North central	6127	4883	820	196	228
South	8462	6933	520	636	373
West	5040	4436	226	169	209
Missing	37	27	0	10	0
Urbanicity					
Urban	7620	5006	1224	979	411
Suburban	10246	8005	1182	610	449
Rural	6733	6361	172	46	154
Total enrollment					
1-99	224	117	28	19	60
100-200	3011	1550	838	318	305
300-499	5512	3896	819	626	171
500-749	7159	6037	448	339	335
750-999	4320	3987	98	211	24
1000+	3885	3785	23	77	0
Missing	488	0	324	45	119

