
NATIONAL CENTER FOR EDUCATION STATISTICS

Statistics in Brief

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Transitions Experienced by 1988 Eighth Graders

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The passage from the eighth grade to senior high school represents a very significant transition phase. While 98 percent of public school students remained in public schools, over one-third of Catholic school eighth graders transferred to public schools, and over 25 percent of National Association of Independent Schools (NAIS) students transferred to public or other private schools. Moreover, about 6 percent of all eighth graders were classified as dropouts as of the spring of their scheduled tenth grade year; the majority of them coming from public schools. Among students from a low socioeconomic status background, Hispanic and black students did not show a higher dropout rate than white students.

This report presents findings regarding two types of transitions experienced by students as they move between eighth and tenth grade: 1) continuing or dropping out of school; and 2) transferring between sectors (e.g., Catholic to public schools). For most students, the move between eighth and tenth grade involves a change of schools and exposure to new educational settings--new teachers, new curriculum, and many new schoolmates. Other students may leave school, perhaps to return later. These transitions may impact on student learning and personal development. Thus, differences in transition patterns, as well as possible outcomes, are of major interest.

The data in this report were obtained from the base-year and first follow-up surveys of the National Education Longitudinal Study of the Eighth Grade Class of 1988 (NELS:88). NELS:88 began in 1988 with a sample of 1,052 schools and 24,599 eighth graders. In the spring of 1990, 17,424 students were subsampled and surveyed as part of the first follow-up to determine their education status and progress, and school, community, and work experiences. Data from this group of students (i.e., those with both base-year and first follow-up data) were used in this report. (Additional information about this study is presented in Appendix A.)

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The data collected from this cohort of 1988 eighth graders provide a rich source of information for examining a myriad of issues relating to students' educational development (e.g., transitions, cognitive growth, persistence). This brief report presents selected statistics to illustrate potential uses of these data and hopefully to encourage researchers and analysts to conduct their own in-depth analyses.

Progression Through School

Because previous NCES longitudinal studies surveyed high school students, these studies cannot be used to determine the extent to which students dropped out prior to 10th grade. This information gap has been partially filled by NELS:88. It is estimated that 6.1 percent of the eighth graders surveyed in 1988 left school without completion by the spring of 1990¹ (see table 1).

Consistent with the findings of earlier studies (Kaufman, McMillen, & Whitener, 1991; Peng & Takai, 1983), this study found that Hispanic and black students had a higher dropout rate than their white counterparts. As shown in figure 1a, Hispanic and black eighth graders dropped out at a higher rate than whites (9.3 percent for Hispanics and 10.0 percent for blacks as compared to 4.9 percent for whites). It should be noted that students who dropped out before eighth grade are not included in these dropout estimates. For those who drop out after tenth grade, though, the second follow-up of NELS:88 will provide information to study this type of behavior.

As with previous studies (e.g., Peng et al., 1983), low-SES (socioeconomic status) eighth graders dropped out at higher rates than their high-SES counterparts. About 14.9 percent of low-SES eighth graders dropped out as compared to 1.6 percent of high-SES eighth graders (see figure 1a). It is interesting that for low-SES eighth

graders, the dropout rates for blacks and Hispanics did not differ from whites (11.5 percent and 14.4 percent as compared to 16.8 percent) (See figure 1b).

Among those who stayed in school, a small proportion (1.6 percent) indicated that they would surely or probably not graduate from high school (see table 2). Again, lower SES students were more likely than higher SES students to report such possibilities (low - 3.5 percent; middle - 1.5 percent; and high - 0.5 percent) (see figure 2).

Another question of interest is what proportion of students will graduate on time. Students were asked how sure they were that they would graduate from high school. Those who thought they would probably graduate or were very sure they would graduate, were asked: "After this school year (1989-90), about how many more years do you think it will take you to graduate from high school?" Data show that 3.7 percent of students indicated that it would take more than two years (see table 3). Consistent with the above dropout patterns, lower SES students were more likely than their higher SES counterparts to give such responses (low - 6.9 percent; middle - 3.5 percent; and high - 1.5 percent) (figure 3).

Future NELS:88 follow-up studies will provide more information on expectations and dropout behavior. With NELS:88 it will be possible to: 1) compare students' expectations with reality, and 2) study coursework patterns to identify specific areas where students may need assistance.

Enrollment in Public and Private Schools

Of those eighth graders in 1988 who were still in school during the spring of 1990, 89.9 percent were enrolled in public schools, 6.1 percent in Catholic schools, 1.2 percent in NAIS schools and 2.8 percent in other private schools (see

Table 1.--Enrollment status of 1988 eighth graders during the spring of 1990, by type of eighth grade school, race/ethnicity and socio-economic status

	Status as of Spring 1990								Percent Dropping out	
	Percent Enrolled by Type of School									
	Public		Catholic		NAIS		Other Private			
Total	84.5	(0.73)*	5.7	(0.44)	1.1	(0.19)	2.7	(0.32)	6.1	(0.48)
Base Year School Type										
Public	91.4	(0.59)	1.1	(0.21)	0.3	(0.10)	0.5	(0.15)	6.8	(0.55)
Catholic	36.6	(3.35)	59.0	(2.96)	2.2	(1.97)	1.2	(0.91)	1.1	(0.31)
NAIS	15.0	(2.79)	6.5	(1.78)	73.4	(3.85)	5.0	(2.65)	0.1	(0.09)
Other Private	34.7	(6.00)	6.6	(2.76)	0.0	(**)	58.5	(6.36)	0.3	(0.15)
Race/ethnicity										
Asian	80.7	(3.02)	8.3	(1.77)	2.8	(0.49)	5.3	(2.67)	3.0	(1.05)
Hispanic	83.8	(1.69)	5.3	(1.12)	0.2	(0.05)	1.5	(0.75)	9.3	(1.02)
Black	84.5	(2.19)	4.8	(1.31)	0.6	(0.33)	0.1	(0.10)	10.0	(1.95)
White	84.7	(0.89)	5.9	(0.57)	1.3	(0.26)	3.2	(0.41)	4.9	(0.53)
Native American	87.9	(2.68)	1.5	(0.92)	0.1	(0.05)	0.0	(**)	10.5	(2.60)
Socio-economic Status										
Low 25%	83.6	(1.34)	1.5	(0.31)	***	(0.01)	0.1	(0.04)	14.9	(1.33)
Middle 50%	87.7	(0.81)	5.6	(0.54)	0.3	(0.11)	2.1	(0.36)	4.2	(0.54)
Upper 25%	78.8	(1.64)	9.7	(1.08)	3.8	(0.67)	6.1	(0.88)	1.6	(0.65)
Low Socio-economic Status										
Asian	88.5	(4.36)	5.3	(4.02)	0.1	(0.11)	0.0	(**)	6.1	(2.37)
Hispanic	83.7	(1.83)	1.7	(0.74)	***	(0.04)	0.2	(0.12)	14.4	(1.73)
Black	87.0	(2.41)	1.5	(0.76)	***	(0.02)	0.0	(**)	11.5	(2.31)
White	81.9	(2.23)	1.2	(0.32)	0.0	(**)	0.1	(0.04)	16.8	(2.24)
Native American	82.0	(4.67)	0.0	(**)	0.0	(**)	0.0	(**)	18.0	(4.67)

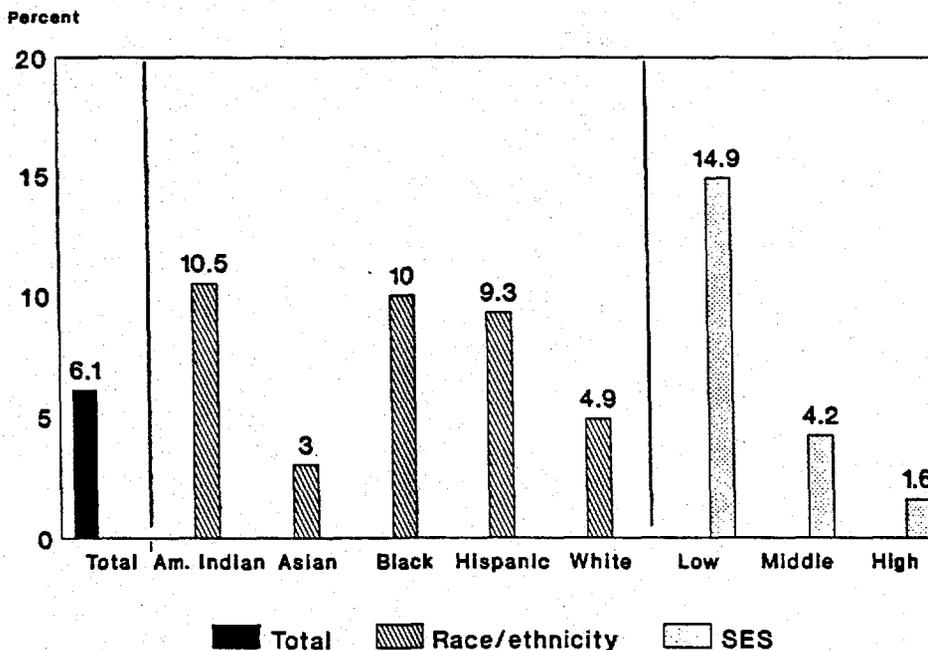
*Numbers in parenthesis are standard errors for individual estimates.

**True standard error is very small (close to zero).

***Less than .05.

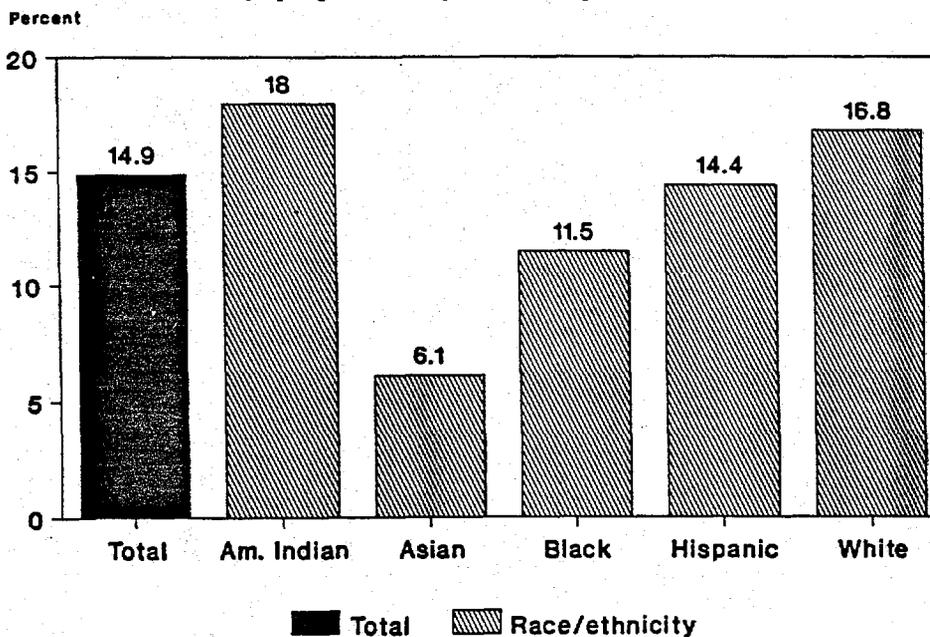
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year and First Follow-up Student Survey.

Figure 1a.—Percent of 1988 eighth graders dropping out of school by the spring of 1990, by race/ethnicity and socioeconomic status



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year and First Follow-Up Survey.

Figure 1b.—Percent of low socioeconomic status 1988 eighth graders dropping out of school by spring of 1990, by race/ethnicity



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year and First Follow-Up Survey.

Table 2.—Percentage of 1988 eighth graders (still enrolled during the spring of 1990) who reported that they probably would not graduate from high school, by socio-economic status

	Will graduate		Will not graduate	
Total	98.4	(0.16)*	1.6	(0.16)
Socio-economic Status				
Low	96.5	(0.51)	3.5	(0.51)
Middle	98.5	(0.19)	1.5	(0.19)
High	99.6	(0.13)	0.5	(0.13)

*Numbers in parenthesis are standard errors for individual estimates.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year and First Follow-up Student Survey.

Table 3.—Percentage of 1988 eighth graders¹ (still enrolled during the spring of 1990) who reported they would take longer than two years to graduate by socioeconomic status

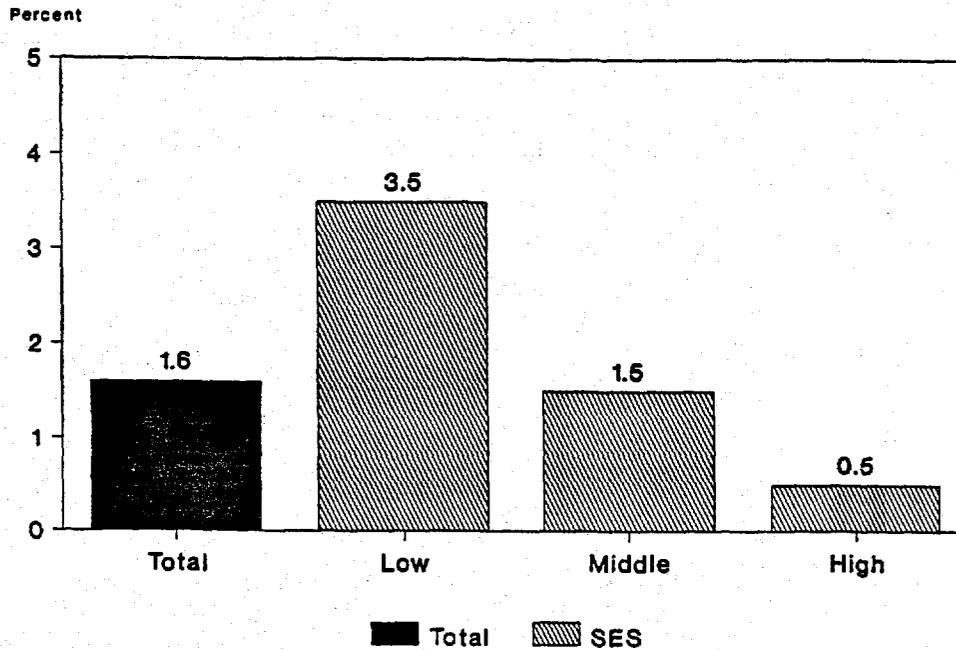
	Two years or less		More than two years		Don't know	
Total	95.2	(0.29)*	3.7	(0.23)	1.2	(0.15)
Socio-economic Status						
Low	91.2	(0.68)	6.9	(0.63)	1.9	(0.27)
Middle	95.2	(0.41)	3.5	(0.31)	1.4	(0.27)
High	98.1	(0.30)	1.5	(0.28)	0.4	(0.11)

¹Students who indicated that they would surely or probably not graduate from high school (question F1S17) were excluded from this analysis.

*Numbers in parenthesis are standard errors for individual estimates.

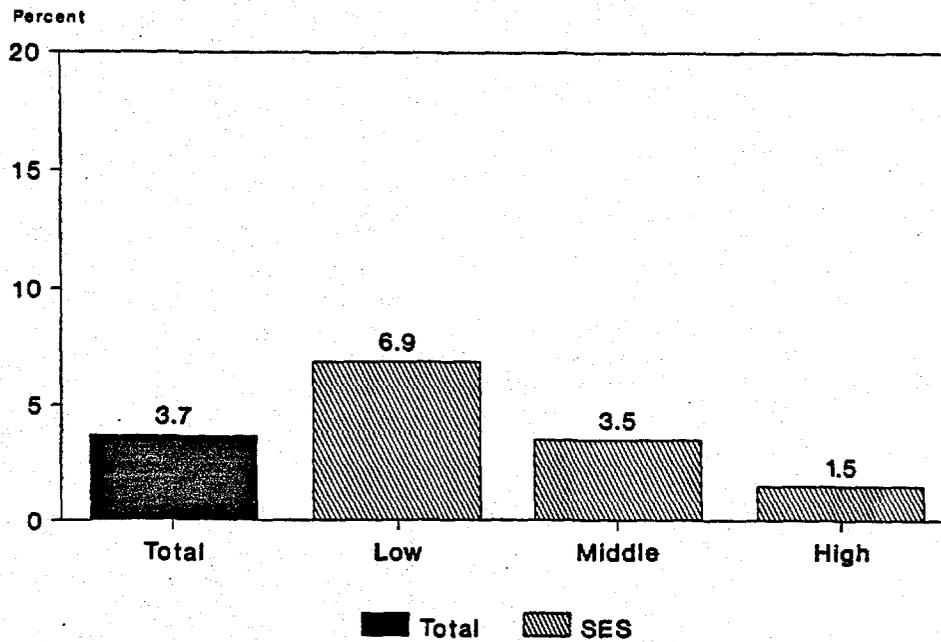
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year and First Follow-up Student Survey.

Figure 2.--Percent of 1988 eighth graders still in school during the spring of 1990 who reported that they would surely or probably not graduate from high school, by socioeconomic status



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year and First Follow-Up Survey.

Figure 3.--Percent of 1988 eighth graders¹ still in school during the spring of 1990 who reported that they would probably take longer than two years to graduate, by socioeconomic status



¹Students who indicated that they would surely or probably not graduate from high school (question F1S17) were excluded from this analysis.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year and First Follow-Up Survey.

table 4). During the eighth grade, 87.2 percent of these students were enrolled in public schools; 8.0 percent in Catholic schools; 1.1 percent in NAIS schools; and 3.8 percent in other private schools (see figure 4).

Among public school eighth grade students who were still enrolled two years later, 98.0 percent had remained in public schools. This same transition pattern did not hold for private school eighth graders. While about 2 percent of 1988 eighth graders in public schools transferred to private schools by 1990, over one third of Catholic and other private school students had enrolled in public schools. Among the eighth graders in NAIS schools, 15 percent transferred to public schools and 11.5 percent transferred to other types of private schools (see table 4). Reasons for different student mobility patterns among schools are probably complex and multiple. More in-depth analyses is necessary before competing hypotheses can be eliminated. However, availability and cost may be two factors. Some private schools may not offer 10th grade programs. Thus, their eighth grade students would have to move to other schools. In such cases, students may decide to stay in the neighborhood public high school. Second, costs may be a factor of students transferring from private to public schools. As shown in table 4, students of lower SES are more likely than students of high SES in Catholic schools to transfer to public schools. Some 47 percent of low SES and 43 percent of middle SES compared to 25 percent of high SES eighth graders in Catholic schools transferred to public schools. On the other hand, less than 1 percent of low SES public school eighth graders compared to 4 percent of high SES counterparts transferred to private schools.

Summary and Future Reports

The findings presented in this report suggest that socioeconomic status may be an important factor in explaining some of the transition patterns

experienced by students as they move between eighth and tenth grades. For example, socioeconomic status appears to be related to both dropping out and school sector changes.

In several forthcoming NELS:88 first follow-up reports, student transition patterns are studied in more detail. Major topics covered will include: 1) socio-demographic influences on transitions patterns, 2) changes in school characteristics and student characteristics between eighth and tenth grades, and 3) changes in eighth to tenth graders' future plans.

For Further Information

NELS:88 has comprehensive information about student backgrounds as well as students' educational and other personal development. Various types of tabulations on the data presented in this brief report are possible. Readers who are interested in further information about the databases should contact Jeff Owings (202) 219-1777.

References

- Kaufman, P., McMillen, M.M., & Whitener, S.D. (1991). Dropout Rates in the United States: 1990. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Peng, S.S. and Takai, R., (1983). High School Dropouts: Descriptive Information from High School and Beyond. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

Technical Notes for NELS:88

The NELS:88 baseline comprised a national probability sample of all regular public and private eighth grade schools in the 50 states and

Table 4.--Percent of 1988 eighth graders enrolled in selected types of schools during the spring of 1990, by type of eighth grade school and socio-economic status

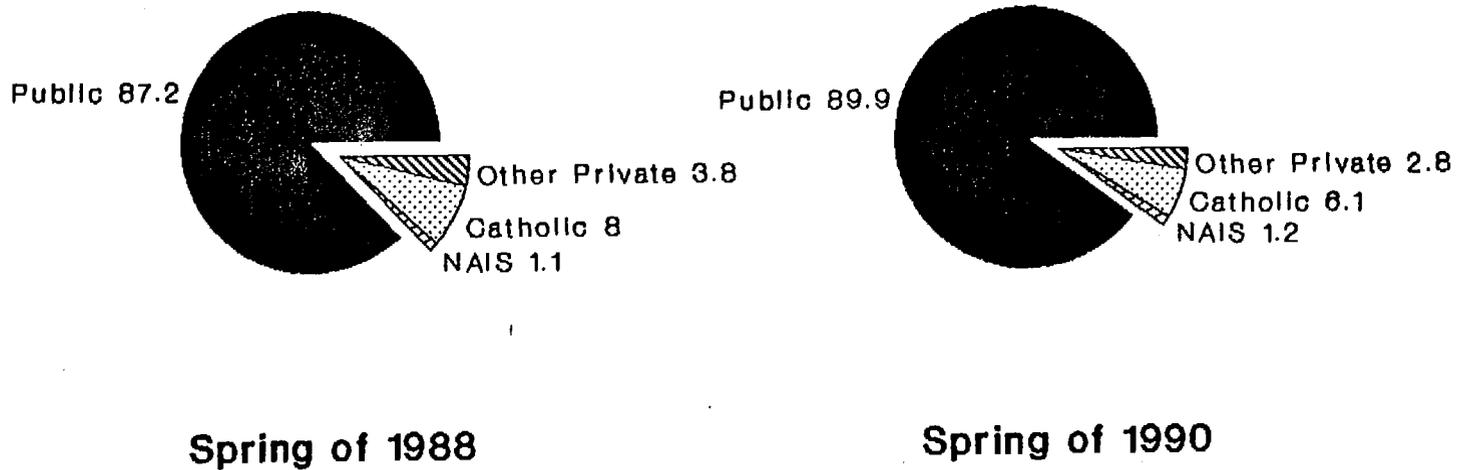
Type of Eighth Grade School and SES	Type of 1990 School							
	Public		Catholic		NAIS		Other Private	
Total	89.9	(0.64)*	6.1	(0.47)	1.2	(0.20)	2.8	(0.34)
Public	98.0	(0.29)	1.1	(0.23)	0.3	(0.11)	0.5	(0.16)
Low	99.9	(0.12)	0.1	(0.12)	0.0	(**)	0.0	(**)
Middle	98.2	(0.40)	1.0	(0.29)	0.2	(0.13)	0.7	(0.25)
High	96.0	(0.81)	2.4	(0.67)	0.8	(0.34)	0.8	(0.37)
Catholic	36.9	(3.41)	59.7	(2.96)	2.2	(1.99)	1.2	(0.92)
Low	47.0	(7.60)	53.0	(7.60)	0.0	(**)	0.0	(**)
Middle	42.9	(3.89)	55.6	(3.60)	0.0	(**)	1.5	(1.47)
High	25.0	(4.34)	67.8	(4.70)	6.2	(5.18)	1.0	(1.02)
NAIS	15.0	(2.79)	6.5	(1.78)	73.5	(3.86)	5.0	(2.65)
Low	--	--	--	--	--	--	--	--
Middle	27.2	(7.65)	8.7	(5.82)	59.5	(8.51)	4.6	(3.30)
High	13.7	(3.09)	6.1	(1.71)	75.3	(3.93)	4.9	(2.96)
Other Private	34.8	(6.00)	6.6	(2.76)	0.0	(**)	58.6	(6.40)
Low	--	--	--	--	--	--	--	--
Middle	39.7	(9.27)	4.3	(2.73)	0.0	(**)	55.9	(9.17)
High	30.5	(6.72)	8.2	(3.84)	0.0	(**)	61.3	(7.52)

*Numbers in parenthesis are standard errors for individual estimates.

**True standard error is very small (close to zero)

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year and First Follow-up Student Survey.

Figure 4.—Types of schools attended by 1988 eighth graders, spring 1988 and spring 1990



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year and First Follow-Up Survey.

the District of Columbia in the 1987-88 school year. During the base year data collection, students, parents, teachers, and school administrators were selected to participate in the survey. The total eighth grade enrollment from the 1,052 NELS:88 sample schools was 202,996. During the listing procedures (before 24-26 students were selected per school), 5.35 percent of the students were excluded because they were identified by school staff as being incapable of completing the NELS:88 instruments owing to limitations in their language proficiency or to mental or physical disabilities. Ultimately, 93 percent or 24,599 of the sample students participated in the base-year survey in the spring of 1988.

The NELS:88 first follow-up survey was conducted during the spring of 1990. Students, dropouts, teachers, and school administrators participated in the follow-up, with a successful data collection effort for approximately 93 percent of the sampled base-year student respondents. In addition, because the characteristics and education outcomes of the students excluded from the base year may differ from those of students who participated in the base-year data collection, a special study was initiated to identify the enrollment of a representative sample of the base-year ineligible (BYI) students. Data from this sample can be combined with first follow-up data for the computation of eighth to tenth grade dropout rates of the full student population (including base-year ineligibles). For the current report, data from base-year ineligibles were not used because measures that reflect education status and environment for two points in time (base-year and first follow-up), a necessary requirement for determining the transitions of students, are not available for these students.

For the cohort data presented in this report, only responses from those students who completed questionnaires in both the base year and first follow-up were used in producing estimates

Thus, these estimates do not include responses from BYI students. Also excluded from this analysis are freshmen (10th grade students in 1990 who did not have the opportunity to participate in 1988 for various reasons including not being in country) students.

Variables Used in Analysis

Base-year School Type (G8CTRL4)² - Base-year eighth grade schools were classified as 1) Public, 2) Catholic, 3) National Association of Independent Schools (NAIS),² and 4) Other Private.

First Follow-up School Type - (G10CTRL2)³ - First follow-up - tenth grade schools were classified as 1) Public, 2) Catholic, 3) NAIS, and 4) Other Private.

F1RACE - As of 1990, students were classified as 1) Asian, 2) Hispanic, 3) Black, 4) White, and 5) American Indian.

F1SESQ (Socio-economic status) - For purposes of this analysis, the middle two quartiles were collapsed to form three categories: 1) low 25 percent; 2) middle 50 percent; and 3) upper 25 percent.

F1S17 (After this year (1989-90), about how many more years do you think it will take you to graduate from high school?) This variable was used as an indicator of "graduating on time". Students who indicated that they would "surely or probably not graduate from high school" (F1S18A) were recoded to missing. Three categories were used:

- 1) - one to two years (collapse categories 1 and 2);
- 2) - three plus years (collapse categories 3, 4 and 5);
- 3) - Don't Know (category 6).

F1S18A (How sure are you that you will graduate from high school?). This variable was used as an indicator of student's perception of his/her probability of graduation. Two categories were used:

- 1) - will graduate (collapse categories 1 and 2 from codebook);
- 2) - will not graduate (collapse categories 3 and 4 from codebook).

The data were weighted to reflect the sampling rates (probability of selection) and were adjusted for nonresponse. The complex sample design was taken into account when a Taylor series approximation procedure was used to compute the standard errors in this brief. The standard error is a measure of the variability due to sampling when estimating a parameter. It indicates how much variance there is in the population of possible estimates of a parameter for a given sample size. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated for about 95 percent of the sample (i.e., 95 percent confidence intervals). Comparisons noted in this brief are significant at the 0.05 level and were determined using Bonferroni adjusted t-tests.

Standard errors for all of the estimates are presented in the tables. These standard errors can be used to produce confidence intervals. For example, an estimated 6.1 percent of eighth

grade students who were still in school two years later were in Catholic schools (see table 4). This figure has an estimated standard error of 0.47 percent. Therefore, the estimated 95 percent confidence interval for this statistic is 5.2 to 7.0 percent.

ENDNOTES

¹During the base-year survey of NELS:88, 5.4 percent of students were excluded from the sample because they were identified as being unable to complete the questionnaire owing to limitations in their language proficiency or their mental or physical disabilities. The dropout rates reported here are based solely on the sample of base-year eligible students. These rates are somewhat lower than the rates reported in P. Kaufman, M. McMillen, and S. Whitener (1991), Dropout Rates in the United States: 1990, which were based on estimates from both the eligible and ineligible students.

²NAIS - Schools included in this classification are members of the National Association of Independent Schools. Member schools are accredited, non-parochial, non-profit, and non-discriminatory.

³For purposes of this analysis, the two variables for school type (G8CTRL4 and G1OCTRL2) were taken from the privileged NELS:88 files. These files are only available to licensed users of NCES data. For confidentiality reasons, NAIS schools cannot be identified using public release files. To apply for a licensing agreement, interested users should contact Jackie O'Neal at (202) 219-2199.