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ABSTRACT

This report provides 1968-69 baseline data regarding the extent to which pupils change schools (within or between school districts) during the school year. The report begins by establishing the national magnitude of pupil mobility among public schools. Data show (1) the total number of pupil moves, (2) the moves of elementary and secondary pupils, and (3) the moves of pupils in elementary and secondary schools in the nation's 130 largest cities (cities of 100,000 or more population in the 1960 Census) and those outside of these cities. The data come from a national survey conducted in May, 1969 and composed of a representative sample of approximately 700 elementary and secondary schools. (Author)

Highlights

1. During the 1968-69 school year, an estimated 3.7 million pupils entered public elementary and secondary schools after fall enrollment, 1968, either for the first time or after having been enrolled in another school. This number of pupils was equivalent to 8 percent of the fall enrollment.
2. After fall enrollment, 1968, nearly 500,000 more pupils left than entered secondary schools.
3. More elementary and secondary schools in than outside the Nation's 130 largest cities had large numbers of pupils entering a school during the school year. About 2,000 elementary schools (21 percent) and 600 secondary schools (24 percent) in the Nation's large cities experienced 150 or more pupils entering during the 1968-69 school year.
4. The median numbers of pupils entering school after fall enrollment during the 1968-69 school year were higher for schools in large cities than for schools outside large cities: 80 and 95 for elementary and secondary schools in large cities and 31 for both elementary and secondary schools outside of the large cities.
5. Relative to the size of schools' initial enrollments, elementary schools in large cities had a median entering rate after fall enrollment of 15 percent, compared with 7 percent or less for secondary schools in the large cities and for both elementary and secondary schools outside of the large cities. Nearly 3,000, or one-third, of large-city elementary schools had the equivalent of at least 20 percent of their opening fall enrollment entering late.
6. Rates for pupils leaving large-city schools during the 1968-69 school year were about double the rates outside of the large cities.

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PUPIL MOBILITY IN PUBLIC ELEMENTARY AND SECONDARY SCHOOLS DURING THE 1968-69 SCHOOL YEAR

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FOREWORD

The data in this report are derived from the pilot School Staffing Survey, a cooperative project conducted by the U.S. Office of Education's National Center for Educational Statistics (NCES) and Bureau of Educational Personnel Development, with support from the National Center for Educational Research and Development. This survey, in part, provides statistical content for the Commissioner of Education's annual report on the education professions, which is required under section 503(b) of the Education Professions Development Act.

The survey was developed and directed by Leslie J. Silverman and A. Stafford Metz of NCES' Statistical Standards Staff, with the assistance of Jonathan Chang and the supervision of Boyd Ladd, Assistant Director for Statistical Development. The survey attained a very high response rate--95 percent overall--attributable in part to the support of the Committee on Educational Data Systems. Significant advice also came from the National Education Association's Research Division and others. The Office of Education is grateful to the many school principals who took time from their very busy days to complete the questionnaires. The collection and tabulation of data were carried out under contract by Westat Research, Inc., Rockville, Md.

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PUPIL MOBILITY IN PUBLIC ELEMENTARY AND SECONDARY SCHOOLS

Introduction

This report provides 1968-69 baseline data regarding a pupil membership phenomenon generally neglected in educational statistics, in State or Federal financial assistance formulas, and in curriculum designs. The phenomenon is pupil mobility during the school year; i.e., the extent to which pupils change schools (within or between school districts) during the school year.

The aggregate or total number of pupils enrolled during the school year can be very much greater for some schools or school systems than is revealed by either of the two major membership concepts in general use--membership as of a given date and, for the school year, average daily membership. Schools experiencing high and low pupil mobility can have the same membership or average daily membership; but the aggregate membership would be larger for schools with high mobility, reflecting the number of different pupils served. Likewise, attendance statistics do not reveal total enrollment of pupils during the school year because the numbers of pupils entering and withdrawing during the school year are not recognized.

This report begins by establishing the national magnitude of pupil mobility among public schools. The data show (a) the total number of pupil moves, (b) the moves of elementary and secondary pupils, and (c) the moves of pupils in elementary and secondary schools in the Nation's 130 largest cities (cities of 100,000 or more population in the 1960 Census) and outside of these large cities.

In no direct way does the Nation as a whole experience the consequences of high pupil mobility. These effects are directly experienced and coped with by the school districts and schools, the basic organizational units of public education in the United States. The nationally aggregated data, therefore, do not indicate how many schools or school systems experience high numbers or rates of pupil mobility. To document that the rates of pupil mobility may vary greatly among schools, an analysis going beyond the nationally aggregated data to degree of pupil mobility for types of schools appears in the latter part of the report. In this way it is possible to estimate the number of schools affected by "high" pupil mobility and some of the characteristics of these schools. The survey design did not allow for a similar analysis showing impact upon school districts.

The data come from a national survey composed of a representative sample of approximately 700 elementary and secondary schools conducted in May 1969 by the National Center for Educational Statistics. The survey is described in the Technical Appendix.

The National Magnitude of Pupil Mobility

During the 1968-69 school year it is estimated that almost 3.7 million pupils entered public elementary and secondary schools after fall enrollment of October 1, 1968, or when initial enrollment was considered stabilized 1/ (table 1). Nearly three times as many pupils entered elementary schools after fall enrollment as entered secondary schools.

Relative to the number of pupils reported as the fall enrollment, more elementary than secondary pupils (10 percent compared to 5 percent) entered school during the school year. Although this difference of 5 percentage points is not a large one, the possibility of its representing a real difference (not due to sampling error) is supported by the findings that the rates of pupils entering elementary schools after October 1 are twice as high as for secondary schools both in and outside of large cities.

In the case of elementary schools in large cities, a disproportionately high rate of during-the-year entering occurred--pupils entering elementary schools in large cities after fall enrollment at a rate of 21 percent, more than twice as high as the entering rates for the other three groups of schools.

Nearly 4 million pupils left elementary and secondary schools during the school year 1968-69.2/ For elementary schools the entering and leaving rates were similar, but for secondary schools the leaving rate was somewhat larger than the entering rate, resulting from nearly 500,000 more secondary school pupils leaving than entering.

1/ Some pupils may leave more than one school or enter more than one school during the course of the school year. Since the figures presented are a count of all moves, the actual number of pupils moving (entering and leaving), therefore, will be somewhat less than the numbers presented.

2/ It is assumed that during the school year most pupils, especially in elementary schools, who leave one school enter another school. The pupils who leave schools, therefore, will be for the most part the same pupils who enter other schools and will be counted among those both entering and leaving. Those pupils who leave schools without entering other schools have dropped out, at least for the remainder of the school year. These latter pupils are counted only among those leaving.

Table 1. Fall enrollment 1968, number and percent of pupils entering and leaving schools during the school year 1968-69 after fall enrollment, enrollment May 1969, and net change in enrollment, by level and location of school: 48 contiguous States and D.C.

Characteristic	All schools ^{1/}	Elementary schools		Secondary schools			
		All elementary schools	All secondary schools	In large cities	Outside large cities	In large cities	Outside large cities
Fall enrollment, 1968	45,167,000	25,757,000	18,594,000	5,634,000	20,123,000	3,774,000	14,820,000
Pupils entering after fall enrollment							
Number	3,692,000	2,699,000	935,000	1,156,000	1,542,000	333,000	602,000
Percent of fall enrollment ..	8	10	5	21	8	9	4
Pupils leaving after fall enrollment							
Number	3,963,000	2,485,000	1,423,000	960,000	1,525,000	511,000	912,000
Percent of fall enrollment ..	9	10	8	17	8	14	6
Enrollment, May 1969	44,896,000	25,971,000	18,106,000	5,830,000	20,141,000	3,596,000	14,510,000
Net change in enrollment, fall 1968-May 1969							
Number	^{2/} -271,000	^{2/} +214,000	^{2/} -488,000	^{2/} +196,000	^{2/} +18,000	^{2/} -178,000	^{2/} -310,000
Percent of fall enrollment	-1	+1	-3	+3	**	-5	-2

^{1/} Combined schools, with both elementary and secondary grades, are included in the total but not in the detail by school level.

^{2/} A minus (-) denotes loss in enrollment and plus (+) denotes gain in enrollment during the school year.

** Percent more than 0 but less than 0.5.

NOTES.--Large cities: 130 cities of 100,000 and over population in the 1960 Census. Detail may not equal total due to rounding.

Pupil Mobility by Schools

This section elaborates the nationally aggregated data by examining pupil mobility on a school-by-school basis. Table 2 shows how many schools had various ranges, low to high, in numbers of pupils entering after fall enrollment.

More elementary and secondary schools in the large cities than outside of the large cities had large numbers of pupils entering.

In the large cities, 2,000 elementary schools, nearly one-fourth of all large-city elementary schools, and 600 secondary schools, again approximately one-fourth, experienced 150 or more pupils entering during the 1968-69 school year. Almost no elementary or secondary schools outside the large cities had this many pupils entering. The different situations of the schools in the large cities can also be seen by comparisons of the median numbers of entering pupils per school: 80 and 95 pupils for elementary and secondary schools in large cities, compared with only 31 for both elementary and secondary schools outside of large cities.

Table 3 presents statistics of schools for pupils leaving during the school year. In large cities, the median number of pupils leaving secondary schools, 151, was substantially larger than for elementary schools, 81, and far more than for elementary and secondary schools elsewhere in the Nation: 31 and 40 respectively.

In numbers of schools, 1,300, or one-half of the secondary schools in large cities, and 1,700, nearly one-fifth of the elementary schools in large cities, had 150 or more pupils leaving during the school year. But outside of large cities no elementary schools and only 900, or 5 percent, of the secondary schools had 150 or more pupils leaving.

The number of pupils who entered a school relative to its fall enrollment (entering rate) is presented in table 4. Elementary schools in large cities had the highest entering rates with a median of 15 percent; the other three school categories had lower and similar late-entering rates with medians ranging from 5 to 7 percent. When cumulated, the figures show that nearly 3,000 or one-third of large-city elementary schools had the equivalent of at least 20 percent of their fall enrollments entering late. Nearly 4,000, or 8 percent, of the elementary schools outside of large cities had late-entering rates equivalent to at least 20 percent of the fall enrollments.

Rates for pupils leaving schools (table 5) appear to have a close association with school location. The median rates for pupils leaving large-city elementary and secondary schools were about double those for public schools outside of large cities. There appears to be little difference, however, between the medians for pupils leaving elementary and secondary schools.

Table 2. Number and percent of schools with numbers of pupils entering during the school year 1968-69 after opening fall enrollment, by level and location of school: 48 contiguous States and D.C.

Number of pupils entering	All schools ^{1/}		Elementary schools				Secondary schools			
	Number	Percent	In large cities		Outside large cities		In large cities		Outside large cities	
Total	81,900	100	3/ 9,000	100	4/ 49,700	100	2,600	100	18,400	100
0-49	61,200	75	3,100	35	40,300	80	700	27	14,900	81
50-99	11,900	15	2,300	26	7,100	14	700	26	1,800	10
100-149	5,800	7	1,500	17	2,300	4	600	25	1,400	7
150-199	500	1	300	4	-	-	200	8	-	-
200-249	900	1	400	5	-	-	100	5	300	2
250-and over	1,500	2	1,300	14	-	-	300	10	-	-
Median number of pupils entering	33		80		31		95		31	

^{1/} Combined schools, with both elementary and secondary grades, are included in the total but not in the detail by school level.

^{2/} Excludes an estimated 900 schools, 1 percent of the estimated total, represented by the sampled schools that did not respond to the item.

^{3/} Excludes an estimated 100 schools, 1 percent of the estimated total, represented by the sampled schools that did not respond to the item.

^{4/} Excludes an estimated 800 schools, 2 percent of the estimated total, represented by the sampled schools that did not respond to the item.

- Quantity zero in sample.

NOTES.--Large cities: 130 cities of 100,000 or more population in the 1960 Census.

Detail may not equal total due to rounding.

Table 3. Number and percent of schools with numbers of pupils leaving schools during the school year 1968-69, by level and location of school: 48 contiguous States and D.C.

Number of pupils leaving	All schools ^{1/}		Elementary schools				Secondary schools			
			In large cities		Outside large cities		In large cities		Outside large cities	
			Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	^{2/} 81,900	100	^{3/} 9,000	100	^{4/} 49,700	100	2,600	100	18,400	100
0-49	56,300	69	2,800	31	39,500	80	400	14	11,500	62
50-99	16,900	21	2,800	31	9,600	19	500	21	3,900	21
100-149	4,700	6	1,600	18	500	1	400	14	2,200	12
150-199	1,600	2	400	5	-	-	400	15	800	4
200-249	600	1	400	5	-	-	200	6	-	-
250 and over ..	1,800	2	900	10	-	-	700	29	100	1
Median number of pupils leaving	36		81		31		151		40	

^{1/} Combined schools, with both elementary and secondary grades, are included in the total but not in the detail by school level.

^{2/} Excludes an estimated 900 schools, 1 percent of the estimated total, represented by the sampled schools that did not respond to the item.

^{3/} Excludes an estimated 100 schools, 1 percent of the estimated total, represented by the sampled schools that did not respond to the item.

^{4/} Excludes an estimated 800 schools, 2 percent of the estimated total, represented by the sampled schools that did not respond to the item.

- Quantity zero in sample.

NOTES.--Large cities: 130 cities of 100,000 or more population in the 1960 Census.

Detail may not equal total due to rounding.

Table 4. Number and percent of schools with numbers of pupils entering school during the school year 1968-69 after opening fall enrollment, as a percent of opening fall enrollment, by level and location of school; 48 contiguous States and D.C.

Percent of pupils entering	All schools ^{1/}		Elementary schools		Secondary schools	
	Number	Percent	In large cities	Outside large cities	In large cities	Outside large cities
Total	^{2/} 81,900	100	^{3/} 9,000	^{4/} 49,700	2,600	18,400
0-9%	62,000	76	3,100	38,000	1,800	16,900
10-19%	12,700	15	3,100	7,700	500	1,300
20-29%	3,700	5	1,400	1,900	100	200
30% or more	3,500	4	1,500	1,900	100	-
Median percent of pupils entering		7%	15%	7%	7%	5%

- ^{1/} Combined schools, with both elementary and secondary grades, are included in the total but not in the detail by school level.
- ^{2/} Excludes an estimated 900 schools, 1 percent of the estimated total, represented by the sampled schools that did not respond to the item.
- ^{3/} Excludes an estimated 100 schools, 1 percent of the estimated total, represented by the sampled schools that did not respond to the item.
- ^{4/} Excludes an estimated 800 schools, 2 percent of the estimated total, represented by the sampled schools that did not respond to the item.
- Quantity zero in sample.

NOTES.--Large cities: 130 cities of 100,000 or more population in the 1960 Census.
Detail may not equal total due to rounding.



TECHNICAL APPENDIX

Sample Design

The sample for this 1969 pilot survey was designed to provide field experience in a variety of areas and schools. It was not designed with primary regard to statistical efficiency for making national estimates from the survey, as was the subsequent 1970 survey. The 1969 survey was based on a sample of public schools from local school systems having total enrollment in fall 1967 of 300 or more pupils. (School systems having enrollment under 300 accounted for less than 2 percent of fall 1967 enrollment.) School systems in Alaska and Hawaii were also excluded from the universe.

All school systems included in the survey were stratified according to whether the central office address was in a city with 1960 population of 100,000 or more ("large city") or outside of the large cities.

Large-City Systems. For the sample of schools from large-city school systems, the city was treated as a stratum for sampling. There were 129 large cities in the 48 States and D.C. covered by the sample. Two of these were served by a single system and were therefore treated as a single stratum. Thus, there were 128 strata of large cities. Two elementary schools and two secondary schools were selected from each city-stratum by systematic random sampling. Distinctions between systems within one city were ignored in this sampling. Two forms designated as Form A and Form B were to be used in the survey. Correspondingly, one elementary school and one secondary school were randomly assigned for the use of Form A in the survey, the other member of the pair being assigned for Form B.

Systems Outside Large Cities. The sample of schools from systems outside the large cities was selected as a two-stage sample. At the first stage, a sample of 100 systems was randomly selected. One elementary and one secondary school were to be chosen at random from each of these systems. Because some of the selected systems did not operate secondary schools, additional systems were randomly selected, and one secondary school randomly sampled per system, until a total sample of 100 secondary schools was obtained.

Summary. The allocation of the school sample over the strata is summarized in the table below:

	<u>Location of system and level of school</u>			
	<u>In large cities</u>		<u>Outside large cities</u>	
	<u>Elementary</u>	<u>Secondary</u>	<u>Elementary</u>	<u>Secondary</u>
Number of systems				
Population	128	128	11,108	9,987
Sample	128	128	100	100
Number of schools in:				
Population	9,122	2,583	50,475	18,426
Sample:				
Total	<u>256</u>	<u>256</u>	<u>100</u>	<u>100</u>
Form A	128	128	100	100
Form B	128	128	0	0

Sampling Reliability of Estimates

Since the estimates in this report are based on only a sample of schools, they are subject to sampling variability. The data presented here on schools are not likely to differ by more than a few percentage points from the results that would have been obtained from a complete canvass of all public elementary and secondary schools. The data presented on pupils, however, are subject to relatively more variation due to sampling; and, for small estimated numbers or percents, the variations may range up to 50 percent of the reported estimate. For example, the estimate for all schools of 3.7 million pupils entering late -- not a small estimated number -- is subject to a coefficient of variation of 6.6 percent. This means that the chances are about two in three that the difference between the survey estimate of 3.7 million and the results of a complete census of all schools would be less than 244,000 pupils (3.7 million pupils x .066).

More specific measures of sampling reliability of the estimates will appear in a forthcoming report of the survey.

Variation From Sources Other Than Sampling

In addition to sampling variability, the survey estimates are also subject to reporting error and biases in response as well as processing error which would affect a survey of all schools as well as a sample survey. The effects of these are not completely reflected in the measures of sampling reliability just presented. A number of steps were taken in the survey aimed at minimizing the impact of such nonsampling error.

School Nonresponse. To the extent to which schools which do not respond in a survey differ from those which do, there is an unknown bias in the estimates for all schools which may be serious if the rate of nonresponse is high. In this survey, a high rate of cooperation from schools was achieved, as indicated by the following table of response rates:

	Location of system and level of school			
	In large cities		Outside large cities	
	Elementary	Secondary	Elementary	Secondary
Form A	95.3%	93.0%	96.0%	92.0%
Form B	99.2%	91.4%	--	--
Forms A and B	97.3%	92.2%	96.0%	92.0%

Item Nonresponse. Steps were also taken to keep at a low level missing responses for items on the questionnaires from schools which cooperated. As a result of these efforts the nonresponse rate is less than 1 percent for almost all items.

Quality of Reported Data. The steps taken to identify and deal with situations likely to give rise to poor quality of data may be illustrated in many ways and at all phases of the survey process. Interviewers, for example, were used to elicit information personally from over half of the respondents. On completion of the questionnaire, the interviewer performed a preliminary edit of responses for completeness, accuracy, and consistency. Also, the interviewer and respondent completed an evaluation form which probed into possible problems in understanding of the meanings of any of the key items or in obtaining reliable data for a response. Some weak items were subsequently dropped from the analysis based on the evidence of this evaluation. Prominent among these was the identification of programs in schools which were or were not supported by Federal funds; many principals were unable to identify programs with funding sources.

Each completed form was given a full edit by at least one survey specialist. A number of items were designated as "call" questions; the principal was to be reinterviewed by telephone if any one of these questions was found to be answered in contradiction to or in some way inconsistent with other responses.

Also, members of the NCES professional staff and consultants visited personally 14 responding schools and interviewed the respondents in depth. These case studies were undertaken because their reports indicated that the schools were especially atypical in some regard. For example, one elementary school in the Midwest reported that more than half the pupils who completed the school year there did not begin the school year in that school. It was important to verify this report; as a "bonus," it was also possible to find out how the school attempted to deal with its large, unstable pupil membership.

Comparable cautions were exercised with the coding, key punching, and each of the several phases of electronic data processing.

Finally, estimates from the School Staffing Survey were compared with estimates from other sources. In this regard, for example, counts of full-time equivalents (FTEs) of staff members estimated from the School Staffing Survey compare very well for nine different positions with estimates of FTEs from NCES' ELSEGIS for the same positions, based on reports for the same year from a sample of about 1,400 school districts.

Questionnaire Items

Data in this report derive from the following items which were included in both Forms A and B of the 1969 School Staffing Survey.

STATISTICS OF PUPILS IN THIS SCHOOL (Best estimates are acceptable where no figures are available.)

24. Excluding preprimary, adult, and post-secondary pupils, for the time periods indicated below, what was:
- A. Opening fall enrollment, 1967? _____ pupils
 - B. Opening fall enrollment, 1968? _____ pupils
25. Of those pupils who were enrolled in this school at the fall opening of school, 1968, how many are no longer enrolled in this school at the present time? _____ pupils
26. Of the pupils who are enrolled in this school at the present time, how many were not enrolled in this school at the fall 1968 opening? _____ pupils

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