RETENTION IN HIGH SCHOOLS IN LARGE CITIES

A Report of a Study of School Holding Power
Conducted in Cities of Over 200,000 Population in Cooperation
with the Office of Education

Written and compiled by

DAVID SEGEL
Specialist for Pupil Appraisal
Office of Education

and

OSCAR J. SCHWARM
Director of Guidance and Child Accounting
Pittsburgh Public Schools

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Participants in the Study

Chicago—George C. Brook
Cincinnati—Maurice Crotty, Mary P. Corre, Wendell H. Pierce
Columbus—V. K. Replogle, John Young
Detroit—Warren K. Layton
Indianapolis—H. L. Harshman
Kansas City, Mo.—James A. Haslett, Clyde J. Baer
Louisville—Charles S. Sanders
Milwaukee—T. J. Kuemmerlein, Elden S. Bond
Minneapolis—Fred P. Roessel
Newark—Michael R. McGreal, Alice S. Ruotolo
New Orleans—Aimee Poncet
New York—Morris Krugman, J. Wayne Wrightstone, William Reiner, Margaret C. Wagner
Omaha—Don Warner
Philadelphia—Robert C. Taber
Pittsburgh—Oscar J. Schwarm
Providence—Mary D. Basso
Rochester—Howard D. Seymour, Robert F. Barry
St. Louis—Glynn E. Clark
San Antonio—James T. Shea
San Diego—George V. Hall, William H. Stegeman
San Francisco—Morris Williams
Youngstown—C. A. Christopher, Marie G. Verschoor

Office of Education personnel

This study was conducted under the direction of FRANK L. SIEVERS, Chief, Guidance and Student Personnel Section, and J. DAN HULL, Director, Instruction, Organization, and Services Branch, of the Division of State and Local School Systems. They were also concerned directly with the original plans and development of the study and, for a time, the latter acted as coordinator of the study. DAVID SEGEL, Specialist for Pupil Appraisal, was the coordinator of the study for most of the period.

FOREWORD

ONE OF the major problems confronting the leaders of our Nation today is the acute shortage of competent manpower. This problem is recognized in government, business, industry, and education. It has motivated professional groups as well as business and industry to develop incentive programs that have as their aim the proper training and eventual recruitment of high school and college graduates. For school administrators this problem has brought into sharp focus two important objectives with relation to American youth:

1. Encouraging youth to plan and follow with success educational programs which capitalize to the fullest on individual interests, aptitudes, and educational potentials.

2. Reducing to a minimum early school leaving, which represents a serious loss to individuals as well as to society.

The first of these objectives points to secondary school program and to adequate guidance services. It was the second need which prompted superintendents of schools in cities of over 200,000 population to request the Commissioner of Education to plan work conferences which might lead to a constructive approach to the problem. Two work conferences were held—the first in January 1950, and the second in February 1951.

Though many promising avenues of approach were agreed upon by the conference participants, it became apparent that a uniform system of pupil accounting would become imperative to a nationwide study. Such a system was developed during the second work conference. It became the basis of a four-year study of school dropouts in 14 large city school systems, beginning with the ninth-grade class of September 1951.

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The study which is reported in this bulletin classifies students according to sex and reason for dropout. It provides comparisons of school holding power during grades 9, 10, 11, and 12.

Although this report, in the main, restricts itself to those significant findings that throw light upon the problem of pupil dropout, it is hoped that the report will encourage independent research of greater magnitude by school systems and individual schools. The report attempts to insure clarity through the use of simple tables and graphs. However, the statistics do not reflect the involved and complex operations that were necessary to gather and process the facts.

Twenty-two cities cooperated in various phases of the study over a period of four years. This type of cooperation by the Office of Education and these large cities is unique in the history of the Office of Education and shows awareness and interest in a major educational problem.

E. GLENN FEATHERSTON
    Acting Assistant Commissioner
    Division of
    State and Local
    School Systems

J. DAN HULL
    Director
    Instruction, Organization
    and Services Branch

Retention in High Schools In Large Cities

INTRODUCTION

THIS STUDY of School Holding Power is based upon a system of pupil accounting which was started with the beginning ninth-grade class of September 1951. The study follows this class through a four-year period and accounts for all pupils who had entered or who had left the study group for any one of many reasons including transfer.

.The forms developed for use in the participating school systems divide all pupils removed from the study group into two main categories—Involuntary Withdrawals and Voluntary Withdrawals. Involuntary Withdrawals include pupils who drop out for reasons over which a school presumably has little or no control, whereas Voluntary Withdrawals include pupils who drop out for reasons over which a school presumably has considerable control.

Although transfers to other schools or other school systems are not considered dropouts, such transfers purposely are classified as Involuntary Withdrawals. This method simplified reporting and makes certain that all pupils are accounted for in a uniform manner. The amount of such transferring among schools is important in itself. All pupils transferred into or out of the study group are taken into consideration when establishing a base figure (true class membership). This base is used in calculating the dropout rate.

The main purpose of this study originally was to determine accurately, by means of a uniform system of pupil accounting, the extent of, and the reasons for, pupil dropout. However, the study

1

also reveals the degree of mobility among the student body that was studied. The facts emphasize not only that the study group was fluid but that the size of the group was affected considerably by factors other than dropout. This has reference particularly to the increase or decrease in enrollment from one year to the next, due to transfer.

In computing both types of holding power, as defined above, for a school or school system over a four-year period, it becomes necessary first to determine the holding power for each year during that period. This is based upon class membership during a given year and pupil dropouts during the same year. The holding power then is determined by applying consecutively the holding power for each of the four years. This eliminates the effects of extraneous factors such as acceleration, retardation, and transfers in or out of a school system.

Complete data were available on 14 of these cities and it is on these data that the tables and charts are based. For most purposes the data are divided into two groups of cities. These cities, divided into the two groups, are: Group A (Population 200,000 to 1,000,000)—Cincinnati, Columbus, Indianapolis, Louisville, Minneapolis, Newark, Omaha, Pittsburgh, San Diego, San Francisco, and Youngstown; Group B (Population over 1,000,000)—Chicago, New York, and Philadelphia.

The terms Involuntary Withdrawals and Voluntary Withdrawals are basic to the understanding of holding power and true holding power. Involuntary Withdrawals and Voluntary Withdrawals were defined by the conferences which set up this cooperative study. Involuntary Withdrawals were defined as those over which the schools were presumed not to have control. They were: (1) Left school—whereabouts not known; (2) excused—physical disability; (3) excused, uneducable; (4) drafted into the Armed Forces; (5) deceased; (6) institutionalized, and others in like categories. Voluntary Withdrawals were defined as those withdrawals over which the school presumably has some control. These were: (1) Entered employment; (2) needed at home; (3) enlisted in the Armed Forces; (4) married; (5) dropped, not employed nor needed at home; (6) inability to adjust, and those in a like category. True holding power is defined as retention based on Voluntary Withdrawals alone, whereas holding power, without the adjective, is defined as retention based on the total of Involuntary and Voluntary Withdrawals.

ACTUAL CLASS MEMBERSHIP DURING THE FOUR YEARS OF THE STUDY

INTERPRETATION

1. Chart I, showing actual class membership during the 4 years of the study, emphasizes the importance of factors other than dropout in computing school holding power. These factors include transfers in or out of a school system, retardation, acceleration, and reentry after dropout.

2. The net effect of factors other than dropout is shown graphically for the second, third, and fourth years of the study by a vertical rise or drop (Chart I) at the beginning of each year. The plotting of a similar gain or loss for the first year was impossible because of the manner in which first-year memberships were reported.

3. Group A cities follow a consistent pattern of net gain in membership due to factors other than dropout. These gains are 1,590, 276, and 361 pupils respectively. Group B cities show a mixed pattern, with a relatively large gain of 7,616 pupils during the second year of the study and losses of 1,080 and 2,012 pupils during the third and fourth years.

4. The vertical drop shown at the end of the fourth year of the study represents a residue of pupils not graduating but remaining in school (retardation). A similar group of pupils was absorbed by the study group during the previous year.

5. Chart I points to a serious error that would be made in computing school holding power by comparing the number of pupils at the beginning of the study with the number in school just prior to graduation four years later.

HOLDING POWER

As indicated previously, holding power in high schools cannot be calculated directly by noting the membership at the beginning of the 9th grade and at the end of the 12th grade. Such a method is erroneous for use in any school district or city. Even when used with States, it would be questionable. The calculation of holding power may be divided into steps. The first step is essentially the calculation of the percentage for each year and the second step is the correction of these figures for the varying populations in each year. How and why this is done will become apparent.

ACTUAL MEMBERSHIP DURING THE FOUR YEARS
OF THIS STUDY

GROUP 'A' CITIES
(Populations of 200,000 to 1,000,000)

Pupils
36,000
34,593
33,680

GAIN, 1,950

GAIN, 276

29,294

GAIN, 371

25,718

23,331

18,000

SEPT. 1951   SEPT. 1952   SEPT. 1953   SEPT. 1954   JUNE 1955

GROUP 'B' CITIES
(Populations of over 1,000,000)

Pupils
110,000

GAIN, 7,616

103,550
102,802

83,202

LOSS, 1,080

66,602

LOSS, 2,012

58,207

55,000

SEPT. 1951   SEPT. 1952   SEPT. 1953   SEPT. 1954   JUNE 1955
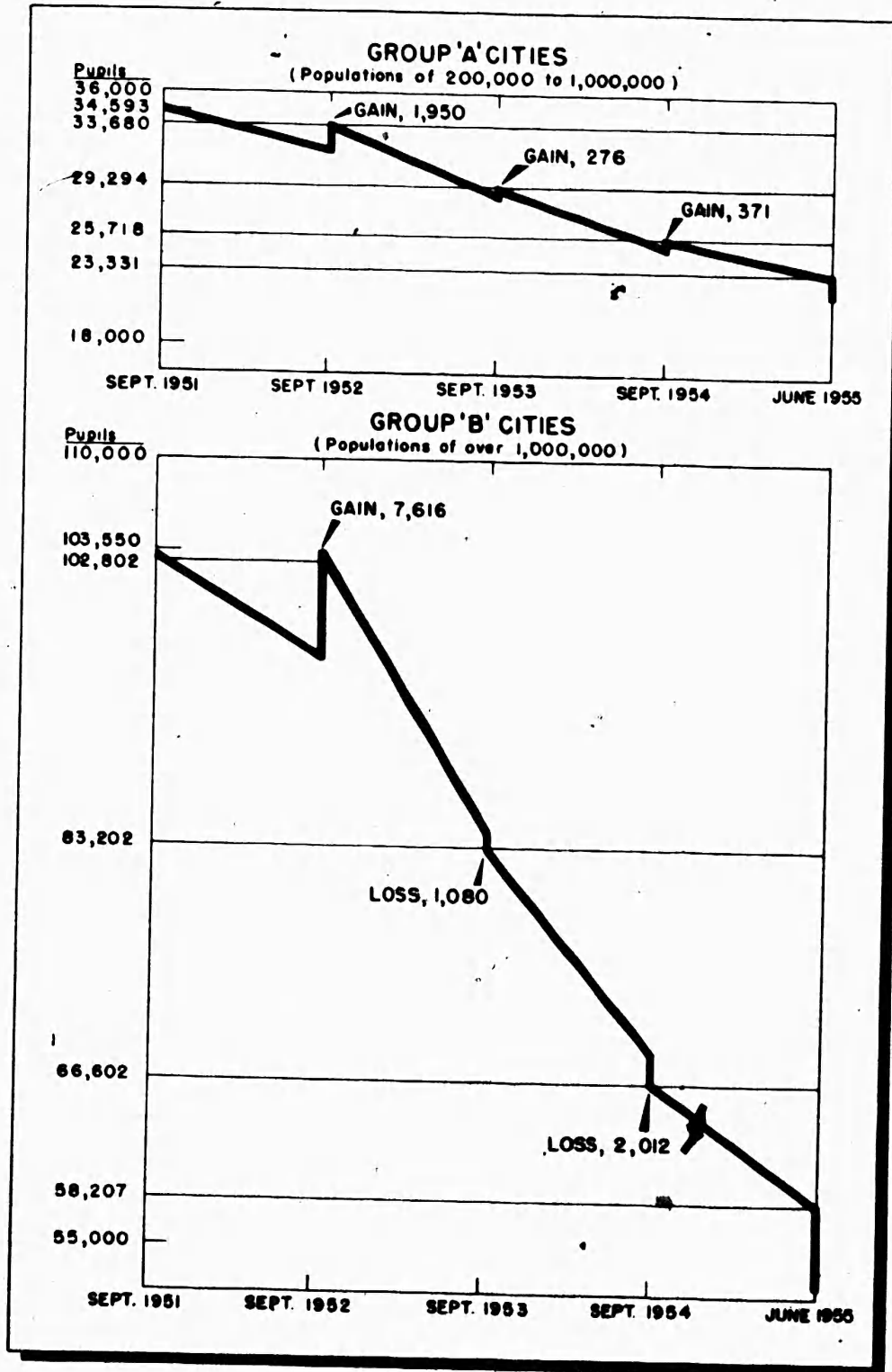
CHART I

PUPIL WITHDRAWALS BY GRADE

CLASS 'A' CITIES

CLASS 'B' CITIES

GRADE 9
FIRST YEAR OF STUDY

TOTAL

VOLUNTARY

INVOLUNTARY

7.2 %

4.7 %

2.5 %

6.7 %

4.5 %

2.2 %

13.8 %

9.7 %

4.1 %

18.6 %

15.4 %

3.2 %

13.4 %

11.4 %

2.0 %

17.5 %

15.6 %

1.9 %

9.3 %

8.0 %

1.3 %

12.6 %

11.7 %

TOTAL

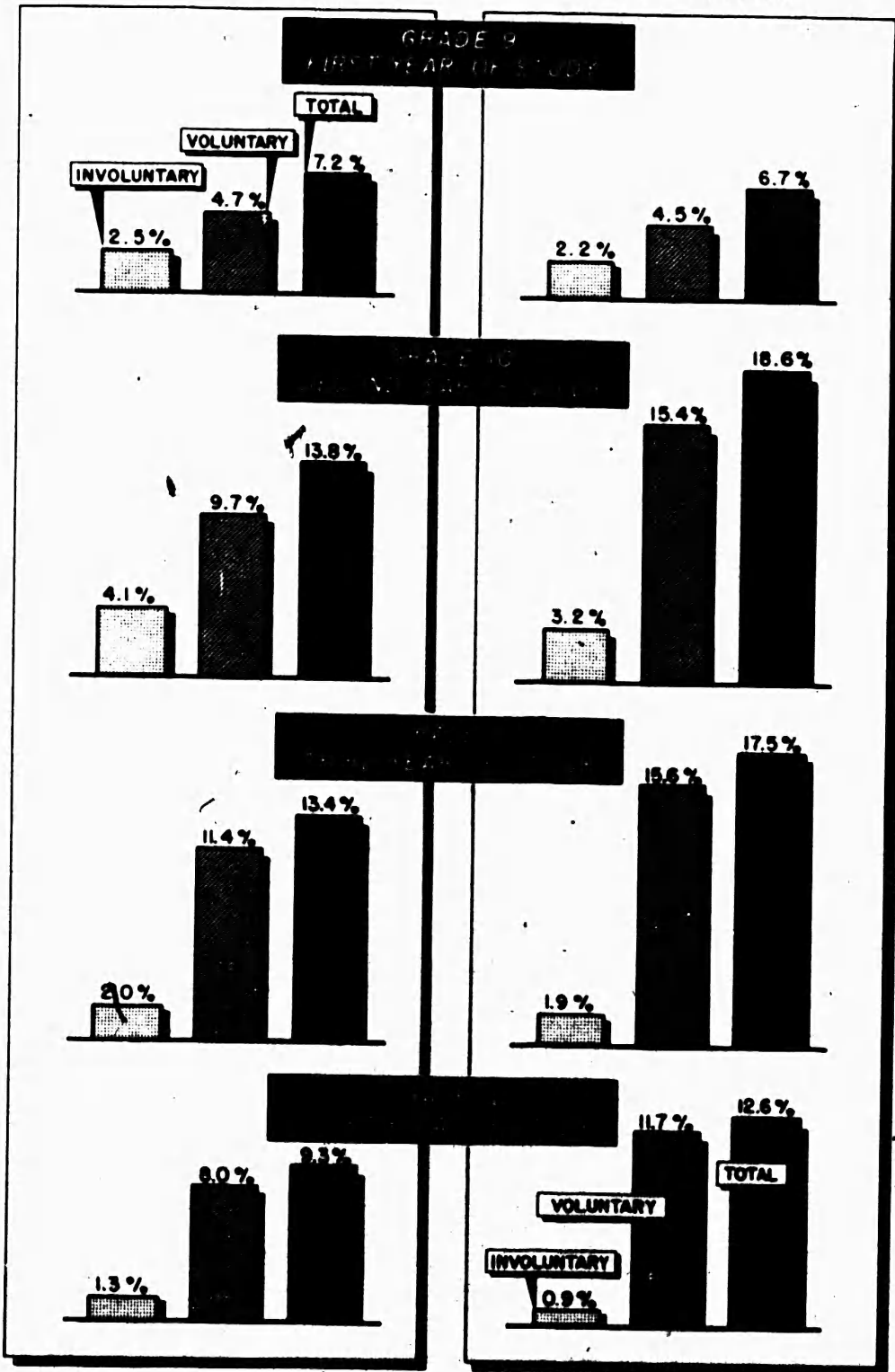VOLUNTARY

INVOLUNTARY

0.9 %

CHART II

PUPIL WITHDRAWAL BY GRADES

First Step

The first step for calculating the holding power of the two groups of cities—Group A (cities from 200,000 to 1,000,000 in population) and Group B (cities of 1,000,000)—is shown in Chart II. The percentages for Involuntary and Voluntary are obtained by using the number of such withdrawals and dividing by the true membership, the latter term meaning the membership of any grade minus the transfers. These true or base memberships for each year appear in the Appendix under items A-T-I, A-T-II, A-T-III, and A-T-IV.

Year of study	Group A cities			Group B cities		
	Involuntary Withdrawals	Voluntary Withdrawals	True Membership	Involuntary Withdrawals	Voluntary Withdrawals	True Membership
1. The data:						
First	880	1, 623	34, 593	2, 246	4, 622	102, 802
Second	1, 382	3, 280	33, 680	3, 334	15, 934	103, 550
Third	589	3, 348	29, 294	1, 576	13, 012	83, 202
Fourth	322	2, 065	25, 718	582	7, 813	66, 602

Involuntary Withdrawals

2. Calculations:	*Percent*	*Percent*
First	$(880 \times 100) \div 34,593 = 2.5$	$(2,246 \times 100) \div 102,802 = 2.2$
Second	$(1,382 \times 100) \div 33,680 = 4.1$	$(3,334 \times 100) \div 103,550 = 3.2$
Third	$(589 \times 100) \div 29,294 = 2.0$	$(1,576 \times 100) \div 83,202 = 1.9$
Fourth	$(322 \times 100) \div 25,718 = 1.3$	$(582 \times 100) \div 66,602 = 0.9$

Voluntary Withdrawals

	Percent	*Percent*
First	$(1,623 \times 100) \div 34,593 = 4.7$	$(4,622 \times 100) \div 102,802 = 4.5$
Second	$(3,280 \times 100) \div 33,680 = 9.7$	$(15,934 \times 100) \div 103,550 = 15.4$
Third	$(3,348 \times 100) \div 29,294 = 11.4$	$(13,012 \times 100) \div 83,202 = 15.6$
Fourth	$(2,065 \times 100) \div 25,718 = 8.0$	$(7,813 \times 100) \div 66,602 = 11.7$

Total Voluntary and Involuntary Withdrawals [1]

	Percent	*Percent*
First	$(2,503 \times 100) \div 34,593 = 7.2$	$(6,868 \times 100) \div 102,802 = 6.7$
Second	$(4,662 \times 100) \div 33,680 = 13.8$	$(19,268 \times 100) \div 103,550 = 18.6$
Third	$(3,937 \times 100) \div 29,294 = 13.4$	$(14,588 \times 100) \div 83,202 = 17.5$
Fourth	$(2,387 \times 100) \div 25,718 = 9.3$	$(8,395 \times 100) \div 66,602 = 12.6$

[1] These may also be obtained directly by adding the percentages for Involuntary and Voluntary Withdrawals.

Second Step

The second step is to find the withdrawal for all four years, for the voluntary withdrawals and for the total withdrawals. To do this, it is necessary to use a new base each year since the base becomes smaller year by year. The new base for each year is the base of the year before minus the total withdrawals for that year. This calculation is outlined below. Chart III shows graphically the results.

Year	Voluntary Withdrawals only	
	Group A cities	Group B cities
End of—	*Percent*	*Percent*
First	$100 - \dfrac{100 \times 4.7}{100} = 95.3$	$100 - \dfrac{100 \times 4.5}{100} = 95.5$
Second	$95.3 - \dfrac{92.8 \times 9.7}{100} = 86.1$	$95.5 - \dfrac{93.3 \times 15.4}{100} = 81.1$
Third	$86.1 - \dfrac{80.0 \times 11.4}{100} = 77.0$	$81.1 - \dfrac{75.9 \times 15.6}{100} = 69.3$
Fourth	$77.0 - \dfrac{69.3 \times 8.0}{100} = 71.5$	$69.3 - \dfrac{62.6 \times 11.7}{100} = 62.0$

	Total—Involuntary and Voluntary Withdrawals	
End of—	*Percent*	*Percent*
First	$100 - \dfrac{100 \times 7.2}{100} = 92.8$	$100 - \dfrac{100 \times 6.7}{100} = 93.3$
Second	$92.8 - \dfrac{92.8 \times 13.8}{100} = 80.0$	$93.3 - \dfrac{93.3 \times 18.6}{100} = 75.9$
Third	$80.0 - \dfrac{80.0 \times 13.4}{100} = 69.3$	$75.9 - \dfrac{75.9 \times 17.5}{100} = 62.6$
Fourth	$69.3 - \dfrac{69.3 \times 9.3}{100} = 62.9$	$62.6 - \dfrac{62.6 \times 12.6}{100} = 54.7$

SHOWING DECREASE IN MEMBERSHIP DURING FOUR - YEAR PERIOD
DUE TO INVOLUNTARY AND VOLUNTARY WITHDRAWALS

GROUP 'A' CITIES
(Populations of 200,000 to 1,000,000)

Percentage

VOLUNTARY
WITHDRAWALS
ONLY

INVOLUNTARY
& VOLUNTARY
WITHDRAWALS

71.5

62.9

SEPT 1951   SEPT 1952   SEPT. 1953   SEPT 1954   JUNE 1955

GROUP 'B' CITIES
(Populations of over 1,000,000)

Percentage

VOLUNTARY
WITHDRAWALS
ONLY

INVOLUNTARY
& VOLUNTARY
WITHDRAWALS

62.0

54.7

SEPT. 1951   SEPT. 1952   SEPT. 1953   SEPT. 1954   JUNE 1955
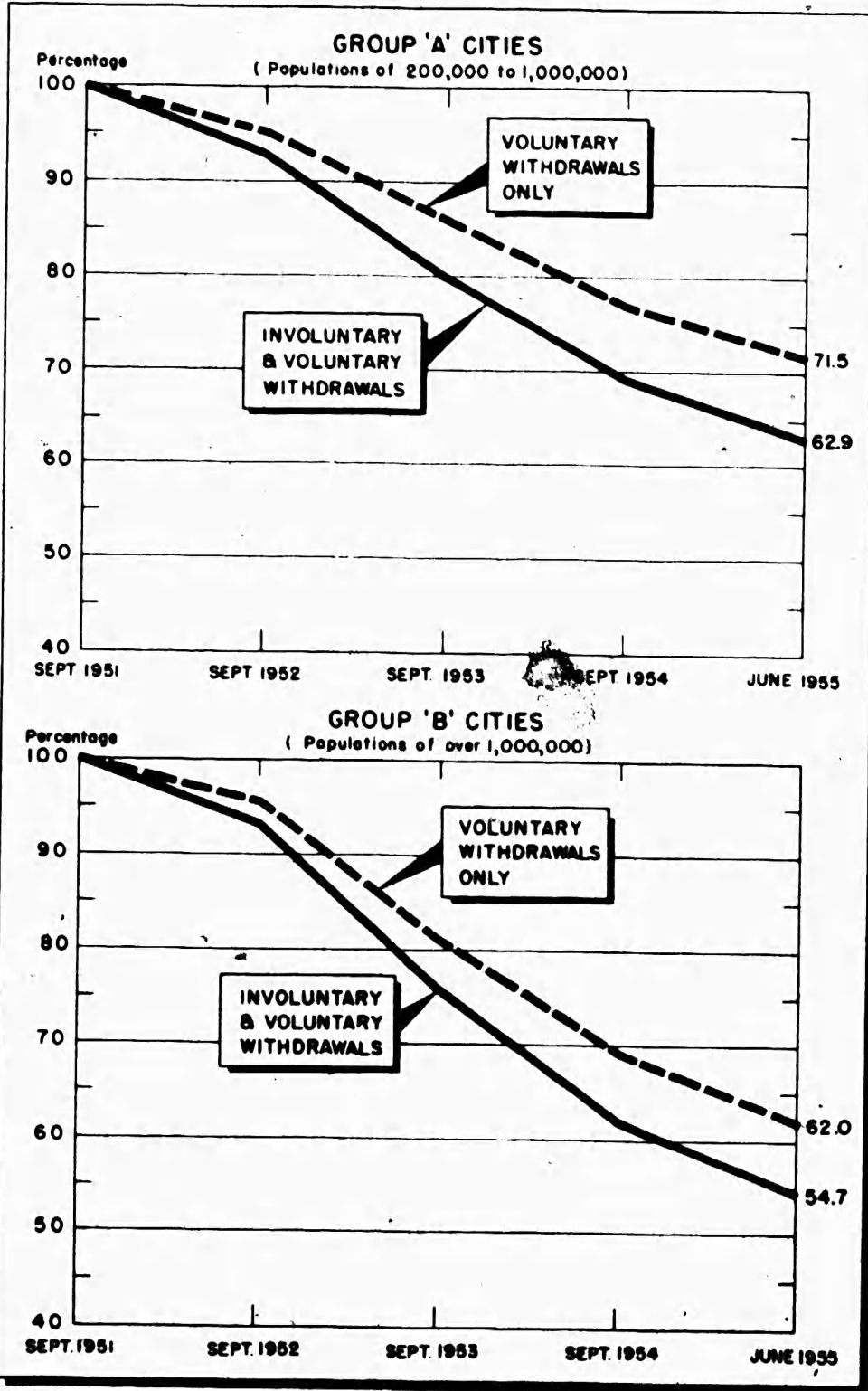
CHART III

HOLDING POWER, BY BOYS AND GIRLS

The percentages of boys and girls remaining in school at the end of each year of high school in each of the two groups of cities are as follows. These percentages were obtained in the same manner as those obtained on the previous page, except that the base populations are different in this case for boys and for girls.

Year	Group A cities		Group B cities	
	Boys	Girls	Boys	Girls
End of—	*Percent*	*Percent*	*Percent*	*Percent*
First	91. 9	93. 7	92. 0	94. 8
Second	78. 0	82. 0	72. 1	80. 2
Third	66. 9	71. 6	57. 9	68. 0
Fourth	60. 2	65. 4	49. 5	60. 7

These percentages show that boys leave school before the end of high school at a substantially higher rate than girls and the trend is proportionately greater in the larger cities—Group B.

VARIATIONS IN RETENTION AMONG INDIVIDUAL CITIES

The variations in retention rates among cities run as high as 89 percent and as low as 45 percent. These variations are not caused by variations in the compulsory school laws because such laws are very nearly the same in all the States concerned. The possible causes of these variations are thought to lie in the (a) enforcement of the compulsory school laws and leniency in providing work permits; (b) appeal of the school programs—both the curriculum and the guidance program; or (c) the type of population; or any combination of these factors.

PUPIL MOBILITY

The mobility of the present-day secondary school population is evidenced by the movement of pupils between school systems, between schools within a school system, and between grades within a given school. Further evidence of this mobility is the number of graduates who, during the 4-year period of the study, attended school

in two or more school systems or two or more schools in the same system.   The data pertaining to mobility follow:

Group A Cities

	Boys	Girls	Total
True membership, 1st year	17, 543	17, 050	34, 593
Graduates, close of 4th year	10, 761	11, 412	22, 173

1. 21,939 pupil transfers were reported between school systems or between schools within a school system or they represent movement in or out of the study group due to retardation, acceleration, or reentry after dropout.   This number represents 63 percent of the first year membership; it is equal approximately to the number of pupils in the graduating class at the close of the 4-year period of study.

Of the 21,939:

2. 3,511 represent pupils who remained in the study group while transferring between schools within the same public school system.

3. 5,792 represent pupils who were removed from the study group because of transfer to other school systems, public or private.

4. 7,839 represent pupils who were entered in the study group after the initial ninth-grade enrollment through transfer from other school systems, public or private.

5. 1,567 [1] represent pupils who were entered in the study group after the initial ninth-grade enrollment through retardation or acceleration.

6. 1,064 represent pupils who were entered in the study group after previous dropout in the same school.

7. 2,166 [1] represent pupils who were removed from the study group because of retardation or acceleration.

8. 9,413 graduates, representing 42.5 percent of the graduating class, attended school in two or more school systems during the 4-year period.

9. 10,703 graduates, representing 48.2 percent of the graduating class, attended two or more schools during the 4-year period.

10. With relation to mobility, boys outnumbered girls 6 to 5 in all categories but one.   The exception is the movement of pupils in or out of the study group through acceleration.   In this group girls outnumbered boys 3 to 2.

[1] The gain and loss to the study group, due to retardation and acceleration, are not equal.   This probably is due to the differences in the size of fall and midyear classes in a number of the participating cities.

Group B Cities

	Boys	Girls	Total
True membership, 1st year	53, 356	49, 446	102, 802
Graduates, close of 4th year	23, 993	26, 913	50, 906

1. 59,889 pupil transfers were reported between school systems or between schools within a school system or they represent movement in or out of the study group due to retardation, acceleration or reentry after dropout. This number represents 58 percent of the first year membership; it is equal approximately to the number of pupils in the graduating class at the close of the 4-year period of the study.

Of the 59,889:

2. 24,075 represent pupils who remained in the study group while transferring between schools within the same public school system.

3. 12,740 represent pupils who were removed from the study group because of transfer to other school systems, public or private.

23,074 represent pupils whose status changed because:

(a) They entered the study group after the initial ninth-grade enrollment through transfer from other school systems, public or private.

4.
5.
6.
7.

(b) They entered the study group after the initial ninth-grade enrollment through retardation or acceleration.

(c) They entered the study group after previous dropout in the same school.

(d) They were removed from the study group because of retardation or acceleration.

(NOTE: A numerical breakdown of these four items, similar to that for Group A cities, was not available.)

8. 6,848 graduates, representing 20 percent of the graduation class in one city,[2] attended school in two or more school systems during the 4-year period.

9. 13,103 graduates, representing 38 percent of the graduation class in one city,[2] attended two or more schools during the 4-year period.

10. With relation to mobility, boys outnumbered girls 6½ to 5 in all categories combined.

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[2] This information not available from other Group B cities.

Table 1.—Involuntary Withdrawals: Classified According to Grade, Sex, and Reason for Withdrawal

Item	Reason for withdrawal	Sex	Group A cities (Populations of 200,000 to 1,000,000)					Group B cities (Populations of over 1,000,000)				
			Grade 9	Grade 10	Grade 11	Grade 12	Grades 9-12	Grade 9	Grade 10	Grade 11	Grade 12	Grades 9-12
3	Left school—Whereabouts not known	M	94	318	65	51	528	247	321	133	42	743
		F	91	262	53	45	451	224	306	152	67	749
		T	185	580	118	96	979	471	627	285	109	1,492
4	Excused, physical disability	M	44	61	65	17	187	311	369	201	91	972
		F	100	160	124	59	443	472	771	437	178	1,858
		T	144	221	189	76	630	783	1,140	638	269	2,830
5	Excused, uneducability	M	19	18	9	3	49	17	22	11	0	50
		F	13	8	5	2	28	16	29	8	2	55
		T	32	26	14	5	77	33	51	19	2	105
6	Drafted, Armed Forces	M	3	1	78	7	89	2	20	27	43	92
		F	0	0	0	0	0	0	0	0	0	0
		T	3	1	78	7	89	2	20	27	43	92
7	Deceased	M	6	3	3	4	16	12	30	19	14	75
		F	6	5	3	0	14	5	12	10	4	31
		T	12	8	6	4	30	17	42	29	19	106
8	Institutionalized	M	106	77	47	13	243	294	210	62	32	598
		F	47	35	12	7	101	168	101	35	9	313
		T	153	112	59	20	344	462	311	97	41	911
9	Others	M	176	230	55	42	503	206	431	166	28	831
		F	175	204	70	72	521	272	712	315	72	1,371
		T	351	434	125	114	1,024	478	1,143	481	100	2,202
10-T	TOTAL	M	448	708	322	137	1,615	1,089	1,403	619	250	3,361
		F	432	674	267	185	1,558	1,157	1,931	957	332	4,377
		T	880	1,382	589	322	3,173	2,246	3,334	1,576	583	7,738
A-T	Base membership *	M	17,543	16,914	14,595	12,669	----	53,356	53,058	42,671	34,012	----
		F	17,060	16,766	14,699	13,049	----	49,446	50,492	40,531	32,590	----
		T	34,593	33,680	29,294	25,718	----	102,802	103,550	83,202	66,602	----

* Base membership (or true membership) is equal to total membership less transfers out of study group.

INVOLUNTARY WITHDRAWALS CLASSIFIED ACCORDING TO GRADE, SEX, AND REASONS FOR WITHDRAWAL

INTERPRETATION OF TABLE I

Of the 62,608 withdrawals reported by the 14 cities in the study, 10,911 or 17.4 percent were classified as Involuntary. These withdrawals, by definition, were considered to be the result of conditions over which a school has little or no control.

Of the 10,911 Involuntary Withdrawals:

Item

3   2,461, or 22.6 percent of the Involuntary Withdrawals represent families or individuals who moved out of their communities without leaving a forwarding address.

4   3,460, or 31.7 percent were the result of physical disabilities. Two out of every three of these withdrawals were girls, suggesting the need of study and, perhaps, a different approach to a social problem that is the responsibility of other agencies as well as the school.

5   182, or 1.7 percent were considered uneducable, with no significant difference between boys and girls.

6   181, or 1.7 percent were drafted into the Armed Forces. These withdrawals reflect considerable retardation.

7   136, or 1.2 percent died. In this classification, boys outnumbered girls 2 to 1.

8   1,255 or 11.5 percent were committed to correctional institutions. Boys outnumbered girls slightly more than 2 to 1.

9   3,236, or 29.5 percent represent miscellaneous cases that did not meet the definition of classifications 3 through 8. Girls outnumbered boys by 558. Close examination of the reports indicates that some cities chose classification 9 rather than classification 4 for certain physical disabilities among girls.

Table II.—Voluntary Withdrawals: Classified According to Grade, Sex, and Reasons for Withdrawal

Item	Reason for withdrawal	Sex	Group A cities (Populations of 250,000 to 1,000,000)					Group B cities (Populations of over 1,000,000)				
			Grade 9	Grade 10	Grade 11	Grade 12	Grades 9-12	Grade 9	Grade 10	Grade 11	Grade 12	Grades 9-12
11	Entered employment	M	620	1,046	755	264	2,685	2,421	7,316	4,187	1,229	15,153
		F	289	618	539	152	1,598	924	3,948	2,901	989	8,762
		T	909	1,664	1,294	416	4,283	3,345	11,264	7,088	2,218	23,915
12	Needed at home	M	55	23	8	4	90	34	112	230	84	460
		F	69	78	58	15	220	113	230	361	137	841
		T	124	101	66	19	310	147	342	591	221	1,301
13	Enlisted in Armed Forces	M	43	161	247	328	779	43	159	262	449	913
		F	0	0	1	0	1	2	1	3	2	8
		T	43	161	248	328	780	45	160	265	451	921
14	Married	M	4	8	15	16	43	3	9	10	12	34
		F	162	358	432	328	1,290	80	218	234	268	800
		T	166	366	447	344	1,323	83	227	244	280	834
15	Dropped, not employed nor needed at home	M	188	339	407	200	1,134	373	1,002	1,347	1,615	4,337
		F	83	178	314	193	768	124	476	816	1,073	2,489
		T	271	517	721	393	1,902	497	1,478	2,163	2,688	6,826
16	Inability to adjust	M	39	137	120	54	350	171	474	1,191	529	2,365
		F	10	76	74	27	187	67	204	542	178	991
		T	49	213	194	81	537	238	678	1,733	707	3,356
17	Others	M	28	141	202	268	639	155	1,007	599	748	2,469
		F	33	117	176	216	542	112	778	369	500	1,759
		T	61	258	378	484	1,181	267	1,785	928	1,248	4,228
18	TOTAL	M	977	1,855	1,754	1,134	5,720	3,200	10,079	7,796	4,666	25,731
		F	846	1,425	1,594	931	4,596	1,422	5,855	5,226	3,147	15,650
		T	1,623	3,280	3,348	2,065	10,316	4,622	15,934	13,012	7,813	41,381
A-T	Base membership*	M	17,543	16,914	14,595	12,669	......	53,356	53,058	42,671	34,012	......
		F	17,050	16,766	14,699	13,049	......	49,446	50,492	40,531	32,590	......
		T	34,593	33,680	29,294	25,718	......	102,802	103,550	83,202	66,602	......

*Base membership (or true membership) is equal to total membership less transfers out of study group.

VOLUNTARY WITHDRAWALS CLASSIFIED ACCORDING TO GRADE, SEX, AND REASONS FOR WITHDRAWAL

INTERPRETATION OF TABLE II

Of the 62,608 withdrawals, reported by the 14 cities in the study, 51,697, or 82.6 percent, were classified as Voluntary Withdrawals. These withdrawals, by definition, were considered to be ones over which a school generally has considerable control.

Of the 51,697 Voluntary Withdrawals:

Item

11   28,198, or 54.5 percent, entered verified employment. Boys outnumbered girls almost 2 to 1, with 46 percent of all withdrawals in this classification occurring in grade 10.

12   1,611, or 3.1 percent, were needed at home. Girls outnumbered boys about 2 to 1.

13   1,701, or 3.3 percent, enlisted in the Armed Forces, with increasing frequency from grade 9 through grade 12. Group B cities (over 1,000,000), having an overall membership of about three times that of Group A cities, accounted for only 54 percent of these withdrawals.

14   2,157, or 4.1 percent, withdrew because of marriage. Only 77 of these were boys.

15   8,728, or 16.9 percent, withdrew because of lack of interest in school. Boys outnumbered girls about 5 to 3.

16   3,893, or 7.5 percent, withdrew or were forced to withdraw because of inability to adjust. Boys outnumbered girls more than 2 to 1.

17   5,409, or 10.4 percent, withdrew for various reasons that did not meet the definitions of classifications 11 through 16.

SUMMARY

THE FACTS

1. The retention rates for these cities show that such rates have either been increased substantially recently or have usually been underestimated, since the usual holding power of high schools has been considered to be less than 50 percent. This indicates that schools are probably holding more and more students through high school, continuing the longtime trend in this regard in American education. It is assumed that this trend is a good one. In the past, this increasing attendance at school in the higher grades and agencies has come about partly because of the greater number of compulsory school regulations. At present, most students remain in school until they can be released legally. For this reason, further increase in retention rates will largely

have to come from improvements in the school program which
would better satisfy the requirements and characteristics of
our present type of dropouts.

2. The usual method of determining holding power in high school,
i. e., comparing graduates with the membership in the entering
class, is quite an inaccurate method for a school district or city.
The method here described takes into account the varying
local conditions which influence the enrollment such as the
transfer of students between the public and the private schools
and the varying labor market.

3. The other important facts shown in this study are: (a) The
retention of girls is higher than that for boys; (b) entering veri-
fied employment came high as a reason for leaving school early;
(c) there is a tremendous amount of transfer of students among
the public schools of the city, and from and to private schools,
and to and from other cities, and (d) the largest number of
dropouts occurred at around the 10th grade.

ANALYSIS

The problem of retention is a problem only in the fact that pupils
do not finish high school. It is not a particular problem that youth
do not attend school long enough. Actually, dropouts stay in school.
in number of years, almost as long as high school graduates. The
problem of retention, therefore, becomes either (a) to see that they
are not retarded so much and they thus get the benefit of a high
school education before they attain an age when they can leave
school, either with or without work permits, or (b) an attraction
must be set up to induce them to remain in school past this age of
easy leaving. In any case, there is an attraction away from school.
This attraction is so strong with some that they leave school before
they can do so legally. However, the data indicate that the majority
of the school leaving is done under compulsory schooling and work-
permit laws. This pullaway from school may, because of these
factors, indicate (a) actual economic need of the student and/or of
his family, or (b) the lack of adaptation of the school to the student,
resulting in school failure and/or disinterest in school because of
no apparent relation of the program to his own needs and characteris-
tics. The great amount of transfer as between schools causes dis-
ruption in schooling plans. The school-leaving problem is greatest
at around the 10th grade level. It is true that this is in part because
of the fact that the compulsory school age comes to an end for many

students in that grade. But it happens that in this grade (the 10th) the choices of the curriculum and the individual subjects within the curriculum become acute. Since it is known from a number of studies that a substantial portion of early school leavers are of better than average intelligence, it means that the intellectual potentiality and therefore also the manpower potentiality of the schools of the country is not being used.

SUGGESTIONS FOR IMPROVEMENT

Many suggestions for the improvement of secondary education are current. Those which seem to have the greatest support from the facts and analysis presented above are:

1. For some pupils in high school the problem is financial need in the home. This is difficult to solve since it is a problem which impinges on our whole economic life. Scholarships and reducing the actual expenses in schools would be of some help.

2. The curriculum of the high school needs to offer curriculum sequences adapted to the characteristics of the students beginning with the 9th or 10th grade. The present curriculum seems better adapted to girls than to boys.

3. There is need for a concentrated guidance attack at the ninth-grade level (1) to give students a view of the educational and occupational world; (2) to help in the analysis of each individual in relation to his potentialities so that, assuming the school offers suitable curriculums, he can be aided in choosing and entering them. Through this process more students will stay in school until graduation and become assets to our country as well as to themselves.

4. The great amount of transfer between schools indicates that, at least in each city, the high schools—except for special trade schools—should all offer similar curricular sequences and subject offerings. This would alleviate the difficulty of adjusting to a new curriculum when transferring. It is possible that the confusion resulting in trying to make an adjustment to a new school may be one of the major factors in the school-leaving problem.

APPENDIX

DATA REPORTED BY 14 CITIES

First Year of Study (Grade 9)	School year ending June 1922					
	Group A cities (Populations between 250,000 and 1,000,000)			Group B cities (Populations over 1,000,000)		
	Male	Female	Total	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A-I. Total cumulative registrations	18,900	18,288	37,278	57,072	52,431	109,503
A-T-I. True first-year membership (Item A-I minus sum of items 1 and 2 below)	17,543	17,050	34,593	53,356	49,446	102,802
INVOLUNTARY WITHDRAWALS						
1. Transferred to other public schools within the same school district	543	393	936	2,101	1,397	3,498
2. Transferred to another school district, or to a parochial or private school within the same school district	904	845	1,749	1,615	1,588	3,203
3. Left school, whereabouts unknown	94	91	185	247	224	471
4. Excused from school attendance until close of the school year because of physical disability (properly certified by a medical doctor)	44	100	144	311	472	783
5. Legally excused or excluded because of uneducability, as determined by an approved psychologist	19	13	32	17	16	33

DATA REPORTED BY 14 CITIES—Continued

First Year of Study (Grade 9)	School year ending June 1952					
	Group A cities (Populations between 250,000 and 1,000,000)			Group B cities (Populations over 1,000,000)		
	Male	Female	Total	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
6. Drafted into the Armed Services	3	0	3	2	0	2
7. Deceased	6	6	12	12	5	17
8. Entered withdrawals because of commitments to correctional institutions	106	47	153	294	168	462
9. Others	176	175	351	206	272	478
10. Total Involuntary Withdrawals	1,895	1,670	3,565	4,805	4,142	8,947
10-T-I. True Involuntary Withdrawals (Item 10 minus sum of items 1 and 2 above)	448	432	880	1,089	1,157	2,246
VOLUNTARY WITHDRAWALS						
11. Entered verified employment	620	289	909	2,421	924	3,345
12. Needed at home	55	69	124	34	113	147
13. Enlisted in Armed Services	43	0	43	43	2	45
14. Married	4	162	166	3	80	83
15. Dropped out of school; not employed nor needed at home	188	83	271	373	124	497
16. Inability to adjust in school	39	10	49	171	67	238
17. Others	28	33	61	165	112	267
18. Total Voluntary Withdrawals	977	646	1,623	3,200	1,422	4,622
B-I. Net membership, end of first year of study	16,118	15,972	32,090	49,067	46,867	95,934

Second Year of Study (Grade 10)	Group A cities (Populations between 500,000 and 1,000,000)			Group B cities (Populations over 1,000,000) [1]		
	Male	Female	Total	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
B-I. Net membership, end of first year of study (Item B-I, first year of study)	16,118	15,972	32,090	49,067	46,867	95,934
E-II. Pupils removed from study group because of retardation or acceleration	509	283	792			
F-II. Net membership carried over into second year of study (B-I minus E-II)	15,609	15,689	31,298	49,067	46,867	95,934
G-II. Total number of pupils having returned to same school or same school system after dropout. These pupils may have been a part of the original study group or may have dropped out of school during an earlier year	232	180	412			
H-II. Pupils entering study group because of retardation (from grade-group above)	189	113	302			
J-II. Pupils having entered study group because of acceleration or up-grading ((from grade-group below)	17	25	42			
K-II. Pupils received from other public schools within the school system (normal transfer)	576	494	1,070			
L-II. Pupils received from other public schools within the school system when transfer also involved retardation (repetition of grade)	120	35	155			
C-II. New registrations, or those entered from other school systems—public, parochial, or private—any time during school year	1,933	1,691	3,624			

School year ending June 1958

[1] Breakdown into items G-II through C-II not reported by Group B cities: male, 12,126; female, 10,056; and total 24,144.

DATA REPORTED BY 14 CITIES—Continued

Second Year of Study (Grade 10)	School year ending June 1955					
	Group A cities (Population between 250,000 and 1,000,000)			Group B cities (Population over 1,000,000)		
	Male	Female	Total	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A-II. Total cumulative registrations (sum of F-II, G-II, H-II, J-II, K-II, L-II, C-II	18,676	18,227	36,903	62,253	57,825	120,078
A-T-II. True second-year membership (Item A-II minus sum of items 1 and 2 below)	16,914	16,766	33,680	53,068	50,492	103,560
INVOLUNTARY WITHDRAWALS						
1. Transferred to other public schools within the same school district	756	481	1,237	6,891	4,888	11,779
2. Transferred to another school district, or to a parochial or private school within the same school district	1,006	980	1,986	2,304	2,445	4,749
3. Left school, whereabouts unknown	318	265	580	321	306	627
4. Excused from school attendance until close of the school year because of physical disability (properly certified by a medical doctor)	61	160	221	369	771	1,140
5. Legally excused or excluded because of uneducability, as determined by an approved psychologist	18	8	26	22	29	51
6. Drafted into the Armed Service	1	0	1	20	0	20
7. Deceased	3	5	8	30	12	42
8. Excused withdrawals because of commitments to correctional institutions	77	35	112	210	101	311
9. Other	230	204	434	431	712	1,143

10. Total Involuntary Withdrawals	2,470	2,135	4,605	10,598	9,204	19,862
10-T-II. True Involuntary Withdrawals (item 10 minus sum of items 1 and 2 above)	708	674	1,383	1,403	1,931	3,334
VOLUNTARY WITHDRAWALS						
11. Entered verified employment	1,046	618	1,664	7,316	3,948	11,264
12. Needed at home	23	78	101	112	230	342
13. Enlisted in Armed Services	161	0	161	150	1	160
14. Married	8	358	366	9	218	227
15. Dropped out of school; not employed nor needed at home	339	178	517	1,002	476	1,478
16. Inability to adjust in school	137	76	213	474	204	678
17. Other	141	117	258	1,007	778	1,785
18. Total voluntary withdrawals	1,855	1,425	3,280	10,079	5,855	15,934
B-II. Net membership, end of second year of study	14,351	14,667	29,018	41,576	42,706	84,282

DATA REPORTED BY 14 CITIES—Continued

Third Year of Study Grade 11

(1)	School year ending June 1954					
	Group A cities (Populations between 200,000 and 1,000,000)			Group B cities (Populations over 1,000,000)[1]		
	Male	Female	Total	Male	Female	Total
	(2)	(3)	(4)	(5)	(6)	(7)
B-II. Net membership, end of second year of study (item B-II, second year of study)	14,351	14,667	29,018	41,576	42,706	84,282
E-III. Pupils removed from study group because of retardation or acceleration	399	283	682	------	------	------
F-III. Net membership carried over into third year of study. (B-II minus E-III)						
G-III. Total number of pupils having returned to same school or same school system after dropout. These pupils may have been a part of the original study group or may have dropped out of school during an earlier year	13,952	14,384	28,336	41,576	42,706	84,282
H-III. Pupils entering study group because of retardation (from grade-group above)	316	119	435	------	------	------
J-III. Pupils having entered study group because of acceleration or up-grading (from grade-group below)	154	73	227	------	------	------
K-III. Pupils received from other public schools within the school system (normal transfer)	54	102	156	------	------	------
L-III. Pupils received from other public schools within the school system when transfer also involved retardation (repetition of grade)	522	404	926	------	------	------
C-III. New registrations, or those entered from other school systems—public, parochial, or private—any time during school year	60	48	108	------	------	------
A-III. Total cumulative registrations (Sum of F-III, G-III, H-III, J-III, K-III, L-III, C-III)	929	855	1,784	------	------	------
A-T-III. True third-year membership (Item A-III minus sum of items 1 and 2 below)	15,987	15,985	31,972	46,509	44,353	90,862
	14,595	14,609	29,204	42,671	40,531	83,202

[1] Breakdown into items G-III through C-III not reported by Group B Cities: male, 4,583; female, 1,647; and total, 6,230.

INVOLUNTARY WITHDRAWALS

1. Transferred to other public schools within the same school district	563	449	1,042	2,297	1,967	4,264
2. Transferred to another school district, or to a parochial or private school within the same school district	799	837	1,636	1,541	1,855	3,396
3. Left school, whereabouts unknown	65	53	118	133	152	285
4. Excused from school attendance until close of the school year because of physical disability (Properly certified by a medical doctor)	65	124	189	201	437	638
5. Legally excused or excluded because of uneducability, as determined by an approved psychologist	9	5	14	11	8	19
6. Drafted into the Armed Services	78	0	78	27	0	27
7. Deceased	3	3	6	19	10	29
8. Enforced withdrawals because of commitments to correctional institutions	47	12	59	62	35	97
9. Others	55	70	125	196	315	481
10. Total Involuntary Withdrawals	1,714	1,553	3,267	4,457	4,779	9,236
10-T-III. True Involuntary Withdrawals (item 10 minus sum of items 1 and 2 above)	322	267	589	619	957	1,576

VOLUNTARY WITHDRAWALS

11. Entered verified employment	755	539	1,294	4,187	2,901	7,088
12. Needed at home	8	58	66	230	361	591
13. Enlisted in Armed Services	247	1	248	262	3	265
14. Married	15	432	447	10	234	244
15. Dropped out of school; not employed nor needed at home	407	314	721	1,347	816	2,163
16. Inability to adjust in school	120	74	194	1,191	542	1,733
17. Others	202	176	378	559	369	928
18. Total Voluntary Withdrawals	1,754	1,594	3,348	7,786	5,226	13,012
B-III. Net membership end of third year of study	12,519	12,838	25,357	34,266	34,348	68,614

DATA REPORTED BY 14 CITIES—Continued

Fourth Year of Study, Grade 12

	School year ending June 1954					
	Group A cities (Populations between 250,000 and 1,000,000)			Group B cities (Populations over 1,000,000) [1]		
	Male	Female	Total	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
B-III. Net membership end of third year of study, (Item B-III, third year of study)	12,519	12,838	25,357	34,266	34,348	68,614
E-IV. Pupils removed from study group because of retardation or acceleration	463	229	692			
F-IV. Net membership carried over into fourth year of study (B-III minus E-IV)	12,056	12,609	24,665	34,266	34,348	68,614
G-IV. Total number of pupils having returned to same school or same school system after dropout. These pupils may have been a part of the original study group or may have dropped-out of school during an earlier year	162	55	217			
H-IV. Pupils entering study group because of retardation (from grade-group above)	150	66	225			
J-IV. Pupils having entered study group because of acceleration or up-grading (from grade-group below)	139	206	345			
K-IV. Pupils received from other public schools within the school system (normal transfer)	177	117	294			
L-IV Pupils received from other public schools within the school system when transfer also involved retardation (repetition of grade)	4	3	7			
C-IV. New registrations, or those entered from other school systems—public, parochial, or private—any time during school year	320	362	682			

[1] Breakdown into items C-IV through O-IV not reported by Group B cities: male, 2,48; female, 1,495; and total, 3,941.

A-IV. Total cumulative registrations (sum of F-IV, G-IV, H-IV, J-IV, K-IV, L-IV, C-IV)	72,528	35,844	38,684	26,435	13,418	13,017
A-T-IV. True fourth-year membership (item A-IV minus sum of items 1 and 2 below)	66,602	32,590	34,012	25,718	13,049	12,669
INVOLUNTARY WITHDRAWALS						
1. Transferred to other public schools within the same school district	4,534	2,546	1,988	296	118	178
2. Transferred to another school district, or to a parochial or private school within the same school district	1,392	708	684	421	251	170
3. Left school, whereabouts unknown	109	67	42	96	45	51
4. Excused from school attendance until close of the school year because of physical disability (properly certified by a medical doctor)	269	178	91	76	59	17
5. Legally excused or excluded because of uneducability, as determined by an approved psychologist	2	2	0	5	2	3
6. Drafted into the Armed Services	43	0	43	7	0	7
7. Deceased	18	4	14	4	0	4
8. Enforced withdrawals because of commitments to correctional institutions	41	9	32	20	7	13
9. Others	100	72	28	114	72	42
10. Total Involuntary Withdrawals	6,508	3,586	2,922	1,039	554	485
10-T-IV. True Involuntary Withdrawals (item 10 minus sum of items 1 and 2 above)	582	332	250	322	185	137
VOLUNTARY WITHDRAWALS						
11. Entered verified employment	2,218	989	1,229	416	152	264
12. Needed at home	221	137	84	19	15	4
13. Enlisted in Armed Services	451	2	449	328	0	328
14. Married	280	268	12	344	328	16
15. Dropped out of school; not employed nor needed at home	2,688	1,073	1,615	393	193	200

DATA REPORTED BY 14 CITIES—Continued

Fourth Year of Study, Grade 12

School year ending June 1965

(1)	Group A cities (Populations between 500,000 and 1,000,000)			Group B cities (Populations over 1,000,000) [1]		
	Male (2)	Female (3)	Total (4)	Male (5)	Female (6)	Total (7)
VOLUNTARY WITHDRAWALS—Continued						
16. Inability to adjust in school	54	27	81	529	178	707
17. Others	268	216	484	748	500	1,248
18. Total Voluntary Withdrawals	1,134	931	2,065	4,666	3,147	7,813
M–IV. Membership prior to June 1965 graduation (Item A–T–IV minus the sum of items 10–T–IV and 18)	11,398	11,933	23,331	29,096	29,111	58,207
N–IV. June graduates	10,761	11,412	22,173	23,993	26,913	50,906
B–IV. Net membership after June 1965 graduation (M–IV minus N–IV). This total includes all pupils remaining in the study group because of failure during the current school year	637	521	1,158	5,103	2,198	7,301

INFORMATION PERTAINING TO JUNE 1955 GRADUATES

Classification	Group A cities [1] (population between 200,000 and 1,000,000)			Group B cities [1] (populations over 1,000,000)		
	Male	Female	Total	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
O-IV. Graduates in original study group in September 1951 who remained in same city school system during 4 complete years	6,317	6,443	12,760	12,345	15,664	28,009
P-IV. Graduates in original study group in September 1951 who remained in same school during 4 complete years	5,200	5,503	10,703	9,004	12,750	21,754
Q-IV. Graduates who met requirements for graduation (grades 9–12) in 3½ years or less	227	357	584	347	537	884
R-IV. Graduates who were required to attend school 4½ years or more in meeting requirements for graduation (grades 9–12) (summer school)	358	158	516	598	236	834

[1] 7 of 11 Cities Reported.
[1] 1 of 3 Cities Reported.

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