

IDENTIFICATION OF THE FACTORS  
RELATED TO THE STUDENT FLOW  
WITHIN THE MIDDLE SCHOOLS  
OF USAK PROVINCE, TURKEY  
(A Pilot Study)

Dissertation for the Degree of Ph. D.  
MICHIGAN STATE UNIVERSITY  
AHMET SUDI BULBUL  
1974

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IDENTIFICATION OF THE FACTORS  
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OF USAK PROVINCE, TURKEY  
(A Pilot Study)  
presented by

AHMET SUDI BULBUL

has been accepted towards fulfillment  
of the requirements for

Ph.D. degree in Secondary Education and  
Curriculum



Major professor

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## ABSTRACT

### IDENTIFICATION OF THE FACTORS RELATED TO THE STUDENT FLOW WITHIN THE MIDDLE SCHOOLS OF USAK PROVINCE, TURKEY

(A Pilot Study)

By

Ahmet Sudi Bülbül

The study attempts to identify some of the background characteristics of middle school students which might be related to student flow within the middle schools. The study does not concern itself with the degree of learning mastered by the students, rather it focusses on the destination (passed or failed) of the students at the end of the school year. The aim is to identify the kind of information useful in educational planning to improve middle school productivity and equality of educational opportunity.

Six of the ten middle schools of the Province of Usak are included in the sample. Three of them are city middle schools located in the city of Usak and the remaining three are town middle schools located in different communities. All the students (4130 students) attending the sample schools during the 1970-71 school year are included in the study. This constituted about 65 percent of the total

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students in Usak Province's middle schools. Data is based on the 1970-1971 school year.

Most of the data needed for the study are available in the school records. A student questionnaire was developed to obtain additional information.

The data were processed on a 1620 IBM computer. The data collected are numerical (number of students) and categorical (destinations arrived at the end of the school year). Therefore, the study is descriptive in general. Chi-square Tests are applied to some of the data to test the significance of observed differences.

The overall outcomes of the study reveal the following:

1. At the end of 1970-1971 school year the percentage of the students who failed or dismissed is 32.74 percent for the first grade, 23.38 percent for the second grade, and 21.80 percent for the third grade students;

2. Boys and village primary school graduates fail or are dismissed more than the girls and city-town primary school graduates respectively (both are significant at .05 level);

3. As the level of father's education increases, the percentages of failing and dismissing decrease (significant at .05 level);

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5. As the number of previous failures in middle school increases, the percentages of failing and dismissing also increase (significant at .05 level);

6. The number of teachers at the primary school from which the students graduated is related to success in middle school (significant at .05 level), but there is not a constant pattern. The data indicate that the students graduated from three- and four-teacher primary schools tend to fail and be dismissed more than the others;

7. In the first grade of middle school, the students attending town middle schools are more likely to fail and be dismissed than the students attending city middle schools (significant at .05 level), but in the second grade, third grade and middle school total, no significant difference is found in terms of type of middle school attending;

8. As the grade level increases, the percentages of failing and being dismissed decrease (significant at .05 level).

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(A Pilot Study)

By  
Ahmet Sudi Bülbul

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Department of Education

1974



To Melek,  
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Most of all, a special thank you goes to the author's wife, Melek, for her bountiful understanding and encouragement throughout the study. To my children, Sema and Feza, my thanks for letting me put first attention to the project during these past months.

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Middle School

11. Horizontal  
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13. Percentages  
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Number of  
School Grd  
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I. Percentage  
Number of  
School Grd  
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J. Percentage  
Number of  
School Grd  
Third Grd

K. Results of  
Between M.  
by Sex, T.  
of Middle

L. The Rank of  
Middle Grd  
Those 6-12  
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for Type 1  
Grade. . .

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9. Percentage of  
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and Type c

10. Results of  
Between M.  
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Attendance

11. The Rank  
Middle St  
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Test Value

12. Percentage of  
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3. Percentage  
Village and  
by Grade

4. Number of  
Schools by  
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Village Score  
in Task Force

6. Percentage  
1971-1972  
Turkey and

7. Percentage  
Turkey and

8. Percentage  
City-Town  
Students  
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2. Percentage  
Level in  
Province

3. Percentage  
Middle School  
Graduated

4. Percentage  
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5. Percentage  
Primary School  
Middle School

6. Percentage  
Primary School

7. Percentage  
Primary School

8. Percentage  
of Primary  
School Age

9. Percentage  
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Level

11. Percentage  
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(2). Percentage  
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(2). Vertical  
of Farmer's  
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(2). Percentage  
at Each  
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12. Vertical: Pa  
of Mother's  
Graduated

13. Horizontal  
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and Grade

14. Percentage  
Mother's  
Graduated,  
Level . . .

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21. Vertical: A  
Primary  
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22. Horizontal  
School: Gr  
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12. Percentage  
Number of  
School Gr  
Grade Level

13. Percentage  
Number of  
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14. Percentage  
Previous  
and Grade

15. Vertical  
Level of  
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Level . . .

16. Horizontal  
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17. Percentage  
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21. Percentage  
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23. Percentage

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The basic purpose

is to obtain from

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purpose of this

framework indicates

directional procedure

undertaken to study

objectives, definitions

and identification

are imposed. The

following statements

A. Statement of

B. Need for

C. Need for

D. Scope of

E. Direction

F. Variables

Selection

G. Summary

the Study

H. Definition

I. Assumptions

A. Statement of

1. Expansion

tion for

## CHAPTER I

### INTRODUCTION

The basic purpose of the following research was to study certain factors which may have an important bearing on the student flow within Turkish middle schools. The purpose of this initial chapter is to provide a general framework indicating the nature of this important Turkish educational problem, the need for the research which was undertaken to study the problem, the study's purposes and objectives, definitions of variables and terms employed, and identification of assumptions and limitations which were imposed. The chapter is organized according to the following sub-headings:

- A. Statement of the Problem
- B. Need for the Study
- C. Need for Better Data
- D. Scope and Purpose of the Study
- E. Objectives of the Study
- F. Variables Included in the Study and Criteria for Selecting Variables
- G. Summary of Variables and Their Levels Used in the Study
- H. Definitions of Terms
- I. Assumptions and Limitations of the Study

#### A. Statement of the Problem

- 1. Expansion of Lower Secondary Education and Transition from Primary into Secondary Education.

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Secret S. S.  
Literacy in the  
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Society, at Moscow

After the proclamation of the Turkish Republic (1923), Turkey adopted as a policy the modernization of its educational system and the expansion of educational opportunities. Since that time, there has been a strong emphasis on the expansion of education, especially on five-year compulsory primary education for all.

One observes that from the very beginning of the Republic several attempts have been made to expand and improve primary school facilities with the aim of increasing the rate and the level of literacy in the country. Primary education always had a priority in the educational policies of Turkey.

Among the measures taken during the early years of the Republic was the abolition of different earlier types of schools and replacing them with modern schools with a standard school year and standard curriculum. Through legislative acts various attempts were made to build and improve primary school buildings, to finance schools, to improve curriculum, to supply teachers and to ensure attendance.<sup>1</sup>

Until 1939, there were three years of compulsory education in villages and five years in towns and cities.

---

<sup>1</sup>Ahmet Sudi Bülbül, The Efforts on the Eradication of Illiteracy in Turkey, a paper presented in Midwest Regional Conference of Comparative and International Education Society, at Michigan State University, April 16-17, 1971.

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secondary schools  
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Table 1 show  
this middle sc  
schools increase  
number of new en  
1981 increase,  
91,217 to 916,1

<sup>2</sup> State Plan  
for Development  
1981-83, at  
State Plan, 1981-83,  
1981-83, State

In 1939, compulsory education was raised to five years in villages too. Today the compulsory school attendance age is 7-14.

As a result of this commitment, the enrollment in Turkey's primary schools, expressed as a percentage of the 7-12 age group, has reached to 87.62% in 1971-1972 school year. At the end of the Third Five Year Development Plan (1977) it is intended that there will be no children in this age group without five years primary school opportunities.<sup>2</sup>

Partly because of the expansion of primary education and partly because of the policies followed to increase the educational level of the populace beyond primary education, Turkey has witnessed a rapid increase in the demands for secondary schooling, in the number of secondary schools, and in the number of secondary students enrolled every year.

Table 1 shows this increase for the past six years in public middle schools. In six years the number of these schools increased from 780 to 1909 (245% increase); the number of new enrollments increased from 197,425 to 311,425 (158% increase) and the total number of students rose from 488,817 to 906,187 (185% increase). But the transition

---

<sup>2</sup> State Planning Organization, Turkey (SPO), Third Five Year Development Plan, 1973-1977 (Ankara, 1973), Turkish Copy, p. 803, and Turkey Ministry of Education, PAKD, 67 İlde Okul, Öğretmen, Öğrenci Sayıları, 1972-1973 (Ankara: MEB, PAKD, Statistical Division, 1973), p. 7.

population 1980

0.0, because

order of priority

Table 1. Increase

Year	Increase	of	the	population
1980	1.0	1.0	1.0	1.0
1981	1.0	1.0	1.0	1.0
1982	1.0	1.0	1.0	1.0
1983	1.0	1.0	1.0	1.0
1984	1.0	1.0	1.0	1.0
1985	1.0	1.0	1.0	1.0

Ministry of Education  
Department of Education  
Ministry of Education  
Office of the Secretary  
Ministry of Education  
Office of the Secretary

Table 1. Increase  
in the number of  
private schools  
in the year  
1980-1985  
if they were to  
become public  
schools. The  
number of private  
schools would be  
100,000.

proportion into middle school increased only from 38.6% to 42.2%, because there was also a large increase in the number of primary school graduates over the same period.

Table 1. Increase in the Number of Public Middle Schools and Students<sup>3</sup>

School Year	Number of Total Schools	Number of New Schools Added	New Enrollment	Transition Proportion from Primary Graduates	Total Students
1966-1967+	780	132	197,425	38.6	488,717
1967-1968+	930	155	207,755	38.8	562,593
1968-1969+	1,046	175	288,189	40.5	633,635
1969-1970+	1,499	243	264,718	42.4	701,919
1970-1971++	1,728	229	316,311	44.5	776,790
1971-1972+++	1,909	181	311,425	42.2	906,187

+Ministry of Education (MOE), Ortaöğretim Genel Müdürlüğü, Yıllık, 1969-1970 (Ankara, 1971), pp. 126-127.

++MOE, Statistical Documents of Planning Research and Coordination Office (the Turkish Initials are PAKD).

+++MOE, PAKD, 67 İlde Okul, Öğretmen, Öğrenci Sayıları, op. cit., p. 7.

<sup>3</sup>Table 1 includes only public middle schools which are called "Resmi Ortaokullar". Because additional information for private middle school and for vocational and technical middle schools are broken down differently, in order not to confuse the reader the data are not included in Table 1. If they were to be included, the total number of middle schools would become 2,173; new enrollment would become 360,800; the transition proportion from primary graduates would become 47.83%; and the number of total students would become 958,407, for the 1971-1972 school year.



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Tennessee  
Knoxville, Tenn.  
1970, 1971

Despite a continuous increase, one notices that the transition proportion for the previous school year's primary graduates was less than 50% in the 1971-1972 school year. It means that more than half of the primary graduates did not continue their education beyond primary school. On the other hand, the total number of students attending middle schools in 1970-1971 constituted only about 31.0% of the total number of the children in the middle school age group.<sup>4</sup> According to long-term planned targets, the school participation percentage for the 13-15 age group at middle school level will be 50% in 1977 and 75% in 1995.<sup>5</sup>

When we break down the population of primary school graduates into two categories, graduated from a "city-town" or from a "village" primary school, we observe a large difference between the two groups. The last three years' figures are given in Table 2 as an example.

The following observations seem important in Table 2:

1. The percentages of the village primary graduates in the total numbers of primary graduates are 61.5% for 1968-1969, 61.6% for 1969-1970, and 60.7% for 1970-1971 school year; but the percentages of village graduates in the total numbers of new middle school enrollment are 33.0%, 36.0% and 35.9% for the same school years.

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<sup>4</sup>Nurettin Fidan, Equality of Educational Opportunity in Turkey, A Quantitative Approach (East Lansing: Michigan State University, 1971, Thesis for the Degree of Ph.D.), p. 103.

<sup>5</sup>SPO, Third Five Year Development Plan, op. cit., p. 820.

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2. The transition proportions into middle school for "city-town" primary graduates are 70.6% for 1968-1969, 70.7% for 1969-1970, and 72.6% for 1970-1971; but the proportions of village primary graduates are 21.8%, 24.8% and 26.3%, respectively.
3. Transition proportions into middle school for "city-town" primary graduates did not change between 1968-1969 and 1969-1970; but for the following school year it increased 2.0 percent. The same proportions for the village primary graduates increased 3.3% between 1968-1969 and 1969-1970; and only 1.6% for the following school year.
4. Total transition proportions kept increasing about 2.0% each year. This 2% increase meant about 36,000 more students in secondary schools in 1969-1970; and 50,000 more students in the following school year.

The figures in Table 2 are broken down into sex variables for each category in Table 3.

Table 3 indicates: (1) the transition proportions for females is much smaller than it is for males, either for "city-town" graduates or "village" graduates. But the difference between male and female city-town primary graduates is smaller than the difference between male and female village primary school graduates; (2) In 1969-1970 the transition proportion for male city-town graduates increased only 0.6% while decreasing 0.4% for female city-town graduates. But transition proportions increased by 3.4% for male and 2.6% for female village primary school graduates. In 1970-1971 the transition proportion for male city-town graduates increased by 3.1%, while it increased only 0.7% for female city-town primary graduates. In the same school year,

Table 2. Number of City Town and Village Primary School Graduates and Translation Proportions into Middle School (1960-1969 and 1970-1971)

	Type of Primary	Number of Graduates	Number of This Year	Translation Proportion

Table 2. Number of City-Town and Village Primary School Graduates and Transition Proportions into Middle School (1968-1969 and 1970-1971)

Year	Type of Primary School Graduated	Number of Previous Year Primary School Graduates		Number of This Year Middle School New Enrollment		Transition Proportions into Middle School
		N	%	N	%	
1968 and 1969	City-Town	216,563	38.5	152,920	67.0	70.6
	Village	345,570	61.5	75,269	33.0	21.8
	Total	562,133	100.0	228,189	100.0	40.6
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1969 and 1970	City-Town	239,746	38.4	169,439	64.0	70.7
	Village	384,480	61.6	95,229	36.0	24.8
	Total	624,226	100.0	264,718	100.0	42.4
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1970 and 1971	City-Town	279,281	39.3	202,891	64.1	72.6
	Village	431,702	60.7	113,420	35.9	26.3
	Total	710,983	100.0	316,311	100.0	44.5

Source: MOE, PAKD, Student Flow from Primary into Middle Schools (an unpublished study by Mustafa Aydin, 1971), and Statistical Documents of Educational Statistics Division, PAKD, MOE.

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Source: MCE, FANC  
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Table 3. Number of Primary School Graduates, Middle School New Enrollments and Transition Proportions into Middle Schools, by Type of Primary School and Sex

Year	Type of Primary School Graduates	Sex	Number of Previous Year Primary Graduates	Number of This Year Middle School New Enrollment	Transition Proportions into Middle School
1968 and 1969	City-Town	M	122,678	103,411	83.5
		F	93,855	50,509	53.8
	Village	M	233,459	66,440	28.5
		F	112,111	8,829	7.9
	Total	M	356,137	168,851	47.4
		F	205,996	59,338	28.8
Grand Total			562,133	228,189	40.6
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1969 and 1970	City-Town	M	134,840	113,373	84.1
		F	104,906	56,066	53.4
	Village	M	256,405	81,870	31.9
		F	128,075	13,409	10.5
	Total	M	391,245	195,243	49.9
		F	232,981	69,475	29.8
Grand Total			624,226	264,718	42.4
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1970 and 1971	City-Town	M	156,431	136,383	87.2
		F	122,850	66,508	54.1
	Village	M	279,609	96,443	34.5
		F	152,093	16,977	11.2
	Total	M	436,040	232,826	53.4
		F	274,943	83,485	30.4
Grand Total			710,983	316,311	44.5

Source: MOE, PAKD, Student Flow from Primary into Middle Schools (an unpublished study by Mustafa Aydin, 1971), and Statistical Documents of Educational Statistics Division, PAKD, MOE.



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transition proportions increased only 2.6% for male village primary graduates and increased only 0.7% for female village primary graduates; (3) Transition proportions for female city-town graduates is much higher than it is for the male village graduates.

The policy set by the Second Five Year Development Plan (1968-1972) in terms of expansion of middle school education was as follows:

Within the 1968-1972 period, the capacity of general secondary schools will be increased to provide the proper number of graduates commensurate with the requirement of the enlarged capacity of the higher levels of education.<sup>6</sup>

Table 4 shows that planned targets at the middle school level were not reached.

Table 4. Actualization of Planned Targets in Middle School New Enrollments

Years	Planned Targets	Actualization
1967-1968	-	212,000
1968-1969	227,000	232,400
1969-1970	296,000	268,400
1970-1971	390,000	304,700
1971-1972	361,000	324,900

Source: SPO, Third Five Year Development Plan, p. 814.

<sup>6</sup>SPO, Second Five Year Development Plan, 1968-1972 (Ankara, 1969, English Copy), p. 183.

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Planned targets of schooling for the 13-15 age group were 19.0% in 1965-1966 and 42.4% for 1970-1971, but actualization was 18.8% for 1965-1966 and 30.4% for 1970-1971.<sup>7</sup> Now the Third Five Year Development Plan's target is 50.7% for 1977, and the long-run target is 75.2% for 1995.<sup>8</sup>

It is safe to assume that as in other developing countries, in Turkey too the social demand for middle schools will continue to increase. It would not be surprising if the actualization of schooling for 13-15 age group becomes higher by 1995 than the planned targets simply because of reasons pointed out by Philip Foster in the following paragraph:

The combination of the limited opportunities for paid-wage or salaried employment combined with a rapid expansion in the size of the outputs of the educational system tends to rapidly raise the minimal educational qualifications associated with a given occupational level. This situation tends, in turn, to generate new public demand for access to secondary and higher education; as the occupational currency of a primary school education declines, public pressure for parity of access to superior educational opportunities continues to mount.<sup>9</sup>

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<sup>7</sup> SPO, Third Five Year Development Plan, op. cit., p. 814.

<sup>8</sup> Ibid., p. 820.

<sup>9</sup> Philip Foster, "Access to Schooling", in Don Adams (ed.), Education in National Development (London: Routledge and Kegan Paul, 1961), pp. 14-15.

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No government will reject this pressure combined with the pressures of the commitment to provide "equal educational opportunities for all." Even by pushing available resources to their ceilings, governments will strive to satisfy this strong demand as much as possible. But limited resources and high rates of population increase still will make it very difficult for Turkey to realize three years of secondary education for all. Therefore, the problem of "who gets educated" will continue to be a salient issue.

From the very beginning of the proclamation of the Turkish Republic, the country has set objectives and policies concerned with the problem of "equality of educational opportunities." In the First Five Year Development Plan (1963-1977) one stated objective was:

Efforts will be made to equalize the education and teaching levels of schools in various regions, with a view to ensuring equal education opportunities for all citizens.<sup>10</sup>

The same objective was repeated in the Second Five Year Development Plan, with different words, as follows:

The possibility to take advantage of the State-provided educational facilities beyond primary level will be secured according to the principle of equality of opportunity.<sup>11</sup>

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<sup>10</sup>SPO, First Five Year Development Plan, 1963-1977 (Ankara: 1963, English Copy), p. 432.

<sup>11</sup>SPO, Second Five Year Development Plan, op. cit., p. 175.

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Neither of the development plans gives a clear definition of "equal education opportunities". There have not been clear, continuing policies, and the necessary measures that should be taken toward the realization of these objectives have not been developed clearly. Nevertheless, all the governments have tried in one way and another to provide equal opportunities for all.

Despite these efforts, the problems related to equity still remain. The present situation and problem areas which are recognized and publicly mentioned in terms of educational opportunity could be summarized as follows:

First is the low participation rate at the middle school level. As mentioned above, in 1970 only 31% of the 13-15 age group were in the middle schools. The planned targets of schooling at this level are 50% for 1977 and 75% for 1995. It means there still will be 25% of the age group in 1995 whose education terminates before middle school level. This is one part of the problem.

Secondly, there are regional and provincial differences in terms of middle school participation. Fidan found in his study that national average participation for the middle school (which he calls "lower secondary") was 31% in 1970 in Turkey. There were twelve provinces with averages of 18.9% or below, one province with an average between 18.9%-20%, thirty-two provinces with averages between 20%-31%;



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In the third place, there are differences between rural-urban, and between male-female populations in terms of middle school participation, as Table 1 and Table 2 indicate.

Based on these observations, we can conclude that Turkish children do not have equal opportunities to continue their education beyond primary level. The province and region where they live, the type of primary school from which they graduate, and their sex are significantly related to transition proportions into middle schools. What other related factors may exist are not yet known.

We do not know for sure what other factors affect the flow of students from primary to middle school and determine which village primary school graduates (male or female) will be able to enter the middle schools, and whose education will terminate after primary school. Again, we do not know which male-female and city-town primary school graduates will be leaving education after primary school.

Assume that all of the children in the 7-12 age group will be provided a five year primary education in Turkey by 1977. This is one of the requirements of equity to prepare to enter middle school. But will there be other factors affecting their entry into middle schools which will

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<sup>12</sup>Nurettin Fidan, op. cit., p. 103.

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be present. It goes without saying that these factors go beyond the factors that we already have identified. As Foster points out in the following paragraphs, secondary level education has a very important function in the process of general mobility. Such related factors should be more closely investigated.

In some respects, problems arising from inequalities in access to primary schooling have less salience than those stemming from restrictions on entry to secondary and higher institutions. Whatever long-run contribution to development will be achieved through the extension of widespread primary education and literacy, there is little doubt from the viewpoint of clientele of the schools that a primary education alone now provides little opportunity for occupational or social mobility in an increasing number of less developed nations. Increasing pressure for higher institutions where largely control access to upper and middle level occupational roles. Since postprimary education is in short supply studies of recruitment patterns into this sector can provide insights into general mobility processes in these societies and cast light on the characteristics of their potential elites. Studies of secondary rather than university populations are particularly significant insofar as the secondary schools frequently have a dual function of providing terminal education for a proportion of their pupils while routing others to higher institutions.

Unfortunately, relatively few investigations of recruitment patterns into selective secondary institutions have been undertaken in the developing areas.<sup>13</sup>

This is only one side of the problem. Another side, which has not been widely recognized in general by the authorities, is the problem of what happens to those students who are in fact able to enter into middle school.

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<sup>13</sup>Foster, op. cit., p. 23.

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## 2. Transition Within the Middle Schools.

The fact is that the middle schools in Turkey are very selective educational institutions. Registration is open to everybody who is a graduate of primary school but many of the students who enter the middle school fail and repeat the grades and then are dismissed according to regulations, or simply drop out of the school.

The decreased number of students enrolled from one grade to the next gives an idea about the selective character of the Turkish middle school. For example, in 1968-1969 there were 274,126 students in the first grades of the middle school, 193,120 in the second grade, and 133,077 in the third grade. This decrease can not be explained by the increased number of newly opened schools.

Table 5 shows the percentages for the last eight years of the middle school students who passed and were promoted from the grades which they attended that year.

Table 5 shows that the passing rates of middle school students do not remain the same from one school year to the next. Rates vary between 49.9% and 66.9% for the first grade; between 54.8% and 74.6% for the second grade; and between 50.3% and 80.4% for the third grade. During the latter years, there has been a tendency for the rates to increase. For each school year (with the exception of 1964-1965) the first grade has the lowest and the third grade has

Table 5. Percentage  
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Table 5. Percentages of Students Who Passed, by Grade Levels (1961-1962 to 1968-1969)

Years	Grades		
	I	II	III
1961-1962	66.9	65.2	50.3
1962-1963	61.2	66.0	66.4
1963-1964	49.9	54.8	52.9
1964-1965	57.0	71.0	67.0
1965-1966	59.0	70.3	71.7
1966-1967	57.8	68.8	73.3
1967-1968	62.6	70.0	80.4
1968-1969	60.0	70.0	75.9

Source: MOE, Ortaöğretim Genel Müdürlüğü, Yıllık, 1969-1970, op. cit., pp. 75-127.

the highest passing rates, which is characteristic of a selective educational system. Factors which could be related to changes in the national average of passing rates are not known.

The overall percentage of passing students across the grades by sexes from 1955-1956 to 1964-1965 are shown in Table 6.

Table 6 shows that for each of the school years included in the table the national average of passing rates for females was higher than for the males (except 1965-1967, where the rates were equal).



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**Table 6.** Overall Passing Rates in Middle School by Sex (1955-1956 to 1964-1965)

Years	Males (%)	Females (%)	Total (%)
1955-1956	56	57	56
1956-1957	50	50	50
1957-1958	50	52	50
1958-1959	50	55	52
1959-1960	46	53	48
1960-1961	47	53	48
1961-1962	49	53	51
1962-1963	48	56	50
1963-1964	55	61	56
1964-1965	59	67	61

Source: State Statistical Institute (SSI), Milli Eğitim Hareketleri, 1927-1966 (Ankara, 1967), p. 23.

Several attempts have been made at different times to increase the productivity of secondary schools through changes in the promotion and examination regulations, changes which were intended to make promotion easier for the students. But despite these efforts, the philosophy, objectives and functions of secondary schools have kept their selective characteristics, in their structure, curriculum, promotion system and the methods of evaluating the student's success. Hence, changes merely in some of the examination regulations have not generated the intended

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increase in productivity.<sup>14</sup>

There are discrepancies among available Turkish data on school success as calculated by different offices or different persons. One reason for this is the use of different definitions of "passing" or "failing". Some data include dropouts in the category of "failing"; some do not. Some data include in the "failing" category those students who stay out of school for a period of time waiting until the end of the year to take re-examinations in courses which they failed earlier in the year and which prevent them from moving forward until they do pass the re-examinations. Other data do not include these "waiting" students as "failing".

There are also discrepancies between calculated figures of "productivity" in the middle schools, partly because of the reasons mentioned above and partly because of the unavailability of data needed to make such calculations. Nevertheless, according to an estimation made by the State Planning Organization, "productivity at Middle Schools decreased from 70% in 1960 to 50% in 1965".<sup>15</sup> If this

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<sup>14</sup>M. Andreas Kazamias, Education and Quest For Modernity in Turkey (London: George Allen and Ltd., 1966), p. 133.

<sup>15</sup>SPO, Second Five Year Development Plan, op. cit., p. 178.

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Whatever the differences in estimations, it is very clear that a considerable portion of the efforts to expand middle school education in Turkey is cancelled out by low productivity. Despite the seriousness of the problem, the process of promotion has not been investigated systematically and continuously. Factors related to (or affecting) this process in middle schools are not adequately identified.

As stated by René Maheu at the International Conference on Educational Planning held in Paris in August, 1968:

The internal productivity of education is low. Too often it seems that educational establishments become incapable of achieving their immediate object, which is to carry pupils and students through the termination of their studies.<sup>16</sup>

Since the general middle schools and lycees have been regarded as ~~selective~~ institutions for all, it is not surprising to have such low internal productivity rates in the Turkish middle school.

According to Anderson and Bowman:

Selection refers to the choosing of some out of a larger number of pupils for promotion to the next class in school or admission to the next successive level of schooling. Where wastage is chronic the numbers of pupils can diminish steadily and rigidly from one grade to the next; in more established systems it occurs normally at the breaks, between levels

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<sup>16</sup>UNESCO, Educational Planning, A Survey of Problems and Prospects (UNESCO: ed. cs. 138.3), p. 23.



of system. Behind these figures are common assumptions that school work becomes more difficult with each successive step up the ladder and that some pupils do not have sufficient ability to cope with the more difficult work.

Apart from the question of cost, few school systems have seriously investigated the assumption that pupils can learn something worthwhile sufficiently to justify their remaining indefinitely in school.

In selective school systems and particularly in the underdeveloped countries there is a heavy reliance upon formal examinations (apart from usual classroom tests) as a mechanism of selection. The queue of repeaters and the heavy rate of withdrawal from school are in considerable degree the results of using examinations.<sup>17</sup>

The above description applies very well to the Turkish secondary education system. Andreas Kazamias also touches on the selective character of Turkish secondary schools.

One of the main purposes of selective devices is to eliminate those who are not able to meet the standards and to allow the others to proceed. In Turkey, since 1923, many changes have been made in the rules and regulations governing the system of examinations but their selective function has constantly been maintained. It has been an avowed policy of the authorities that lycee must seek to educate only the students who are intellectually superior, and one way of finding out who such persons are is through examinations. Whether those who attend lycee or who are able to graduate are in fact intellectually superior students is another matter. Some writers have expressed strong doubts as to whether the examinations accomplish their aim of screening the most able students.<sup>18</sup>

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<sup>17</sup>C. Arnold Anderson and Mary Jean Bowman, "Theoretical Considerations in Education Planning," ed. Don Adams, in Educational Planning (New York: Syracuse University, 1964), pp. 33-34.

<sup>18</sup>Kazamias, op. cit., p. 135.



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The high rate of failures has come to the attention of many different people including parents, writers, representatives of Parliament and of the Senate, Ministries of Education, and others. The following are a few examples.

The Minister of Education, Ismail Arar, said in the Senate on February 2, 1972, that "According to the records of the Ministry of Education, the number of students who graduate from middle schools without any failure is 57 in 1000."<sup>19</sup>

This is a report from a daily newspaper:

Representative said in the Parliament last night that last year 1,029,201 students in primary schools, 238,111 students in middle schools, and 69,515 students in lycees have failed, and 36,881 students have been dismissed. The system of promotion, which is an important part of the system of education, must be adjusted to the requirements of contemporary understanding of training and educating mankind.<sup>20</sup>

Minister of Education Sabahattin Ozbek said in the Parliament on February 21, 1973, during the discussion of the Ministry of Education (MOE) 1973 budget,

We are going to abolish our selective education system and replace it with a new system which aims not to eliminate thousands of students but to train and educate them all. I just do not understand how an education system can fail more than one million of the students each year. A child is not to be failed, but trained and educated.<sup>21</sup>

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<sup>19</sup>MOE, Milli Eđitim Bakanı Ismail Arar'ın Seneto Konusması (a mimeographed document).

<sup>20</sup>Milliyet, February 22, 1973.

<sup>21</sup>Ibid., p. 9.

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Despite all the complaints about the high rates of failure in schools, it is also a common complaint among the teachers, as well as among the intellectuals who are also the products of the same system, that secondary schools in Turkey are "lowering the standards". When the low internal productivity of education is criticized, it is also usually said, "It is an excellent thing to increase productivity, but quality must not be sacrificed by number." As pointed out by UNESCO:

This value judgment (or quality) is definitely open to challenge. The question is not at all one of preserving in mass education the qualities of a type of education designed for an elite, but of determining the new qualities of education for all. Many current difficulties arise, in a new situation, from imitating 'qualities', means and objectives which belong to another situation.<sup>22</sup>

Because at least one-fourth of the governmental efforts to expand secondary education is cancelled out by the low rate of passing, increasing attention has been focussed on this problem, especially in recent years. But the apparent contradiction has also been noted: to increase productivity could mean "low quality" or "low standards". The rules and regulations of promotion and examination have changed several times in order to increase productivity, but the system's selective functions have been constantly maintained. Several efforts have been made to expand secondary educational opportunities for all, but the belief that only those

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<sup>22</sup>UNESCO, Educational Planning, op. cit., p. 23.

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with "superior ability" should continue their education has been held, in fact, through the regulations of promotion and examination. Despite the changes of the rules to make promotion "easier", still at the end of each school year many students are failed, or are dismissed, or drop out of school.

The Ministry of Education and the State Statistical Institute annually collect data on the promotion and examination results from schools. These data are divided only into sex and grade level variables. The data, therefore, do not tell us much about the process of selection within the middle school.

Readers not familiar with the Turkish secondary schools promotion system should be alerted to the fact that it is extremely elaborate. Definitions and explanations of the complexities involved in the promotion system of secondary education are given below (see especially pp. 57-64).

### 3. The Problem

The explanation made so far tries to point out:

- (1) Turkish children do not have equal opportunities to continue their education beyond the primary school.
- (2) Many of the students are not successful, fail, are dismissed or drop out of the middle school because of the selectivity of the school system.
- (3) It might be possible that the student transition pattern within the middle

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schools is significantly determined by non-intellectual personal and background characteristics of the students.

This study attempts to learn whether some of the non-intellectual personal and background characteristics of the students do help determine the transition pattern within the middle school system.

#### B. Need for the Study

Article 50 of the Turkish Constitution reads: "It is the primary task of government to meet the educational and training needs of the people." Article 21 denies any special privileges to any individual or social group. To be educated is accepted by the Constitution as a social and legal right of the individual.

In the programs of all the political parties, special attention is given to "freedom", to "equality", and to social and economic "welfare".

The development plans have emphasized the "democratic way of life" and have aimed to realize "equality of educational opportunity", a "standard of living compatible with human dignity" on the basis of "equity".

As one of the general objectives of education, the Third Five Year Development Plan says that the "educational system should be organized so as to realize the principles of equality of opportunity and social justice."<sup>23</sup>

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<sup>23</sup> SPO, Third Five Year Development Plan, op. cit., p. 786.



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The National Education Reform Strategy adopts two primary strategies: one is "universality of education", the other one is "equality of opportunity in education".<sup>24</sup> "Universality of education" means that "educational institutions are open to every individual regardless of language, race, sex, and religion. No individual, family, group, or class will be accorded any special privilege in the educational system". "Equality of opportunity in education" means that "everyone will be provided equal opportunity to be educated in accordance with his interests, talents, and abilities".

The Turkish Constitution also makes "planned economic and social development" an imperative.<sup>25</sup>

Yet there has not been enough systematic study carried out to obtain data needed in order to be able to check if these commitments have been realized in the field of education.

### C. Need for Better Data

The data collected yearly show that the productivity rate is low in middle schools. Therefore, a considerable proportion of the resources allocated to education

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<sup>24</sup>MOE, Turkey, National Education Reform Strategy (Ankara, 1973, English Copy), p. 23.

<sup>25</sup>Articles 41 and 102.

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evaporates because of it. Low productivity means not only economic wastage but also failures, dismissals, and drop-outs resulting from inequalities in educational opportunities.

Turkey has committed herself to the aim of providing educational opportunities for all Turkish youngsters beyond the primary school through planned means, regardless of their sex or their socio-economic, regional, or personal background characteristics. To make use of the limited resources as efficiently as possible, the decision-makers, the planners, the central and local administrators, and the teachers must be provided with information about the factors affecting the flow of students into and through secondary schools.

As pointed out by McReynolds,<sup>26</sup> when one looks at the flows of secondary age population into, through and out of the arrays of secondary school institutions, one sees an immensely complicated process which determines which students will be able to enter the various levels and types of secondary schools and will be able to transfer from one status to another within the system they are in. The factors affecting the student flow might be demographic,

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<sup>26</sup>William Peter McReynolds, A Model for The Ontario Educational System (Ontario: Department of Educational Planning, The Ontario Institute of Educational Planning, 1969), p. 65.

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Secondary school facilities are expanding very rapidly in Turkey. The rate of schooling in secondary education is also increasing. But still about 65% of the age group are not included in middle schools and many of the students who are able to enter the middle school are not successful. But what are the distinguishing characteristics, if any, of those who are able to enter, who are able to pass, and who once entered later fail, are dismissed, or drop out? Any information concerning these questions could be very valuable for establishing educational policies and deciding on priorities.

In the absence of data, decisions are made on the basis of educated guesses about the situation, which may or may not reflect the realities. The development plans of a country should not be built upon inadequate and insufficient data.

The need for the establishment of an educational data processing system which will provide necessary information for the planners and the administrators has been felt since the preparation of the First Five Year Development Plan. With the cooperation of the Turkish Ministry of Education, the Agency for International Development, and Michigan State University, a project was carried out in Turkey called the

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"National Educational Research and Planning Project" (NERP). One of the objectives of this project was to establish a "data bank" in the Planning Research and Coordination Office the Ministry of Education. Following the conclusion of NERP, development of an adequate data processing system continued as an objective of the Turkish Ministry of Education for this purpose; it will be necessary continually to decide what kind of information about students will be included in the data gathering system.

The present study, therefore, is a part of a larger project aiming at the identification of the major factors related to: (a) the flow of students from primary school level to middle school level, (b) from middle school level to the lycee or to lycee level technical and vocational schools (or programs), and (c) the transition of students within each level and type of secondary schools.

Through application of this purpose, those factors which are significantly related to student flow (from one level or type of system to another) and the patterns or transition (within each level of type of system, from one status to a destination) may be identified, and the flow data may be collected annually in the form of an exhaustive or representative set of student records which includes those factors identified as related to the flow of students.





#### D. Scope and the Purpose of the Study

The content of such a project, covering all aspects of student flow in all levels and types of secondary schools far exceeds the scope of a single doctoral dissertation. Therefore, for the purposes of limiting the present initial study to a manageable scope, the single Province of Usak was selected as a pilot province. Based on evidence found in several previous research studies, certain non-intellectual personal and background characteristics of students which could be related to their transition within secondary schools also were selected. Moreover only the first cycle of public secondary schools (middle schools) were included, and the patterns for a given single year (1970-1971) were studied.

As a pilot study, therefore, the present study is limited to identifying some of the non-intellectual factors affecting (or related to) the student transition pattern within the middle schools of Usak Province for the school year, 1970-1971.

#### E. Objectives of the Study

##### 1. Overall Objective

The present secondary schools Promotion and Examination Rules make the transition of the students within the secondary school system a very complicated process. Various rules

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establish many routes to several destinations. In order to understand what goes on in the system in terms of student transition, one has to make detailed investigations (see pp. 57-64 below for further details of the Turkish promotion system).

(Although this study investigates only some parts of the process, still its scope bears on several major problems and issues.) The overall objective of the study is the identification of the non-intellectual factors derived from measures of personal, family, community, and temporary educational attributes of the students which are predictive of (or related to) the middle school transitions from one status to a destination. (The attributes and the destinations are listed and defined in a special section below-- see pp. 35-48.)

The main concern of the study is on the student transition patterns in middle schools of Usak Province, but in order to assist and facilitate the interpretation of the findings, some general objectives in regard to the student flow from primary school into middle school and their comparisons with national figures also are included.

In order to place them in relationship with each other, this study's specific objectives, problem statements and sample hypotheses are presented as follows.

## 2. Specific Objectives, Problem Statements and Hypotheses

### New Enrolled Student Body Composition--Objective No. 1:

To describe the numerical and percentage values of the new enrolled student body characteristics of Usak middle schools in 1970-1971 school year (by sex and type of primary school graduated) and compare them descriptively with each other and the national figures of the same school year.

#### Problem Statement No. 1:

What are the national numbers and percentages of middle school new enrolled students in each class in terms of sex and type of primary school graduated; do the percentages for different sexes and primary school origins differ from each other?

#### Hypothesis No. 1:

- a) The numbers and percentages will be less for village primary school graduates than for city-town primary school graduates.
- b) The numbers and percentages will be less for girls than for boys.

#### Problem Statement No. 2:

Do the percentages of Usak middle school new enrolled students in each class in terms of sex and type of primary school graduated differ from the national figures of the same school year?

#### Hypothesis No. 2:

The differences between percentages of students in different classes (by sex, and type of primary school graduated) will be less than the national figures of the same school year. But they still will be less for village primary school graduates and girls than for city and town primary school graduates and boys.

### Student Body Composition--Objective No. 2:

To describe the numerical and percentage values of the student body characteristics of Usak, middle schools in 1970-1971 school year (by sex, grade level and type of primary school graduated) and compare them descriptively with the national figures of the same school year.

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Problem Statement No. 3:

What are the national numbers and percentages of middle school students in each class by sex, grade level, and type of primary school graduated?

Hypothesis No. 3:

- a) The number and percentages will be less for village primary school graduates than for city-town primary school graduates.
- b) The numbers and percentages will be less for girls than for boys.
- c) The proportional differences between groups (village and city-town primary school background) will increase as the grade level increases to the disadvantage of the village primary school graduates.

Problem Statement No. 4:

Do the percentages of Usak middle school students in each class (by sex, grade level, and type of primary school graduated) differ from the national figures of the same school year?

Hypothesis No. 4:

The differences between percentages of students in different classes (by sex, and type of primary school background) will be less than in the national figures of the same school year.

Transition Proportions within Middle Schools--Objective No. 3:

To describe the transition proportions of middle school students of Usak Province at all destinations ("passed, failed and dismissed, drop-out") at the end of the 1970-1971 school year by sex and grade level; and to compare them descriptively with each other and with the national figures of the same school year.

Problem Statement No. 5:

What are the transition proportions of the students at all destinations (by sex and grade level)? Do the figures differ from each other and from the national figures of the same school year?

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Hypothesis No. 5:

- a) There will be no difference between sexes through all grades.
- b) The rates of "failure and dismissed", and "dropout" will decrease as the grade level increases.
- c) The rates of failure and dismissal and dropout will be higher in Uşak Province than in Turkey.

Transition Proportions Within Middle Schools--  
Objective No. 4:

To describe the transition proportions of students (included in the study) for two major destinations (passed, "failed and dismissed") by their selected class attributes (listed and defined in a special section below) and test them to identify if the attributes selected are related to student transition.

Problem Statement No. 6:

Are the selected attributes related to the destinations (of "failing and dismissed", and "passing") at which the students arrive at the end of the school year?

Hypothesis No. 6:

- a) The percentages of "failure" will be higher for the students graduated from a village primary school than for those graduated from a city or town primary school.
- b) Sex will not be related to the destination of failure or pass.
- c) The percentages of "failure" will be higher as the educational level of the father is lower.
- d) The percentages of "failure" will be higher as the educational level of the mother is lower.
- e) The percentages of "failure" will be higher as the number of previous failures is higher.
- f) The percentages of "failure" will be higher as the number of teachers at the primary school graduated is lower.

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- g) The students attending town middle schools will fail less often than the students attending city middle schools.
- h) The differences in percentages of "failure", will decrease as the grade level increases.

Transition Proportions Within Middle Schools--  
Objective No. 5:

To describe the numerical and percentage values of the students (included in the study) who drop out during 1970-1971 (by sex and grade level) and compare them descriptively with each other.

Problem Statement No. 7:

What are the numbers and percentages of middle school drop-outs during 1970-1971 (by sex and grade level); do the percentages for different sexes and grades differ from each other?

Hypothesis No. 7:

- a) More boys will drop out of school than girls.
- b) The percentage of drop-outs will decrease as the grade level increases.

Transition Proportions Within Middle Schools--  
Objective No. 6:

To describe the numerical and percentage values of the students (included in the study) who arrived at "dismissed" destinations at the end of the 1970-1971 school year, by sex and grade level, and compare them descriptively with each other.

Problem Statement No. 8:

Do the percentages of the students (included in the study) who reach "dismissed" destinations differ from each other in terms of sex and grade level?

Hypothesis No. 8:

The differences of the percentage who reach "dismissed" destination will not differ from each other in terms of sex through all grades, but their percentages will be highest at the third grade and lowest at the second grade.

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It should be noted that the hypotheses above are stated positively in terms of expected observations though in some cases (as in the last hypothesis, for instance) no sizeable observed differences are expected. Nevertheless, for purposes of statistical analysis, all hypotheses will be tested in the null form, since it is not possible to submit positively stated hypotheses to statistical tests of significance. Then where significant differences occur, they can be trusted to be real. Where significant differences do occur, it will not, however, be possible to assert that there are no differences.

F. Variables Included in the Study and Criteria  
Used for Selecting Variables

Several methodological and practical considerations entered into deciding which personal attributes should be employed in the study. Because this is considered as a part of a general student flow project, as explained earlier, the development of criteria for the selection of attributes was affected by the presumed objectives and nature of this larger project.

1. Criteria Used for Selection of Independent  
Variables

The first criterion used for the selection of attributes was that attributes chosen should be related in some way to educational achievement, as based on the findings of

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The second criterion is that the classes which are defined by attributes must have a substantial membership, in order to justify their inclusion and to insure stability in the class membership.

The third criterion is that the attributes chosen should not be highly related to each other. For example, SES background of the family, father's occupation and parent's education should not be selected at the same time since these attributes would themselves be expected to be highly correlated.

The fourth criterion is that the data on the chosen attributes must be reasonably accurately collectable by individual schools and reported annually. "Reliability" and "practicability" considerations are involved in this criterion. For example, although it is very likely correlated with achievement, the motivation level of the students would not fit this criterion because it could not be easily and reliably collected by the schools annually. At the same time motivation would not fit the second criterion because of its changeable character over time.

For the same reasons, factors such as student's self conception of ability, teacher's or family's expectation of the student, etc., were not chosen, although they may be

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The fifth criterion used for the selection of attributes was related with the amount (number) of independent variables that could be included. There were two considerations: (1) From the practical point of view, how many independent variables are manageable in a data collection to be collected annually from all the secondary schools of Turkey (or from a sample population representing the whole? (2) In this particular study, how many different variables can we feasibly deal with? The criterion established was that the number of independent variables should not be more than can regularly be managed.

## 2. Discussion of the Independent Variables Selected

Eight attributes which fit the criteria were selected. They are: sex, grade level, type of primary school from which graduated, type of middle school now attending, number of previous failures, father's education, mother's education, and number of teachers at the primary school from which graduated.

Sex and grade level have fixed categories. The levels of the remaining variables were decided on the basis of further criteria as indicated in the following discussions.

### a. Educational Level of the Parents

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parents. In this study the father's education level is included. It was discerned that, in Turkey, fathers have more education than mothers which gives this variable a larger variability.

There are evidences from several studies that the level of mother's education is more related to the level of student achievement than the level of father's education is since the correlation between father's and mother's level of education is less in Turkey than it is in developed countries; it may be possible that in Turkey the mother's level of education is much more related to the student transition within middle school than the level of father's education. Both parent's levels were included in the study.

The educational levels of the parents vary from illiteracy to university graduation and above. Since most of the population are in the lower levels, there is a need to establish meaningful categories, especially at the lower levels.

There are no established categories of parents' level of education in Turkey developed for educational research purposes, so the researcher had to develop his own categories.

A recent study made by Nurettin Fidan used five categories: "no schooling", "primary", "lower secondary", "Lycee and vocational", and "higher than secondary".

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"Primary" includes those with education below primary (did attend primary but not completed), and the first category ("no schooling") includes those who are literate (know how to read and write) but did not have any formal primary education.<sup>27</sup>

Those parents who are literate but have no formal schooling seemed to the researcher of this study to be closer to those with some formal primary education or graduates of primary school than to those who are in fact illiterate.

"Higher education" covers several different levels of education in Turkey. The people with years of education totaling from 12 to 15 years or more are all considered to have "higher" education. In fact, the number of students in middle schools having parents with higher education is very low. For these reasons "upper secondary graduation or more" were put together in this study and formed a single category.

The student questionnaire used in this study has ten levels of parents' education. Therefore, for future analyses, different categories of parents' education could be formed using these same data. However, the four categories employed in this study (see page 46 below) seemed meaningful as well as practical for future use in the annual data gathering system.

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<sup>27</sup>Fidan, op cit., p. 164.

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b. Type of Primary School from Which Graduated

The State Statistical Institute collects data on this variable and divides the students at each grade into the type of primary school from which they graduated. The Ministry of Education does the same thing, but only for newly enrolled students. Neither Institution, however, uses this variable to correlate school outcomes (failing, passing, etc.). This study intends to investigate whether these variables are related to school outcomes.

The State Statistical Institute and the Ministry of Education both use two categories for primary schools, "village primary school" and "city and town primary school". There is not, however, a clear definition of a village or town or a city. In this study the same categories also are used, but they are consistently and clearly defined.

By using the two types of primary school origins as independent variables, it was intended to cover at least two important factors related to the achievement of students. One is the different physical facilities of schools; the second is the different educational and social environments of the communities in which students attended primary school.

In Turkey the central towns of the provinces are designated "cities" although most of them do not have the characteristics of an urbanized community. In fact, a central town of one province could be smaller in terms of population

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than a town in another province which is not the "central" town. A small town in one region of the country may actually have more schools and other educational and social facilities than a larger town in another region.

For these reasons, in this study the definitions of the type of the student's primary school is not based on administrative titles or the population of the communities, but is based instead on the educational facilities of the community in which the primary school is located.

Thus, in the present study, a primary school is considered to be a "town or city" school if it is located in any community ("central" or not) in which there is also located any type of secondary school (middle school or lycee-level school). A "village" primary school is one located in a community where there are no secondary school facilities.

#### c. Type of Middle School Now Attending

The middle schools are divided into two categories: "town" and "city" middle schools. The middle schools located in communities which have no higher level schools than middle schools form the category of "town" middle school. Other located in communities with lycee and/or lycee level vocational schools form the category of "city" middle schools. The reason for this is that, though the communities may not be socially and economically different from each other, it was thought that the physical facilities, academic norms,

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expectations of teachers for students, criteria used to evaluate the students' achievements etc., could be different in the middle schools in these two categories.

This possibility was not based on research evidence but was based instead on an expectation of the researcher, which proved to be shared by several of his Turkish colleagues whose opinions were solicited.

d. Number of Previous Failures

Number of previous failures may be thought of as either a dependent or an independent variable. In this study, failure in the present year is used as a dependent variable; but when it happens to a student, or has happened to him, then it was assumed that in subsequent years it works as an independent variable and may be correlated with subsequent failures. So in this study, this year's "failure" is used as a dependent variable, but previous failure as an independent variable.

The relationship between number of previous failures and the development of self-conception of ability is discussed below in the chapter dealing with related literature.

e. Number of Teachers at the Primary School  
from Which Graduated

Village primary schools in Turkey show a considerable variation in terms of learning facilities they provide for their students. There are village primary schools where only one teacher teaches all of the five grades himself.

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Some of them have more than five teachers. Since a teacher teaching five grades has to divide his teaching time into five segments, it could be hypothesized that the students in schools with fewer teachers might have fewer opportunities to learn.

Table 7 shows the number of primary schools in Turkey by number of teachers.

Table 7. Number of Primary Schools by Number of Teachers  
1969-1970 School Year

Number of Teachers	Number of Schools
1	13,408
2	11,355
3	4,002
4	2,052
5	1,577
6 or more	4,718
Total	37,112

Source: MOE, İlköğretim Yılı, 1969-1970, p .31.

Note that the majority of Turkish primary schools had no more than one or two teachers in 1969-1970.

The number of teachers at a primary school could conceivably be correlated with the physical facilities which the schools have, besides the kind of learning environment which the schools provide for their students. Therefore, it was expected that the number of teachers at a primary

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school might be an important factor related to the transition of students within the middle school. If it should prove to be true, it would have wide policy implications.

### 3. Criteria Used for Selection of Dependent Variables

The following three criteria were used for selection of dependent variables:

1. They must include all of the possible destinations at which the students arrive during or at the end of the school year (exhaustive).
2. There must be only one possible destination for each student (mutually exclusive).
3. They must be consistent with the objective of the study.

### 4. Discussion of the Dependent Variables Selected

The existing "Secondary Schools Promotion and Examination" is used to identify the dependent variables which are the destinations at which the students arrive during or at the end of the school year.

At present there are three destinations at which students may arrive at the end of a school year in Turkey's middle schools: a student "passes", "fails" or "drops out". The drop-outs are not considered as failures in this study (as some tabulations do) simply because a student may leave school (drop-out) without having yet established the required academic achievement record with which to determine whether or not he has arrived at a "passing" or "failing"

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destination. Therefore dropouts are kept as a separate destination.

There are two categories of students who arrive at the destination of "failure". The first consists of those students who fail for the first time at that grade level. The second category includes students who were repeaters that year and fail the second time at that grade. They are subject to being "dismissed".

Students who, in fact, are actually "dismissed" constitute a different problem in the Turkish education system. Their circumstances must be studied more closely and distinguished from voluntary dropouts. For purposes of this study, "failing" and "dismissed" are put together into a single destination in most of the tables, from the point of view that they are both groups of students who have proved to be to some degree academically unsuccessful.

Another destination used in the study is "transfers". In the national figures they usually are shown, since if they go to another school their destinations are determined there. If they do not register in another school, however, they are counted as dropouts.

In this study, the students who transferred to one of the six middle schools included in the study are shown in the figures of the school to which they transferred. But if they transferred to any other school which was not

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included in the study (whether or not in the province of Usak), they are kept in a separate category called "transfers".

The last category is "other" which is a miscellaneous used for those few students who may have died during the school year, or whose destination that year could not be otherwise determined on the basis of the evidence gathered.

There are different routes established by promotion regulations which may lead different students to the same destination at the end of the school year. In other words, there are sub-categories of destinations. This information, though it was collected and punched on the data cards, was not used in this study where it was not deemed to be relevant to the objectives, problem statements, or hypotheses stated above.

#### G. Summary of Variables and Their Levels Used in the Study

##### Independent Variables

##### 1. Sex

- a) Male
- b) Female

##### 2. Father's Education

- a) Illiterate
- b) Literate, some primary schooling, primary graduate, or some lower secondary schooling.
- c) Lower secondary graduate or some upper secondary schooling.

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- d) Upper secondary graduate, some higher schooling,  
or graduate of a higher educational institution.

3. Mother's Education

(Same four levels as for father's education.)

4. Type of primary school from which graduated

- a) Village primary school
- b) Town and city primary school (see definitions  
on page 41 above).

5. Type of middle school now attending

- a) Town middle school
- b) City middle school (see definitions on page 41  
above).

6. Number of previous failures

- a) No previous failures
- b) One previous failure
- c) Two previous failures
- d) Three or more previous failures.

7. Grade level in middle school

- a) First grade
- b) Second grade
- c) Third grade.

8. Number of teachers at primary school from which  
graduated

- a) One teacher
- b) Two teachers
- c) Three teachers
- d) Four teachers

- e) Five teachers
- f) Six teachers or more.

#### Dependent Variables

- 1. Passing
- 2. Failing
  - a) First time failing at grade level
  - b) Second time failing at grade level (subject to dismissal)
- 3. Drop-out
- 4. Transfer
- 5. Other

#### H. Definitions of Terms

##### 1. General Information

For administrative purposes Turkey is divided into provinces (vilayet). A province is divided into districts (kaza); a district into sub-districts (nahiye) and a sub-district into villages (köy). The central town of a province in which the provincial governor's office is located is considered as a "city", the central towns of a district are considered as "towns" and finally, the remaining small communities are the "villages".

The places inhabited by the rural population, which constitute about 70% of the total population in Turkey, consist of 65,277 settlement units, 35,441 of these settlements are villages and 29,836 of them are farms,

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neighborhoods, out-posts, and nomad camping sites.<sup>28</sup>

Educational data on the number of students in the middle school system are presently customarily divided into two categories, "village primary school graduates" and "city-or-town primary school graduates". In this classification, a student from a central town of a sub-district, with one thousand population for example, will be in the same category with a student from a city with over a million population. This classification is not adequate for our purposes in this study.

In this study, the type of schools are defined in terms of the levels of educational institutions that the communities have. This classification fits better and is not difficult for school administrators to identify reliably.

In this study, a primary school is accepted as a "village primary school" if the community in which the primary school is located does not have any other schools of a level higher than the primary school. All others are "city or town" primary schools.

A middle school is accepted as a "town middle school" if the community in which the middle school is located does not have any other school at a level higher than the middle school. All others are "city" middle schools.

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<sup>28</sup>SPO, Second Five Year Development Plan, op. cit., p. 200.



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In Turkey, there is a high correlation between the size of the community, the degree of urbanization, and the variety of educational facilities they have. On the other hand, availability or non-availability of a higher level educational institution(s) in a community is one of the main factors affecting student flow from one level to another level of education. It is believed that definitions of type of school used in this study will provide a better classification for our purposes.

Based on these definitions, there is no difficulty in identifying a school as a village, town or city school. Mobility, however, of students from one type of school to another within the same school system presents the problem of identifying which category of school they should be assigned to for purposes of analysis in this study.

In this study, the primary school at which a student got his fourth and fifth grade education will be considered as the type of primary school from which graduated. If the student got his fourth and fifth grade education in different types of schools, the school in which he spent the greater number of years was accepted as the type of primary school he belongs to. This seemed to be a reasonable way to resolve the difficulty.

## 2. Definitions of the Main Terms Used in the Study

Primary School: A five year educational institution

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which gives elementary education, includes the 7-11 age group, and prepares them for life or entrance to the middle school.

Middle School: A three year educational institution following primary school, includes the 12-14 age group, and prepares them for life or for a higher level of general technical or vocational education. The proposed study includes only general public middle schools which are free and operated by the state.

Village: A small rural community which has only primary level education facilities or no school at all.

Town: A community which has only primary and middle school level educational facilities.

City: A community which has lycee and or lycee level technical and vocational educational facilities.

Big City: A community which has higher educational institutions.

Village Primary School: A primary school located in a village.

Town Primary School: A primary school located in a town.

City Primary School: A primary school located in a city.

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Big City Primary School: A primary school located in a big city.<sup>29</sup>

Town Middle School: A middle school located in a town.

City Middle School: A middle school located in a city.

Big City Middle School: A middle school located in a big city.

Lycee: A three year educational institution following middle school, includes 15-17 age group, gives general education and prepares the student for life or higher education (especially for universities).

Lycee Equivalent School: An upper secondary school 5, 6 or 7 years after primary, or 3 or 4 years after middle school, trains students for technical fields or a vocation or higher education.

Village Primary School Graduate: A student who gets his 4th and 5th grade primary education in a village primary school or (in the case of attending a different type of primary school at 4th or 5th grade) a student who spends more years in a village primary school.

Town Primary School Graduate: A student who gets his 4th and 5th grade primary education in a town primary school or (in the case of attending a different type of primary

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<sup>29</sup>There were no higher education institutions in the Usak Province in 1970-1971 school year. The term "big city" is defined and included here for future considerations.

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school at 4th or 5th grade) a student who spends more years in a town primary school.

City Primary School Graduate: A student who gets his 4th and 5th grade primary education in a city primary school or (in the case of attending a different type of primary school at 4th or 5th grade) a student who spends more years in city primary school.

Middle School Now Attending: The middle school in which the official action takes place that determines the final destination of a student at the end of the school year.

Father: The legal father, legal guardian or the father of the family with whom the student lives permanently. In the case of the death of the father, the mother will be considered as father. In the case of separation of the parents, the parent with whom the student lives will be considered.

Mother: The legal mother--normally the natural mother--but if the child's real mother is dead or separated from the family and the father has married again, the step-mother is accepted as the mother. If no mother is present in the family, the father's level of education is used in the mother's place.

Higher Education: Completion of higher educational institution with a program at least two years in duration.

Some Higher Education: Attending a higher educational institution for some time without completion or graduation



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Lycee or Equivalent Education: Completion of lycee or an equal technical or vocational school.

Some Lycee or Equivalent Education: Attending a lycee or an equal technical or vocational school for some time without completion.

Middle School or Equivalent Education: Completion of middle school or an equal technical or vocational school.

Some Middle School or Equivalent Education: Attending a middle school or an equal technical or vocational school for some time without completion.

Primary Education: Completion of primary school (those parents who completed a three year primary school before 1940 will be considered as primary school graduates).

Some Primary Education: Attending a primary school for some time without completion.

Literate: A person who is said to know how to read and write in any language.

Illiterate: A person who does not know how to read or write in any language.

Number of Previous Failures: Total number of failures of a student in his or her middle school education prior to 1970-1971.

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Repeater: A student who repeats the same grade for the second year because of failing at the end of the previous school year.

Non-repeater: A student who does not have a record of previous failure at the grade level he is at now. A non-repeater would have previous failures at lower levels in the past.

Student Flow or Transition Between Schools: Refers to the flow of students from one level of school to another (e.g., from primary to middle).

Student Flow or Transition Within the Same School System: Refers to the flow of students from one status to a destination within the same system and during the same school year.

Status: The place that a student temporarily acquired at any time of the school year depending upon his academic background. There may be students at same grade level with different statuses, depending upon the differences in their academic records.

Grade Level: The established levels of education that follow each other in a school system (e.g., the middle school has three grade levels--first, second, and third).

Destination: A status at which a student arrives during or at the end of the school year as his final status for that school year. A student's destination at which he arrives during or at the end of a school year will be his

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status at the beginning of the following school year, if he continues his education.

Middle School Destinations: Destinations at which a student arrives within the same middle school system (e.g., passing, failing).

Definitions of Destinations:

Failing: Is the destination whose members have to repeat the same grade once more as repeaters.

Passing: Is the destination whose members are promoted to the following higher grade level.

Waiting: Is the destination for third graders whose ~~members wait~~ out of school and take graduation exams only for certain courses that they fail.

Dismissed: Is the destination whose members are the repeaters (in first and second grades) who failed a second time at the same grade level.

Graduating: Is the destination whose members are the students who passed all their courses and the graduation exams and obtained the graduation diploma.

Transferred: Is the status of a student who moves from one school to another during the school year, before his final destination is determined. But he must register in another school somewhere during the same school year to be in this category. If he does not, his destination will be the "drop-out" category. In this study the students who transferred and registered in one of the six middle schools,

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included in the study, during the school year before his final destination was determined, were not considered as transfers. They are included in the study as being in the school to which they transferred to a middle school other than one of the six middle schools included in the study, in or out of Usak Province, are considered "transfers" if their personal files are requested by the middle school to which they transferred. If their files were not requested, they were considered as "drop-outs".

Drop-out: Is the destination of the student who leaves school some time during the school year before his final destination is determined for reasons other than illness, death, or disciplinary actions.

Other: Is the destination of the students who leave school during the school year before their final destination is determined for reasons other than transfer or drop-out.

### 3. Definitions of Other Terms Used in the Study

In addition, and in order to help a foreign reader understand how the student transition system works within the Turkish middle school, definitions are given together with the rules of promotion and examination, based on the existing regulations in practice since 1967.

School year: A "school year" covers the time period from the fall with the beginning of instruction to the end



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Instruction Period: Instruction period starts at the beginning of October and ends at the beginning of June during which the classes are open and students are taught.

Semesters: An instruction period is divided into two semesters. At the end of each semester the students are given grades by the teachers for each of the courses they take.

Grades During Semesters: During each semester, the students are constantly evaluated by the teachers and given several grades (from 0 to 10) from several written exams, oral exams, quizzes and homework.

Semester Grades: At the end of each semester the students are given one final grade for each course. These grades are given on the basis of the several grades given in each course during semester and are called "semester grades". A semester grade is not necessarily the mathematical average of the several grades given during the semester.

Average Grade: The school administration calculates the average grade of the student for each course for the year simply by adding first and second semester grades of a course and dividing by two. This is a mathematical average. Any average grade ending in 0.5 is rounded to the higher whole number.

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Class: Depending upon the size of the school, the students at each grade level are divided into several groups or teams which are called "classes". Class means a group of students taking a course together in the same classroom and from the same teachers.

Classroom Teachers (CT): All the teachers who are teaching the same class constitute the classroom teachers of that class. A teacher, of course, could be the member of several classroom teachers' groups depending upon how many different classes he is teaching.

Classroom Teachers Meeting (CTM): At the end of the second semester, under the chairmanship of the director of the school or his assistant, the present status of each of the first and second grade students are checked by the chairman and by the classroom teachers. This status assessment is based on the average grades of all the special situations of each child. The other teachers who did not teach this class do not join the discussion.

Classroom Teachers' Decision (CTD) in Favor: Classroom teachers have the right to excuse a student's one, two, or three course failures (simply by voting). The student's teacher of the course subject which the other teachers propose to be excused can veto the group's vote. If so, there is nothing to be done, except the other teachers may try informally to persuade or insist that the vetoing teacher

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change his mind. By the rules, a "Turkish" course with an average grade less than 5.0 cannot be excused. Also, "social sciences" and "science" courses with grade averages less than 5.0 cannot both be excused. Only one of them may be excused.

CTD Against the Student: In addition, classroom teachers are empowered to decide against any student whose first semester grade may have been high, but whose second semester grade was "very" low, even though his grade average may be 5.0 or more (e.g.,  $10 + 2 = 12$ ;  $12 \div 2 = 6$ ). If this happens, the student must take the completion exam for his courses (given at the end of the summer, in the fall before the instruction period begins). Otherwise, without this decision against him, the student would normally pass the course, as a result of a grade average of 5.0 or more.

Total Grades Average: Is the average grade obtained by adding average grades of all courses and dividing the total by the number of the courses.

Destination in Summer: Some of the students go to their final destination after the classroom teachers meeting. Some of them are subject to taking "completion" exams in October before their final destination of that school year is determined.

Passing: A student fails, becomes dismissed, or passes immediately after the CTM, under the following conditions:

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Passing Directly: A student whose grade averages of each course are 5.0 or more (or his second semester grade is 7.0 or more) is passed.

Passing by Average: A student who has one, two or three courses with a grade average of 4.0, but his total grade average is 6.0 or more, also passes "by average". A student with a grade average 4.0 in "Turkish" cannot pass this way. At least one of the grade averages for "social science" or "science" courses also must be at least 5.0 to be able to pass this way.

Passing by CTD: A student who passed by having one, two, or three failed courses excused by CTD in favor of him is said to "pass" by CTD.

Failing Directly: A non-repeater student with four or more failed courses after the CTM fails directly, and he is not given an opportunity that year to take completion exams. A non-repeater with more than 20 days non-attendance without reasons accepted by the administration is also directly failed.

Dismissed Directly: A repeater student with four or more failed courses after the CTM is dismissed directly, and he is not given the opportunity to take completion exams. A repeater with more than 20 days non-attendance without reason is also dismissed.

Completion Exams: Any student who has one, two, or three (not more) failed courses after the CTM is given



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another opportunity to take exams from each failed course in September. This examination is called the "completion" examination.

Passing After Completion Exams: A student who gets a grade of 5.0 or more on a "completion" for a given course thereby passes the course.

Failing After Completion Exams: A non-repeater student who gets a grade of 4.0 or less from one or more courses for which he took exams is thereupon dismissed.

Destinations for Third Graders (Final Year of Middle School): The third graders also are given two semester grades at the end of each year and their grade averages also are calculated in the same way as for first and second graders. But their situation is not discussed in a CTM and their failed courses are not excused.

Graduation Exams: There are two graduation exams each school year. One is in June (Summer Graduation Exams) and the other is in September (Fall Graduation Exams).

The Rules of Graduation Exams: Every third grader who got first and second semester grades is able to take graduation exams.

Courses which are Subject to Examination: Every student has to take graduation examinations for the following courses regardless of their semester grades: (1) Turkish, (2) mathematics, and (3) social science, or science (one of them).

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1) Students who take exams for only three courses:

Students whose grade averages are all 5.0 or more (in case of having some courses with a grade average of 4.0 and second semester grade must be 7.0 for those courses), and students who may have one, two or three courses with grade averages of 4.0 but whose total grade average is 6.0 or more, take exams for only those three courses mentioned above.

2) Students who must take graduation exams for more courses besides those three basic courses include those students whose grade averages do not fit the above two criteria (i.e., those who have several courses with grade averages less than 5.0). They must take graduation exams for all those courses with grade averages less than 5.0 in addition to the three courses mentioned.

Passing Rules in Summer Graduation Exams: For the students in group 1, it is necessary to get at least 5.0 from each of the three courses in the exams in order to pass. For the students in group 2, the grades they get in graduation exams from each course are added to the grade average of the same courses and divided by 2. If the result is 5.0 or more, they pass; if less than 5.0, they fail from those courses (e.g.,  $2 + 4 = 6$ ,  $6 \div 2 = 3$ ; summer graduation exam's grade for Course A = 5; final grade =  $3 + 5 = 8$ ;  $8 \div 2 = 4$ ; so he fails, although he got a 5.0 in graduation exam).

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Passing Rules in Failing Graduation Exams: The students who were not successful in Summer Graduation Examinations, take exams for those courses they failed in the fall Graduation Exams. Five is an acceptable grade in the fall, whatever the previous grade averages may have been.

Graduation: Those students who pass all their courses subject to exam are graduated and get diplomas. Without this diploma no one can register at a lycee-level technical or vocational school.

Waiting: A non-repeater with one, two or three failed courses waits out of school for one school year and takes examinations for those courses in the following year's graduation exams.

A repeater waits outside if he has failed one or more courses.

Failing: A non-repeater with four and more courses failed has to repeat the third grade once more.

New Enrollment: Includes the students who enroll in the middle school first grade for the first time after primary graduation.

Private Lesson: Is any amount of extra lessons taken by a student from a paid person, a paid private institution, during an instruction period or during a summer.

School Guardian: Is an adult who is responsible to the school for a given student not necessarily the parent of the student.

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## I. Assumptions and Limitations of the Study

### 1. Assumptions

1. The information kept in the school records on the academic performances of the students are correct. This information is transferred into coding tables and punched on data cards correctly.

2. The questions in the student questionnaire are understood by the students correctly and marked correctly.

3. The information given by the students (or in some cases by the school administrators or the friends of the students) is true and transferred into coding tables and punched correctly.

4. The national official data obtained from the sources of State Statistical Institute, Ministry of Education, State Planning Organization and the Education Directorate of Usak Province are reliable.

5. There are many variables which effect what happens to a student in middle school. His "motivation", his "self-conception" his "peer groups", his "significant others", the "norms of the school" he is attending, the "facilities of the school", "expectations of his teachers", "expectations of his family", "socio-economic level of the family", etc., are possibly important variables. Although the present study does not intend to correlate results (transition proportions) to all these variables, it is assumed that the independent variables included in the study will be



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substantially related to many of these variables. In other words, it is assumed that many of the variables mentioned above are dependent variables of the independent variables which are included in the study.

6. It is also assumed that variations within the same group (for example, village primary school graduates) will not change the common characteristics of that group or that the group will be different from the other groups (e.g., town or city primary school graduates) in terms of their common characteristics.

7. It is assumed that the levels of independent variables are grouped meaningfully.

8. It is assumed that the six middle schools included in the study are representative of the total middle schools of Usak Province.

## 2. Limitations

1. The data used in this study are quantitative and categorical; therefore, the study is descriptive in nature.

2. Official data for national and Usak Province total figures are taken from the official publications or files of the State Statistical Institute, the State Planning Organization, the Ministry of Education, and the Education Directorate of Usak Province. As might be expected in some cases, data from these several different sources are not fully comparable when they are laid against each other.

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When possible, the same source is used for the same type of data for national and Usak totals in order to minimize this difficulty. In some cases, there was only one source available and it was not possible to check the data against another source. In some cases, data needed were not available at all. Therefore, the first part of the study is limited by the availability and reliability of the official data.<sup>30</sup>

3. As will be explained in detail in the chapter dealing with data collection procedures, the population of the 1970-1971 school year is studied but the data actually were collected during the 1971-1972 school year. This entailed some problems in reaching those students who were failed or dismissed at first and second grades and those students who left Usak Province at the end of the 1970-1971 school year and registered in another school outside of Usak Province. This was the case especially for the 1970-1971 middle school graduates. The questionnaire was sent to their new schools and administered by the administrators. More than 90% of these questionnaires were returned. However, 198 students (92 at the first grade level, 60 at the second grade level, and 46 at the third grade level) were not reached, and information on their parents' education was obtained from their friends, teachers, or school guardians by older students and by the school administrators and marked on the

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<sup>30</sup> This problem is investigated in an unpublished study: A. Sudi Bülbul, Educational Statistics Collected by MOE and SSI (Ankara, MOE, PAKD, 1968).

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questionnaires accordingly. (Some other information, which is not included in the study but was collected also was obtained in the same way for these 198 students.) The information on the variables used were marked by the administrators and based on the information in the students' files and school records.

4. The purposes of the study included contributing to the development of a data gathering system for the Ministry of Education. This fact affected the objectives and the scope of this study. The criteria, used to ensure that the independent variable selected must be collectable by schools and processed by the Ministry of Education, annually placed limits on the selection of the variables.

5. Variations within each group could provide important additional information, but because of the above limitations, this study is not concerned with within-group variations. For instance, variations between schools in the same category or variations between the classrooms (teams) of the same grade of the same school could provide valuable information about standards of the several schools, of the teachers, and the effects of classroom composition on student performance etc. These kinds of analyses were not made. However, the data collected could be used later for such analyses.

6. The measures of the performance of the students in this study are categorical (in terms of destinations at

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which they arrive). Who arrives at what destination is based on the subjective teachers' evaluations and the existing promotion and examination rules. The results of the study do not show who learns how much--rather, they show what happens to whom. Again, the results do not show why the students failed. Rather, they show who failed.

7. This study is limited to transitional results for only one school year.

8. There were 19 students reported as "transfers" into another school other than the six schools included in the study. The study did not check to see if some of these 19 students subsequently dropped out of the schools to which they transferred.

9. There were 80 students who were reported as "drop-outs" in the six schools included in the study. Only 26 of these were located through their friends. They were invited to the school and the questionnaire was administered. Fifty-four of the "drop-outs" were not found, and information on some of the questions where data were not kept by the schools was obtained "second-hand" from their friends, teachers, neighbors, parents or school guardians. In most cases, however, most of the information was available in the school files and student personal files, except for parents' education and how many different primary schools they attended. Also, data was usually available on some few other questions included in the questionnaire but not used



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in this study, such as family residence and with whom the student stayed during the school year.

10. The students who dropped out between 1970-1971 and 1971-1972 are not studied. In fact, some number of passing and failing students of the previous school year did not register at the beginning of the following school year. Therefore, this study should not be considered as a "drop-out" study.

11. No information is collected on the background characteristics of teachers or physical facilities of schools.

12. The kind of educational experience a child gets in primary school could be highly related to the route of transition that he/she follows in the middle school (e.g., number of failures, degree of academic success, etc.). No information was collected in this area except for the type of primary school which students attended.

13. The information given by the students was checked against the information in school files when that information was available. But the information that was not available in school records (such as parents' education, residence, etc.) was not checked (for example, by using a properly selected sample). Answers, however, were checked by the school administrators. Incomplete questionnaires were completed later. And the answers which raised doubts

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or suspicions were double checked by contacting the students again and interviewing them orally.

14. Vocational middle schools are not included in the study. There were only two such schools in Usak, and these types of schools are going to be transformed in the near future into regular middle schools throughout the country. There are no private middle schools or foreign language instruction middle schools in Usak Province. This study is limited only to the public middle schools in the Usak Province.

### Summary

Data indicate that Turkish children do not yet have equal opportunities to continue their education beyond the primary level, even though this goal is a high priority objective of the Turkish society. There does not yet exist sufficient data on factors which influence student flows and patterns of transition into, through and out of the Turkish middle schools, which are the next higher level of schools above the primary level. The making of adequate plans requires such information. It was the purpose of the present study to conduct a pilot investigation of some of these factors, selecting six middle schools in one province (Usak), to examine data for one school year (1970-1971) in terms of selected non-academic student characteristics and the various destinations at which students arrived at the end of

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the school year. This introductory chapter presents the problem and the need for the study. It defines the variables of the study. Variables were deliberately selected so that they might serve as bases for further larger studies of the problem, and so that the sort of data involved might subsequently be collected annually and reliably on a nationwide basis as part of an improved data processing system for the Ministry of Education. The key terms of the study are defined, and assumptions and limitations of the study are enumerated.

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## CHAPTER II

### REVIEW OF LITERATURE AND RELATED RESEARCH

#### Introduction

The data presented in Chapter I indicate that Turkish children do not have equal opportunities to enter middle school following graduation from primary school and that the internal productivity rate<sup>1</sup> in Turkish middle schools is quite low.

The low productivity in a school system is not only a problem of economic wastage, but also a problem of "equality of educational opportunity" as indicated by the evidences found in the literature and research findings. Therefore, factors related to the "productivity" and "equity" are obviously both complex and interdependent.

The present study has a practical purpose and aims to identify some of the non-intellectual factors related to student flow within the middle schools of a province of Turkey, but only some of the student background factors

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<sup>1</sup>Internal productivity is defined in this study as the percentage of students arriving at the "passing" destination at the end of one school year.



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affecting this flow in terms of "productivity" and "equity" are included in the investigation.

"Productivity" (internal and external) and "equity" are the two key concepts that have become the focus of attention in all countries (developed, developing or underdeveloped; socialist or democratic), and there have been some common trends and developments related to these concepts in contemporary education. The philosophies of education, the objectives and the functions assigned to education are changing very drastically; new philosophies, objectives and functions are emerging due to the changes in the value systems of the societies and the new perceived needs of the societies in terms of education. As a result of these changes, several reform activities are going on in education in almost every country aiming to increase the effectiveness of educational systems in terms of the concepts of "productivity" and "equity". Therefore, as a result of all these changes several new issues, not only educational, but political, sociological and economic as well, have been created.

Turkey also has been involved with several reform activities including several specific educational reform activities since 1971. The new "Fundamental Law of National Education" (Milli Eğitim Temel Kanunu)<sup>2</sup> which brings, among

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<sup>2</sup>T. C. Resmi Gazete, Milli Eğitim Temel Kanunu (Ankara: Basbakanlik Basimevi, No. 14574, October 7, 1973), pp. 1-5.

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other things, some drastic changes into the educational system, as a result of changes in the philosophy and objectives of education and functions assigned to it at all levels of education, particularly at the secondary level, passed the Parliament and the Senate, and it has been in effect since June 24, 1973.

In the past, in spite of the several changes which had been introduced toward democratization of the system, the Turkish educational system has kept most of its traditional selective characteristics. This is the case also for several European systems by which the Turkish system has been influenced since the Ottoman period.<sup>3</sup>

Fundamental Law of National Education has, as one of its basic objectives, to bring about efficiency in terms of "productivity" (internal and external) and "equity". It introduces "eight year schools" which provides for non-vocational fundamental general education for all; a variety of secondary schools (lycees) which may have separate programs of their own (in large communities), a new type of lycee which is to have a multiplicity of programs under one administration (for small communities); "guidance services" in both the "eight year school" and in the secondary schools; one year "observation periods" at the beginning of secondary

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<sup>3</sup>M. Andreas Kazamias, Education and Quest for Modernity in Turkey (London: George Allen and Ltd., 1966), pp. 25-29.

education; and finally horizontal mobility, from one lycee to another (and from one program to another). This stage at which Turkey has arrived was the result of long discussions (and sometimes fights) in the reform committees within the Ministry of Education, in the newspaper, in the education committees of the Parliament, in the Parliament and the Senate, itself. The fight revolves around how the law will be implemented. As a person who has been involved in this struggle from the very beginning, the researcher of this study appreciates what has been achieved. But he also knows that although it was not easy to come to this end, it is really only the beginning of the struggle. Therefore, he is anxious about the application of the law under then present conditions of Turkey. There are many issues and problems to be faced and many factors to be taken into consideration with great care and patience if we do not want to say, some time in the future "these were too much at one time", and do not want to frustrate the hopes of the public (students, parents, teachers, etc.) which have become vested in the new law.

Most of the European countries have started implementing expanded general education, and many have introduced observation and guidance periods within the last two decades. The Council of Europe has encouraged the member states along this line through several studies, meetings, and publications.

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It seems the new system has advantages over traditional systems, if other necessary changes in the system may also be realized.

Those European countries or other developing countries who abolished a traditional secondary education system and replaced it with a new system based on the concept of "observation" and "guidance" have been confronting several new issues and problems (social, political, financial, organizational, and administrative), according to their own unique conditions. The system of education is one of the sub-systems of society. Students, teachers, curriculum, finance, materials, organization, structure, administration, examination, research, and evaluation--all--are the sub-systems of the school system. In this connection, to be successful, any reform introduced must accord adequately with the other sub-systems within the education system and with the other larger social system of which education is a part.

In view of the present stage of educational reform in Turkey, it was thought that it would be helpful to review the experiences which several different national systems have had in dealing with the issues of "productivity" and with "equity".

The first part of this chapter presents some common developments and trends in contemporary education related to "productivity" and "equity".

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In the second part of the chapter, some of the practical issues related to "productivity" and "equity" are reviewed.

The review of the literature and some of the research findings on the factors related to the area of investigation in this study is given in the third part of the chapter.

One purpose of this chapter is to present some examples from literature which might be helpful in understanding and interpreting the findings of the present study.

## PART I

### Some Common Developments, Problems and Trends, in Contemporary Education Related to Productivity and Equity

#### A. School and Society

The school is a social institution, and like other social institutions, reflects the characteristics of the society in which it is situated. It cannot be thought of in isolation from the organization of that society. Influences affecting the character and development of national systems of education constitute an area which has been investigated by sociologists, anthropologists, comparative educationists, and others with increasing interest.

As pointed out by Cramer and Browne:

It is necessary to go behind the scenes and examine the social and political forces which are at work, for educational systems generally reflect the social

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and political philosophies of their countries, whether or not those philosophies are clearly stated.

Nor is there any sort of uniform pattern. Some systems are the expression of a long, slow evolution, and can be understood only by a study of the history and traditions of the countries concerned. Others are the result of sudden revolution and are then used by the revolutionary government to further the ideals of the new regime. Still others are imposed on, or suggested to, defeated nations along lines acceptable by victors. Disaster within a nation will sometimes bring about a vital educational revival....

Sometimes a sudden acceleration of social change within a nation will be reflected in changes in the educational system. Thus the new Education Act of 1944 in England was one of a striking series of social reforms growing out of World War II. Recently, also we have had the spectacle of young nations, with suddenly awakened national aspirations, seeking to develop systems of education along modern lines to combat illiteracy and to help achieve their national ambitions.<sup>4</sup>

Cramer and Browne group the major influences affecting the character of national systems of education under seven headings as follows:

1. Sense of national unity
2. General economic situation
3. Basic beliefs and traditions, including religious and cultural heritage
4. Status of progressive educational thought
5. Language problems
6. Political background: communism, democracy
7. Attitude toward international co-operation and understanding.<sup>5</sup>

At the base of every educational system, there are always formative factors to be found of a social or cultural

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<sup>4</sup>John Francis Cramer and George Stephenson Browne, Contemporary Education, A Comparative Study of National Systems (New York: Harcourt, Brace and World, 1956), pp. 3-5.

<sup>5</sup>Ibid., pp. 3-5.

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character. All educational systems do, in fact, "reflect the social and political situation and the conditions and objectives of the various national or state systems, besides representing, in the case of each specific situation and each specific requirement dictated by its history a deliberate reply, of one kind or another, offered by the country concerned to a given social or cultural problem."<sup>6</sup>

#### B. Right to Education: Common Intentions

With the modern developments of transportation, mass media and close relations between countries, certain common educational developments may be observed to be occurring simultaneously in many parts of the world. In particular, the right to education and the concept of "equality of educational opportunity" have gained an increasingly widespread attention during recent decades.

The Universal Declaration of Human Rights, adopted by all member states of the United Nations, proclaims, inter alia, that "Everyone has the right to education...."<sup>7</sup>

It is accepted and claimed by many writers that the three basic concepts of the Universal Declaration of Human Rights (liberty, equality and fraternity), are the keystones

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<sup>6</sup>Aldo Agazzi, The Educational Aspects of Examinations (Strasbourg: Council for Cultural Cooperation of the Council of Europe publication, Education in Europe, Series II, General and Technical Education, No. 10, 1967), p. 16.

<sup>7</sup>Universal Declaration of Human Rights, Article, 26 (1).

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of every democracy in the world.

The General Conference of UNESCO at its eleventh session (1960) adopted a Convention against Discrimination in Education which has already been ratified by a number of member states, in whose territories it consequently has the force of law.<sup>8</sup>

The general conference of UNESCO, the International Conference on Public Education, and various regional conferences have adopted recommendations which, without having the force of law, nevertheless serve as guidelines.<sup>9</sup>

The constitutions of most countries set out national aims regarding rights to education and equal education opportunities for all citizens.

As a result, the development plans that exist in many countries also establish general aims and specific targets in terms of democratization of education.

A survey made by UNESCO found that the education plans of many countries contain special provisions designed to ease access to educational facilities for categories of people hitherto inhibited in this respect. In the 70 returns considered, such provisions are found:

- in 44 cases regarding the education of women,
- in 47 cases regarding rural education,

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<sup>8</sup> UNESCO, Educational Planning, op. cit., p. 81.

<sup>9</sup> IBE, Bibliography: Recommendations of the International Conferences on Public Education, 1934-1960 (No. 221).

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- in 29 cases regarding particular social groups such as racial minorities, nomads, dispersed populations, inhabitants of new towns, etc.
- in 56 cases regarding financial assistance for students, and
- in 38 cases regarding special education (handicapped persons, etc.).<sup>10</sup>

The Universal Declaration of Human Rights also elucidates that the right to education calls for the creation of free and compulsory elementary education (from ages 6 to 11 or 12); of general and technical secondary education on the broadest possible scale; of higher education "equally accessible to all on the basis of merit" by Article 26 (1). But, as it is pointed out in one of the publications of UNESCO, "In practice things are not so simple. To begin with, there is too often a real gulf between the objectives proclaimed and those actually pursued."<sup>11</sup>

"All countries without exception or distinction, still have great efforts to make in order to eliminate every form of deliberate or involuntary discrimination; between boys and girls, between rural and urban populations, between different racial and religious groups, between social classes."<sup>12</sup>

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<sup>10</sup> UNESCO, Educational Planning, op. cit., p. 39.

<sup>11</sup> Ibid., p. 81.

<sup>12</sup> Francois Louis, The Right to Education, From Proclamation to Achievement, 1948-1968 (UNESCO: Bergerlevrault, 1968, COM. 68/II24/A), p. 20.

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Ability and Educational Opportunity, published by OECD<sup>13</sup>  
as the first book in the field of educational development  
provides scientific evidence that:

...in the developed countries of OECD, educational opportunity had not yet followed recognized ability in the population. Instead, educational systems in these countries continued to leave large reserves of ability in the population educationally under-developed. Furthermore, it was noted that the 20th century opinion in most countries had converged toward a consensus in accepting the principle of formal equality of opportunity. This moral conception of education in the 20th century, furthermore, is matched by a new understanding of the nature of ability which leads to abandonment of the idea of a fixed 'pool of ability' in the population. It is increasingly recognized that academic and social development, which includes educational input, actually constitutes a process of creating ability among the population. The limits of this ability reserve, if such limits exist, have for practical purposes not yet been reached in any country.<sup>14</sup>

### C. Definitions of Equal Opportunity

Both in theory and in practice there is not yet any single accepted definition of "equal educational opportunity".

Anderson and Bowman explain equity in its four variants as follows:

If a given group, such as rural children, make up 60 percent of the total population of children and occupy 60 percent of the places in primary school we would say there was an equitable distribution.

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<sup>13</sup> OECD, Ability and Educational Opportunity. Papers by J. Ferrex, J. Floud, T. Husen, K. Harnqvist, J. Vaizer, p. de Walff (December 1961).

<sup>14</sup> Henning Friis, "Preface" to OECD, Social Objectives in Educational Planning (Paris: 1967), p. 8.

But this is a very crude test, and it is easy to show that each of the four following variants of this rule has different implication for policy.

a) An equal amount of education for everyone--No country has ever adopted such a goal. Moreover when an educational system approaches this condition beyond the level of compulsory education (as in the U.S. for secondary school) qualitative variations begin to be strongly emphasized.

b) Schooling sufficient to bring every child to a given standard--If this norm is formulated weakly, virtually all children can be brought to a minimum standard as a floor, thus the essence of compulsory attendance laws is that no one is to be allowed to lack the basic minimum. (If performance standards, not merely year of attendance, are specified, this will require repeating of grades and remedial teaching.) Persistence in school beyond the minimum prescribed level will then be brought under other norms setting standards that only a fraction of the children will be expected to attain.

c) Education sufficient to permit each person to reach his potential--Only a wealthy society would try to meet this stipulation in anything like its full implications. It would entail schooling to the point of book fatigue, for every individual has very great potentials in some direction. Hence the potentials in whose development the society is willing to invest become limited by convention, usually the more academic sorts of potential. Educational plans in all countries rest on assumptions, often unexamined, as to which potentials shall be invested in.

d) Continued opportunities for schooling so long as gains in learning per input of teaching match some agreed norm. The norm is usually defined in terms of ambiguous passes on an examination or the judgment that carrying a large number of children into higher grades will be too costly in relation to their predicted learning. It just isn't worth while to keep them in school any longer. When this criterion is examined closely it raises questions about the presumed outcomes of school, questions of learning versus teaching, and choice among various sorts of training.<sup>15</sup>

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<sup>15</sup>Anderson and Bowman, op. cit., pp. 15-16.

[illegible]

Sussmann says in the summary review of the OECD conference on "Social Objectives in Educational Planning" (March 1965) that in the conferences "the talks centered on implementing equality of educational opportunity, a phrase with many definitions". Then she adds that as the phrase was used in the meetings, it referred to one of the following situations:

1. Equal access to non-compulsory education for all youngsters of equivalent measured ability--regardless of sex, race, place of residence, social class or other irrelevant criteria.
2. Equal rates of participation in non-compulsory education by members of all racial classes. This is a more stringent definition of equality than (1) since it leaves out of account the unequal social class distribution of academic ability.
3. Equal opportunity to acquire academic ability for youngsters of all social classes. This is the most radical definition of the three.<sup>16</sup>

Coleman<sup>17</sup> points out that "this is the general idea that educational opportunity is provided by a community through the provision of facilities with free and open access for all". Then he goes on as follows:

The idea of equality of opportunity would seem to derive in a straightforward way from the concept of educational opportunity itself: Equality of educational

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<sup>16</sup>Leila Sussmann, "Summary Review of the Rapportour", in OECD, Social Objectives in Educational Planning, op. cit., p. 15.

<sup>17</sup>James S. Coleman, "Equality of Educational Opportunity, Re-examined", in Socio-Economic Planning Sciences, an International Journal (Nos. 2/3/4/April, 1969), the several quotations which follow may be found between pp. 347-352.

opportunity exists when the community provides the same resources, the same facilities for all children. So long as residential distributions are such as to allow a single common school for all social classes, as in small towns and rural areas, then this idea of equality of educational opportunity is not difficult to implement. The resources are alike for all children within the locality, since all are exposed to exactly the same resources. However, if residential concentrations are larger than the smallest towns, then there are several schools in locality, and new questions immediately arise. Questions about the distribution of resources among different schools arise, questions about the concentration of the best teachers in certain schools and even questions about the educational resources provided by classmates, which might make the experience of a child in a lower-class school quite different from that of a child in a middle class school--even if all other things about the school were alike....

Thus one general concept of equality of educational opportunity itself--the idea that the opportunity consisted of free and open access to the same school resources for all children. The question of equality is the question of whether in fact there is such equality in the past years....

Coleman explains that two of the several approaches used in the Office of Education Survey Equality of Educational Opportunity were based on this general orientation.

The first was the most straightforward and measured by the usual measures of school quality used by school administrators: expenditure per pupil on teaching, teacher preparation, teacher test performance, pupil-teacher ratio, age of building, size of library, and so on--including as part of school equality, such as the educational backgrounds of fellow-students. By use of this approach, it is possible to show a vector of differences or inequalities, based on the composition of the two resource vector in schools attended by the average Negro and the average White in a given country or a given region.

To reduce this vector of differences to some meaningful measure of inequality a second approach was required.



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This second approach was one designed to provide weight to each of the quantities in vector, a weight determined by an estimate of the effect of this resource upon educational achievement. This involved a radical departure from the idea of school quality ordinarily used--a departure from the definition of school quality by resources that had apparent face validity, to the definition of school quality by the existence of resources effective for achievement. This would allow a measure, then, of the degree of inequality of educational opportunity, as the increment in achievement that could be expected to occur if the input resources for school attended by the average Negro were brought to the level of those attended by the average White.

Coleman says that the general principle is that inequality of educational opportunity arises through differential resources made available to Negroes and Whites. But if we examine more carefully the idea of educational opportunity as provided by schools, this conclusion appears less obvious:

The education received by these children would be largely that received outside school. Those children from families with strong educational resources in the home or strong economic resources would supplement these minimal activities of the school, so that children's education would be largely determined by the differential educational resources provided by their families.

From this perspective, equality of educational opportunity depends not merely on the idea of equality in the distribution of school resources, but on the intensity of the effects of these resources. This concept takes into account the fact that outside school and before school, children have very unequal educational resources, so that equality of opportunity is provided by making the resources provided by school not only equal, but quite powerful in their effects. In contrast, the previous definition which focused on equality in distribution of resources, implicitly ignores these outside educational resources, and assumes that opportunity in education derives wholly from a child's experiences within school.

If one then combines these two criteria of equality of educational opportunity, there are two distinct dimensions of which the concept is composed; first, equality in distribution of school resources; and second intensity of effect of the school resources relative to the intensity of outside educational resources. If a system is high on both dimensions, it approaches equality of educational opportunity. But inequality of opportunity may be of two quite different sorts. It may occur through the existence of equal resources which have little effect, so that resulting opportunity depends largely on the differences in external educational resources held by these children. Or it may occur through the differential distribution of resources, which through their weak or strong effects reinforce the differential resources which exist outside school, prior to and during school years.

Coleman concludes that "equality of educational opportunity among different population subgroups depends on two distinct variables, the distribution of affective school resources, and the intensity or effectiveness of these resources, relative to the inequality distributed outside of school resources."

It is not surprising that there are different definitions of "equality of educational opportunity", since every country has different conditions. The Kungälv Conference held in June, 1961, pointed out that:

There is the challenge of applying general knowledge concerning obstacles to the release of human ability through educational opportunity. Every country can see education as a means towards a richer and more just life for its members, but every country has its own special history of education and its own constellation of social forces making up a unique set of conditions, in terms of which social and educational policy has to be formulated.<sup>18</sup>

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<sup>18</sup>Friis, op. cit., p. 8.

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The above sentence does not say only that every country must formulate its own definition of "equality of opportunity" but implicitly it also points out that this definition is open to change over time as the conditions which determine it are changed.

D. Increased Enrollment And the Relative Pattern of Opportunity

No matter what definition of "equality of educational opportunity" a given country may have, the fact is that nearly all countries have experienced a drastic increase in the number of enrollments at all levels of education. As explained in one of the UNESCO publications, there is every indication that the demand for education must increase.<sup>19</sup> The commitments of the governments to provide education for all, compulsory primary education,<sup>20</sup> high rate of population growth, manpower needs and so on, all contribute to this increase in the social demand for education. "But it does not necessarily follow that there has been any substantial change in the relative pattern of opportunities as between regional or ethnic groupings or socio-economic categories within national populations," as pointed out by Foster.<sup>21</sup>

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<sup>19</sup> UNESCO, Educational Planning, op. cit., p. 72.

<sup>20</sup> OECD, Policy Conference on Economic Growth and Investment in Education, III (Paris: OECD Publication, February, 1962), p. 12.

<sup>21</sup> Foster, op. cit., p. 22.

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Foster says that:

In general terms, all studies indicate a skew in recruitment patterns towards the upper end of the social economic scale. In other words, the children of professional and white-collar workers are over-represented in proportion to their distribution in the population or against the offspring of farmers or unskilled workers. Further, there is a distinct bias in favour of urban youth and, where ethnicity is relevant, those groups who obtained early access to schooling are disproportionately represented in the ranks of secondary schools.

An increase in the overall provision of secondary education need not be associated in the short run with diminishing inequalities in access. Thus, in some Western nations, as gross opportunities for selective secondary education have increased, the proportion of pupils of lower-class origin has remained stable or even declined as new places are overwhelmingly taken by middle-class children.

In other words, a sheer increase in the size of enrollments is not necessarily associated in any linear fashion with greater relative equality of educational opportunities for socio-economic or ethnic groups. Governments in developing areas have proceeded on the assumption that more schooling leads to greater equality of access--as indeed it ultimately must--but they must be prepared for considerable short-run reversals in the process of educational democratization.<sup>22</sup>

Typically, in Europe the academic secondary school has provided opportunities for access to elite status and, as we are aware, recruitment into various kinds of secondary school institutions has usually been associated with variations in the social composition of their student bodies.<sup>23</sup>

Westergaard and Little also reminded us that widening of educational provisions does not in itself reduce social

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<sup>22</sup>Ibid., pp. 24-25.

<sup>23</sup>Ibid., pp. 25-26.

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inequalities in educational opportunity, it does so only if the expanded facilities are made proportionately more accessible to those children previously least able to take advantage of them.<sup>24</sup>

In English selective secondary education, a rise from 12 percent to 23 percent of the age group born in 1910 and 1930 respectively has resulted in only "a small reduction" in social class differentials.<sup>25</sup>

A large-scale national follow-up survey of children born in 1946 thus indicates marked social differentials in the chances of admission to grammar and technical schools as between children of similar ability.<sup>26</sup>

A paper by Ruiter examines the Netherlands' experience which is somewhat analogous to England's. He explains that:

In Netherlands, between 1940 and 1957, grammar school attendance grew from 8.6 percent to 16.4 percent of the age group for boys, and from 4.5 percent to 12.9 percent for girls. The middle social strata benefited most, the bottom stratum next, and the top stratum least from the expansion. However, these differences were small and the social composition of first entrants to grammar school was left unchanged.<sup>27</sup>

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<sup>24</sup>John Westergaard and Alan Little, "Educational Opportunity and Social Selection in England and Wales: Trends and Policy Implementation," in OECD, Social Objectives in Educational Planning, op. cit., pp. 215-232.

<sup>25</sup>Ibid., p. 224.

<sup>26</sup>Ibid., p. 226.

<sup>27</sup>R. Ruiter, "The Past and Future Inflow of Students Into the Upper Levels of Education in Netherlands," in ibid., pp. 85-147.



Leila Sussman quotes from Anderson that--

While secondary education in the U. S. increased from 5 percent to 40 percent of the age group between the mid-19th century and 1930's the social composition of the students did not change. Of course when enrollment from the upper social strata approaches 100 percent, further expansion can only come from below and must result in some levelling-up of social class attendance rate.<sup>28</sup>

E. Financing Problems: Limited Resources and Increasing Costs

The actual increase in the number of students in schools, regardless of their background characteristics, has brought with it the problem of financing education. There is, "a shortage of everything, except students".<sup>29</sup>

"In many countries, however, and more particularly in the developing countries, the financing possibilities appear to be reaching to their ceiling."<sup>30</sup> But, "education is not a free goal. It absorbs resources, and the societies most sensitive to their shortfall in schooling have the least resources".<sup>31</sup>

The replies of 63 countries to an ICEP questionnaire,<sup>32</sup> showed, somewhat surprisingly, that "developed countries do

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<sup>28</sup>Leila Sussman, in ibid., pp. 15-16.

<sup>29</sup>Philip H. Coombs, The World Educational Crises, A System Analysis (New York: Oxford University Press, 1968), p. 3.

<sup>30</sup>UNESCO, Educational Planning, op. cit., p. 72.

<sup>31</sup>Anderson and Bowman, op. cit., p. 18.

<sup>32</sup>UNESCO, Educational Planning, op. cit., pp. 50-54.

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not on the average spend a higher proportion of their budgets on education than the developing countries. The most highly developed show ratios of 13.6% in 1960 and 15.9% in 1965. For developing countries the corresponding figures are 13.2% and 15.5%. Hence both developed and developing countries remain very close to the world average."

Phillips quotes from Lewis:

The cost of giving primary education to every child is 0.8% of national income in the U.S.A. and 4.0% in Nigeria, the main reason being that while a primary school teacher gets less than one and a half times per capita national income in the U.S.A. in Nigeria he gets seven times.<sup>33</sup>

The participant at the Regional Study Course on Educational Investment in Latin America, held in December, 1966, declared that:

While the extremely rapid rate of growth of public expenditure on education in the last few years shows that the quickened expansion of educational systems took place in a climate of relative financial euphoria, there is reason to believe that in the future the increased cost of education far from being met with the facility of the past, will call for difficult decisions of a budgetary nature. The utmost care in accounting will be necessary for a most serious obstacle will present itself, namely limitation of resources.<sup>34</sup>

The current situation is summarized by UNESCO as follows:

Since the beginning of the 1950 decade, the percentage of GNP assigned to educational purposes has doubled. In 1955, the industrialized countries set aside from 2 to 4% of GNP for education; by 1965 the

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<sup>33</sup>H. M. Phillips, "Education and Development", in UNESCO, Economic and Social Aspects of Educational Planning (Paris, 1964), p. 42.

<sup>34</sup>UNESCO, Educational Planning, op. cit., p. 73.

rates stood between 4% and 6% and they are likely to reach 6-7% by 1970. It is probable that these industrialized countries can sustain such figures, but only if their economies remain prosperous.

In the developing countries the situation is different. Some of them set aside over 4.5% of GNP for education, and this may well represent 6% of total income in strongly self-sustained regions. Turning now to the total expenditure of these same countries in the social sector, the magnitude of the effort they are making becomes apparent for the figures lie between 20% and 50% of the State budget. It is thus clear that it will be more and more difficult to obtain an ever-increasing proportion of a country's budgetary resources for educational purposes.

It is in fact not possible indefinitely to augment the educational total within the national budget, unless that national budget is itself augmenting. Unfortunately the budgets of the developing countries in the past ten years have stood way below targets and forecasts.... Further, increases in national income are frequently cancelled out by the population increase.

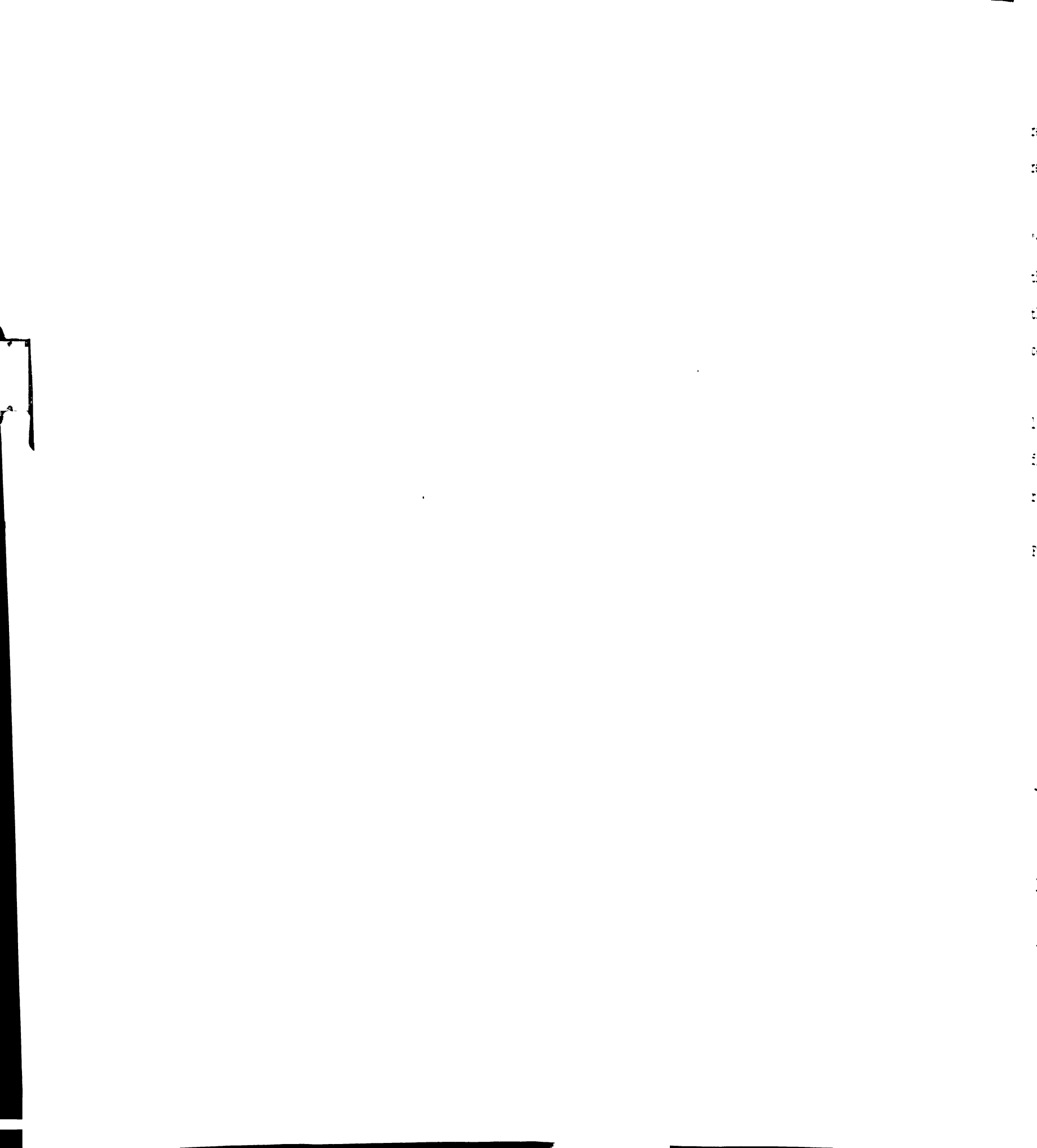
At this point it is natural to think of the assistance that the wealthier countries might grant to the poorer. It is found, however, that the objective set for the Development Decade, the investment of 1% of the gross national product of the industrial countries for the benefit of developing countries, has not been reached; long term investments in 1966 did not exceed 0.62%.

At the same time the debt service of the developing countries is becoming heavier, while fluctuations in the price of primary commodities create a chronic instability and the terms of trade tend to worsen. Despair would be criminal; but in the circumstances, it would be vain to count upon spectacular improvements unless a very much more resolute effort is made than hitherto.<sup>35</sup>

As pointed out by UNESCO also, "the only solution would be to reduce unit costs, but it is unlikely that such a

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<sup>35</sup>Ibid., pp. 73-74.



reduction could be brought about if educational systems remain unchanged."<sup>36</sup>

A comparison of world increase in enrollment in "traditional school systems" shows that between 1960-1968 the enrollment figure rose by 4.5 percent annually, whereas the corresponding annual increase in spending was 11.7 percent.<sup>37</sup>

In most Latin American countries, for example, between 1958 and 1966 the rate of increase in cost of education was from 2 to 5 times greater than the rate of increase in enrollments.<sup>38</sup>

#### F. Productivity and Equity in Education

It is concluded by UNESCO that:

Given that enrollments must increase, that unit costs under the present system cannot be reduced and that it is unthinkable at the moment to count upon a spectacular increase in normal educational resources the only solution viewed solely from the standpoint of expansion is that of making such changes as will very substantially increase the yield of education.<sup>39</sup>

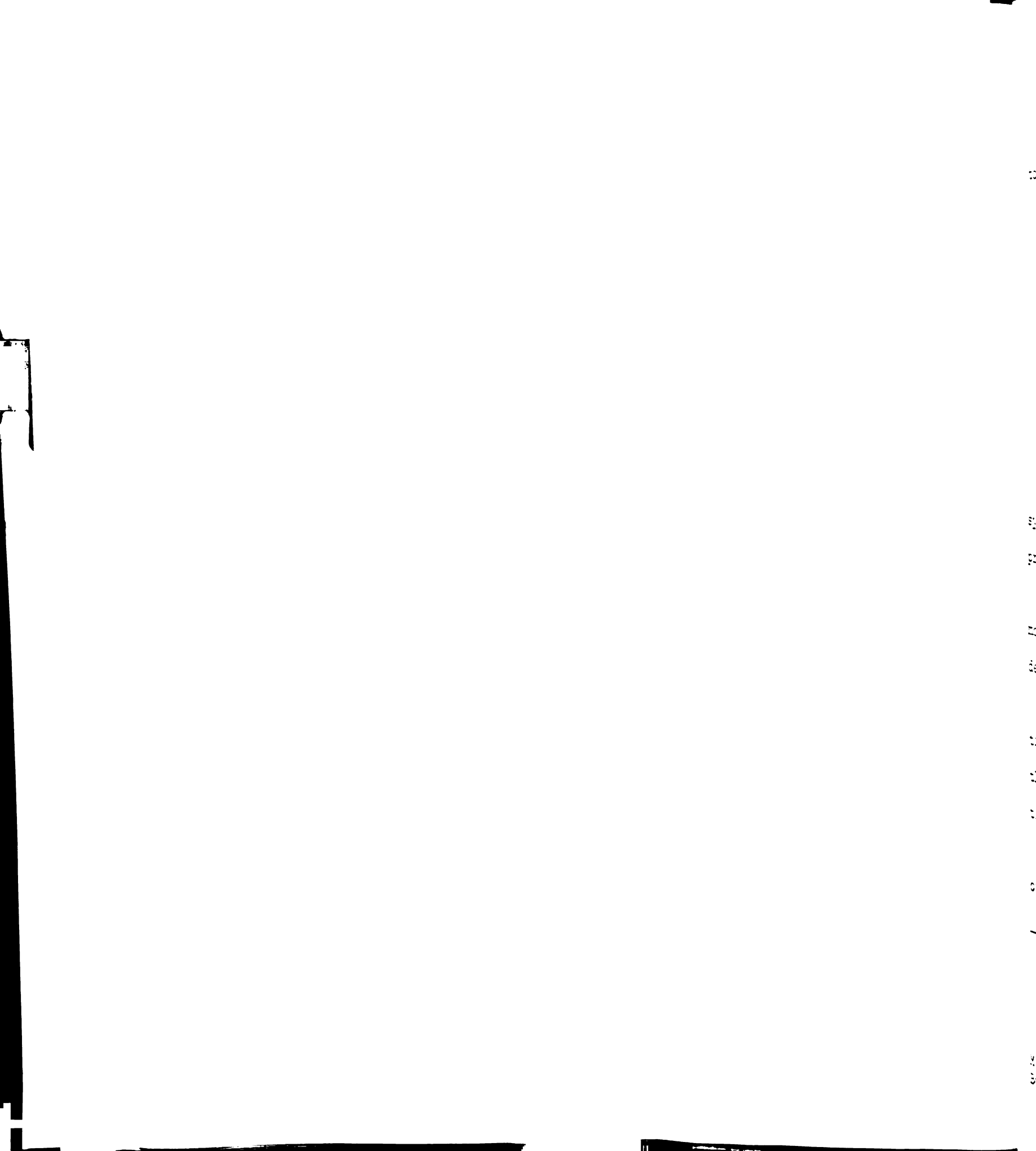
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<sup>36</sup> Ibid., p. 74.

<sup>37</sup> Edgar Faure et al., Learning To Be. The World Education. Today and Tomorrow, UNESCO (Paris, 1972), pp. 14-15.

<sup>38</sup> See Report of the Regional Study Course on Educational Investment in Latin America (Santiago: December 1966).

<sup>39</sup> UNESCO, Educational Planning, op. cit., p. 74.



The problem of financing education and the solutions to it are reviewed by UNESCO in Learning To Be as follows:

The question of financing education cannot under any circumstances be defined in terms of 'thresholds to be reached' or 'ceiling not to be exceeded,' and less still on the basis of simple extrapolations from the past. For even when the proportions of the GNP or of total State spending allocated to education appears to have reached a critical limit, we may be sure that reforming the educational system, by improving the yield from investments in education, will permit a redefinition of the problem. This may be in relation to budgetary outlays or to the over-all position of the national economy and its resources, for example. Either way, it will become clear that many possibilities remain for developing education.<sup>40</sup>

But the crucial need to realize changes in educational systems so as to increase the rate of productivity does not present an encouraging picture.

"The internal output of the educational systems is almost everywhere deficient and is frequently found to be declining sharply."<sup>41</sup>

Since the Second World War when the spending in education began to be accepted by economists as investment in the human resources of a country, the productivity of educational systems has been closely examined.<sup>42</sup>

From the economic point of view the high rates of drop-outs and repeaters causing the high ratio of student years

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<sup>40</sup>Faure et al., op. cit., p. 228.

<sup>41</sup>UNESCO, Educational Planning, op. cit., p. 71.

<sup>42</sup>T. W. Schultz, "Investment in Human Capital," in M. Glaug (ed.), Economics of Education I (U.S.A: Penguin Books, 1968), pp. 13-33.



to the number of graduates has been pointed out as economic wastage and economic aspects of education have been studied by several economists.<sup>43</sup> The idea of stagnation has aroused a great deal of interest and heated debate among those interested in long term educational forecasts. Some of the theories in this area are summarized by Ruiter.<sup>44</sup> Several terms have been used (wastage, holding power of school, stagnation, internal productivity, external productivity, retardation, academic mortality, educational yield internal output, external output), they are defined,<sup>45</sup> and methodologies for their calculation have been developed.

UNESCO takes the following position on the matter of the very high rate of drop-outs and repeaters:

There is certainly no point in sending a constantly increasing number of children to school if most of them are to leave before they learn anything. And if, moreover the pupils take nine years to achieve six years study, the total cost of education is thereby increased by 50%; with the same budget and more efficient methods, it would have been possible to educate half as many again.<sup>46</sup>

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<sup>43</sup> John Yaizy and Michele Debeauvais, "Economic Aspects of Educational Development," in A. H. Halsey et al. (eds.), Education, Economy and Society, A Reader in the Sociology of Education (New York: The Free Press, 1969), pp. 37-49.

<sup>44</sup> R. Ruiter, op. cit., pp. 85-147.

<sup>45</sup> Daniel Rogers, "Productivity and Efficiency Within Education," in Don Adams (ed.), Education in National Development, op. cit., pp. 42-63.

<sup>46</sup> UNESCO, Educational Planning, op. cit., p. 120.

It is also pointed out by UNESCO in the same source that annual drop-out rates of 20% and similar or higher rates for retardation are "clear proof that the educational system is not functioning normally".<sup>47</sup>

As explained by Faure et al. "the increase in spending has not prevented traditional educational systems from displaying serious symptoms of inefficiency". They continue with the following words:

One of the most flagrant of these is the extent of wastage, that is, the rate at which students are repeating or abandoning courses. The dimensions of this problem are typified in a 1969 UNESCO inquiry covering the years 1960-61 and 1967-68.

In half the countries of the world, half the children enrolled in schools fail to complete the primary cycle. Even if we consider only those who leave school after their first, second or third year--that is, for the most part, having acquired little lasting benefit the fact remains that in many countries the money spent on them absorbs between 20 and 40 percent of the total State education budget.

This wastage is, therefore, quantitatively speaking a very serious phenomenon. But it has further, symptomatic interest in that it points out the inefficiency and imperfection of the educational system which give rise to it, and provides a clear illustration of the fact that the frequently cited antinomy between the nominal increase in expenditure on education and the relative decrease in yield from educational activity is due essentially to qualitative factors.<sup>48</sup>

High drop-out and low productivity is a serious problem in developing countries. As pointed out by UNESCO also,

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<sup>47</sup>Ibid., p. 120.

<sup>48</sup>Faure et al., op. cit., pp. 43-44.

"during the past ten years or so it has become more and more clear that the problems of 'wastage' and 'retardation' reach in many developing countries such high proportions as to threaten to cancel out, or at least to retard very considerably, the increase in enrollments won at the cost at heavy financial effort."<sup>49</sup> According to a study made by UNESCO in Asia, 'wastage' and 'retardation' rates were found in 17 countries to range from less than 15% to 80%.<sup>50</sup> Figures submitted to the Conference of African Ministers in Nairobi (1968) are no less disturbing. Earlier conferences (e.g., Addis Ababa) had been conscious of the gravity of the problem and had adopted as a target the reduction of the wastage rate in primary education to a maximum of 10% per school year. At Nairobi, however, it emerged that the rate had remained far higher, at an average of 21% per annum for the African States under consideration taken together."<sup>51</sup>

Failure in examinations has been the main factor in lowering the productivity rate in traditional European educational systems. In such selective systems "it is not unusual to meet with failure rates of 60% at the end of the

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<sup>49</sup> UNESCO, Educational Planning, op. cit., p. 41.

<sup>50</sup> UNESCO, The Problem of Educational Wastage. Bulletin of the UNESCO Regional Office for Education in Asia, Vol. I, No. 2 (Bangkok: March, 1967).

<sup>51</sup> UNESCO, Educational Planning, op. cit., p. 41.

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secondary stage, and this percentage increases in higher education. This has led to the remark that education is the only industry which can allow itself to deliver 60% of its products unfinished."<sup>52</sup>

According to Vaizey most of the developing countries copied their educational system from European countries. One of the most important aspects of the "maladaptation" of an educational system to the needs or the means of the country is the high rate of "wastage" due to the drop-out of pupils at all levels of education. He gives some examples from Pakistan and concludes that "this makes the average cost of training high" and suggests that

... unless the causes of this drop-out can be tackled successfully, it is important that some sort of qualification should be awarded at intermediate stages, so that there is always something to "show" for whatever knowledge or training has been acquired and which can be put to economic use. Then he also reminds that this ~~seems~~ very well understood in the Soviet Union where it is not common for a student to fail or withdraw from a course because of purely academic reasons.<sup>53</sup>

In West Germany the major point of transition is from the fourth grade of the elementary school (Volksschule) to the nine year academic Secondary School (Gymnasium). In England and France it is from fifth grade of elementary school

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<sup>52</sup>Ibid., p. 120.

<sup>53</sup> John Vaizey, "Priorities Within Education," in John W. Hanson and Cole S. Brembeck (eds.), Education and the Development of Nations (New York: Holt, Rinehart and Winston, 1966), p. 368.

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when the children are 11 to the grammar school. There are competitive entrance and selectivity examinations called 11+ examinations. Grade repeating and drop-out is one of the characteristics of the grammar school.

As explained by Husen in detail,

In England and Germany, until recently only about one fifth an age group have been admitted to academic secondary school. A considerable proportion of these students are screened out during the course, and do not graduate. Grade-repeating or drop-out in the Federal Republic of Germany is so frequent that less than 20 percent of those admitted to the Gymnasium graduate. In England, according to the Ministry of Education report, almost 40 percent of those admitted to the grammar school fail--that is, drop-out or lack sufficient scores on the General Certificate of Education (G.C.E.) examination. A follow-up study of a year's intake in Swedish Real Skola (Middle school) showed that about 50 percent failed to graduate in time, and that about one-third repeated at least one grade.<sup>54</sup>

The notion of productivity gives emphasis to the interdependence of several factors: economical, social, political, philosophical, organizational, historical, methodological, and human. One of the disturbing issues in this area is the disproportion of educational results according to socio-economic origin of the students, which is essentially a question of "equality of educational opportunity," rather than a productivity problem. The problem is complex and any solution to any part of it also effects other related factors

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<sup>54</sup>Torsten Husen, "School Structure and the Utilization of Talent," in George Z. F. Bereday (ed.), Essays on World Education, the Crises of Supply and Demand (New York: Oxford University Press Inc., 1969), p. 72.

and creates other problems. Temporary efforts and palliative solutions which have been tried from time to time do not bring the changes required in making the system more efficient as a whole to meet the needs of society and individuals. Effective changes are needed, but they are not easy to achieve.

G. The Need For Effective Changes in Education and Imposing Obstacles

Present educational systems are questioned, criticized, and even protested against by several groups. But it is not easy to change educational institutions or the educators themselves, as is often the case with any basic change or innovation.

Obstacles to innovation are reviewed by UNESCO based on the answers of several countries to the ICEP questionnaire as follows:

1. There is practically complete agreement in theory to the view that great changes are inevitable; but in practice, every positive innovation encounters the most vigorous opposition. Education is a realm of tradition, and resistance to change springs up in the most varied quarters ranging from the teachers themselves, and administrators, the parents, the pupils and students, to political, professional, confessional and cultural circles. Several countries note in their replies to the ICEP questionnaire that socio-psychological resistance to reform is the major problem, perhaps more stubborn than the financial problem itself.
2. In addition the administrative system, in its present form, is ill adapted to the achievement of reforms, since it will almost automatically impede or distort any innovation it is asked to introduce. The existing system of finance is designed to assure control rather than



performance, to favour continuity rather than change. Several countries also stress the fact that governmental directives are not always as precise and consistent as they might be, that the aims are frequently unclear, too numerous, and sometimes contradictory.

3. Finally, innovations are not improvised; they require long preliminary research, patient experimentation and meticulous arrangements for their implementation. Reforms decided upon without study are condemned to failure, and there are today countless reforms which are discredited in most minds because they have never, in fact, been tested out with serious intent.

4. All this brings us back to the inevitability of planning--planning not only in sense of preparing a plan, but building into it the components which will render its implementation possible; of associating the teaching profession and the most varied sectors of society in its preparation; of modernizing the administrative and financing structures; and of according to research and experiment a great deal more importance than they receive today.<sup>55</sup>

#### H. Common Trends Toward Making Education More Effective

Despite all these obstacles, several efforts have been made in nearly every country to realize some changes in the system of education, to make it more efficient and more effective in answering the needs of societies of our time and the individuals living in these societies. Learning To Be lists these efforts under the heading of "Common Trends".

Although exchange of experience is not particularly well organized in this field, education does display a number of common trends and characteristics. If these are more evident in some places than others, it is nevertheless significant that they appear in various guises all over the world. In spite of all the cultural, historical, economic and ideological

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<sup>55</sup> UNESCO, Educational Planning, op. cit., p. 75.

differences that exist among countries, or even regionally or sectorally within a single country, it is interesting and comforting to note that the education enterprise has, in this respect, the character of a worldwide concern.

The first concerns the choice of educational models. When it comes to choosing between two basic options--restrictive selection or open admission the second more commonly finds favour. A number of developed countries are currently at grips with the transition between their earlier, highly selective systems and more open policies. Most developing nations opted at first for open educational systems, but lack of resources and demands of economic development have often led them to introduce more or less strict selection. They are concerned to avoid both the managed dictates of economic plans and the risks of laissez-faire anarchy. Accordingly they seek measures that reconcile respect for man with the demands of society, and individualization with the socialization of education.<sup>56</sup>

Another common trend pointed out by the writers is "educational reforms" which are occurring in nearly every country.

The measures and initiatives taken by public authorities, as well as scientific bodies and individual educators, have implicitly, if not explicitly, prepared the way for major innovations in a number of countries. Numerous changes have taken place in developing countries largely as a result of central-government initiative, although the scarcity of means and a certain bureaucratic inertia sometimes dampen innovative enthusiasm and incline people to wait for confirmation of experiments undertaken elsewhere. In some countries possessing enormous intellectual and financial resources, the extent and gravity of problems--and the failures to date in confronting them provide strong arguments for those who stress that fragmentary measures are ineffectual, and thus advocate total reform.<sup>57</sup>

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<sup>56</sup>Faure et al., op. cit., pp. 14-15.

<sup>57</sup>Ibid., p. 19.

In countries where social and political changes have taken place, "events have often led to profound structural changes in the educational world, affecting the student base, access to education at various levels, curricula revision and, although to a lesser extent, modernization of methods."<sup>58</sup>

The authors also include the student movements in certain countries "swelled by the dissent of users themselves" as a common trend:

... Where education is of increasing concern to politicians, educationists, researchers and philosophers, as well as to the students themselves and the general public.

The analysis of reactions often seen among workingclass people confronted by rigid educational systems--parents who notice negative reactions in their children or students skeptical of the value of the educational possibilities offered them--yields fruitful results. When the school system remains the exclusive preserve of an intellectual elite, the product of the bourgeois class which built the system and continues to dictate its laws and moral values, students become confused by the divorce between an outmoded education and the reality of the world around them. They become frustrated, dissipate their energies, grow bored or put their hopes in something else.<sup>59</sup>

Reuchlin writes that "development toward democracy and technical progress are two main characteristics of our time which appear to exercise the most direct influence on the development of school organization."<sup>60</sup>

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<sup>58</sup> Ibid., p. 20.

<sup>59</sup> Ibid., p. 21.

<sup>60</sup> Maurice Reuchlin, Pupil Guidance: Facts and Problems (Education in Europe Series, No. II, Strasbourg, 1964), p. 20.

Agazzi refers to Reuchlin and continues that "these characteristics of our evolution have created a need for the more general, thorough and varied types of education, leading ultimately to the famous concept of schooling for all.... The first step was talk of mass schooling or basic education, followed by the gradual prolongation of the period of statutory education, accompanied by the provision of further education after leaving school."<sup>61</sup>

The development of "dual" educational systems and democratization is summarized by Agazzi as follows:

The idea of school as the preserve of the sons of a restricted upper class, whose members possessed complete political and economic powers as well as the sole responsibility for all cultural development, gradually gave way, under pressure of experience, to that of a dual educational system, 'with people's schools' created alongside the schools for children of the cultural and political elite. That was the first stage, soon followed by the concept of the general, democratic education of the proletariat which, in its turn, led on to the concept that everyone had the right to develop his own personality to the fullest and take an active and direct part in social organization.

The result of this irreversible process has been to substitute for the traditional idea that schooling is the prerogative of the existing elite, the concept of the single school, in the sense of a non-discriminatory establishment, the object of which is to identify and develop the natural gifts of each pupil, with a view to creating the new and dynamic human material required by a developing society. This evolution in the theory and practice of education has led to the abandonment of the selective--in other words, discriminatory--principle in schools in favour of the fairer and more logical principle of pupil guidance. This is now the more necessary owing both to the type of class in the new

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<sup>61</sup>Agazzi, op. cit., p. 21.

democratic schools and to the extension of compulsory education from the earliest years up to adolescence and beyond.<sup>62</sup>

### Summary

The review of the literature in this part of the chapter indicates the following.

1. "The right to education" and the concept of "equality of educational opportunity" have gained an international acceptance and affected the policies followed. But "in practice things are not so easy".

2. There is not a single definition of "equality of educational opportunity" applicable in every country. Each country should formulate its own definition according to its unique set of conditions.

3. Partly as a result of government commitments to provide primary education for all and partly as a result of other factors, the social demand for education has been increasing very rapidly and governments are not able to ignore it.

4. The increased enrollment in schools has not led to any substantial change in the relative pattern of opportunity, as between regional or ethnic groupings or socio-economic categories within the national populations.

5. The actual increase in the number of students in schools has generated financing problems, especially, for the developing countries. The developed countries do not on the average spend a higher proportion of their budgets on education than the developing countries. Financing possibilities appear to be reaching their ceilings in the developing countries.

6. To reduce the unit costs is not possible if the educational systems remain unchanged. On the contrary they have been increasing.

7. To raise the productivity rate in education seems to be the only solution, but the picture at the present is not encouraging.

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<sup>62</sup>Ibid., p. 21.

8. The problem of low productivity in education is also a problem of "equality of educational opportunity" because of the disproportion of educational results according to socio-economic origins of the students.

9. The need for effective changes in education is obvious, but there are several imposing obstacles.

10. In spite of the obstacles, there are some common trends in the world, especially toward making educational system more effective in terms of "productivity" and in bringing about "equity".

In concluding this section of Chapter Two, it may be observed that the issues reviewed above are all crucial issues in Turkey. The quotations cited were selected for their pertinence to current Turkish conditions as well as for the purpose of characterizing the issues.

## PART II

### Some Practical Issues Related to Productivity and Equity

#### A. Issues of Function: Democratization and Self-perpetuation

Anderson and Bowman point out the need for both educational and other capital investments, and they go on to say that this situation required that "educational systems shall provide that equality of opportunities which democracy proclaims".

But this is not a well-founded conclusion; to agree that widespread schooling is needed for democratic government or that economic productivity which presupposes heavy investments in training carries no implications whatever about educational equality.

They ask, "Why, then has this assumption gained such widespread support?" and they give their answer as follows:

1. Equality of educational opportunity has been widely proclaimed as a "universal human right". At least in form, this faith is set forth in societies with the most diverse political systems.

2. Many countries happen to have become independent just when relative equality in educational opportunity is approaching realization in the nations looked to as models, and these aims are adopted by governments of new nations.

3. By an association with the idea of the hoped-for modernized production, many conclude that equality of opportunity must play the same part everywhere that it does today in the advanced countries. One would hardly deny that a population will be better prepared for modern life if half rather than a tenth receive eight years of schooling. But these resources have alternative use. There is a wide gap between the conclusion about motivation and training and decisions on how to dispose of inadequate resources. Modernization requires that education be given a central place, to be sure, but educational policy has to be related to the stage of economic development. Just as absence of industrial conflict is no criterion of labor commitment, so equality of educational opportunity is an equivocal guide to prudent investment policies. Each of the key terms in most discussions on this topic proves to be ambiguous unless it is considered in a context of sequential social change. But there is also an inherent conflict between the ideal of equity and certain other basic values that also play a key part in national development.<sup>63</sup>

Despite the worldwide "faith" in education, the present structures of societies with their underlying basic value systems also effect the structure of educational systems, which in turn are very closely related to the processes of

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<sup>63</sup>Anderson and Bowman, in Don Adams (ed.), Educational Planning, op. cit., pp. 14-15.

"equity" and "productivity". Without taking into consideration the relationship between the social and economic systems as a whole, it is not possible to explain the issues related to "equity" and "productivity" in education.<sup>64</sup>

As pointed out earlier in this chapter,<sup>65</sup> the organization of education in a given society cannot be thought of in isolation from the organization of society in which the school is situated. At the same time the system of education (its structure and organization), is the main determinant of "productivity" and "equity". Therefore, apart from the common characteristics found in the educational systems of the world, each country has a type of educational system of its own.

Agazzi comments on this point:

Internationally speaking, there is a great and striking disparity in the numbers and types of educational institutions in different areas, as well as in their objects, regulations, teaching standards and relations, diplomas, demand, etc. Another striking fact is the absence of any uniform terminology or common vocabulary to describe institutions, examinations and diplomas.<sup>66</sup>

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<sup>64</sup>The relationship between the level of economic development and the level of education is also discussed in the following two books: C. E. Beeby, The Quality of Education in Developing Countries (Cambridge, Massachusetts: Harvard University Press, 1966); and Frederick Harbison and Charles A. Myers, Education, Manpower and Economic Growth Strategies of Human Resource Development (New York: McGraw-Hill Book Company, 1964).

<sup>65</sup>See Chapter Two, pp. 78-79.

<sup>66</sup>Agazzi, op. cit., p. 33.



In spite of this wide disparity, education in general has similar functions in all societies, in terms of its reciprocal relation with the society in which it is located. This is described by Faure et al., as follows:

Education is both a world itself and a reflection of the world at large. It is subject to society, while contributing to its goals, and in particular it helps society to mobilize its productive energies by ensuring that required human resources are developed. In a more general way, it necessarily has an influence on the environmental conditions to which it is at the same time subjected, even if only by the knowledge about these which it yields. Thus, education contributes to bringing about the objective conditions of its own transformation and progress.... At the level of social phenomena ... until the present, education as we have known it through all the forms of society which have lasted for any length of time has been the selective instrument by means of which existing values and balances of power have been maintained and kept in effect, with all the implications of both a positive and negative character which this process has had for the destiny of nations and the course of history.<sup>67</sup>

The authors continue:

So far as teachers', learners', and parents' personal experience is concerned the social function of educative practice--in its many pedagogic forms and as it actually takes place in a wide variety of different contexts is indefinitely complex. While its practice illuminate the liberating power of education, it also demonstrates the limits of its powers, its shortcomings and its oppressive coercive effects.<sup>68</sup>

One of the essential functions of education is its "self-perpetuating" function. According to Faure and his colleagues:

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<sup>67</sup> Faure et al., op. cit., p. 55.

<sup>68</sup> Ibid., p. 56.

Education, which both reproduces and renews itself, is often accused of immobility. It is certainly not the only institution against which such reproaches are levelled. In fact one of its essential functions is that of repetition, to repeat to each generation the knowledge that the previous generation inherited from its forebears. It is therefore normal for educational systems to be given the job--as in the past--of handing down traditional values. This is why they are inclined to form closed systems, both in time and space, and to be largely concerned with their own existence and success.<sup>69</sup>

#### B. Issues of Social Mobility, Elitism and Mass Education

When the role of education as a factor in upward social mobility is discussed, it is pointed out that education at the beginning was essentially a class education.<sup>70</sup> Traditionally, education has been education for the elite, and it conferred great status upon those who were fortunate enough to acquire it.<sup>71</sup>

"Elitism" in education is described by Faure et al., as follows:

The term "elitism" is a rather poor definition of the condition it describes. Theoretically, it does not generally mean--or no longer does--that first class education is reserved to a specific caste. It really consists of separating the cream of society from the rest. It is a system which aims not at excluding people on

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<sup>69</sup> Ibid., p. 57.

<sup>70</sup> Alfred Sauvy, "Social Factors in Education Plans," in UNESCO, Economic and Social Aspects of Educational Planning, op. cit., p. 103.

<sup>71</sup> Hanson and Brembeck, op. cit., p. 280.

the grounds of their social background, but rather at co-opting the best as defined by the existing elite. Hence the school acts as a sieve, starting in the elementary classes and operating through successive stages of filtering with an eye to selecting the future elite. And if the social mechanism inevitably favours the academic success of children from privileged social and cultural background this must be seen as a consequence and not as an aim of the system. Moreover, the word elite implies a small number, but the system does not cease to be elitist simply because it grows quantitatively.

The determining factor is the principle of selection, however many are chosen, and the exclusion of all others on the basis of criteria laid down by the existing elite, which continually makes these restrictions more stringent.<sup>72</sup>

As pointed out also by Hanson and Brembeck, today, as the masses go to school, which is a result of policies followed by government to expand education to all, "it is understandable that they tend to demand the same kind of education that the elite previously enjoyed even though it may have little relevance to modern life and needs".<sup>73</sup>

But to go to school or to get education does not guarantee becoming a member of the elite as in the following example from Africa.

In order to becoming a member of the elite in most African countries ten years ago, secondary level studies were sufficient; five years ago, a university degree became necessary; the only studies that count today are post-graduate ones. It is useless multiplying opportunities for access to education, since this does not necessarily increase equality of opportunity,

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<sup>72</sup>Faure et al., op. cit., p. 59.

<sup>73</sup>Hanson and Brembeck, op. cit., p. 280.

the level of criteria for success moving steadily higher, so that it is always just beyond the masses grasp.<sup>74</sup>

The function of education (or school system) in the processes of social mobility is discussed by Turner.<sup>75</sup> He suggests a framework for relating certain differences between American and English educational systems to the prevailing norms of upward mobility in each country:

In England and the United States there appear to be different organizing folk norms, which may be labelled sponsored mobility and contest mobility respectively. Contest mobility is a system in which elite status is the prize in an open contest and is taken by the aspirants own efforts. While the contest is governed by some rules of fair play, the contestants have wide latitude in the strategies they may employ. Since the "prize" of successful upward mobility is not in the hands of the established elite to give out, the latter are not in a position to determine who shall attain it and who shall not. Under sponsored mobility, elite-recruits are chosen by the established elite or their agents, and elite status is given on the basis of some criterion of supposed merit and can not be taken by any amount of effort or strategy.<sup>76</sup>

Faure et al., point out that the conception of social advancement through education is "typical of blocked societies" whose sole purpose is "their own perpetuation".<sup>77</sup> But, they say, it also affects societies in evolution, both

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<sup>74</sup>Faure et al., op. cit., p. 59.

<sup>75</sup>Ralf H. Turner, "Modes of Social Ascent Through Education: Sponsored and Contest Mobility," in Halsey et al., op. cit., pp. 121-139.

<sup>76</sup>Ibid., pp. 121-122.

<sup>77</sup>Faure et al., op. cit., p. 59.

in developing and industrialized countries. Then they continue as follows:

The established elite has a convenient and apparently equitable method of recruiting its successors from one generation to the next, namely by taking most of them from among its own offspring, which is a very pleasant thing to be able to do, while at the same time it picks out a selected few from the less favoured classes. This machinery has a triple advantage. It gives society a safety valve, it gives the ruling class a good conscience and it makes sure of fresh blood for the elite. It is surely less scandalous than other selection systems based not on competitive examination but on ethnic, racial or ideological discrimination. It must be above all not be concluded from the vices of elitism as practiced in blocked societies that a healthy conception of elitism and educational democratization are incompatible. These two terms only come into contradiction when allegedly elite intellectual groups are selected in terms of non-democratic criteria and structures.

Elitism of the kind which forges a power-equals-class link into the system will prevent the emergence of an authentic elite, but democratically widening the bases of education to enable all individual aptitudes to find fulfillment stimulates the rise of a "natural" elite.<sup>78</sup>

Foster talks about the "elite--mass gap" and says that in most developing countries schools have done a moderately successful job in facilitating mobility, in spite of the considerable inequality in access to education. Then he continues:

The corollary is that numerous members of existing elites are themselves of humble origin, and formal education more often than not played a crucial role in their earlier upward mobility. This openness in access to elite roles, however, is not associated with high aggregate rates of upward mobility in these societies. Frequently opportunities at the top and middle levels

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<sup>78</sup> Ibid., op. cit., pp. 59-60.

of the occupational structure expand but slowly, and relatively few individuals at the base achieve upward mobility through the careers of those that do often provide striking success stories.

Quite obviously, formal education insofar as it is unevenly distributed contributes to the process of structural and cultural differentiation. But substantial problems arise if privileged groups 'capture' the educational system in such a manner as to use it as an instrument for maintaining existing status differentials. In other words, far from promoting a degree of mobility from the mass, the educational structure largely exists to transmit status to the offspring of existing elites.<sup>79</sup>

According to Coombs, there are different strategies that an educational system can use.

It can, at one extreme, throw open its doors, let everyone in who wishes, allow them to stay in for as long as they like, and go as far as they please. This strategy may satisfy social demand, or at least appear to do so, but at the price of a storm of protests about high drop-out rates, poor quality, and the waste of public resources. India and Latin American countries have had this experience.

At the opposite extreme from this wide-open system there is the policy whereby everyone (if it could be afforded) is given a chance for a primary education, but a severely selective process governs who goes on from there. In this way, elementary education serves to screen the academically bright, the students in secondary and higher education can be held down to a manageable number, and quality can be more readily maintained.

This policy of competitive selectivity and promotion, based on individual academic performance, seems at first glance to be fair and democratic. It makes the examination the impartial arbiter of who will continue into secondary and higher education; it accepts the 'ablest' and ruthlessly rejects the rest, thereby incidentally, stamping more young people with the identifying mark of 'failure' than success. The

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<sup>79</sup>Foster, in Don Adams (ed.), Education in National Development, op. cit., pp. 28-29.

strategy is designed to produce an educated elite, which will provide society with its essential leadership.<sup>80</sup>

C. Issues of Structure: Built-in Barriers to the Utilization of Talent and the Resources

Another paramount factor influencing "productivity" and "equity" in education is the structure and the organization of the school or educational system itself.

Husen points out that in developing and developed countries alike, behind the efforts to reform school structure, particularly of secondary education, there are two major forces. The first is the democratization of secondary and higher education in order to broaden opportunities for young people from all walks of life, and especially for talented students from the lower social classes. The second is the need to provide an expanding economy with a sufficient supply of trained manpower. Then he adds:

In rapidly expanding economies--the United States, many European countries, and Japan are examples--the major problem facing educational planners is the need to structure the educational system so as to provide mass education beginning with the secondary level, but followed rapidly at the university level. What this entails is a mobilization of the "reserves of talent" wherever they might be found.

The implication of democratization and the use of the reserve of talent must be viewed in the light of research on the relation between the use of talent and the way the school system is structured. The main problems to be considered are the kind of built-in barriers that prevent the optimal utilization of talent

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<sup>80</sup> Coombs, op. cit., p. 31.

and how these barriers function.<sup>81</sup>

The present hierarchical structure of most of the school systems in the world contains these "built-in barriers". As pointed out by Faure et al.:

Hierarchies, whether official or merely residual (depending on the society in question), are apparent in the structure of education. The very terms "primary", "secondary", "higher", "professional", "technical" or "scientific" are loaded with discriminatory overtones. The teaching profession itself is too hierarchical. Finally, there is an over-rigid hierarchical relationship between teacher and pupil.<sup>82</sup>

The structure of an educational system determines the terminal norms through general versus specialized schools, the way of selecting pupils among different curricula or types of schools, and the selecting of some out of a larger number of pupils for promotion to the next class in school or for admission to the next successive level of schooling.<sup>83</sup>

The relationship between school structure and the utilization of talent is examined in detail by Husen, based on research in the international sphere and in Sweden.

There are good grounds for saying that during the last decade in most developed countries, a cardinal problem of school policy has been to organize an education that abolishes or diminishes the dualism or parallelism between prolonged elementary school education on the one hand and selective academic secondary education on the other. Economic expansion has made

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<sup>81</sup>Husen, in Bereday, op. cit., p. 68.

<sup>82</sup>Faure et al., (eds.), op. cit., p. 58.

<sup>83</sup>See Chapter One, pp. 19-20.



it necessary to prolong basic education for all young people, regardless of whether in a compulsory elementary school or in a secondary academic school.

The school structure in Europe, and in countries that have tried to imitate European systems, has been molded by certain historical and social forces that have created the parallel or dualistic system.... The question now is whether West European countries--faced by the demand for trained manpower, by a higher "consumption of education", and by soaring secondary school enrollment can structure secondary education in ways that will satisfy both elitist preparation for university studies and prestigious careers and the demand for universal education at the secondary level.

The question, moreover, is even more urgent because the rapidly growing need for trained manpower and the increasing consumption of education, reflected in the so-called educational explosion, conflict with a school organization and a curriculum designed for a static economy and a society characterized by a rather rigid social structure....<sup>84</sup>

Then he points out that until recently both the occupational status structure and the social class system in many developed countries could be symbolized by a pyramid. The base of this pyramid was formed by a mass of unskilled or semiskilled manual workers who had a modest formal education provided by a compulsory elementary school. The next level was formed mainly by white collar workers whose education exceeded elementary school by a few years, in many cases by some kind of a school (Mittlere Reife, course complementaries), with graduation at fifteen or sixteen--a schooling that did not qualify for university entrance. Now, in the countries with advanced economies, the social

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<sup>84</sup>Husen, in Bereday, op. cit., p. 70.

status structure of the occupational universe increasingly resembles the shape of an egg. In this line he explains the relationship between school structure and the occupational status structure of the society as follows:

The school structure in most European countries and in former colonial areas has until now reflected the occupational status structure of a static society. Until the nineteenth century, formal schooling was principally provided for the professionals. The program was academic. Enrollment was limited mainly to young people from upper social strata. This was true even if the schools to a modest extent served as agents of social mobility by recruiting from lower strata. When elementary education, consisting mainly of the three R's, was made compulsory in the nineteenth century in many of today's economically developed countries, it was designed for the masses and not for those who had previously entered the learned academic school. As a rule, therefore, several grades in the compulsory school ran parallel to the pre-university school. In some cases the parallel was complete; that is, children from privileged homes were sent to private preparatory schools. Currently the parallel in countries like France, England, and Germany has occurred mainly from the age of ten or eleven and up. Thus in West Germany children generally transferred from the fourth grade of the elementary school (Volkschule) to the academic secondary school (the nine-year Gymnasium). In England and France they transferred after five years in the elementary school--that is at eleven--to grammar school. Schools of this type resist the "explosion" at the secondary level and have been characterized by competitive entrance and selectivity examinations, grade-repeating, and drop-out. Indeed, the growing consumption of education has made these schools more and more competitive.<sup>85</sup>

Husen gives some examples of very high rates of drop-out and grade-repeating from selective school systems of

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<sup>85</sup>Ibid., pp. 70-72.

Europe<sup>86</sup> and continues that:

In theory the selective schools are supported to admit and promote their students on the basis of "genuine ability" and not because of social background or place of residence. Thus, to the extent that tuition is free, equality of opportunity was supposed to operate with full force even in a highly selective and competitive system. Everybody with the same amount of ability has the same chance to succeed by "free competition". What criteria of ability, then, are usually employed? They are mostly school marks, examination scores, and "intelligence" and achievement test scores, used separately or in combination. These criteria, however, are not independent of social background. A comprehensive body of research has shown that all criteria of selection are more or less loaded with social factors, such as parental education or occupational status and geographical accessibility of the schools. There is ample evidence that the selection procedures for academic secondary and higher education, as well as the screening of students during the course, contain built-in handicaps for children from less privileged social background. If the effective utilization of the pool of talent is a prime concern not only for the individual but also for the economy at large, a school structure that does not promote the abilities of all its students would have to be reformed.<sup>87</sup>

Husen compares the merits and draw-backs of "selective" and "comprehensive" systems as follows:

Comparison of the merits and draw-backs of selective and comprehensive systems have as a rule been confined to the end-products such as the average performance of the students in a graduating class. Even these assessments have been purely subjective, as cross-sectional empirical data have not been available, meanwhile critics of the comprehensive system who point to the high average quality of the graduates of the selective academic schools, overlook certain important elements in the picture. For example, when European and American undergraduates are compared according to

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<sup>86</sup>These rates are given in Chapter Two, p. 101.

<sup>87</sup>Husen, in Bereday (ed.), op. cit., p. 73.

intellectual standards, only about 5 to 10 percent of the age group in Europe is compared with about 30 to 40 percent in United States--a dubious methodological procedure. Furthermore, the price that is paid in loss of talent in selective systems is considerable, particularly due to grade-repeating and drop-out. In a competitive system with formal equality of opportunity, wide latitude is allowed to social factors, such as parental education and social aspirations. Both in Sweden and in England the relation between social class and educational selection has been carefully studied, even with formal equality of opportunity the social background of the student plays a surprisingly important role.<sup>88</sup>

King says "In truth the sheer amount of knowledge which a French child has amassed when ready to leave the lycee is enormous by any standard". It is impossible to make a comparison with the United States system, because there is nothing comparable. European systems and the American are not intended to accomplish the same thing.<sup>89</sup>

As pointed out by Chauffard, "far-reaching changes have taken place in school organizations: the older vertical structures are now given way to horizontal structures with the result that throughout their school careers children have a choice of a number of possibilities".<sup>90</sup>

Among the other suggestion to improve the structures of education, UNESCO suggests that "as far as the actual

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<sup>88</sup> Ibid., pp. 73-74.

<sup>89</sup> Edmund J. King, Other Schools and Ours, A Comparative Study for Today (New York: Holt, Rinehart and Winston, Inc., 1971), p. 83.

<sup>90</sup> Benassy Chauffard, "Pupil Guidance: Its Conception, Meaning, Scope and Connections With Personal and Vocational Guidance," in Council of Europe, CCC/EGT (69) 30, op. cit., p. 9.

structures are concerned, premature specialization, threatens to jeopardize vocational and social mobility, which on the contrary is encouraged by the maintenance of a period of undifferentiated training for all ('single stream')".

It is pointed out by UNESCO that generally speaking, where the programs are long and where the significance of the training becomes apparent after two, three or four years of schooling, drop-outs and failures are always more numerous.

In that case, "the students who stop somewhere in the midway have wasted their time" (not to mention the money expended upon them).<sup>91</sup> Then UNESCO asks: Would not short

programmes, or better still, a school-year constituting a complete educational unit, lead to a more flexible system offering an escape from the policy of all or nothing?<sup>92</sup>

The conventional vertical structure of education, which usually has three levels (primary, secondary first, and second cycles,<sup>93</sup> and higher) with specified periods of schooling, is so strong that any change to it needs unconventional minds. According to UNESCO, "the structure of an educational system itself must be flexible enough to facilitate transition, not only from one branch of education to

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<sup>91</sup>UNESCO, Educational Planning, op. cit., p. 122.

<sup>92</sup>Ibid., p. 122.

<sup>93</sup>In some countries there is a change in the structure of primary and secondary schools toward schools given on eight or nine year compulsory general education for all. In this way the first cycle of secondary schools are going to be eliminated.

another, but also from out-of-school training to training in school and vice-versa".<sup>94</sup>

Agazzi suggests that "there are some specific improvements that must be effected. Educational systems and curricula must be made more flexible; elimination and selection in schools must be replaced by pupil guidance; teachers must be given special courses in education".<sup>95</sup>

Despite the improvements toward non-selective and more flexible systems of education the oppositions still continue. The following quotations are some examples: Szamuely asserts: "What some of our fanatical egalitarian really desire is equality not of opportunity but of results--which is why they are already attacking any kind of examination or selection at any level. The abandonment of all forms of selection would certainly lead to the breakdown of our modern society and ruin of our economy: A denouement they probably anticipate with keen relish". Professor Sir Cyril Burt asks "whether the permissive school be responsible for much of the subsequent delinquency, violence and general unrest". Professor Richard Lynn, defining a system of education designed to produce an elite, writes: "When it is finally destroyed, it does not seem at all unlikely that the tradition of civilization will be destroyed with it.

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<sup>94</sup> UNESCO, Educational Planning, op. cit., p. 122.

<sup>95</sup> Agazzi, op. cit., p. 49.

No doubt this is the intention of its critics".<sup>96</sup>

D. Issues of Quality: Standards and Examinations

As pointed out by Anderson and Bowman, policies which rest upon concern for "standard" raise complex issues that are related to "equity" and "efficiency" of selection or allocation.<sup>97</sup> It is believed by some educational administrators, teachers and even parents that the "quality" in education must not be lowered for the sake of "quantity".<sup>98</sup> "Quality" of an educational system is mainly controlled and maintained through the curriculum, and through examinations and grading system. Hunt quotes the following from Marshall McLuhan in his article "The Tyranny of Subjects":

The world of play is necessarily one of uncertainty and discovery at every moment, whereas the ambitions of the bureaucrat and the systems-builder is to deal with "foregone conclusions".<sup>99</sup>

In terms of his attitudes towards standards and examinations, the education system-builder often does indeed appear to display a strong preference for "foregone conclusions"! Hunt also quotes the following from Bertold Brecht:

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<sup>96</sup>Quotations from David Rubinstein and Colin Stoneman (eds.), Education for Democracy (Penguin Books, 1970), pp. 11-12.

<sup>97</sup>Anderson and Bowman, op. cit., p. 35.

<sup>98</sup>See Chapter One, p. 22.

<sup>99</sup>Albert Hunt, "The Tyranny of Subjects", in David Rubinstein and Colin Stoneman, op. cit., p. 41.

The young person in school is monstrously confronted by the BARBARIAN in unforgettable form. The latter possesses almost limitless power. Equipped with pedagogical skill and many years of experience he trains the pupil to become a prototype of himself....<sup>100</sup>

The complaint that the schools are lowering their "standards" or "quality" of education is common, and this is one of the weapons mostly used by the defenders of "traditional" schools against the "progressive" schools.

The reform of curricula, in recent years, has been the object of discussions at several international conferences.<sup>101</sup> The development of curriculum based on the objectives defined in terms of the change in the behaviours of the learners has gained importance.<sup>102</sup> The unreasonable nature of a system under which children forget from one year to the

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<sup>100</sup> Ibid., p. 42.

<sup>101</sup> XXIX, The International Conference on Public Education (1966): discussion on secondary education curricula. Meeting of experts on basic general education in technical and vocational training, UNESCO, Paris (1966). Meeting of experts on teacher training, UNESCO, Paris (1967). Meeting of experts on the content of general education, UNESCO, Moscow (1968).

<sup>102</sup> B. S. Bloom, A Taxonomy of Educational Objectives, Handbook I: Cognitive Domain (New York: David McKay Company, Inc., 1965); B. S. Bloom et al., Handbook on Formative and Summative Evaluation of Students Learning (New York: McGraw Hill Book Company, 1971); B. S. Bloom, Stability and Change in Human Characteristics (New York: John Wiley, 1966); R. F. Mager, Preparing Educational Objectives (California: Fearson Publishers Inc., 1962); Selahattin Ertürk, Eğitimde Program Gelistirme (Ankara: Hacettepe Univ. Basimevi, 1972).



next a considerable part of what they have learned is largely criticized.<sup>103</sup> But, as pointed out by a UNESCO publication, "although reform of curriculum is a topic most frequently discussed, it is interesting to note that the boldest reforms are often attempted in countries where formal school education is relatively little developed and is accordingly unencumbered by traditions, good or bad".<sup>104</sup> The "fight" between the supporters of "progressive" schools and the writers of "Black Paper One" and "Black Paper Two" in England is a good example of the resistance of tradition.<sup>105</sup>

Anderson points out that the dispute about "quantity versus quality" in education is probably not worth discussing. That, at least, is the conclusion of most sociologists and psychologists in the United States where expansion of schools has been greatest. There is a hard kernel of nourishment inside that husk, however. Then he reads:

It has long been known to a few investigators that the successive winnowings of youth in highly selective school systems is in large part factitious. Much educational waste arises by discouragement of youth with

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<sup>103</sup> UNESCO, Educational Planning, op. cit., p. 120.

<sup>104</sup> Ibid., p. 43.

<sup>105</sup> C. B. Cox and A. E. Dyson (eds.), "Fight for Education: A Black Paper," Critical Quarterly Society (March, 1969); C. B. Cox and A. E. Dyson (eds.), "Black Paper Two: Crises in Education," Critical Quarterly Society (October, 1969).

the "wrong" combinations of interests or abilities. Locking pupils up in courses of study with little opportunity to move into new curricula is sterile guidance. The number of frustrated and discouraged pupils can be diminished by widening the criteria for allocation and particularly by allowing more individuals to have a run at the programme they desire.

Narrow intellectual stipulations for educational elites clearly are going to be broken open. The relevance of schooling for careers will be improved by broadening our criteria of excellence. Mere academic aptitude is perhaps a poor qualification for business executive, public official, or physician.<sup>106</sup>

This is not an issue only for developed countries with their well-established traditional school systems. The newer nations also tend to follow the developed nations.

Anderson and Bowman explain why the newer nations tend to follow Western standards:

The newer nations are determined that the products of their schools shall be as good as those turned out in advanced nations. There is also a desire that the students be able to qualify for overseas study by having "equivalent" certificates. Since most pupils come from humble homes, the use of borrowed standards weeds them out drastically. It may also waste talent that could thrive in practical affairs if bolstered by a certificate even one lower than European quality.... Amidst all the concern over democracy it is overlooked that concentration on the few talented pupils, molded to European patterns, widens the differences of status among the country's citizens.<sup>107</sup>

Hanson describes the "frustration" of Africans educated in "conventional" schools with "conventional school" programs. He says:

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<sup>106</sup>C. Arnold Anderson, "Sociological Factor in the Demand for Education," in OECD, Social Objectives in Educational Planning, op. cit., p. 44.

<sup>107</sup>Anderson and Bowman, in Don Adams (ed.), Social Objective of Educational Planning, op. cit., p. 35.

The question of ambivalence is so omnipresent that it might be cited as the second great dilemma in African Education: It arises in the sense of conflict between relevance and equivalence.... The first generation of Africans ... are frequently as conservative concerning the educational status quo as are the most traditional of the "colonialists". This shows up most clearly when they confront the difficult task of working out the program equivalents of their competing faiths: Equivalence (or European standards) on one hand, and negritude (or Africanization) on the other. Most African educators are deeply concerned lest modified programs be viewed as being of lower stature or less value than their original European counterparts, lest they be viewed as watered down. The surest way to avoid any such implications is to pay lip service to adaptation, or make token modifications, but to adhere essentially to patterns, syllabi, and examinations which vary little, if at all, from inherited European models. Consequently, in most nations little or no fundamental program innovation has appeared in academic programs since Independence.<sup>108</sup>

Anderson points out the problem of "unutilized reserves of talent" in most countries, especially at the secondary level and adds that "we must ask whether it will be desirable to reintroduce non-intellectual criteria in selecting youth for graduation from schools or promotion to a higher school. We have narrowed our criteria to ability in part because that trait is so easy to test reliably."<sup>109</sup>

Where systems of selection are not based on social class, ethnic origin or religions of the student, the tool mostly used for educational selection is the system of

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<sup>108</sup> John W. Hanson, Imagination and Hallucination in African Education (Michigan State University: Institute of International Studies in Education, 1967), pp. 11-22.

<sup>109</sup> Anderson, in OECD, Social Objectives of Education Planning, op. cit., p. 42.

examinations, grading and "guidance". Therefore, it will be helpful to look also at these elements more closely as they may relate to "productivity" and "equity".

The assumptions behind educational selection are explained by Anderson and Bowman under the criteria of "efficiency". According to the criterion that "selection of individuals for further schooling should be based upon how much additional learning can be predicted for one versus another person, those for whom the greatest increment in learning is predicted will be the first chosen, and so on to the point at which the assigned resources are all taken up". The assumptions are that "the number of children capable of profiting from any given kind of training will diminish as the level of schooling rises. Some can learn more than others.... High level people are needed, few have the potentials, so we concentrate resources on the talented". Anderson and Bowman add that ... "to speak of equity in terms of talent is equivocal, with no more intrinsic merit than race, social class or religious orthodoxy".<sup>110</sup>

As pointed out by Anderson and Bowman, there has been a tendency to multiply the examinations in developing countries. "Since new opportunities have been opened only slowly, some methods for deciding which children should benefit has been needed, and examinations have been a ready

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<sup>110</sup> Anderson and Bowman, in Don Adams (ed.), Educational Planning, op. cit., pp. 34-35.

answer supplied by the European countries used models."<sup>111</sup>

Today examinations that have been used to measure "talent", "ability", or the level of "learning" have become the concern of educational authorities, teachers, parents and students alike. The committee for General and Technical Education of the Council of Europe has taken up the subject and has given priority to a number of projects calculated to improve the examination system.

The need to study the examination system is explained by Agazzi as follows:

It has long been felt that some study, perhaps more accurately some fresh consideration, needs to be given to the question of examinations: For centuries, these have been used as a yardstick for measuring the intelligence and capacities of the young and checking the extent of their knowledge. In addition, they serve as a basis for the award of the diplomas which attest the intellectual and other attainments of the candidates and determine their social standing. The need to reconsider the whole question has become even more evident in modern times, following the changes and developments in the social, economic, politico legal and educational spheres; but it has only been recognized comparatively recently that what is needed is not a number of partial, spasmodic and subjective investigations, but a properly organized, systematic and scientific study, or that proposals for such a study have actually been drawn up and put into effect. This has been the result of the growing difficulties arising from the increasing number and complexity of examinations, and the fact that the traditional-type examination no longer fulfills the objectives for which it is set. Moreover, regarded either as a guide to an individuals talents and interests, or as a means of fulfilling the demands of society or contributing to the qualitative or quantitative improvement of modern civilization and culture, it is manifestly and undeniably inadequate.<sup>112</sup>

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<sup>111</sup> Ibid., p. 35.

<sup>112</sup> Agazzi, op. cit., p. 9.

Agazzi explains that the modern study of the question of examinations goes no further than the early years of the twentieth century. At international levels the first study was carried out by UNESCO. Data on the examinations and other methods of evaluation currently in use by some twenty countries in their educational systems were gathered by means of a questionnaire distributed by the Institute for Education at Hamburg. A report based on the answers was completed in 1956, and after two meetings of experts on the subjects, the final report was drawn up by F. Hotyat and issued in 1962.<sup>113</sup>

Since 1962, the Council of Europe has organized several courses, conferences and study groups on the topic, which resulted in several documents and reports, especially during 1962-1965.<sup>114</sup>

Parallel to these, the Council of Europe has organized several courses on various aspects of observation and guidance, particularly in secondary general and technical education.<sup>115</sup>

In spite of all these efforts to improve the selective examination systems toward the concept of guidance, in many countries, including Turkey, thousands of students drop out,

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<sup>113</sup>Ibid., p. 10.

<sup>114</sup>Ibid., pp. 10-15.

<sup>115</sup>Yves Roger, The Observation and Guidance Period (Strasbourg: Council of Europe, CCC, Education in Europe II, General and Technical Education, No. 7, 1967), pp. 76-82.

are dismissed, fail or repeat the same grade every year.

Agazzi points out the relationships between social systems and examination systems as follows:

The problem of examinations is more than a merely technical one of administrative and educational procedures, relating to practical and functional requirements of the educational system and to be considered in isolation within its own framework. It is, on the contrary, directly linked to the whole spirit and aims of the social and even the political system. A country's examination system and problems connected with it are the expression of that country's civilization and culture.<sup>116</sup>

According to Agazzi, the question calls for the most careful study from three points of view: (1) there are the existing examinations taken at different stages of the educational cycle; (2) there are the proposals for new systems suggested or demanded by new social, cultural and educational situations; and (3) there is need for a whole new concept of examinations, which brings us back to the question of training of teachers and examiners.<sup>117</sup> He says that "the questions of examinations ... must be considered as basically an educational problem, the organizational aspects of all schooling being necessarily subordinate to the educational requirements of examinations."<sup>118</sup>

A close link exists, or should exist, between the structure, curricula, methods and spirit of the school,

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<sup>116</sup>Agazzi, op. cit., pp. 25-26.

<sup>117</sup>Ibid., p. 26.

<sup>118</sup>Ibid., p. 15.

and the system, methods and spirit of examinations.

Nevertheless:

Examinations themselves, however, continue on the whole to be impersonal and aimed merely at finding out how much the pupil knows.... Their effects, it is argued, is or at least can be to oblige him to make an effort, to rethink and set in order the knowledge he possesses and to realise the need to plan his work. They are also said to provide the pupil with the assurance of his quantitative and qualitative progress, to call for and to develop a sense of responsibility, and to be, potentially at least, of real formative value besides encouraging him in "self-guidance".

According to the concepts on which they are based, and to their organisation and methods, schools can either be basically selective or can see their task as being to provide an education and type of guidance that will enable their pupils to specialise in this or that subject up to the upper phase of secondary schooling and university.<sup>119</sup>

It is impossible to stress too strongly the danger that the mere fact of examinations being a part of the educational system may disrupt the whole task and function of the school, unless adequate care is taken to ensure that they do not become the be-all and the end-all of the teaching provides. In the modern concept of the school it is hardly possible to retain any longer the pernicious belief that examinations are the core of the whole system. Now that we are gradually reforming our educational and teaching methods, and that the tendency is to assess a pupil's capacities on the basis of reports from all the teachers that come into contact with his class, we can no longer allow examinations to exercise a degree of influence on his education and future career which, besides being out of date, is also on the whole intrinsically negative.<sup>120</sup>

Agazzi goes on to explain what functions are expected of examinations from teachers, pupils', families' and school administrators' points of view and concludes that:

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<sup>119</sup> Ibid., pp. 41-42.

<sup>120</sup> Ibid., p. 42.



In most cases, however, the hopes reposed in examinations are largely illusory and their results one-sided.<sup>121</sup>

It is possible as well as necessary, Agazzi says, to investigate the question along bolder and more far-reaching lines, if we are to show exactly what is involved and how examinations are responsible for "regulating" both the educational system itself and the destinies of so many human beings and hence of a whole society, in terms of its intelligence and creative and productive powers.<sup>122</sup> Then he compares two different educational systems (European and American Systems):

The real difference between the two systems does not lie in the type of education offered, since each provides for an average level of knowledge according to traditional methods. The difference consists in the fact that one system eliminates the greater number of its students and offers a complete education only to the survivors, whereas the other system keeps all its students for as long as possible in order to give each of them an opportunity of reaching the highest possible level of culture. The difference is a fundamental one.<sup>123</sup>

Agazzi comments on the early pre-selection of children, which is the target of growing criticism in nearly all countries, because of the social rather than intellectual handicaps that may debar many able children from an advanced secondary education. Then he adds that "at the moment when the tests are given they may produce quite misleading results

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<sup>121</sup>Ibid., p. 43.

<sup>122</sup>Ibid., pp. 43-44.

<sup>123</sup>Ibid., p. 45.

and, finally, their prognostic value is by no means universally accepted."<sup>124</sup>

No one pretends that successful students in entrance exams are really always better than those who failed, or that because one has passed the examination he will necessarily succeed in his following grade or school, or even that repeated examinations serve any useful educational purposes at all.<sup>125</sup>

One of the consequences of heavy reliance on examinations is the emergence of the "coaching industry". In the countries where selective examinations and eliminatory educational systems are present, an unrecognized private educational system has grown up for preparing candidates for entrance examinations or for preparing pupils for internal promotion examinations. It is also capable of creating an environment in which a teacher might find himself giving additional paid lessons to his own students, which could ruin the relationship between the teacher and the student or the parents.

Agazzi also touches on this as follows:

So far as the families are concerned, the examination system is apt to distort their judgement and produce in them a state of nervous anxiety, as a result of which the candidate is subjected to additional outside coaching which besides being expensive, damages

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<sup>124</sup>Ibid., p. 48.

<sup>125</sup>Ibid., p. 46.

the reputation of school and has the worst possible psychological and moral effect on the candidate himself. The system encourages parents, like teachers, to pay more attention to examination results than to the process of education itself, thus distorting the whole question and producing highly undesirable results in both educational and psychological fields. It also generates a kind of collective panic and has opened up a new field of activity for individuals and groups, through the creation of what we may call the private "coaching" industry to provide courses preparing candidates for examinations or re-examinations. It has created a complete private education system, existing along-side the ordinary system of private and state schools.<sup>126</sup>

According to Agazzi, there is no need to enlarge on the significance of consequences of selective eliminations, examinations which are either erected into a system of their own or regarded as one aspect of the educational system as a whole. It is the cause of the so-called "academic mortality rate", or "academic wastage". Then he goes on as follows:

The "academic mortality rate" is increased by the "examination mortality rate", whereby the already reduced group of those who have emerged successful from the selection--by--elimination process operated by the schools see their numbers shrinking still further following each examination. It comes down, in the end, to the formula: everyone has the right to exist, some people have the right to go to school, a very few have the right to pass examinations. The situation is one of which neither we ourselves as individuals, nor society, nor civilization have any cause to be proud.<sup>127</sup>

What should the purpose of examinations be? Agazzi's answer is as follows:

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<sup>126</sup>Ibid., p. 52.

<sup>127</sup>Ibid., p. 49.

The purpose of an examination should be to discover: Whether the candidate has assimilated what he has learned and not merely stuffed his mind with useless facts; whether, and in what form, he remembers it; whether he has understood it; whether he can apply his knowledge; whether he can build on it. In addition, it should ascertain whether, in addition to his actual knowledge he has acquired the other elements of a balanced, creative, well-directed personality; and finally whether, in the case of failure the fault lies with the teaching.<sup>128</sup>

E. Issues of Guidance: Transition and Specialization

As expressed by a symposium organized by the Council of Europe in Strasbourg, in 1971:

All countries have at some time had rigid education systems in which pupils are graded on some principle of assessed talent or social class origin at an early age and segregated for different educational processes that will determine both their occupational futures and their social class levels. Into such systems, most countries have introduced guidance services ... to guide young people in their choices, however limited, that are open to them.<sup>129</sup>

The Council of Europe has sponsored a series of courses dealing with the problems of secondary education, and the topics of the observation period and guidance have had an important role in them.<sup>130</sup>

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<sup>128</sup> Ibid., p. 52.

<sup>129</sup> Council of Europe, Committee for General and Technical Education, Symposium on Methods of Guidance and Social Education for the 14-17 Years Age Groups (Strasbourg: 18 January, 1971, CCC/EGT (71),1), p. 1.

<sup>130</sup> Council of Europe, Council for Cultural Cooperation and Cultural Fund, Annual Report 1970 (Strasbourg, 1971), p. 20.

The Committee for General and Technical Education of the Council of Europe has concerned itself with the problem of guiding pupils "towards studies which will enable them to realize their full potential as well as obtain employment suited to their capabilities". Many countries recognize that this need for guidance is in line with the principle of democratization of education, which principle underlies most educational reforms today.

Expansion of compulsory education up to 8 or 9 years, establishment of comprehensive schools in place of traditional secondary schools and institution of an observation and guidance period are among the changes in the type and structure of education adopted recently in nearly all European countries. According to Roger, there is "evidence of a deliberate choice in favour of a more democratic approach to education as opposed to the traditional stratified system".<sup>131</sup> These new developments are very closely related to the underlying issues of "productivity" and "equity", which are the key concerns of the present study.

The proposal to incorporate an observation and guidance period often has been opposed on the grounds a) that it is essentially a political weapon of the left, and b) that it is bound to entail an all-round lowering of standards.

In reply to the first argument, Roger says:

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<sup>131</sup>Roger, op. cit., p. 1.

It may be well asked whether the observation and guidance period does not, on the contrary serve to abolish a political attitude vis-a-vis the school--a political attitude which rendered education a privilege granted solely to the children of the cultured minority, in other words of the wealthy or ruling classes of our countries.<sup>132</sup>

The second objection has been refuted by many authors, some of whom have been cited earlier.<sup>133</sup> The objection that "comprehensive" programs and general guidance periods might lower standards is often directed at the mixing together of students of all ranges of academic ability. Roger quotes the following opinion on the intermixing of pupils which was expressed by Lo Gatto, Italian Chief Inspector of Education:

Such groupings should on the contrary serve to give the school an atmosphere of community life and co-operation reflecting reality this can only be achieved if the children are of different intellectual capacity and have different social and cultural background.

In other words, the class and the group should help children to get along with one another and adapt themselves to other personalities even where profound differences exist; that is the essential aim of all democratic education.<sup>134</sup>

The main object of the new guidance periods was formulated as one of the final resolutions of the Council of Europe's Frascati course (1961):

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<sup>132</sup>Ibid., p. 9.

<sup>133</sup>See pages 21-22.

<sup>134</sup>Roger, op. cit., p. 10.

The main object of guidance is to promote the full development of the pupil's personality in all its aspects, determining the kind of course and, ultimately, the profession best suited to his capacity. Through this process it aims at giving him the best material and spiritual future and to give him the place where he will be most useful to society.<sup>135</sup>

The International Conference on Public Education (1963)

added to this functional concept of pupil guidance "a psychological objective in the shape of personal assistance designed to help the pupil to map out his future life".<sup>136</sup>

Reuchling emphasizes the concept of pupil guidance by linking it with economic development and social change, with their effects on our concept of the function of the school.<sup>137</sup>

Reuchling also points out that pupil guidance services tend "to undertake tasks that are very similar to those formerly undertaken by educational psychologists and guidance clinics" and adds "finally there are working teams consisting of teachers and non-teaching educationalists who in many countries assume the duty of easing the adjustment of all children to the school in order to preserve all possible opportunities for each one".<sup>138</sup>

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<sup>135</sup> Council of Europe, Committee for General and Technical Education, Course on Pupil Guidance Training for Teachers (Strasbourg, December 2, 1969, CCC/EGT (69), 30), p. 2.

<sup>136</sup> Ibid., p. 3.

<sup>137</sup> Maurice Reuchling, op. cit., p. 251.

<sup>138</sup> Ibid., p. 252.

As stated by the Council of Europe, this is a new extension of the role of pupil guidance with the addition of an educational function. It is on the latter aspect that emphasis was laid at the ad hoc Conference of Ministers of Education in 1967 when it was stated that guidance was intended to develop the pupil's ability to make social choices in the present, and also in the near and more distant future.<sup>139</sup>

The Council of Europe also points out that:

The new guidance concept has developed parallel to and in connection with the new philosophy regarding demands that must be put forward in an optimal educational system in a modern democratic society (gradual specialization, flexibility, and free choice of education, instead of selecting pupils).<sup>140</sup>

The Sigtuna Course was organized in August, 1958 by the Swedish Government. The object of the course was to study differentiation and guidance with special reference to the nine-year comprehensive school introduced by the Swedish Government, after a trial, to replace the former school system.

Some of the most important ideas of general interest to emerge from the Sigtuna Course are as follows:

1. The extension of compulsory schooling is an instrument of social promotion.
2. The present structure of primary and post-primary education results in wastage of intellectual

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<sup>139</sup> Council of Europe, CCC/EGT (69), 30, op. cit., p. 3.

<sup>140</sup> Council of Europe, CCC/EGT (71), 1, op. cit., p. 5.



potential, since some bright children are overlooked or unsuitably oriented.

3. Aptitudes, it seems, are better revealed by prolonged experience. And in fact intelligence tests, which take only a moment to perform, are not an infallible method of discovering an aptitude....

The results obtained by the traditional type of examination are most disappointing and the system itself leaves room for inconsistencies. In making their assessments the markers or examiners are involuntarily swayed by factors beyond their control; their criteria vary for reasons unrelated to the aim pursued.

4. It is not unusual to find, in schools of many different types throughout Europe--possibly throughout the world--that children are studying without knowing exactly why.
5. Continuous guidance is of greater value than periodic consultations, which are apt to lead to unreliable results.<sup>141</sup>

The Brussels Course held in 1964 emphasized the following ideas:

1. All children should have the benefit of an observation period lasting at least three years while they are between the ages of 11 and 16.
2. Whatever name is given to this stage of compulsory education, the purpose of the observation and guidance period is to introduce the children to the widest range of activities....
3. The first step should be to overcome handicaps for which family background or previous education are responsible and to give special help to all who need it, develop and understand the positive traits of each child's character, allow personality to grow freely whilst furnishing as many good reasons as possible for continuing education, and finally to guide the child, after a sufficient lapse of time,

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<sup>141</sup>Roger, op. cit., pp. 76-78.

towards the type of future activity most suitable for him, without neglecting the needs of society.<sup>142</sup>

The Council of Europe reminds us that through less segregated and more flexible school systems, which delay decisions and choices to a later age, pupils are enabled to have a larger say in deciding their own future within the educational and economic systems that claim them.

... Guidance is an educational matter preparing young people both for adequate functioning and for making decisions. Such decisions are usually both educational and vocational. Often however, the choices still have to be made before adequate understanding and maturity are achieved by pupils.

But in our discussion we are aware that some of us are already envisaging a still later stage in the development of school systems in which full "democratization" is possible and where pupils have a full voice in deciding both the nature and content of their courses and in which we respect their rights to decide for themselves totally what they should do with their lives....

Examinations systems, as they operate in education today, place many unnecessary constraints on the pupil's freedom of choice. We should therefore try to reduce to a minimum the decision making constraints that inflexible examinations systems often impose....

When young people can make mistakes "objectively" or "subjectively" in making a decision, we should insure that these are not permanently damaging and irreversible, but rather opportunities to learn and mature and thus to make a wiser decision the next time....<sup>143</sup>

The Council sums up all these implications as follows:

There is a need to define the concept of free choice. There are indeed many limitations; economic, geographical, ethnic, religious, sex role-founded,

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<sup>142</sup> Ibid., pp. 81-82.

<sup>143</sup> Council of Europe, CCC/EGT (71), 1, op. cit., pp. 17-20.

social, etc. There are also limitations because of ignorance, prejudices, personal handicaps or other limitations in the range of abilities. It is obvious that there is no absolutely free choice. Furthermore, pupils and parents should not be led to believe that there is. But the guidance programme (including individual counselling) should aim to widen the field of what is known, of what may be achieved of what can be accepted as being free from traditional "status-conscious" and other prejudices.<sup>144</sup>

The need for adequate teacher training became clear in the course of work carried out under Council of Europe auspices. Analyzing the teacher's means of action, Working Group No. 2, meeting in Brussels in 1961, stated that:

Finally the participants stressed the need for special training for teachers of the observation period to enable them to perform their double task of education and guidance in the best possible conditions. Training would include the study of special teaching problems in connection with the observation period, information on the structure of the different types of education and on the career possibilities they provide, and a psychological and sociological preparation designed to make collaboration between teaching staff and psychologists as effective as possible. Moreover, the training teachers receive in educational methods should enable them to make judicious use of the information and experience which the child acquires out of school.<sup>145</sup>

Roger emphasizes the need to adjust the training of teachers to their new function in terms of guidance and stresses the value of training in "practical psychology" and the need to diversify teaching methods.<sup>146</sup>

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<sup>144</sup>Ibid., p. 20.

<sup>145</sup>Council of Europe, CCC/EFT (69), 30, op. cit., p. 5.

<sup>146</sup>Roger, op. cit., pp. 118-122.

It goes without saying that the introduction of observation and guidance into a system of education necessitates parallel changes in the structure of education and particularly in the traditional selection function of education. If the system is not changed, and if the teachers behaviors and skills are not adjusted accordingly, the traditional selective function of the school could continue to operate under the name of guidance and observation, perhaps not as an eliminating function, but as an assigning function, assigning individuals to different programs with different statuses. Under a new guise, the school might then continue, nevertheless, to function as a perpetuation agent, as indeed it has already been observed to do in many countries.<sup>147</sup>

Roger points out that if the school is to perform its task efficiently during the observation and guidance period, changes will be necessary in some of the national education systems. He suggests that:

In a large number of countries there is no longer--if, indeed, there ever was any question of examinations such as those that recur with harrowing regularity in France and Belgium. It is clear that the notion of selection must be eliminated from a school system which claims that its principal functions are the following:

1. Good adjustment of the children.
2. Character development, with a view to disclosing aptitudes and attributes.
3. Careful observation of every ability.

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<sup>147</sup> There are several evidences which suggest this danger. Some of these may be found in W. B. Brookover and E. L. Erickson, Society, Schools and Learning, op. cit., in several pages. See also pp. 147-150 and 160-162 below.

Selection on the basis of intellectual attainment criteria should therefore be abandoned at least during the observation period.... The system of works, school reports and placing seems in general to be harmful, first of all because it focuses the attention of every one--parents, children and teachers upon what should be a secondary aspect of education, the numerical expression of results, while neglecting the primary aspect, i.e., knowledge, learning, progress achieved with confidence and a keen interest.

Let us remember the high degree of unreliability in examiners' decisions, for the tests revealed an alarming inconsistency even as regards the passing or failing of candidates. Where six examiners were marking the papers on different subjects of a hundred candidates, the number of candidates unanimously "failed" or "passed" sometimes seemed small by comparison with the number of cases where the examiners disagreed. In one subject there was disagreement with regard to 81 papers.

It is inadmissible that throughout their schooling young people should be "passed" or "failed" on the bases of such subjective and unreliable assessments when the whole course of their future existence is at stake.<sup>148</sup>

#### F. Issues of Groupings: Homogeneous or Heterogeneous

We have seen the examples of two methods of grouping: Grouping in intelligence level or personal choice is to be found in the English comprehensive school and in the French system, while heterogeneous groups are the rule in the Swedish and Belgian systems. Each formula has its partisans and its opponents.

Professor Bruno Bettelheim, Professor of Education, Psychology and Psychiatry at the University of Chicago, is opposed to segregation of gifted pupils. Based on his own

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<sup>148</sup>Roger, op. cit., pp. 106-107.

observation, he points out that--

in the special school for the gifted, these children had shown little ability to use their own critical judgement. Instead, they had relied heavily on their teacher's direction. In the slower-paced school, no longer having to worry about keeping up, these students began to reflect spontaneously on many problems, some of which were not in the school programme.

He also talks about the children from lower socioeconomic homes when they are put in the same classrooms with the gifted children and says:

In order to achieve educationally, many children from economically impoverished homes need to be challenged and motivated by example. Grouping deprives these children of such situation. They are left behind as second-class students, a situation which is more likely to create hopelessness than to lessen anxiety. Should some of them display outstanding leadership or ability, they are sent away to join their intellectual peers, leaving the non-gifted group even more impoverished.

Professor Bettelheim adds that the complaint that the gifted child becomes bored and loses interest in learning when they are put in the same classroom with the average pupils is "heard more often from adults, parents or educators than from students".<sup>149</sup>

Mr. Kenneth Mott, Supervisor of Social Studies, State of Louisiana, Department of Education, Baton Rouge, on the other hand, thinks that children should be taught in homogeneous groups. He says:

If the educators sincerely desire to promote individual growth and self-respect, they have no grounds, as far as I can see, to fear any kind of

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<sup>149</sup> Ibid., pp. 93-95.

grouping. The teacher, not the manner in which a class is organized, determines students attitudes toward individual differences.<sup>150</sup>

According to him, heterogeneous classrooms frequently produce frustration in children who are persistently unable to do the same work that most of the other children do. Frustration is also produced when bright children are not properly challenged by their social work, as is too often the case in heterogeneous classrooms.<sup>151</sup>

Brookover and Erickson classify grouping of the students to different curricula, or tracs in the same or different schools as a "type of segregation". They state:

... the traditional vocational high schools are generally heavily imbalanced in racial and social class composition. Vocational or other non-college curricula in comprehensive high schools are generally provided for predominantly lower class and minority group students. Various types of tracking or ability grouping provides similar patterns of differentiated education. Assignment to groups or tracs, as well as some curricula, has generally been based on some criteria of presumably fixed ability or capacity to learn. The aptitude tests or other criteria generally reflect the disadvantages of lower classes and Negro sub-societies. By placement in less adequate educational programs the disadvantages of these students are exacerbated rather than reduced. The widely publicized track system developed in the District of Columbia schools was also condemned by Judge Wright as a denial of Educational opportunity and thus equal protection of the law in the 1967 United States District Opinion.<sup>152</sup>

As summarized by Esposito:

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<sup>150</sup> Ibid., pp. 96-97.

<sup>151</sup> Ibid., p. 97.

<sup>152</sup> Wilbur B. Brookover and Edsel L. Erickson, Society Schools and Learning (Boston: Allyn and Bacon, Inc., 1969), pp. 120-121.

The debate between proponents of heterogeneous versus homogeneous ability grouping has been, in effect, over the issue of which grouping plan results in better conditions for teaching and learning. The theoretical rationale for homogeneous ability grouping, not necessarily based on research findings, generally includes the following points: homogeneous grouping takes individual differences into account by allowing students to advance at their own rate with others of similar ability, and by offering them methods and materials geared to their level more individual attention from teachers is possible; students are challenged to their best in their group, or to be promoted to the next level, within a realistic range of competition; and it is easier to teach and to provide materials for a narrower range of ability.

Alternatively, the usual arguments for heterogeneity include these: homogeneous grouping is undemocratic and affects the self-concept of all children adversely by placing a stigma on those in lower groups while giving high-group children an inflated sense of their own worth; most adult life experiences do not occur in homogeneous settings, and students must learn to work with a wide range of people; students of lesser ability may profit from learning with those of greater ability; it is impossible to achieve truly homogeneous grouping, even along a single achievement variable, since test data are not generally reliable or valid enough for this type of distinction; homogeneous grouping may provide less sensitivity to individual differences in children by giving the teacher the false sense that students are similar in social needs, achievement, and learning style while heterogeneity permits different patterns of abilities and needs to emerge within a group of children; and finally, homogeneous ability grouping tends to segregate children along ethnic and socio-economic lines as well as ability.<sup>153</sup>

Taking all the studies considered in the report prepared by the Findley Task Force on ability grouping, major findings of ability grouping research are essentially fourfold, as

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<sup>153</sup> Dominick Esposito, "Homogeneous and heterogeneous ability grouping: Principal findings and implications for evaluating and designing more effective educational environments," in Review of Educational Research Vol. 43, No. 2 (Spring 1973), pp. 163-179.



quoted by Esposito:

1. Homogeneous ability grouping as currently practiced shows no consistent positive value for helping students to achieve more scholastically or to experience more effective learning conditions. Among the studies showing significant effects, the slight gains favoring high ability students is more than offset by evidence of unfavorable effects on the learning of students of average and below average ability, particularly the latter.
2. The findings regarding the impact of homogeneous ability grouping on affective development are essentially unfavorable. Whatever the practice does to build or inflate the self-esteem of children the high ability groups is counterbalanced by evidence of unfavorable effects of stigmatizing those placed in average and below average ability groups as inferior and incapable of learning.
3. Homogeneous ability grouping, by design, is a separative educational policy, ostensibly according to students' test performance ability, but practically, according to students socio-economic status and, to a lesser but observable degree according to students' ethnic status.
4. In cases where homogeneous or heterogeneous ability grouping is related to improved scholastic performance, the curriculum is subject to substantial modification of teaching methods, materials, and other variables which are intrinsic to the teaching-learning process, and which, therefore, may well be the causative factors related to academic development wholly apart from ability grouping per year. Similarly, with respect to social development, there is evidence which points to variables other than ability grouping which tend to relate substantially to children's personal growth or lack of growth.<sup>154</sup>

G. Nature of Intelligence: Hereditary or Environmental

The debate among recognized authorities on the question of which qualities are innate and which are not, or to what

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<sup>154</sup> Ibid., p. 171.

extent, has not ended yet.

In the winter of 1969, an article by Jensen was published, in the Harvard Educational Review:

There is an increasing realization among students of the psychology of the disadvantaged that the discrepancy in their average performance can not be completely or directly attributed to discrimination or inequalities in education. It seems not reasonable, in view of the fact that intelligence variation has a large genetic component, to hypothesize that genetic factors may play a part in this picture.

Research findings suggest that heredity explains more of the differences in IQ between individuals than does environment, and that heredity accounts for the differences between the average IQ's of groups as well as those of individuals.<sup>155</sup>

Professor P. E. Vernon is another psychologist who has long been associated with a hierarchical view of intelligence, and still emphasizes the existence of genetic differences between individuals and social classes.<sup>156</sup>

Bort's approach to intelligence begins from a belief in a single universal factor of intelligence, g, at the top of a hierarchy above a number of less important but more specific group factors such as verbal ability, numerical ability and so on. Although he concedes a small part (about one-fifth) to environment, this general intelligence factor is largely determined by heredity.<sup>157</sup>

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<sup>155</sup> Arthur R. Jensen, "Environment, Heredity and Intelligence," Harvard Educational Review, No. 2 (Winter 1969)

<sup>156</sup> Rubinstein and Stoneman, op. cit., p. 82.

<sup>157</sup> Lewis Owen and Colin Stoneman, "Intelligence, Social Class and Educational Achievement," in ibid., p. 80.

On the other hand, this view of intelligence is rejected very strongly by several educational psychologists who believe and argue, based on research evidence, that intelligence is more a product of environment.

Simon cites a UNESCO publication by Alfred Yates pointing out that:

It was specially the research of such men as the Canadian physiologist Hebb, of Piaget on concept formation, of Luria on the role of language in mental development, which led to the breakdown of the old theories of intelligence. Intelligence is now defined very differently, as a fluid collection of skills whose development is demonstrably affected by early experience and subsequently by the quality and duration of formal education.

It sums up the view most widely held by educational psychologists, in spite of the recent attempt by Arthur Jensen in the United States to reinstate the view that genetic factors have an over-all and dominant influence on intellectual development.<sup>158</sup>

Gardner explains how concern for hereditary nature of intelligence has affected the strategy a society adopts:

The strategy a society adopts in dealing with differences in ability may depend in part on its concepts concerning the hereditary nature of such differences.... But the genetic facts cannot be wholly decisive for social policy. But in the past, certain widely held views concerning heredity have played a powerful role in buttressing social policy with respect to differences in ability.

In societies of hereditary privilege it is usually widely believed that the social strata correspond to hereditary differences in human quality. The society is stratified, the argument runs, because people do differ in quality; and since these differences are

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<sup>158</sup> Brian Simon, "Streaming and Unstreaming in the Secondary School," in Alfred Yates (ed.) UNESCO publication, p. 147.

hereditary the stratification is hereditary. This view is most strongly held by the upper classes of a stratified society.<sup>159</sup>

Simon points out that this theory of intelligence was the basis for school structure:

The method of grouping adapted was based on the theory that intellectual potential was largely determined by heredity, that it was fixed and unchanging, and that it could be accurately assessed at an early age. On this basis, streaming was clearly defensible.<sup>160</sup>

Simon continues with the following words:

It is now held a child's intellectual skills and abilities, instead of being fixed by heredity, are formed in the process of his life and experience in particular through his interaction with adults through the use of language. It follows clearly that the group of which a child forms a part is itself a crucial factor in his development, providing him with stimulation in many different ways. The modern theory of intelligence makes it clear that to group children in different streams, A, B, and C (and even down to N, O, P in a very large school) according to a prediction about future intellectual development, is no longer a viable procedure. The child's development will be determined, to some extent by the specific group of which he forms a part.<sup>161</sup>

Brembeck points out that educational programs also frequently are based on the assumption that:

Each child has a fixed capacity and that this capacity can be identified and measured ... that the idea that the students with low intelligence cannot learn at a high level is related to this assumption. So programs are organized to provide less difficult

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<sup>159</sup> John W. Garner, Excellence, Can We Be Equal and Excellent Too (New York: Harper and Row, 1962), p. 54.

<sup>160</sup> Simon, op. cit., p. 146.

<sup>161</sup> Ibid., p. 147.

programs for low IQ students and they are not given the opportunity to learn more advanced subjects.<sup>162</sup>

Brookover and Erickson explain the conception of learning based on the observation that:

Children learn to behave in the ways that the people with whom they associate behave. Although minor exceptions to this generalization can be found, the overpowering evidence demonstrates that children in every society learn to act, talk, and think much as their associates do.<sup>163</sup>

Gardner calls to the attention of all responsible persons in the society that:

Teachers, curators, deans, critics, art dealers, editors, foundation officers, publishers--in short, all who are in a position to encourage talent--should continuously ask themselves whether the society is providing sufficient opportunities for its varied resources of talent. If important kinds of talent are withering on the vine, they had better know why.<sup>164</sup>

#### H. New Practices in Europe Toward More Flexible School Structures

The basic characteristics of recent development in several European countries toward a less selective and more flexible, extended compulsory general education, including introduction of observation and guidance services may be summarized:<sup>165</sup>

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<sup>162</sup>Cole S. Brembeck, Social Foundations of Education (New York: John Wiley and Sons, Inc., 1967), p. 83.

<sup>163</sup>Brookover and Erickson, op. cit., p. 15.

<sup>164</sup>J. W. Gardner, op. cit., p. 45.

<sup>165</sup>This summary is based on presentations made in the Council of Europe courses by the representatives of respective countries, which are given by Roger, op. cit., pp. 31-73. For Sweden, Council of Europe, CCC/EGT (69), 30, op. cit., pp. 26-27 is also used.

a) Sweden: Comprehensive School

The Swedish Comprehensive School was established after 1962. In 1962 Parliament resolved that the Swedish educational system was to be reformed. Compulsory attendance at school was to be extended to nine years for all children. The new school is called the comprehensive school, "grundskolan", and is to be common to all school-age children. The new system was to be introduced gradually and was to be completed in 1972-1973.

In a booklet published in 1964 by the National Board of Education in Stockholm ("The New School in Sweden: The Comprehensive School: Aims, Organization, Methods"), we read:

Nor is the task of the school only to provide a certain definite sum of knowledge--if that has ever been its goal. The right of every person to an all-round development of his personality, talents and interests is fundamental to the aims of the new comprehensive school and to the tuition it is to provide. Of great significance also are the demands made by society on citizens as regards democratic principles for cooperation and tolerance between people of different sexes, races and nations.

There are no examinations in the Swedish Comprehensive School and in the Lower and Middle Departments marks are given only once a year.

Normally, pupils in the comprehensive school will be promoted to the next higher grade at the end of each spring term. In principle, a pupil may be kept two years in the same grade if it will be to his advantage. No pupil may be

kept a second year in a grade until the school has conferred with the parents, who, by the way, have the right to request the headmaster to keep their child in one grade for two years.

In Swedish Comprehensive Schools, optional subjects begin in the Upper Department. This means that there are a number of different lines of study.

Under the Swedish education system, pupils are called on to make choices as early as the sixth year of the nine year compulsory schooling period (for example, as regards taking German, French, art, technology, economics or more or less advanced mathematics or English); the pupils moreover decide, in consultation with the teachers, on the subject, the method and the allocation of work. Streaming is not to begin until grade nine (the age of 15). It is at the end of compulsory schooling (after nine years at school) that pupils are confronted with the most important alternative: general education or vocational training. The choice lies with the pupil; he makes it after consulting his parents.

b) Norway and Denmark

Many features of the Swedish nine-year school are to be found also in the Norwegian nine-year school instituted recently on lines very similar to the Swedish system.

The same applies to Denmark. While this country has not yet adopted the nine-year comprehensive school system,

the general structure of education is very similar to that of Sweden and allows for a smooth transition from the primary school to a middle school which may lead directly to a job or be followed by a technical course or the general Gymnasium course.

c) Belgium: Observation and Guidance Period

An educational reform committee was formed and met during the academic year 1956-1957 to study a formula for guiding pupils according to their positive aptitudes, within a framework offering the very best chances to every pupil and materially facilitating changes of orientation.

The six schools represented on the committee then started a first-year observation and guidance course, organized as follows: the pupils were divided into groups of 25-30, where the three options--Latin, modern and technical--were all represented. The pupils remained in their groups for all general subjects and only split up for the special subjects of their chosen course.

After a few years trial, it was possible to draw the following conclusions:

1. The fusion of pupils considerably improved the general school atmosphere. Tensions between Latin, modern and technical pupils were practically nonexistent.
2. Mixing the pupils in this way also has the consequence of raising average school results, although it has often been said to produce the opposite effect. The psychologists attributed this to the fact that the brighter pupils played the role of group leaders and spurred on the others.



These conclusions were primarily responsible for the decision to:

- a) Change the observation and guidance period from an experiment into a normal gateway to secondary education (Royal Decree of the 10th of June 1963);
- b) Introduce the new system first of all in new schools, and subsequently in existing schools.
- d) Switzerland

In Switzerland, an observation period has been instituted by the Geneva education authorities. There, too, "the observation period is designed to provide the pupil with all the elements he needs to make a choice before the final decision regarding his future is taken".

- e) Italy: Comprehensive Middle School  
(Skuola Media Unica)

La Morgia, during the Brussels course in 1964, provided a complete and detailed description of the Italian Comprehensive Middle School.

Early 1940 saw the commencement of the process that was to unify all schools for children between 11 and 14 years of age. Law No. 899 created the middle school by combining the lower three-year courses of the ginnasio, the technical institute and the ordinary school.

In 1951, Mr. Gonella, Minister of Education, tabled a bill in Parliament. It provided that after the five years of primary school, there were to be three years of secondary school, in one of three sections: general, technical and classical.

But the final choice between further study and a job was to be postponed to the age of 14.

In 1956, a committee was set up to resume study of the problem of schools for the 11 to 14 age-group. This committee submitted a very detailed report to the Minister. The main conclusions of the report were as follows:

1. If it is necessary to provide at least an eight year elementary education for all young Italians, no possibilities should be excluded and no final decisions taken during the last three-year stage of schooling and this stage should be organized in such a way that all children have the opportunity of continuing their studies to the highest level.
2. In the three year-stage, children between 11 and 14 years of age should all receive the same grounding in culture and education designed to develop character.
3. It is postulated, as a first principle, that average ability is similar in all sections of the population. With children who are less fortunate in the circumstances of their economic or social background it is absolutely essential to use every possible means to enable them to develop their powers to the full.

Law No. 478 of June 9, 1961 virtually abolished the secondary school entrance examination.

Law No. 1859 of December 31, 1962 established the Comprehensive Middle School.

f) The United Kingdom: Comprehensive Schools

The United Kingdom started to create comprehensive schools following the Education Act of 1944.

Comprehensive schools have precisely the same object, namely, to ascertain the type of education most suitable for each child (grammar school, technical college or secondary modern school), but in a less arbitrary manner and especially

at a less tender age than by the eleven plus system (primary school leaving examination of the county education authorities). In addition to the three categories, there are also the "public schools", but these are still largely the reserved domain of the aristocracy and upper middle classes.

In the United Kingdom, most comprehensive schools have a large number of parallel classes at the lower end of the scale. A description in the report of the Sigtuna course by Miss Miles, headmistress of one of the comprehensive schools in the United Kingdom, refers to fourteen parallel forms of first year pupils (11-12-years of age).

In fact, current practice in comprehensive schools reflects the type classification obtained by the eleven-plus examinations. In other words, the pupils are grouped according to I.Q. and primary school reports. As Miss Miles points out, mathematics and general science are taught in all forms, with a modified syllabus for the weaker forms. Thus, from the outset, the comprehensive school continues the streaming system now well-established in the United Kingdom. All the children are, indeed, grouped in one school, the comprehensive school, but they are divided up according to their intelligence quotient.

The important question is whether such an assessment really corresponds to the intelligence these children actually possess and to their latent possibilities. Pupils from rural areas whose language is of the simplest kind and

who have only a very limited vocabulary at their disposal are apt to experience serious difficulties at first which hold them back and cause them to be relegated to the weaker forms.

The general description of Miss Miles' school shows that the child's whole school career and the degree of choice open to him in the course of his studies are largely pre-determined by the A, B or C grading of the form in which he is placed at the outset. It rarely happens that a child is promoted from a weak to a stronger stream.

In the United Kingdom, the comprehensive school system is still far from being accepted on a nation-wide scale, and, indeed, controversy is still raging. Hardly a week passes without some argument being published in the press for or against the comprehensive school. Some say the comprehensive schools are lowering the standard of school education in England, while others maintain that they are the only feasible means of enabling all the children of the nation to obtain qualifications consistent with their abilities. The debate is still open. "It may be difficult to give the comprehensive school a fair trial where there exist other types of school to which parents can send their children if they wish."

A country like the United Kingdom, with a deep tradition in individual liberty, is not likely to abolish such prerogatives overnight in favour of more homogeneous or more

standardized types of school at which attendance would be compulsory for all children.

g) France: Observation and Guidance Periods

Mr. Heby, a Director in the French Ministry of Education, speaking at Brussels on October 9, 1964, explained the present structure of the observation and guidance period in French educational reform.

The decisions that have been taken originated in the same way as in other countries, for it is essentially a matter of dealing with diversity among pupils; diversity of background and, consequently, of basic cultural level. There are also problems connected with the adjustment of children to extended schooling. The purpose of guidance work is, accordingly, to employ the various means available at successive stages to help the child to adjust and then to point out the road which offers him the greatest hopes of success.

How did guidance become a part of the French educational system? In the old days, guidance operated mainly on negative principles. Following a setback in one section or examination, the pupil was transferred to a branch considered to be easier. The value of this process of examination was obviously negligible in terms of guidance and was hardly conducive to a fair distribution of pupils among the different branches, each of which needs to train and nurture its own elite. Nor was it the best way of sparking off enthusiastic zeal.

After the Second World War, there appeared in France, as in other parts of Europe, vocational guidance centers which, with the help of intelligence tests, advised young people on the choice of an occupation.

Following up the pre-war experiment of Jean Zay, the new classes, which emerged to carry on the good work, undertook to seek out the aptitudes of pupils through their work in various subjects and especially in subjects hitherto regarded as being of secondary importance, for example, drawing, handicrafts and music. This was a most important initiative which may well have had decisive influence in education trends and school structure in France. Another measure was the abolition of the secondary school entrance examination, replaced by consideration in committee of the school record of the pupil leaving primary school. The committee scrutinized the child's reports and personal file and, on the basis of the results achieved and the marks awarded by teachers, decided whether he should go to a lycee, the modern lycee, colleges d'enseignement generale, technical schools or the terminal primary school classes. All of these formed watertight compartments although, in fact, they were all receiving pupils of the same ages. Children used to attend these schools for reasons not always connected with their aptitudes, often it was a question of proximity, or lack of ambition on the part of the parents.

In remote areas the problem was rendered more acute by distances, and when board and lodging had to be paid, the cost undoubtedly did influence the decision of parents on whether or not to keep their child at school. As a result, a wealth of intellectual potential was being lost in France, as in other countries too.

What measures are the outcome of the French educational reform?

1. In place of the different types of school there is to be one school in each geographic sector of all children from the age of 11 to 12 up to 15 or 16 (college d'enseignement secondaire).
2. The classical and modern curricula have been brought closer together in the lower division and technology has been introduced.
3. Teachers are being encouraged to observe their pupils more closely and some experimental measures have become general practice: the personal file, class council and the "principal teacher".
4. A guidance service has been established. The college d'enseignement secondaire, which will become the standard model for secondary schools throughout the country, is compulsory for all children. The new school will replace all the existing types of school for children aged 11 to 16.

What problems remain to be solved?

1. The first problem naturally lies in the die-hard resistance of the old systems.
2. The problem of the long-standing rivalry between the literary side and the scientific side, those ancient and purely academic disputes which many French school administrators deem to be sterile if not positively harmful to school life.
3. The need for more detailed definition of guidance criteria and the part they should play in decisions during the child's school career.

4. To make teachers aware of their role in observation and guidance.

### Summary

The review of the literature in Part II indicates the following points and presents some of the practical issues related to them:

1. It is clear that a nation's educational policy must be related to its stage of economic development, but there is also a worldwide agreement that everybody has the right to education; widespread schooling is needed for democracy and economic productivity.
2. In spite of the faith in the "equality of education opportunities" for all, there are several issues related to the functions of education stemming from democratization as opposed to self-perpetuation of the society.
3. The present structures of societies with their underlying basic value systems also effect the type of educational systems, which in turn are very closely related to the processes of "equity" and "productivity" in education.
4. Under the new concept of mass education and democratization of education, education is no longer reserved to a specific caste, and decisions on who gets educated are not taken on the grounds of social class background of the children. But educational systems which emphasize the academic success of children (as defined by the existing elite) might still be serving mainly to perpetuate the present structure of the society, through the process of selection, instead of being an important factor in upward social mobility.
5. Another paramount factor influencing "productivity" and "equity" in education is the structure and the organization of the school, or of the educational system itself. The present structure of most school systems in the world contain several built-in barriers that prevent the optimal utilization of talent and resources.



6. There is a tendency toward heterogeneous groupings of the students. This practice is supported by findings of ability grouping research.
7. The selective function of schools is maintained through ability grouping; by keeping the "quality" (standards) high and using examinations to measure it. But the prognostic value of examinations is by no means universally accepted. The conventional definition of "quality" is also questioned.
8. The debate on the hereditary and environmental nature of intelligence has not ended yet. The position that a country takes in this respect affects the educational policies, the structure of education and the ways of teaching. There is a growing interest all over the world toward a social psychological conception of learning.
9. Recently, there is a noticeable development in the world toward democratization of education through less selective and more flexible educational systems, later specialization in education, and introduction of observation and guidance services. In regard to organization, curricula and staffing, the present trend in countries with rather developed school systems is to integrate the different school types that formerly ran parallel at the secondary level. Many European countries have already applied these modifications to their systems.

### PART III

#### Some Research Findings Related to Productivity and Equity

##### A. Some Background Information on the Turkish Society

Kazamias compares the feudal West and Ottoman systems in terms of stratification and social mobility and points out that:

A distinguishing characteristic of the feudal West was the existence of estates, which were clearly defined and differentiated as well as almost hereditary

social strata. The Ottoman society of the time was also socially differentiated and stratified, but it was not marked by the existence of a closed aristocracy based on wealth and birth, as the Western societies were. To be sure, there were great inequalities of power and wealth, and a bifurcation between the elite and the peasant masses; but, paradoxically, the Ottoman system, unlike that of the feudal West, maintained a comparatively fluid system of recruitment of talent.<sup>166</sup>

On the other hand, changing the behavior of peasant masses toward "modern" education provided by the State has not been easy for the governments who opened a "war" against illiteracy right after the proclamation of the Republic, as mentioned in the beginning of Chapter I.

OECD<sup>167</sup> makes some "preliminary suggestions" on the educational demand and behavior of three groups which are identified as "traditionals", "moderns" and "transitionals", based on the classification offered by Daniel Lerner in The Passing of Traditional Society. In the first group ("traditionals"), it is pointed out that:

The Turkish peasant villager although he lives within a modernising nation, still shares the characteristics of a member of a traditional society; this does not necessarily mean that he is unwilling to have the advantages of education brought to him, but rather that it affects the achievement pattern of his children....

By contrast with medieval feudalism the institution of serfdom has never had a legal formulation in Turkey. Islam, which remains very strong in the countryside, insists on the theoretical equality of

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<sup>166</sup> Andreas M. Kazamias and Byron G. Massialas, Tradition and Change in Education, A Comparative Study (Englewood Cliffs, N. J.: Prentice Hall, Inc., 1965), p. 30.

<sup>167</sup> OECD, The Mediterranean Regional Project, Turkey (Paris: Country Reports, 1965), pp. 60-73.

all believers--the "equalitarian theocracy" of one commentator.

OECD also cites a study by Inalcik and points out that:

In the Ottoman Empire there was a simple dichotomy with regard to social classes: on the one hand the official bureaucracy, on the other the rest of the people.<sup>168</sup>

Lewis studied the emergence of the new Turkey from the decline and collapse of the Ottoman Empire; and examined the aspects of change in Turkish society. He discusses the role of officials, peasantry and "esnaf" in the process of change and toward secularization after the proclamation of the Republic and claims that:

Officials, as a class, are extremely sensitive to changes in the direction of the wind.... The peasantry were still as religious as they had always been. For them there was no question of a revival--the only difference was that they could now express their religious sentiment more openly. Perhaps one of the strongest elements supporting the revival was the class known in Turkey as the "esnaf" the artisans and small shopkeepers in the towns.<sup>169</sup>

Based on Lewis' view, OECD further hypothesizes that "if the peasants' 'traditional' outlook affects the education pattern of his children, it is interesting to note that the pressure to shape reactionary educational policies does not by and large originate in the village but among

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<sup>168</sup> OECD, *ibid.*, p. 61. The citation to Halil Inalcik is from "Turkey" in R. E. Ward and D. A. Rustow (eds.), Political Modernization in Japan and Turkey (Princeton: 1964), p. 44.

<sup>169</sup> Bernard Lewis, The Emergence of Modern Turkey (New York: Oxford University Press, 1969), p. 423.

the town artisans and small shopkeepers, who are known in Turkey as 'esnaf'." Then it continues as follows:

It would be an error, however, to conclude that the attitude of the peasant per se determines the educational lag in rural areas. A number of distinctions has to be made. First, a distinction exists between the peasants' idea of the educational and social status which his son might rightfully claim and the actual material and intellectual barriers encountered by those of his children who embark on the educational venture. The lack of legitimate class distinction, other than that between ruling class and the ruled, and the persistence of the earlier Ottoman ideal of equal chance of access to the ruling class for those equally able, gives the Turkish peasant considerable assurance with regard to the first question. It is the barrier encountered in integrating the village personality with that required for success at school which seems to be the most difficult obstacle.<sup>170</sup>

The following points are concluded by OECD based on the review of the present tendencies of the time:

1. The demand of the Turkish peasant for education is changing.
2. The nature of this demand seems to change as the peasants' intellectual horizons are enlarged, but this enlargement is part of a matrix in which the material conditions of his life play a part.
3. Demand is at present "shapeless" and fills whatever channels are provided to give the peasants' children a free education.
4. Urbanization does not of itself create an understanding of the ends for which education can and should be used.
5. There will be a great waste of talent unless the secondary school system is developed to accommodate successfully the large numbers of peasant children.<sup>171</sup>

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<sup>170</sup> OECD, The Mediterranean Regional Project, op. cit., pp. 62-63.

<sup>171</sup> Ibid., p. 65.

## B. Studies on Turkish Education

High rates of student failure at the end of each school year especially at secondary levels, has claimed the attention of the Turkish public for many years, but there are very few formal studies.

The major studies which relate to "productivity" and "equity" are summarized as follows:

a) Dalat's Studies on Productivity in Secondary Schools of Ankara.

Dr. Dalat is the first Turkish educator who interested himself in the problem of failure in middle school and lycees. He first studied the academic school records of 19,082 students who attended five secondary schools of the time in Ankara, from 1932 to 1938. Some of his findings are:

1. The changes in curriculum and in administrative and examination rules between 1932 and 1938 did not have significant affect on the percentages of the students who failed or passed.
2. The students whose ages were over the average age of their grademates failed more than the younger students.
3. The averages of 8 years' results showed that the rates of failure were considerably higher in the first grades of both middle school and lycee than they were at second and third grades.
4. At all grades of middle school, foreign language courses caused more failing than other subjects.
5. At the last grade of lycee, physics was the subject which caused the highest failure; algebra and geometry came after that.

6. Over the years some teachers constantly failed their students more than other teachers of the same subjects, regardless of what subject they taught.
7. The average of eight years' results showed that 50 percent of the students who took completion examinations were not successful.<sup>172</sup>

In another study Dalat wanted to explain that the reasons behind our examination rules are not right, and we fail our youngsters without having acceptable reasons. He studied the results of several examination regulations, adopted between 1933 and 1947, and, based on his findings, concluded that "our examinations do not have a strong, fair and reasonable base at all."<sup>173</sup>

b) Özden, a Study on Productivity of Turkish Secondary Schools.

Özden collected data at the end of the 1960-1961 school year from 640 selected public middle schools, 116 public lycees and some other private schools. Based on these data, she studied the occurrence of failure for each subject taught. She also studied the results on completion examinations separately. Some of her findings are given below:

In the middle schools, she found that at the first grade, mathematics was the subject which caused most failure (34.0%) then foreign language (26.8%), history (24.0%),

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<sup>172</sup> Ziya Dalat, *Nicin Sinif ve ikunal Kaligorlar? Psikolojiden Gelen Bir Tahsil Teorisi* (Ankara: Titas Basimevi, 1941), pp. 22-55.

<sup>173</sup> Ziya Dalat, *Sinifta Kalanlar Ugruna* (Ankara: Ulus Basimevi, 1948), p. 89.

geography (23.7%), and Turkish (22.3%). At the second grade, again, mathematics was the first (28.3%), then foreign language (22.5%), and physics (22.4%). At the third grade, mathematics was still in the highest position (31.7%), then foreign language (24.1%), physics (21.9), history (20.0%), geography (18.3%) and Turkish (18.0%).

Özden also studied the differences between sexes and found that in general the girls were more successful than boys.<sup>174</sup>

One of her remarks is important to mention here. When she compares the general results of the 1960-1961 school year with the results of the 1950-1951 school year in terms of the rates of failure in middle schools, she found that despite the actions taken by the Board of Education of the Ministry of Education between 1950 and 1960 to decrease the rate of failure, in reality the rates were increased. It is interesting to notice that Dalat also points out the same thing between 1932 and 1938, as mentioned before.

c) Çalışkaner's and Özgentaş's Study on Productivity of Turkish Secondary Schools.

Çalışkaner and Özgentaş studied the relationship between the number of courses failed the completion examination and the rates of passing at the end of this examination,

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<sup>174</sup> Hayriye Özden, Ortaokul ve Liselerde Başarısızlık Durumu ve Basi Sebepleri. 1960-1961 Ders Yılı (Ankara: Eğitim Araştırmaları ve Değerlendirme Merkezi, 1963), pp. 51-54.

based on the data they collected from a sample of middle schools and lycees covering the six years from 1956-1957 to 1961-1962.

Their findings in terms of six year averages show that as the number of subjects failed for completion examination increased, the rates of failed students (for repeating the same grade) also increased. The rate of failed students who had four failed courses subject to re-examination (completion) was 72.7% at the first grade, 61.9% at the second and 43.1% at third grade.<sup>175</sup>

d) Eastmond's Study on the Distribution of Educational Opportunities in Turkey.

N. J. Eastmond studied the distribution of educational opportunities in terms of distribution of enrollments, teaching force, and financial resources in 1964, in the total 67 provinces of Turkey. His analysis revealed significant differences between geographical regions. Some of his findings are as follows:

1. At the time of the census in 1960, only two elementary school-age children out of every three were enrolled in school, only one middle school-age child out of every eight was enrolled, and only one lycee age child out of every fourteen.
2. Of every four students in the middle school and lycees, only one was a girl. The rural elementary schools enrolled approximately two boys for every

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<sup>175</sup>Asaf Çalışkaner and İbrahim Özgentaş, Orta Dereceli Okullarımızda Ders Sayısına Göre Başarısızlık Durumu (Ankara: M.E.B. Eğitim Araştırmaları ve Değerlendirme Merkezi, 1963), p. 17.



girl, and in the urban elementary schools there were 15 per cent more boys enrolled than girls.

3. Schools were very inefficient in terms of their holding-power, having approximately one beginning student in every two drop out of middle school before graduation.
4. There were significant differences between geographical regions and between the provinces of West and East, in terms of educational opportunities provided.<sup>176</sup>

e) Kazamias's Study on the Expansion of Educational Opportunities in Turkey.

Kazamias studied the expansion of educational opportunities in Turkey and examined the role of school in the process of social change.

Kazamias<sup>177</sup> points out that over-all enrollments in primary schools increased steadily throughout the forty year period (1924-1964). The growth of middle schools and lycees displayed more dramatic and uneven changes. But school attendance on the part of girls has consistently lagged behind that of boys, although in terms of percentages, the increases have been greater. He also showed that disparities in boy-girl enrollments have been greater at the post-elementary levels of education. He also gives figures showing that there are sharp differences from province to province in terms of geographical distribution of education.

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<sup>176</sup> N. J. Eastmond, Educational Opportunity in Turkey, 1964, A Source Book of Facts on Education and Analysis (Ankara: M.O.E. Test and Measurement Bureau, 1964).

<sup>177</sup> Kazamias, Education and the Quest for Modernity in Turkey, op. cit., pp. 160-166.

Kazamias gives examples on the holding power of the Turkish schools and points out that the rate of attrition or drop-outs has been a persistent major problem in Turkish education. Statistical estimates in this, as indeed in most other aspects of education, must be approximate and liable to error. But there is high consensus that the rates of attrition are very high.

Based on 1961-1962 figures, educational opportunity beyond the primary stage is summarized by Kazamias in terms of the following estimates:

- a) Of 100 primary school students, about 10 can expect to enter an orta (middle) school, or 13 can expect to enter an orta or another middle-level institution.

Of 100 primary school students, less than 3 can expect to enter a lycee. Of 100 primary school students, about 1 can expect to enter a university.

- b) Of 100 orta school students, about 26 can expect to enter a lycee.

Of 100 orta school students, about 14 can expect to enter a university.

- c) Of 100 lycee students, about 55 can expect to enter a university.

Of 100 lycee students, about 86 can expect to enter an institution of higher learning.<sup>178</sup>

Kazamias' study also includes a case study on Turkish lycees and variations which are seen in the urban-rural dimension and socio-economic background characteristics of lycee students are also given:

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<sup>178</sup>Ibid., p. 171.

In contrast to village children, those from urban areas have considerably better opportunities to continue their education. Although data on the social composition of orta school students is lacking, it could be inferred with good reason that the greatest majority of such children come from towns or cities, and that, socio-economically, they are a select group. Turning to lycee students, it was found that they are overwhelmingly urban in origin, and even within the urban category, they are recruited from relatively large towns and cities.... About 40 percent of the students in the public lycees and about 52 percent in the private Turkish lycees have fathers classified as professionals, high technical, managerial, high and low administrative, and clerical; and yet these occupational categories constitute only 5.6 percent of the male population of Turkey! This shows that the lycee group is not only urban; it is also a rather socially select group. Furthermore, over 30 percent of the students in all four types of lycees are drawn from the categories of private traders, small business men, small farmers, fishermen, and the like, who constitute over 70 percent of the male labour force. This indicates that, although the lycee is a socially selective institution, it is by no means exclusively an elite school. Yet, taken in conjunction with the urban-rural variable it also shows that the children of urban traders, small business people, and such, have decidedly greater chances for a lycee education than their rural counterparts.<sup>179</sup>

In the lycees, Kazamias found that,

In general, girls came from higher occupational groups than boys. While one-third of the girls were drawn from the three uppermost groups (professional, higher technical, managerial and higher administrative), less than one-fourth of the boys came from the same groups.

The background characteristics of lycee students in terms of parental education appeared to be as follows:

More than half of the students had fathers with a secondary (middle, technical, lycee) or higher education, and about one-fourth, had fathers with an elementary education. The educational level of the

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<sup>179</sup>Ibid., pp. 173-174.

mother was lower, but not substantially so: about 46 percent of the students indicated that their mothers had attended and/or completed a secondary school or an institution of higher learning; and about 28 percent, that their mothers had gone to an elementary school. In the case of both father's and mother's education, the highest percentage was in the secondary school category; that is, taking a four-tiered structure (no education, elementary, secondary and higher), the largest number of the students parents had attended or finished an orta school, a lycee, or a vocational school.

Kazamias further points out that

In a society in which the majority of the people are totally illiterate or possess very little formal schooling, the very fact that 20 percent of fathers and 29 percent of the mothers are drawn from an educationally disadvantaged group is particularly noteworthy.... Apparently, therefore, when education is taken as the social background characteristic, public lycees in Turkey are not exclusively elite institutions.<sup>180</sup>

f) The University of Istanbul's Study on the Socio-economic Background Characteristics of New Enrolled Freshmen.

A study made on some of the family characteristics of 5,241 new enrolled university students in Istanbul University (1972-1973) showed that:

1. 14.75 percent of them came from families with less than 500 T.L. monthly income, and 16.98 percent with 500-750 T.L., 21.39 percent with 750-1000 T.L., and 33.96 percent with over 1000 T.L., respectively. 13.31 percent of the students did not answer.
2. 9.23 percent of the fathers were army officers, 30.51 percent were government officers, 12.65 percent were in agriculture, 10.88 percent were workers, 10.74 percent were small traders, 1.56 percent were technicians, 16.10 percent were in private

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<sup>180</sup> Ibid., pp. 233-235.

professions and 5.51 percent of the fathers were retired men.

3. 86.43 percent of their mothers were housewives.
4. 13.17 percent of the students indicated that their fathers had no formal education; and 28.70 percent of the mothers also were said to have had no education at all.<sup>181</sup>

g) Mihcioglu's Study on the Origins of University Students Who Registered for the Entrance Examination.

Mihcioglu studied the students who took university entrance examinations for the 1965-1966 school year in terms of the regions they came from and their success in the examination. It was found that there were differences between the regions; for example, 315 per thousand of the students came from the Marmara region with an average score of 360.78, while 136 per thousand came from the Eastern region with 311.07 as their average score.<sup>182</sup>

h) Fidan's Study on the Equality of Educational Opportunities in Turkey.

A recent dissertation study by Fidan also deals with the equality of educational opportunity in Turkey. Fidan explains the differences in growth of educational opportunities in the context of demographic changes, of educational attainment levels of population, and of socio-economic level

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<sup>181</sup> Istanbul Universitesi Mediko-Sosyal Merkezi, "5241 Yeni Öğrenci Uzerinde Yapilan Incelemenin Sonuclari," in Cumhuriyet, February, 1973.

<sup>182</sup> Cemal Mihcioglu, Universiteye Giris ve Liselerim (Ankara: Ankara Universitesi Basimevi, 1969), pp. 144-145.

of the provinces. His sample contained 203 lower (middle) and 125 upper (lycee) secondary schools. In the analysis, the differences among provinces were presented in terms of school participation ratios of development categories based on school participation in 1960, 1965 and 1970. Some of his findings are as follows:

1. Increases in school participation ratios at lower secondary school levels did not substantially change the position of provinces relative to the national averages over ten years 1960-1970.
2. Differences in primary participation ratios were best explained by differences in educational attainment levels (population who had at least completed primary education).
3. At lower secondary levels, school participation rates did not associate substantially with differences in socio-economic factors.
4. The children of urban areas and economic centers of the regions have better chances for further schooling than the children of the areas where agriculture is the main economic activity and the population is widely distributed.
5. In lower secondary and upper secondary schools, one-third of the students were those with parents residing in villages.
6. The children of fathers who are administrators or professional men are over-represented in the secondary schools.<sup>183</sup>

i) Arseven's Study on the Relationship Between Students' Socio-economic Background and Their Academic Achievement at the Sixth Grade in Ankara, Turkey.

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<sup>183</sup> Nurettin Fidan, "Equality of Educational Opportunity in Turkey, A Quantitative Approach (East Lansing: Michigan State University, 1971, Ph.D. Thesis) (Abstract).

Arseven studied the relationship between students' socio-economic background and their academic achievement at the sixth grade level. He used two stratified student populations (primarily low SES--i.e., "socio-economic status"--and primarily high SES) attending sixth grade in the 1971-1972 school year. A majority of the students of low SES live in Gecekondur dwellings (slum areas) and attend schools in the same area, and the students in high SES live mostly in well-to-do neighborhoods in the metropolitan area and attend schools in the same area. The sample included 364 students from the low SES population and 378 students from the high SES population. Achievement was defined in terms of the first semester grades of the students.

Some of the major findings are:

1. For the combined population, there is a significant relationship between the students' socio-economic status and their academic achievement. The highest relevant SES factors related to achievement are father's occupation and fathers education.
2. In comparing the two sub-populations, the relationships between SES and achievement are substantial for non-Gecekondur students, whereas those relationships for Gecekondur students are either negligible or nonsignificant.
3. The relationships between SPS--i.e., "student perceived status"--variables and academic achievement based on the combined population are significant. However, the magnitude of the relationships is higher in the non-Gecekondur population than in the Gecekondur population. Students perceived evaluation by parents and students self-concept of ability are the factors contributing most to the variance in academic achievement of students in both populations.

4. SPS variables were found to be more significant than SES variables in establishing the relationships between achievement and the above nonintellectual variables (SPS and SES).
5. For the Gecekondü population, a negative relationship was found between SES and SPS, while it was positive for non-Gecekondü. There was no correlation between SES and students' grades for the Gecekondü population.<sup>184</sup>

### C. Regional Inequalities of Opportunity:

#### A French Example

Piere Laderriere shows the regional inequalities of opportunity in French education and reviews the measures designed to reduce them. He observed that there are regional differences in the entry into secondary education following compulsory schooling. When he used school attendance rate (in the first year of general secondary education), which is the rate determined by taking the ratio of school attendance in the 6th grade to the corresponding school-age population, he found the same imbalance of school attendance by geographical area as in the preceding case. Again he found that within a department the rate varies for each canton; and the cantonal attendance rate decreases with the distance away from a major urban area equipped with a secondary school. He concludes that:

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<sup>184</sup> Ali D. Arseven, The Relationship Between Students Socio-economic Background and Their Academic Achievement at the Sixth Grade in Turkey. Unpublished Ph.D. Dissertation (East Lansing: Michigan State University, 1973). (Abstract) It should be noted that Arseven's Gecekondü sample proved to be remarkably homogeneous on the several independent variables employed in the study.



The location factor alone does not alone influence school attendance. To such geographical inequalities must be added such factors as the pupils' social background, the attitude of parents and teachers towards the various types of education, etc. The statistics show that secondary school attendance rates below the national average do not occur in departments with scattered residence areas or a primarily farm population. The interaction of various social factors therefore suggests that inequalities of opportunity cannot be corrected simply by improving the geographical distribution of schools.<sup>185</sup>

D. Social Class and Access to Education:  
British and French Examples

John Westergate and Alan Little brought together evidence from different sources on class differences in access to education in post-war Britain to provide an overall picture of the operation of social selection in education, from school to university; and at the same time to allow a comparison with pre-war years. For the children born in the late 1930's, they found that:

1. At each successive stage of education, progressively smaller numbers of children survive to enter the next stage....
2. As this process of elimination goes on, so the relative prospects of survival as between children of different social origin become steadily less equal....
3. Disparities widen during the stage following entrance to selective secondary education. This results mainly from the fact, repeatedly demonstrated by recent research, that in the public supported grammar schools middle class children complete the full

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<sup>185</sup>Piere Laderriero, "Regional Inequalities of Opportunity in French Education and the Measures Designed to Reduce Them," in OECD, Social Objectives in Educational Planning, op. cit., pp. 254-256.

course far more often than do working class children. This conclusion stands even when the comparison is confined to children of similar measured ability.<sup>186</sup>

Halsey and Gardner produce evidence to show, that in the London areas they studied, uneven distribution of working-class and middle-class children in the modern secondary schools and in the grammar schools could not be attributed solely to the intelligence of the children, but must be in large part the result of social forces. It was found that the middle classes were heavily over-represented and the working classes, especially the unskilled families, heavily under-represented in the grammar school group.<sup>187</sup>

In the paper which gives some of the results of a sample survey carried out on a national basis in France in the Spring of 1954, Girard concludes that "the inquiry's findings confirm that children of varying home backgrounds do not have equal chances of selection at eleven to secondary schools. For agricultural laborers' children, the chances are slightly more than one in ten; whereas, children from more fortunate homes have eight or nine chances in ten."<sup>188</sup>

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<sup>186</sup> John Westergaard and Allen Little, ibid., pp. 219-220.

<sup>187</sup> T. H. Marchal, "Social Selection in the Welfare State," in Halsey et al. (eds.), Education, Economy and Society, A Reader in the Sociology of Education (New York: The Free Press, 1969), p. 157.

<sup>188</sup> A. Girard, "Selection for Secondary Education in France," ibid., p. 194.

E. Socio-economic Factors and School Outcomes  
as They Relate to Equity

The Coleman Study is a large scale attempt, covering more than 600,000 teachers in more than 4,000 schools all over the United States, to determine how far American Public Schools have moved toward the ideal of providing equal educational opportunities for all students. It examined some of the critical factors related to student achievement and quality education, focusing particularly on factors affecting the education, and hence achievement, of minority-group children. Children were tested at the beginning of grades, 1, 3, 6, 9 and 12.<sup>189</sup>

Some of the findings of the survey could be summarized as follows:

1. Achievement of the average American Indian, Mexican, Puerto Rican, and Negro was much lower than the average White, at all grade levels.... The differences are large to begin with, and they are even larger at higher grades.
2. The regional variation is rather consistent for both Negroes and Whites. Consistently lowest for both groups is the non-metropolitan South. Consistently highest is the metropolitan North. The regional variation is much greater for Negroes than for Whites. The Negro scores differ little by region in the first grade, but increasingly as school proceeds.
3. Educational disadvantage among the minority groups is not specific to reading or math; where it is found in one subject, it is found in others.

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<sup>189</sup> James Coleman et al., Equality of Educational Opportunity (Washington, D.C.: U.S. Government Printing Office, 1966).

4. School factors make more difference in achievement for minority group members than for Whites; for Negroes, this is especially true in the South. This result suggests that insofar as variations in school factors are related to variations in achievement, they make most difference for children of minority groups. For each group, by far the largest part of the variation in student achievement lies within the same school, and not between schools.
5. The schools have very little influence on the students that is independent of their family background. Educational disadvantage with which a group begins remains the disadvantage with which it finishes school. Individual students may have an opportunity to overcome the handicap with which they begin; but if so, that opportunity is not widespread enough to reduce the gap that exists.... A large part of this disadvantage arises from the background cultures from which these groups come. Differences in family background and general influences of the society at large leave strong effect. Variations in family background account for far more variations in school achievement than do variations in school characteristics....
6. Social class composition of schools is the single most important school factor affecting student performance and attitudes independently of the students' own social background. Disadvantaged Negro students do better when they are in schools with more advantaged Negroes or White students.
7. Coleman found that student characteristics show stronger association with achievement than do family background or school factors. For Whites and Orientals academic self-concept was highly related to academic achievement but for all other minority groups, the variance in academic achievement was better accounted for by sense of environmental control than any other variable. The report also stated that family background, more than the school factors, influenced both self-concept and sense of environmental control. Among the family background factors, the parents' desires for the child's further education made the largest contribution toward a positive academic self-concept. There was a positive relation between the socio-economic level of the home, the presence of a father in the household

and the sense of environmental control.<sup>190</sup>

The report entitled, A Study of Our Nation's Schools, also concluded that:

The influence of the school is bound up with the social background of the students that they get initially ... the social background of the students usually plays a greater independent role in the development of all school outcomes than do the independent influences of the school.<sup>191</sup>

Another report, entitled, Racial Isolation in the Public Schools, concluded that:

There is a strong relationship between student and school social class, and performance and attitudes. The social class composition of schools is the single most important school factor affecting student performance and attitudes.<sup>192</sup>

Despite these relationships between social factors and school performance, there are some lower-class children who are also successful in school. Jackson and Marsden were interested in these types of students and made an interesting study on 10 former middle class children whose names were drawn at random from the list of boys and girls who had passed their advanced level at any Marburton (Britain) grammar school between 1949 and 1952, and whose fathers were in social class 1 or 2. At the time that the study was

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<sup>190</sup> Ibid., chapter 3, pp. 217-230.

<sup>191</sup> George Mayeske et al., A Study of Our Nation's Schools (Washington, D.C.: Office of Education, 1969), pp. 327-333.

<sup>192</sup> U.S. Commission of Civil Rights, Racial Isolation in the Public Schools, Vol. 1 (Washington, D.C.: U.S. Government Printing Office, 1967), p. 89.

carried on, the subjects were between 26 and 30 years old. They interviewed also their parents, and the sketch that follows, while making no claims for typicality, does try to make up in detail what it lacks in range. It moves very freely around both the child and the family, to catch the texture and feel of life behind their success at school. They conclude that:

The sons and daughters in this small "middle-class" group turn out to be men and women who in many basic respects are close to their parents. They have inherited their parents spirit of self-help, their drive, and many of their social sympathies and antipathies.

The authors wonder "what could have happened to these children if, though of equal potential, they had come from a lower social class? How many would have passed the eleven plus? How many would have sunk into the C stream? How many would have left the sixth without a university place?"<sup>193</sup>

The authors also studied 88 former working-class children. The sample was drawn from the pass-list of the Higher School Certificate and G.C.E. the same as in the case of the 10 middle-class children. Sampling in this way provided them with 49 boys, but only approximately half that number of girls. So they increased the number of girls by extending the years, for them only, back to 1946 and

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<sup>193</sup> Brian Jackson and Dennis Marsden, Education and the Working Class, Some general themes raised by a study of 88 working-class children in a northern industrial city (London: Routhledge and Kegan Paul, 1968), pp. 41-42.

forward to 1954. At the time that the study was made, these girls were as young as 23 and as old as 32. The authors wanted to know "who these children could be and what made, and what did not make for success in grammar school." Some of their conclusions are as follows:

The successful children were usually born into small families. Over one-third were only children. Often they also lived near to a successful primary school where the pace and tone were influenced by middle-class parents. Further over a third of the parents had connections with the middle class themselves, and shared many of its aspirations.... Most of the remaining two-thirds of the homes also came from the uppermost levels of the working class. Behind the majority of the 88 children was a home where, for different reasons and in different ways, considerable pressure was put upon the children to do well, and to survive at school....<sup>194</sup>

In his very well-known early classic study, Elmtown's Youth, Hollingshead found, among the many effects of social class structures in "Elmtown", that lower-class youngsters have limited their horizons to the class horizon, and, in the process, they have unconsciously placed themselves in such a position that they will occupy the same levels as their parents.<sup>195</sup>

The interest of parents in further education of their children also seem to be low for lower-class parents, as pointed out by Marchal:

In one county area parents of children about to sit for the examination for secondary schools were

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<sup>194</sup> Ibid., p. 190.

<sup>195</sup> A. B. Hollingshead, Elmtown's Youth (New York: John Wiley and Sons, Inc., 1949), pp. 282-287.

asked whether they had thought a lot, a little, or not at all about the matter. The proportion claiming to have thought a lot declined steadily as one moved down the social scale and was little over a third among the unskilled workers. But the preference for a grammar school education, though it showed the same trend, did not fall so low. The lowest proportion preferring the grammar school was 43.4 percent and the highest preferring the modern school 23.9 percent--these figures being those for unskilled workers. But over two-thirds of the unskilled worker-parents preferring the grammar school did not want their child to stay there after the age of 16. Their ambitions were limited. And about half the professional and a quarter of the clerical families said that if their child did not get a grammar school place they would not send it to a modern school.<sup>196</sup>

The evidence of research shows fairly conclusively that the more highly parents value education, the more they will support their child's educational endeavors and the more likely he is to succeed.<sup>197</sup>

Hernandez summarizes the findings of several studies on the variables affecting achievement of middle school Mexican-American students, and she concludes that "socio-economic aspects appear to be of crucial importance in determining students' educational achievements." Hernandez cites a 1970 study by Bachman and points out that:

In an extensive study on the impact of family background and intelligence on over two thousand tenth-grade boys, Bachman stated that from the influence drawn from his study, the socio-economic level (SEL) was the most fundamentally important of the

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<sup>196</sup>Marchal, op. cit., p. 158.

<sup>197</sup>See J. Banfield, C. Bowyer, and E. Vlikie, "Parents and Education," Educational Research, 9, 1966, pp. 63-66.



family background measures investigated. In this study a nationally representative panel of adolescent boys was surveyed periodically with no attempt made to obtain responses from any one ethnic group of socio-economic level. Bachman found that SEL was related to the young men's self-concept about their school ability and high SEL was associated with above average self-esteem, ambitions, job attitudes, feelings of internal control, and political knowledge. Boys from high SEL homes tended to be lower than average in rebellious school behavior, negative school attitudes, and test anxiety. Another aspect related small family size with higher academic achievement, self-concepts of scholastic ability, occupational aspirations, and likelihood of college entrance.<sup>198</sup>

#### F. School Dropout and Factors Affecting It

Early school leaving or drop-out is another outcome of school which also seems to be related to the socio-economic background factors of the students, as the following study cited by Ottoway indicates:

In the report prepared on Early Leaving in 1954 in Britain a modern sociological approach was adopted at the request of the Minister of Education. The report concludes that the most potent factor as a cause of early leaving was the child's home background. The pupils were classified in five social groups according to occupations of their fathers. The sample studied was about 10,000. Fewest left, in proportion, whose fathers were in professional and managerial occupations, and most left whose fathers were unskilled workers, with a regular increase of leaving going down the status level through clerical, skilled and semi-skilled manual occupations. Further, the children of professional and managerial fathers tended to improve in academic performance and promise during their

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<sup>198</sup> Norma G. Hernandez, "Variables Affecting Achievement of Middle School Mexican-American Students," in RER, Vol. 43, No. 1 (Winter, 1973), p. 3. The citation to Bachman is from G. G. Bachman, Youth in Transition: The Impact of Family Background and Intelligence on Tenth-grade Boys (Ann Arbor, Michigan: Institute for Social Research, The University of Michigan, 1970).

school life, while the children of working-class fathers tended to deteriorate in these same respects, regardless of performance on entry, for children of similar measured intelligence at the time of selection.<sup>199</sup>

The fact of early leaving and its relation to social background was shown even more clearly by the National Service Survey undertaken for the Crowther Report in Britain. A random sample of nearly 9,000 men who began their National Service between 1956 and 1958 was studied. The age at which each man left school was known, and the general fact emerged that it was still the exception for the children of manual workers to stay at school beyond statutory leaving age, since 78 percent, 85 percent, and 92 percent, respectively, of the sons of skilled, semi-skilled and unskilled workers children left school at fifteen, as against 25 percent for the professional and managerial group. But those who left school so promptly did not all do so because they lacked ability, and the most important result of this survey was the revelation of latent ability in the population which hitherto had not shown itself in educational achievement.

Ottoway concludes from this study that:

There seems no doubt at all that whichever way one looks at the figures of this report, whether one takes the chances of outerring a selective school, the

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<sup>199</sup> A. K. C. Ottoway, Education and Society: An Introduction to the Sociology of Education (London: Routledge and Kegan Paul, 1966), p. 117.

chances of staying there, or the chances of doing well academically, they are all weighted against the children of the lower status groups. Some wastage of ability is evident at all social levels, but the most serious loss is among the sons of manual workers. It is true that their mean intelligence as measured by tests, is less than that of the higher status groups. But this social distribution of measured intelligence is not the only factor at work. It is among those who show intelligence and who fail that we count the obvious losses. They win places to selective schools, and then so many leave and still fail to develop their potential ability. There are social factors closely associated with home background and cultural patterns in our society which influence the educational achievement of school children. These are among the social facts of education.<sup>200</sup>

The problem of school drop-out and the chance of it is described in the Encyclopedia of Educational Research as follows:

The drop-out problem, in its most important dimensions, is one area of the much larger problem of our so-called lower classes. However, dropping out is by no means strictly a lower-class problem; it can and does occur with great frequency anywhere along the socio-economic scale. But it is predominantly a lower-class problem, so much so that while a middle-class child's dropping out of school will seem unexpected and somewhat incongruous, dropping out is rather endemic to the lower class. It is, in many instances and for any number of reasons, a norm in lower-class cultures.<sup>201</sup>

The summaries of the following three studies on drop-outs are quoted from several in the Encyclopedia of Educational Research:

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<sup>200</sup> Ibid., pp. 115-116.

<sup>201</sup> American Educational Research Association, Encyclopedia of Educational Research (Fourth edition, London: The Macmillan Company, 1969), pp. 312-313.

A Los Angeles study found that:

Almost one-fourth of the parents of drop-outs encouraged their children to drop out, and another one-fourth were indifferent; fewer than one-half of the parents of drop-outs encouraged their children to stay in school.

A comparison of the occupational statuses of parents of drop-outs and of graduates revealed that whereas almost one-half of the parents of drop-outs were employed in unskilled, service, or semi-skilled occupations, only one-sixth of the parents of graduates were so employed. Also, twice as many drop-outs as graduates came from families in the lower income brackets (35 percent and 15 percent), and twice as many graduates as drop-outs come from families in the highest income brackets (23 percent and 12 percent).<sup>202</sup>

The Maryland State Department of Education found that 52 percent of the parents of drop-outs were either unskilled workers or unemployed. It can probably be safely assumed that a large proportion of the remainder were low-skilled or semi-skilled workers. It was also found that 78 percent of the mothers and 80 percent of the fathers of drop-outs had themselves never finished high school. Also, 25 percent of the mothers and 30 percent of the fathers had never gotten beyond sixth grade.<sup>203</sup>

Bledsoe found a perfect inverse ratio between parents' educational level and percentage of drop-outs in his study on high school drop-outs. He found that:

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<sup>202</sup>Los Angeles City School District, "Drop-outs vs. Graduates," ibid., pp. 312-313.

<sup>203</sup>Maryland State Department of Education, "Our Drop-outs: What Can Schools Do?" ibid., p. 313.

Those students whose parents had had some college education did not drop out; those whose parents had completed high school dropped out to the smallest extent; next ranked those with parents with one to three years of high school, then those with parents with one to four years of school. Parents who had had five or six years of schooling had the largest proportion of drop-outs among children.<sup>204</sup>

Miller says that adequate information on school drop-outs is lacking. The best available estimate is that presently one-third of all youths will never finish high school. He also points out that:

A re-analysis of data collected by the Bureau of the Census suggests that 70 percent of all drop-outs come from families whose income is below \$5,000 a year. While this under \$5,000 group is, of course, over-represented among drop-outs, the surprising result is the large percentage of drop-outs who do not come from the poorest families.<sup>205</sup>

A study by F. J. Porter gives some evidence of the different reasons why boys within the same social class decided to leave school at the age of sixteen while others decided to stay on for the sixth-form course. This work confirmed that "leavers tended to have worse home conditions, and poorly educated parents whose attitudes favoured early entry to employment, sometimes, but not always for financial reasons. It was also found that the influence on the boys

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<sup>204</sup> Joseph C. Bledsoe, "An Investigation of Six Correlates of Student Withdrawal from High School," ibid., p. 313.

<sup>205</sup> S. M. Miller, "Dropouts--A Political Problem," in Daniel Schreber (ed.), Profile of the School Dropouts (New York: Vintage Books, 1968), p. 185.

of experiences at school was considerable."<sup>206</sup>

G. Educational Level of Parents on Level of Achievement

The findings of several studies suggest that it is very difficult to establish homogeneous groups in terms of background characteristics that are related to certain school outcomes. There are variations within SES levels and one school outcome also has an impact upon other school outcomes.

Hernandez quotes from Kimball's study on Mexican-American students which indicates that educational aspiration, percent of Anglo students at school, SES, father's education, family intactness, and family birth in Mexico are all significantly related to achievement.<sup>207</sup>

The inter-correlation tables in Arseven's study show that father's education, occupation and income variables are positively and significantly correlated for the combined population as well as for Gecekondlu or non-Gecekondlu populations. However, although significant at the 0.1 level, inter-correlations for non-Gecekondlu population are lower than they are for Gecekondlu population.<sup>208</sup>

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<sup>206</sup>J. F. Porter, "A Sociological Study of the Cause of Early Leaving from Grammar Schools," M.A. Thesis, London, 1957, cited in Ottaway, op. cit., p. 117.

<sup>207</sup>Hernandez, op. cit., p. 7.

<sup>208</sup>Arseven, op. cit., pp. 66-68.

Anderson values the level of parents education, beside others as being related to the several school outcomes, especially to "aspiration". He reads:

The level of his parents' education is certainly one of the best predictors of a child's aspiration for schooling. Some of the more subtle mechanisms in this sphere of socialization have been revealed by the work on achievement motivation. Children with educated parents assimilate the habits that underlie academic proficiency for the most part unwittingly. When parents plan that their offspring shall receive more education than they acquired, children are both exhorted and unconsciously stimulated toward ambitious plans for schooling. The dependence of higher aspirations upon a higher level of schooling is impressed upon the attention of a child in daily life. For children in some strata little supplementation of such incentives by the school is needed, but for children from less privileged families the arousal of motivation to continue in school will depend upon the influence of teachers and fellow pupils.

Acceleration of school enrollments is explained partly by this cumulative interaction within families; particularly in Western societies. The mother's education is crucial in this respect.

Mother's education will have more affect for children with poorly educated fathers, but this relation in turn will change as other factors are considered.<sup>209</sup>

It was found in the Coleman Study that the parents' educational level had made a higher contribution to the sixth grade White students than to any other groups. However, in the higher grades, the contribution of parents' educational level to achievement increases for nearly all groups.<sup>210</sup>

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<sup>209</sup>Anderson, in OECD, Social Objectives in Educational Planning, op. cit., pp. 33 and 40.

<sup>210</sup>Coleman, op. cit., pp. 298-302.

#### H. Income of the Family and Achievement in School

Sexton made a study in "Big City", located in Midwest America, to relate average family incomes to many measures of pupils' achievement. Some of her findings are summarized in the following.

She found that in group 1 (the lowest income group, \$3,500 or less), 10.9 percent of all students in Big City failed to be promoted to a higher grade in January 1958. In group 26 (the highest income group, \$11,055 or more), less than 1 percent (0.8 percent) of all students failed to be promoted.<sup>211</sup>

In the lowest income group, there was a pupil turnover of almost 50 percent during one semester. The rate in the lowest income group is three times as great as the rate in the highest income group. Among the income groups, group 1 had a turnover rate of 59.6 percent, while group 26 had a rate of only 13.1 percent. This amounts to a difference of 46.5 percent.<sup>212</sup>

School attendance is also related to income. The worst attendance record, among Sexton's larger sub-groupings, was found in the lowest income groups, where the attendance rate during the week under examination was 87.7 percent.

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<sup>211</sup>Patricia Cayo Sexton, Education and Income: Inequalities in Our Public Schools (New York: The Viking Press, Inc., 1965), p. 54.

<sup>212</sup>Ibid., p. 97.



The best record was found in the highest income groupings, where the attendance rate was 93.8 percent. Thus in group 26, there were 6.1 percent more students attending school during the week than in group 1.<sup>213</sup>

The drop-out rate in the lowest set of groups (Set I) is 22 times greater than the rate in the highest (Set IV).<sup>214</sup>

#### I. Other Interrelated Factors Affecting Student Level of Achievement

The effect of communities, neighborhoods, education system, school atmosphere, school norms, and peer-groups upon school outcomes are all discussed and investigated by several authors. Some of these are discussed by Anderson as follows:

With communities, as with families, the present level of educational attainment predicts the level of educational opportunities offered to children. Of importance here is the fact that families of similar sort tend to live in clusters. The stimulation of aspirations within a family is reinforced by peer-group stimulation among the children, each of whom has had a broadly similar indoctrination at home. That secondary pupils and university students appear in non-random clusters is due not only to neighbouring families having "like" aspirations but also to their having "common" aspirations: articulately shared appreciations and motivations....

Children differ in average "ability" when they enter particular schools and this ability is not easily separable from the characteristics of the community....

Stimulation of pupils by the school atmosphere is accordingly affected by the practices of streaming or

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<sup>213</sup>Ibid., pp. 98-99.

<sup>214</sup>Ibid., p. 97.

of separate schools. There are counter forces; teachers in the less esteemed schools may push their pupils vigorously in order to prove the merits of that school. On all these points, unfortunately, we have little concrete evidence beyond impressions....

Rural families living near large cities will both receive and respond to different incentives for schooling than those residing in remote localities.<sup>215</sup>

As was discussed in detail in the first and second parts of this chapter, the structure of the education system also has impact upon the outcomes of school.

Becker points out that:

Research on the American school system has alerted us to some of the ways in which schools tend ~~to aid or hinder~~ mobility on the part of subordinate groups.<sup>216</sup>

Torsten Husen summarizes the effect of school structure upon utilization of ability based on the findings of several researches made in Sweden and Europe and concludes that "high percentages of pupils are screened out after they have been selected or held back as grade-repeaters.... The social handicaps assert themselves in a selective system, especially when selection takes place at an early age." Then he adds that:

An attempt has been made here to assess the significance of these handicaps. It was found that one consequence of the system is to deny many pupils from the lowest social class the education enjoyed by their coevals of comparatively academic ability who come

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<sup>215</sup> Anderson, in OECD, Social Objectives in Educational Planning, op. cit., pp. 37-41.

<sup>216</sup> Howard S. Becker, "Schools and System of Stratification," in Halsey et al. (eds.), Education Economy and Society, op. cit., p. 93.

from more privileged environments. Finally, grade-repeating and failures act as social handicaps. The Swedish findings suggest, as have similar studies made in the United Kingdom and other countries, that grade-repeating and failures are interwoven with social-class factors.<sup>217</sup>

Rubinstein and Stoneman refer to a recent study in Britain which has shown that comprehensive schools keep a significantly higher proportion of their pupils after the age of fifteen than other secondary schools in Britain.<sup>218</sup>

Several authors have also investigated the impact of examination systems upon students of different background; the value of examinations as the instrument of selection and promotion has been questioned.

Jean Floud and A. H. Halsey studied the cohort of boys entering secondary school in the Educational Division of South-West Hertfordshire in 1952, 1953 and 1954 to see how in fact the use of intelligence tests in selection affects the social distribution of grammar school places. They found that the abolition of intelligence tests and the associated changes in procedure appear to have resulted in a marked diminution in the opportunity of working-class

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<sup>217</sup>Torsten Husen, "The Effect of School Structure Upon Utilization of Ability: The Case of Sweden and Some International Comparisons," in OECD, Social Objectives in Educational Planning, op. cit., pp. 53-64.

<sup>218</sup>Rubinstein and Stoneman, op. cit., p. 13.

children.<sup>219</sup> Westergate and Little refer to this study and point out that:

If the retrogression thus indicated has occurred, this could be the result of an increased use of general records, teachers assessments and traditional examinations as the criteria of selection for secondary schools, in place of standardized ability test. That such informal or conventional selection procedures discriminate still more in favour of middle class children than do the standardized tests of ability on which much criticism of the "11+" has focused is suggested by at least this one study.<sup>220</sup>

#### J. Self-Concept of Ability and School Achievement

Coleman says that "self-concept of ability is an important outcome of education."<sup>221</sup> It is not easy to identify if the low self-concept is the outcome of low SEL or if it is developed through interaction with others and the experiences in school.

Brookover and Erickson point out that:

In a recent study of public school students, in grade seven, eight, nine, and ten, it was concluded that the parental evaluations of students' academic ability were more highly related to students' self-conceptions of academic ability than were friends' evaluations of students. In grade eleven, the parents and friends seemed to have an equal impact on students' self-concept of ability. In grade twelve, the evaluations of friends in contrast to parents were slightly

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<sup>219</sup>Jean Floud and A. H. Halsey, "Social Class, Intelligence Tests, and Selection for Secondary Schools," in Halsey et al. (eds.), Education, Economy and Society, op. cit., pp. 209-215.

<sup>220</sup>Westergate and Little, in OECD, Social Objectives in Educational Planning, op. cit., p. 227.

<sup>221</sup>Coleman, op. cit., p. 281.

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more related to students' self-concept of ability. From grade seven through twelve, the impact of parental evaluations on self-concept of ability was greater than that of teachers evaluations.<sup>222</sup>

However, when the teachers evaluate the level of students' academic achievement by their own subjective judgments (i.e., grades) in essay or oral examinations, as is the practice in Turkey, teachers' evaluations of students' academic achievement could have an important impact on the self-concept of academic ability of the students.

The purpose of the following study by Torshen was to investigate the relationship of evaluation of cognitive achievements in classroom to students' self-concepts.

The data indicate that there is a significant, positive relation of students achievement and the students' self-concepts. Removing the influence of achievement test performance does not reduce the relationship significantly. However, the relationship between achievement last performance and students self-concept is not significant when the influence of the teachers evaluation is removed.

These findings support the proposition that teachers' evaluation of students' cognitive achievement have a greater influence upon students self-concepts than do their objective achievement test evaluations.<sup>223</sup>

It is also pointed out by several authors that lower-class children are not expected to do well in schools.

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<sup>222</sup> Brookover and Erickson, op. cit., pp. 76-77.

<sup>223</sup> Kay Torshen, "The Relation of Classroom Evaluation to Student Self-Concepts," in J. H. Block (ed.), Mastery Learning, Theory and Practice (New York: Holt, Rinehart and Winston, Inc., 1971), pp. 139-140.

This expectation is transferred to the family and to the students.<sup>224</sup>

Anderson also reminds us that how effectively teachers serve as models is affected by their position on key educational issues. Which children will be motivated and to what extent depends upon teachers views as to the proportion of youth who should move forward to the higher school.<sup>225</sup>

Opinions of teachers on the kinds of behaviors, such as industry, responsibility, interest in school work, etc., which are required for success in school emerge against the working-class children, as Marchal notes:

We have evidence to show that middle-class boys in grammar schools (in the area studied) do better on the average in class examinations in pretty well all subjects than working-class boys, and that, when teachers are asked to rank the boys in their class in terms of such things as industry, responsibility, interest in school affairs, good behaviour, and popularity, the middle-class boys do definitely better than the rest. And working-class boys are inclined to care less about their marks and to take less part in general school activities, and yet, as we have seen, they expect great results from their grammar school status when the time comes for them to get a job.<sup>226</sup>

It could be hypothesized that low expectations of teachers for lower-class children would affect their

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<sup>224</sup> Brookover and Erickson, op. cit., pp. 33, 61-62, 83-85.

<sup>225</sup> Anderson, in OECD, Social Objectives in Educational Planning, op. cit., p. 41.

<sup>226</sup> Marchal, op. cit., p. 160.

evaluations of cognitive achievement of the children in written and oral examinations.

The findings of the following two studies are examples showing how the school administrators and the teachers perceive the lower social-class children in their several characteristics.

A research by Harriott and Hoyt St. John aimed to study the impact of the socio-economic composition of schools upon the attitudes and behavior of their principals and teachers. They used the same data which were collected by the National Principalship Study during the years 1959 to 1964. Five hundred and one principals and 3,367 teachers in 41 cities throughout the United States with populations of 50,000 or more were studied. They found that:

Achievement in reading dramatically differentiates pupils in schools of different SES levels. In schools of lowest SES, 43 percent of the pupils are reported to be one or more years retarded in this skill, as compared to 10 percent in schools of highest SES. Similar differences in other measures of academic achievement appeared in the reports of staff in schools of different SES levels. Further, according to both principals and teachers, the lower the school SES, the greater the percentage of pupils who are uninterested in academic achievement and who present discipline problems. In schools of lowest SES, 7 percent are expected to go to college and 44 percent to drop out. In schools of highest SES, 64 percent are expected to go to college and 7 percent to drop out.<sup>227</sup>

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<sup>227</sup> Robert E. Harriott and Nancy Hoyt St. John, Social Class and the Urban School. The Impact of Pupil Background on Teachers and Principals (New York: John Wiley and Sons, Inc., 1966), p. 204.



Research in four London Grammar Schools by A. H.

Halsey and L. Gardner has shown that for boys of equal I.Q. on entry, the working-class boys had on the average less good academic records as they moved up the school than the middle-class boys. The working-class boys received lower ratings from their teachers on personality characteristics associated with success in work in school affairs, in short, on being likely to profit from a grammar school education.<sup>228</sup>

Non-intellectual factors, arising from the formal and informal structure of the classroom and from classroom interaction, as they relate to student achievement, are also investigated, especially by sociologists.

In an article published in the 1972 fall issue of RER, Cohen points out that:

Status in the classroom can have multiple basis: societal status characteristics, sociometric status or achievement status. Societal status characteristics in many classrooms include differences in sex, social class, race, and ethnic group. These characteristics may effect the learning of the individual through some medium of early socialization.<sup>229</sup>

Cohen summarizes the findings of several studies in this area with a central interest on how they have come to have effects on achievement as an outcome of classroom

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<sup>228</sup>Ottoway, op. cit., pp. 113-114.

<sup>229</sup>Elizabeth G. Cohen, "Sociology and the Classroom: Setting the Conditions for Teacher-student Interaction," in RER, Vol. 42, No. 4 (Fall, 1972), pp. 441-452.

interaction. She also quotes the following words from a study by Brookover et al.:

... achievement status is a second basis for rank ordering in the class-room because of the nature of grades, ability grouping and recitation in the typical class-room. Over time, students develop an achievement pattern which is known to themselves, to other students and to the teacher, operating like any other status ranking. Many teachers and students seem to believe that there is one general human ability with smart high-achieving students at one end and "dumb" low-achieving students at the other end of the continuum. There are also measurable achievement differences in these two groups; no doubt some of the performance differential is due to individual differences in ability and skills, but the sociologist hypothesizes that some of the variance in performance is due to the expectations for competence held by the teachers and students for high-achieving smart students as compared to low-achieving dull students.<sup>230</sup>

Coleman concludes, in the Equality of Educational Opportunity study, that "if a child's self-concept is low, if he feels he cannot succeed, then this will affect the effort he puts into the task and thus his chance of success. It is true, of course, that his self-concept is affected by his success in school and it is thus hard to discover the effect of self-concept upon achievement."<sup>231</sup>

The study made by Brookover et al.,<sup>232</sup> was based on the view that a persons' self-concept is developed through

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<sup>230</sup> Ibid., p. 445. Quoted from Brookover et al., Self-Concept of Ability and School Achievement (East Lansing, Michigan: Bureau of Educational Research Services, 1965).

<sup>231</sup> Coleman, op. cit., p. 281.

<sup>232</sup> Brookover et al., op. cit.

his interaction with persons who are important to him and that these interactions, in turn, influence his future behavior. It focused on one aspect of the student role, academic achievement, and one aspect of self-concept, self-concept of academic ability, and asked how these two aspects interrelate.

The major findings were:

1. General self-concept and academic performance were positively and significantly related (+.57 for males and +.57 for females); the relationship held even when I.Q. was controlled.
2. There were specific self-concepts of ability related to specific areas of academic performance. These specific self-concepts were found to be significantly better predictors of specific subject achievement than was general self-concept.
3. General self-concept was positively and significantly related to the student's perception of how a few significant persons evaluated him. His self-concept in the various subjects were related to his perception of how a number of other persons evaluated him as a student.

As noted by Block, referring to the above study, the implications of changing self-concept are considered. The writers suggest that self-concept is a key factor in role performance and that changes in self-concept should result in changes in performance.<sup>233</sup>

Based on the findings of the above study Block also reminds that:

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<sup>233</sup>Block, op. cit., pp. 106-107.

The writers view these findings as being important for several reasons. First, the possibility that self-concept may be changed should be noted. Second, if changes in self-concept may lead to changes in academic performance, then it is also possible that changes in academic performance may lead to changes in self-concept. The idea that there are general and specific self-concepts of ability suggests that we might change self-concept in specific subject areas by increasing a student's performance without necessarily first changing his general academic self-concept. Perhaps enough changes in his specific self-concepts would eventually lead to changes in his general self-concepts.<sup>234</sup>

We should hope that we might have enough evidence by now to accept the following remark by Rowe:

Marks never encouraged any pupils except those who got good ones, nor a prize any pupil except the one that was awarded.<sup>235</sup>

Feather's experiment investigated the relationships between an individual's orientation toward a task (seeking success or avoiding failure), his expectation of the task at hand (easy or difficult), and his initial experiences with the task (actual success or failure). The entire theoretical framework for the experiment was derived from a theory of achievement motivation.

The sample consisted of 72 college students. The subjects worked at a task consisting of 15 anagrams. On the first five anagrams, half of the subjects were given

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<sup>234</sup> Ibid., p. 107.

<sup>235</sup> Albert Rowe, "Human Being, Class and Education," in Rubinstein and Stoneman, op. cit., p. 40.

unsolvable anagrams so that they failed (initial failure), and half were given very easy anagrams so that they succeeded (initial success). Half of the subjects were then told that the remaining anagrams would be easier than most (high expectation) and half were told they would be more difficult than most (low expectation). In reality, however, the last ten anagrams were all of approximately 50 percent difficulty. Measures of need-achievement and test anxiety indicated the subject's general orientation toward any task (success versus failure oriented). Finally, the subject's estimate of his probability of success on each anagram was obtained before the anagram was given.

The results indicated the important influence of prior success or failure on the individuals' expectations of later success and actual performance. Changes in expectations of success were greater following uniform initial failure than uniform success. Those who failed on the first five anagrams expected to continue to fail (i.e., gave low estimates of their probability to succeed). These subjects also performed significantly lower on the remaining anagrams than those who initially succeeded. The data also showed that in certain cases a person's general orientation toward a task (success or failure oriented) seemed to further exaggerate the influence of the initial success or failure

condition on his expectations of success.<sup>236</sup>

K. Mastery Learning: A New Definition of Learning

As a result of recent developments in the definition of learning, based on the findings of researches and the new trends in education, a "mastery learning approach" has gained importance.

Block gives background information on the development of the "mastery learning approach" and explains the main principles upon which the approach is based. First, he introduced the Carroll Learning Model.

In its simplest form, Carroll's model proposed that "if each student was allowed the time he needed to learn to some level and he spent the required learning time, then he could be expected to attain the level. However if the student was not allowed enough time, then the degree to which he could be expected to learn was a function of the ratio of the time actually spent in learning to the time needed."<sup>237</sup>

Then he explains Bloom's approach as follows:

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<sup>236</sup>N. T. Feather, "Effects of Prior Success and Failure on Expectations of Success and Subsequent Performance," Journal of Personality and Social Psychology, 3 (1966), summarized in Block, op. cit., pp. 115-116.

<sup>237</sup>Block, ibid., p. 5.

Bloom (1967) transformed this conceptual model into an effective working model for mastery learning. Bloom argued that if students were normally distributed with respect to aptitude for a subject, and if they were provided uniform instruction in terms of quality and learning time, then achievement at the subject's completion would be normally distributed.... However, if students were normally distributed on aptitude but each learner received optimal quality of instruction and the learning time he required, then a majority of students could be expected to attain mastery. There would be little or no relationship between aptitude and achievement.<sup>238</sup>

Block gives the following information on the development of the mastery learning approach and the results of implementations in the United States and other countries.

In the three years since publication of Bloom's ideas, extensive mastery learning research has been carried out, both in the U.S. and abroad. Successful strategies have been easily and inexpensively implemented at all levels of education and in subjects ranging from arithmetic to philosophy to physics. Mastery approaches have been used for samples of up to 32,000 students and have been found to work equally well in classrooms with one teacher to 20 students or in those with one teacher to 70 students.

The results from about 40 major studies carried out under actual school conditions have shown that, in general, three-fourths of the students learning under mastery conditions have achieved to the same high standards as the top one-fourth learning under conventional, group-based instructional conditions. In studies where a strategy has been refined and replicated, 90 percent of the mastery learning students have achieved as well as the top 20 percent of the non-mastery learning students. Mastery learning students also have exhibited markedly greater interest in and attitudes toward the subject learned compared to non-mastery learning students.<sup>239</sup>

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<sup>238</sup> Ibid., pp. 6-7.

<sup>239</sup> Ibid., pp. 8-9.

### Summary

In this part of the chapter, some research findings related to "productivity" and "equity" are summarized in the following order:

1. Some background information on the Turkish society is given very briefly as it relates to education.
2. Some selected studies on Turkish education concerning "productivity" and "equity" are summarized.
3. A French study in regard to regional inequalities is summarized as an example.
4. One British and one French study are summarized as examples of the relationship between social class and access to education.
5. The effects of several other socio-economic factors upon school outcomes as they relate to "equity" are summarized, based on some selected studies.
6. At the end, the concept of a "mastery learning" approach to learning is briefly introduced.



### CHAPTER III

#### DESIGN OF THE STUDY

##### Introduction

This chapter sets forth the operational procedures which were followed in gathering and processing the data employed in this study. The reader will note that much of the information came from school records, with additional information being gathered by teachers who administered a questionnaire to their students. Several special procedures had to be followed, however, to follow-up on students who were no longer available for direct contact. These procedures are enumerated below.

##### A. Overview of the Study

1. This study is a pilot study of the middle schools in one province in Turkey aiming to explore whether certain non-intellectual factors affect the transition of students within middle schools. The study is not primarily interested in how much the students learn or if there is any relationship between the degree of learning and their personal characteristics, family, community, school facilities, etc. Rather the study is designed to identify some

of these objective background characteristics which might be related to student transition in middle schools. The aim is to obtain information useful in long range planning with a view to improving middle school productivity.

2. The data collected are numerical (numbers of students) and categorical (destinations at the end of the school year). Therefore, the study is descriptive in general. Chi-square tests are applied to some of the data to test the significance of observed differences.

3. Data were obtained from two sources: the data on the sample of students came from the student questionnaire and from the official files and records of the middle schools included in the study; the data for national totals and Usak Province totals were drawn from the records of the Ministry of Education, State Planning Organization, State Statistical Institute and the Education Directorate of Usak Province. If the data needed were available in several different sources, the Ministry of Education's data were used. If the data needed were available only in one source, that one was used. Though there were some differences among data collected by different institutions (mainly because of different observation dates or different definitions of the data), the researcher did not feel that it was necessary to try to apply corrections, since the main interest of the study was in the sample of schools investigated.

4. The study's objectives, problem statements and hypotheses were set forth in Chapter I (see pages 31-35 above). The following two conditions also affected the design of the study and the data gathering procedures:

- a) availability of information in the school records;
- b) use of data on the population of the 1970-1971 school year in a study carried out during the 1971-1972 school year.

5. Where information needed was available in the official school records, it was not included in the student questionnaire, except for some few questions which the researcher used to check the students' answers against the records (such as "the number of previous failures") or some questions which saved time in gathering the data by putting them in the questionnaire.

6. Using the 1970-1971 school year population but applying the student questionnaire subsequently in the 1971-1972 school year generated some problems in terms of locating some of the students of the previous school year in order to give them the questionnaire. Special procedures had to be developed for gathering data in these cases.

#### B. Sampling

Six of the eleven middle schools of Usak Province were included in the study. The students in these six schools constituted about 65% of the total students of the middle schools in the whole province. The schools were selected as follows:

1. In 1970-1971 there were eleven public middle schools in operation in Usak Province. One of them (Kizilcasogut Middle School) just opened in that school year and had only two first grade classes. This school was, therefore, excluded from the study since it was not a complete school yet. Data were collected from six of the remaining ten middle schools.

2. According to the definition used in this study, four of the ten schools were "city" schools. This cluster included three schools located in Usak (the central town of Usak Province) and one school located in Esme (the central town of the district of Esme). The remaining six schools constituted the second cluster of "town" middle schools.

3. To make sure that both middle-size and small-size middle schools would be represented in the sample, the cluster of "town middle schools" was subdivided into two sub-clusters: (a) middle schools located in district centers (but without lycee), and (b) middle schools located in "villages".

4. Therefore, there were three groups of middle schools from which the sample schools were drawn. Half of the schools from each group were selected by drawing. The names of the schools for each of the three groups were written on pieces of paper, put in a bag, and half from each group were drawn out.

Table 8 contains the results of the sample selection procedure. After the drawing, two "city middle schools" (Besim Atalay and Merkez) and three "town middle schools" (Sivasli, Ulubey and Buyuk Oturak) had been included in the sample.

5. It was further recognized that in the central City of Usak, the graduates of primary schools are not randomly distributed among middle schools. Graduates from certain primary schools tend to register at certain middle schools. Village primary school graduates who come into the City of Usak to attend middle school also tend to distribute themselves to particular middle schools, according to the neighbourhood in which they live.

6. In order to overcome possible biases in the distribution of students to the middle schools located in Usak City, there appeared to be two alternatives. One was to draw a certain percentage of students from the total population of middle school students. The other was to include in the study all of the middle schools located in the central City of Usak. The second alternative was chosen, and Halit Ziya Middle School was added to the sample. A total of six middle schools (Halit Ziya, Besim Atalay, Merkez, Ulubey, Sivasli and Buyukoturak) were, therefore, included in the final sample.

7. All the students of these schools who registered at the beginning of 1970-1971 school year or who transferred

Table 8\*. Middle Schools in Usak Province and Schools Included in the Sample

Type and Names of the Middle Schools	Place Located		Year Estab- lished	Number of Students 1971-1972	Number of Classes <sup>1</sup>	Number of Teachers <sup>2</sup>	Schools Included in the <sup>3</sup> Sample
	Province	District Village					
<u>City Middle Schools</u>							
Besim Atalay	Usak		1968 <sup>4</sup>	1444	28	30	+
Halit Ziya	Usak		1961	1051	21	21	+
Merkez	Usak		1968 <sup>5</sup>	1410	30	25	+
Esme	Usak	Esme	1949 <sup>5</sup>	956	18	21	-
-----							
<u>Town Middle Schools</u>							
Banaz	Usak	Banaz	1956	557	10	8	-
Karahalli	Usak	Karahalli	1954	358	9	8	-
Sivasli	Usak	Sivasli	1954	425	11	9	+
Ulubey	Usak	Ulubey	1955	486	8	7	+
Buyukoturak	Usak	Banaz	1966	161	4	3	+
Kizilcasogut	Usak	Banaz	1970	109	2	2	-
Yelegen	Usak	Esme	1968	122	3	2	-

\*Source: MOE, Ortaogretim, 1971-1972 (Ankara: March, 1972), p. 140.

- 1 "Class" means here a group of students who are instructed together. These students sit in the same classroom in all the subjects except workshop and foreign language if all of them are not studying the same language.
- 2 The figures show the number of teachers who are under the administration of each school. They may teach in other schools also as needed. In addition there may be persons who are not qualified to be in the teaching profession but who teach part-time at middle schools (e.g., a lawyer, a doctor, the sub-governor) and there may be some primary school teachers who also teach at middle schools if they are needed to help fill out a teacher shortage. These latter two groups of teachers are not included in the figures above.
- 3 (+) shows the schools included in the final sample; (-) shows the school not included in the sample.
- 4 This school is the oldest middle school of the province, established before 1930. The school was put under the same administration with the lycee, after 1953. In 1968, it was again separated from the lycee, and has operated independently since that date.
- 5 This school was established in 1949. In 1968, a lycee was also opened, and both schools now operate under the same administration.

in during the school year were studied. The students who transferred out from these schools during 1970-1971 are shown as having reached the destination "transferred" (and their subsequent destinations for 1970-1971 in their new school were not recorded). If, however, the transfer was between two schools both of which were included in the sample, this was not counted as a "transfer" and the student's data were counted in the school into which he moved.

### C. The Questionnaire

Most of the data needed for this study were available in the school records. A student questionnaire was developed to obtain additional information.<sup>1</sup>

Some of the questionnaire information (such as residence of the family, changes in residence, the people with whom the students stay while attending the school, the type of place in which they live, whether they paid for any private tutoring, names of subjects in which they were coached by a paid teacher, etc.) was not actually used in this study but was collected for possible future use. The first draft of the questionnaire was developed by the researcher with the advice of colleagues in the Planning Research and Coordination Office, including a test construction expert and a data processing expert, and the draft was

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<sup>1</sup>See Appendix 1.



first administered to the researcher's two children, who were in fourth grade of primary and first grade of middle school at that time. Some changes were made in the words and contructions of the sentences in light of their reactions, and a second draft was developed. The second draft was administered in two first grade classes of a middle school in Ankara. The students were asked to raise questions if there were any things in the items which they did not understand easily. It seemed that the questionnaire worked well. Then the final questionnaire was printed.

D. Procedures Followed for Reaching Students of the 1970-1971 School Year and for Administering the Questionnaire

As mentioned above, using the population of 1970-1971 in 1971-1972 created some problems in terms of finding students who were not in the same school or perhaps not even still in the Usak school system.

Such follow-up problems occurred chiefly among the 1970-1971 middle school graduates and among the drop-outs.

1. Two tabular forms were developed which were to be filled out by the schools included in the sample. Table 1 referred to the 1970-1971 first and second graders, Table 2 referred to the third graders.<sup>2</sup>

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<sup>2</sup>See Appendices 2 and 3.

These tables included a complete listing of the student population of the sample schools, comprising all students who either registered at the beginning of the school year or who transferred in during the school year.

Table 1 also included the following information: whether the student was still enrolled in 1971-1972; whether he was still in the same school or transferred into another school; if he was in the same school, at what grade and in what class; if he transferred, whether it happened in 1970-1971 or 1971-1972; if he transferred, the name and place of the school to which he moved; if he was no longer in school, whether he was a drop-out or dismissed; if he dropped out, whether it happened in 1970-1971 or 1971-1972.

Table 2 for third graders included the following additional information: students who left education during 1970-1971 school year; students who transferred into another school (names and place of the schools); students who graduated and registered in an upper secondary school (names and places of the schools); students who graduated but did not register in an upper secondary school; students who were "waiting" out of school during the 1971-1972 school year (to take exams in the courses they failed at the end of the 1970-1971 school year); whether or not the students who "failed" at the end of the 1970-1971 school year were still in the same school, what class they were in; if they were not in the same school, what class they were in; if they were

not in the same school, whether they transferred into another school (names and places of the schools) or left school.

2. On the assumption that most of the 1970-1971 middle school graduates would register in an upper secondary school in Usak Province, a special table was developed to be filled out by those schools.<sup>3</sup>

This table included the classes, student identification numbers, and names of students graduated from one of the six middle schools included in the study. A separate list was requested for each study school. The table also included information for each student as to whether or not he was still in that upper secondary school; if so what class he was in, and if he transferred to another upper secondary school during 1971-1972, the name of that school and the community where it is located.

3. Special instructions were prepared for filling out each of these tables. The researcher also prepared sample tables with examples of entries for every possible situation. Then the tables, the instructions and sample tables were given to the administrators in one middle school and one lycee in Ankara to see whether they could be understood by them and whether the information requested was available at the schools.

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<sup>3</sup>See Appendix 4.

It became clear to the researcher that the tables would be easily understood by the school administrators, and it would not be difficult to fill them out if their student Academic Record Books (Sinif Geçme Defteri) were complete. If the record books were not yet completed, it would be necessary for the schools to complete them first before filling out the tables prepared for this study.<sup>4</sup>

4. While these tables were in the process of development, the researcher made a preliminary trip to Usak. He visited the Director of Education, the administrators and some of the teachers of the secondary schools. He explained the purpose of the study and discussed with them the problems of student flow. He asked them to complete their student Academic Record Books if they were not already complete and prepare the other files which also would be needed.

5. About two weeks after this initial visit, an official letter was sent to the schools through the Governorship of Usak Province on the letterhead of the Planning Research and Coordination Office of the Ministry of Education and signed by the Undersecretary of the MOE.<sup>5</sup>

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<sup>4</sup>A student Academic Record Book is kept by each school. There is a place for each student in this book. The book includes the identification number, name, sex, birth date of the student, and all his grades in detail. The book also records the final destination of the student, the school he transfers out to, or the school he came in from as a transfer.

<sup>5</sup>See Appendix 5.

The letter transmitted a supply of blank tabular forms, instructions for filling them out, plus sample forms containing example entries. The letter of transmittal asked the Governor to get the tables filled out by the schools according to the instructions, informing him that a researcher would visit Usak to help them. The letter indicated that any assistance provided to the researcher would be appreciated by the Ministry of Education.

6. Approximately two weeks after the sending of this letter, the researcher went to Usak with the student questionnaires, visited each school, and helped them if they had difficulty in filling out the tables and preparing the lists of students.

7. A meeting was arranged in each of the sample schools with the administrators and the teachers who were going to administer the questionnaire. The researcher explained the questionnaire to them and answered their questions.

8. Administrations of the questionnaire were planned with the teachers and administrators of each school. Actual administration was left to the responsibility of the assigned teachers or administrators.

9. The questionnaires were distributed to the students one day ahead of collection. Teachers read them to the students and answered their questions. The students were directed to take the questionnaire home and learn from their parents the right answers to some of the questions that

they may not be sure about and to bring them back the following day.

10. During the administration of the questionnaires, the assigned teachers stood ready to help the students in every way possible.

11. The answers and the marks of the students were checked by the assigned teachers, and if there were any empty places or any contradictions, he or she asked the student to complete it or to correct the contradiction.

12. For those students who were not found, one of the administrators in each school was assigned to find them and administer the questionnaire or to get the information not available in school records from their friends, neighbours, parents, school guardians, etc.<sup>6</sup> There were 198 students who could not be located by direct contact.

13. The tabular forms indicated that there were 159 students who were located in 1971-1972 in other schools outside of Usak Province. An official letter was written to the schools to which these 159 students were either transferred or registered in an upper secondary school. The letter asked the school administration to find the student, to get him to fill out the questionnaire, and to make sure that all the questions were answered. The letter also

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<sup>6</sup>See Table 9.

Table 9. Total Number of the Students at the Beginning of 1970-1971 School Year at the Middle School Included in the Study by Source of Information on Some of the Answers of the Questionnaire Used, Destinations of the Students Within and at the End of the School Year, and Grade Level

Destinations	N* and %	First Grade			Second Grade			Third Grade			Total		
		Student	Someone else	Total	Student	Someone else	Total	Student	Someone else	Total	Student	Someone else	Total
Drop-out	N	22	32	54	4	19	23	0	3	3	26	54	80
	%	40.74	59.26	100.00	17.40	82.60	100.00	0.00	100.00	100.00	32.50	67.50	100.00
Within School Year													
Transferred	N	6	2	8	6	4	10	0	1	1	12	7	19
	%	75.00	25.00	100.00	60.00	40.00	100.00	0.00	100.00	100.00	63.16	36.84	100.00
Total	N	28	34	62	10	23	33	0	4	4	38	61	99
	%	45.17	54.83	100.00	30.30	69.70	100.00	0.00	100.00	100.00	38.39	61.61	100.00
Passed	N	1275	17	1292	972	21	993	678	36	714	2925	74	2999
	%	98.69	1.31	100.00	97.88	2.12	100.00	94.96	5.04	100.00	97.53	2.47	100.00
At the End of School Year													
Failed and Dismissed	N	588	41	629	287	16	303	193	6	199	1068	63	1131
	%	93.49	6.51	100.00	94.71	5.29	100.00	96.99	3.01	100.00	94.42	5.58	100.00
Total	N	1863	58	1921	1259	37	1296	871	42	913	3993	137	4130
	%	96.99	3.01	100.00	97.14	2.86	100.00	95.40	4.60	100.00	96.69	3.31	100.00
Total Population at the Beginning of School Year	N	1891	92	1983	1269	60	1329	871	46	917	4031	198	4229
	%	95.37	4.63	100.00	95.49	4.51	100.00	94.99	5.01	100.00	95.31	4.69	100.00

\* Number of students.

provided the name of the student, the name of the school from which the student had transferred or graduated, and his grade level.<sup>7</sup> After a follow-up letter, 141 of these 159 questionnaires were returned. Then the original middle schools of the remaining 18 students were requested to complete the information about them, as in the case of the 198 students mentioned above in Step 12. These 18 are included in the 198 students in Step 12.<sup>8</sup>

#### E. Processing the Data

After all questionnaires and data from original student Academic Record Books had been gathered, the data were coded, punched, and processed on the 1620 IBM facilities of the Planning, Research and Coordination Office. The tables and analyses presented in the next chapter are based on the outputs of this data processing.

#### Summary

This pilot study of factors affecting middle school productivity is generally descriptive in nature. The data came from school records and from a questionnaire which was administered in 1971-1972 to students who had attended six

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<sup>7</sup>For example, a list of students (based on the tables of Merkez Middle School) showing those last year graduates registered in Usak Lycee was checked against the list of students prepared by Usak Lycee showing those students who graduated from Merkez Middle School and registered in that lycee. Differences between the lists are corrected if there were any.

<sup>8</sup>See Table 9.



middle schools in 1970-1971 in the Province of Usak.

Gathering the data entailed following up on some 1970-1971 students who could not be contacted directly in 1971-1972. Procedures are described above according to which the sample population was selected and the data gathered and processed. The next chapter presents the study's findings.

## CHAPTER IV

### DISCUSSION OF THE DATA COLLECTED

#### Introduction

This chapter has four parts.

Part I presents some basic information about Usak Province where the present study was carried out. The purpose of this part is to give a sense of the Province to the readers in order to help them to interpret the data presented in Parts II, III and IV.

Turkey's middle school population data is compared with Usak Province middle school total population in Part II based on data collected by the State Statistical Institute, Ministry of Education, and the Education Directorate of Usak Province. Firstly, the data on the transition from primary schools into middle schools and secondly, the data on the student body composition are presented in tabular and graphic forms. Since both of the data are on the total population of Turkey and Usak, a Chi-square Test was not applied to them. The data are explained very briefly and the findings are referred to the corresponding hypotheses.

In Part III, the sample data collected in the study on the selected factors are presented. The sample data on drop-outs and dismissed students are presented in Part IV.

The purpose of this study (see Chapter I, pp. 29-34) included investigation of the following factors (see Chapter I, pp. 37-44) as independent variables which could be related to the transition of students (passed, failed) within the middle schools:

- a) Grade level  
(first, second, third).
- b) Type of middle school now attending  
(city, town).
- c) Sex  
(girls, boys).
- d) Type of primary school from which graduated  
(city-town, village).
- e) Level of father's education
  - I: illiterate,
  - II: literate with no formal education, some primary education, or graduation of primary school,
  - III: some middle school education or graduation of middle school or their equivalents,
  - IV: some lycee education, graduation of lycee or their equivalents, or more).
- f) Level of Mother's education  
(same levels as father's education).
- g) Number of previous failures  
(first grade: none, one,  
second grade: none, one, two or three,  
third grade: none, one, two, three or more).

- h) Number of teachers at the primary school from which graduated (type of primary school graduated by the number of teachers: e.g., one teacher school, two teacher school, etc.) (1, 2, 3, 4, 5, 6 and more).

The data on these factors are also presented in tabular and graphic forms. Firstly, the composition of the students based on the factor investigated by their selected class attributes is given. Secondly, the destination arrived at the end of the school year ("passed" and "failed and dismissed") by the levels of the factor investigated is presented. It was possible to arrange several combination of cross tables, but it would increase the number of tables. Therefore, in cross tables, for dependent variables investigated, sex, type of primary school graduated, type of middle school attending and grade level at middle school are kept constant as the class attributes, except the independent variable, "number of teachers at primary school from which graduated" since this variable is also dependent on the type of primary school from which graduated. Chi-square tables are presented after the graphs.

It is thought that the cross tables and graphs tell the readers more than we can explain. Therefore, no explanation is made on them. But at the end of each group of data (based on the factors investigated), a summary of outcomes, in terms of hypotheses, is made. They are also cited by the code number of the hypothesis.

The following rules are used to apply the Chi-square Test:

1. Since it is still discussed by the authorities whether we could apply Chi-square Test in the cases of cells with small expected values or zero, we preferred not to apply it when the expected value of a cell is less than five or there is a cell with zero value. These cells are reported as "--" in the tables.

2. If all the cells on one or more levels of a factor (horizontal cells) are empty (it means there are no students at that level of the factor), the Chi-square Test is applied by ignoring that level. Therefore, a different degree of freedom is used.

3. The .05 level of significance is used for all tables.

## PART I

### Some Comparative Information About Usak Province

#### A. Characteristics of the Population

##### 1) Village and City-Town Population by Sex

Usak is a small province in the western part of Turkey with 207,512 population in the 1970 census. As it is seen in Table 10, 66.3 percent of this population lives in 251 villages and some small neighborhoods each of which is

connected to a village. The population living in the villages constitutes 61.5 percent of total population in Turkey.

Table 10.\* Percentages of Village and City Population by Sex in Usak Province and Turkey in 1970

Percentages of Population Living in the:		Female	Male	Total
Villages of	** Turkey	63.8	59.4	61.5
	Usak	68.3	64.2	66.3
-----				
Cities of	*** Turkey	36.2	40.6	38.5
	Usak	31.7	35.8	33.7
-----				
Total Number of Population (in 1000)	Turkey	17599	18006	35605
	Usak	107	100	207

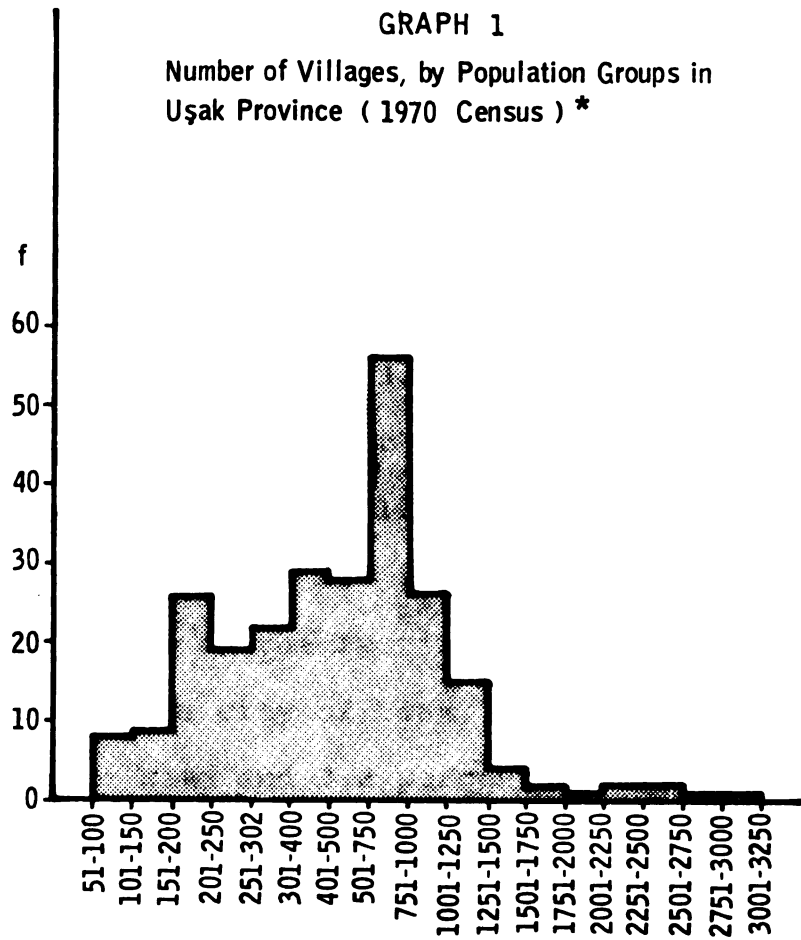
\* Turkey figures from SSI, Census of Population by Administrative Division (Ankara: SSI Printing Division, 1973), p. XVII; Usak figures from the same source, p. 581.

\*\* Village: Sub-district or muhtarlik outside the municipal boundaries of Province and District centers.

\*\*\* City: Area within the municipal boundaries of Province and District centers.

## 2) Villages and Village Population Groups in Usak Province

The frequency distribution of the villages in Usak Province by population groups is shown in Graph I. The graph shows that most of the villages of Usak Province have populations under 1500.



\*SSI, Census of Population by Administrative Division,  
op. cit., p. 580.

### 3) Population Increase in Usak Province and Turkey

The rate of increase in the population of Usak Province was much less than it was for Turkey as a whole. While the increase was 28.3 percent for Turkey's total population in five years between 1965 and 1970, it was only 8.9 percent for Usak Province between the same years. There was a considerable difference between the rate of increases in the village and city and town populations of Usak Province. While the increase was only 3.1 percent for village population, it was 22.4 percent for city and town populations in five years between 1965 and 1970. Although there was a general increase in city and town population; it was not the same for each town in the Province. The population increased 30.6 percent in the city of Usak, 36.3 percent in Banaz, 22.7 percent in Esme and 3.2 percent in Sivasli towns, but it decreased 8.7 percent in Karahalli and 4.4 percent in Ulubey towns between 1965 and 1970.<sup>1</sup> It is pointed out in the Usak Province Year Book of 1967 that there is a constant migration in Usak Province from villages to the towns and especially to Usak city, and from Usak Province to the other big cities of Turkey. There is also a seasonal migration from Usak's villages to the nearby provinces.<sup>2</sup>

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<sup>1</sup>a) Usak figures from Usak İl Yilligi, op. cit., p. 31;  
b) Turkey figures from Census of Population by Administrative Division, op. cit., p. 580.

<sup>2</sup>Ibid., pp. 32-33.



#### 4) Household Heads Usual Occupation Groups in Usak Province and Turkey

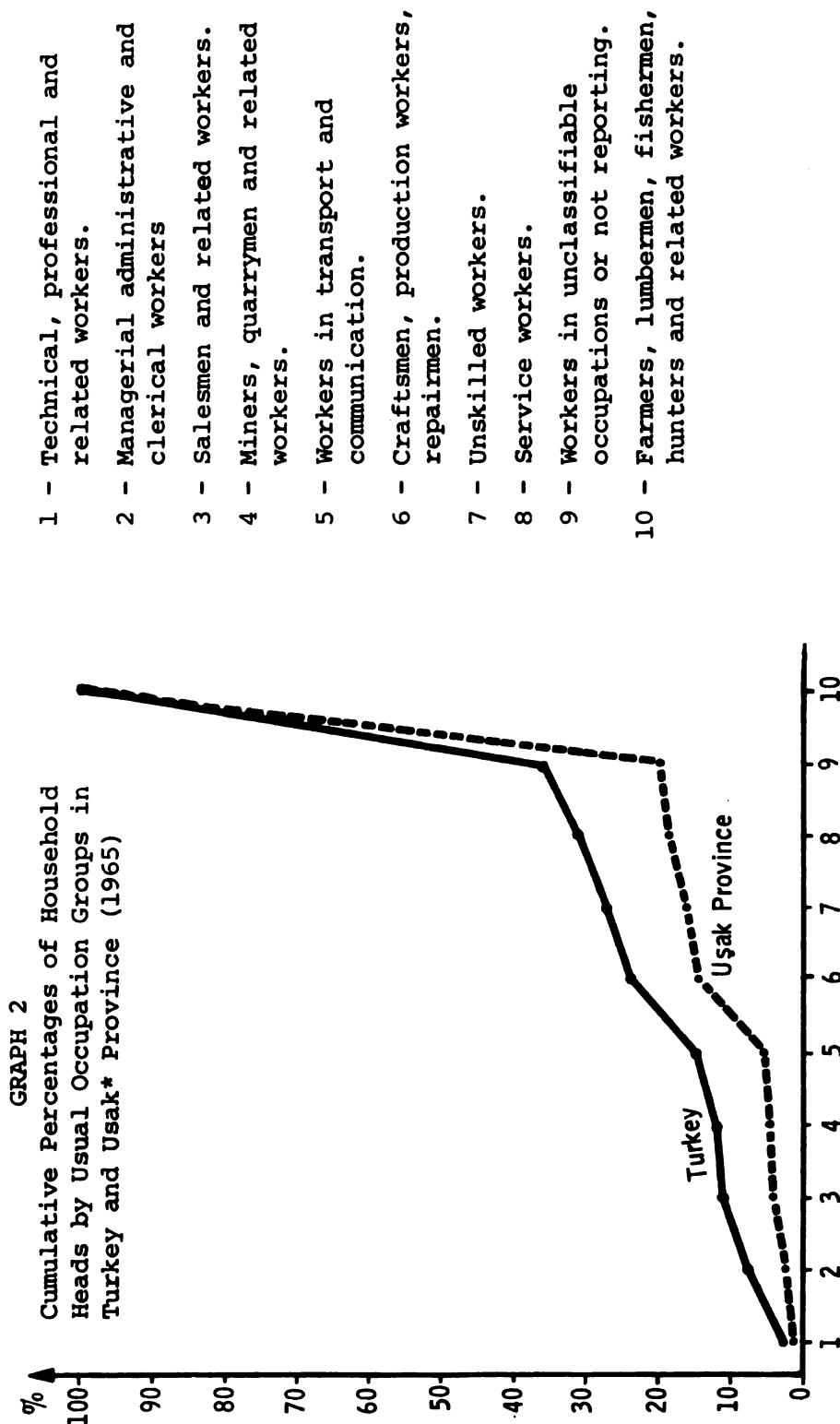
Cumulative percentages of "household heads usual occupation groups" are given in Graph 2, for Turkey and Usak Province. Both lines follow more or less the same pattern, but the cumulative percentages are always less for Usak Province than they are for Turkey in the first nine groups. While in the first two groups which could be accepted as "white collar" occupations, the line reaches to 7.2 percent for Turkey, it becomes 2.8 percent for Usak Province. The first nine occupations constitute 36.5 percent of the total in Turkey but 19.2 percent in Usak Province. In other words, while group 10 constitutes 63.5 percent of the total in Turkey, it constitutes 80.8 percent of the total in Usak Province.

#### 5) Illiteracy Rates in Usak Province and Turkey

Percentages of illiterate population of Usak Province in village and city-town populations by sex are shown in Table 11, on page 240.

The table shows that the percentages of illiterate population are higher for females than for males and higher for villagers than city-town population.

Table 12, on page 240, gives the percentages of illiterate population in Turkey by sex in 1965 and 1970.



\*a) Usak ili, Usak il Yilligi, 1967 (Istanbul: S. Goran Mat. 1968), p. 34.

b) SSI, Statistical Pocket Book of Turkey, 1972 (Ankara: SSI, Mat., 1973), p. 26.

Table 11.\* Percentages of Illiterate People (6 years old and over) of Usak Province in Village and City-Town Populations by Sex in 1965 Census

Illiterates in:	Female %	Male %	Total %
Village Population	74.7	41.2	58.4
City-Town Population	54.6	20.8	37.5
Total Population	68.6	34.7	51.9

\* Usak İl Yilligi, 1967, op. cit., p. 36.

Note: A person who is said to know how to read and write in any language is accepted as a literate person.

Table 12. Percentages of Illiterate People (6 years old and over) of Turkey by Sex in 1965\* and 1970\*\*

Illiterates in:	Female %	Male %	Total %
1965 Total Population	67.2	36.0	51.3
1970 Total Population	59.9	30.9	45.2

\* SSI, Statistical Pocket Book of Turkey, op. cit., p. 20 (census results).

\*\* Ibid., p. 20 (1% sample results).

B. Some Figures of Primary and Middle Schooling,  
and the Basic Characteristics of Students in  
Usak Province and Turkey

1) Primary Schools in Usak Province and Rates of  
Schooling in Turkey, Usak and Van Provinces

There were 292 primary schools in Usak in 1971-1972, and 270 of them were located in the villages and the neighborhoods. There were only 4 small villages without a primary school.<sup>3</sup>

Table 13 presents the rates of schooling at three levels in 1972-1973, in Turkey, Usak Province and Van Province which is one of the underdeveloped provinces of Turkey.

Kazamias points out the advanced level of Usak Province in education when he discusses the regional and geographical disparities in the growth of educational opportunities.

He says:

For example, in the province of Van, in the Eastern part of Turkey, enrollments in public elementary schools from 1953-54 to 1959-60 increased from 6,000 to 8,000, but in the Province of Usak, in the Western part of the country the increase was from 16,000 to 23,500; and yet, according to 1960 census, Van had a population of 211,034, and Usak 184,733. The same two provinces registered sharp differences in orta (middle) school enrollments during the same period: in Van, in 1953-54, there were 74 students attending public middle schools which were not attached to lycees; in 1959-60, the number rose to 267. But in Usak, the figures for the two years were 97 and 1,000 respectively.<sup>4</sup>

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<sup>3</sup>MEB, PAKD, 67 Ilde Okul, Öğretmen, Öğrenci Sayıları, op. cit., p. 76; and the Documents of Education Directorate of Usak Province.

<sup>4</sup>A. Kazamias, op. cit., p. 162.

Table 13.\* Representative Age Group and Rates of Schooling at Primary and Secondary Levels in Turkey, Usak Province and Van Province, in 1972-1973

Provinces	Primary Level		Secondary First Level		Secondary Second Level	
	7-12 age Group	Primary Schooling %	13-15 age Group	First level Secondary Schooling %	16-18 age Group	Second level Secondary Schooling %
Turkey Total	6,012,843	87.62	2,581,231	38.17	2,113,636	21.98
Usak Total	32,233	100.00**	12,901	68.13	10,380	36.07
Van Total	71,148	49.50	26,743	19.99	17,760	14.90

\* MEB, PAKD, 67 İlde Okul Öğretmen Öğrenci Sayıları, op. cit., pp. 7, 76-77.

\*\* The actual rate comes to be more than 100 percent, because there are students in schools younger and older than the corresponding age groups. Naturally in Usak Province also there are some students in 7-12 age group out of school. The percentages of schooling are computed as

$$\frac{\text{Number of students in that level of school}}{\text{Population size of that age group}} \times 100.$$

2) Student Body Composition in Primary Schools of Usak Province by Type of Primary School and Sex

Table 14 gives the number of students in city-town and village primary schools and percentages of girls by grade level in Usak Province in 1970-1971.

Table 14 and Graph 3 show that the percentages of girls are lower than those for the boys at each level of primary school for both village and city-town primary school populations with the exception of third grade village girls. But it is observed that 1) the difference between the percentages of girls and boys are 13.8 percent for city-town and 17.4 percent for village fifth grade students at most, and 2) the difference between the percentages of girls and boys increases as the grade level increases for both populations (city-town and village), again with the exception of third grade village girls.

3) Student Body Composition in Primary and Middle Schools of Usak Province by Sex, Type of Primary School Attending or Graduated and Grade Level

Graph 4 shows the number of students in primary and middle schools of Usak in 1970-1971 at each grade by sex and type of primary school attending now or graduated before middle school. Graph 5 shows the percentages of the students at each of these groups in the total number of students at each grade level (e.g., the total of the percentages at each grade level adds up to 100%).

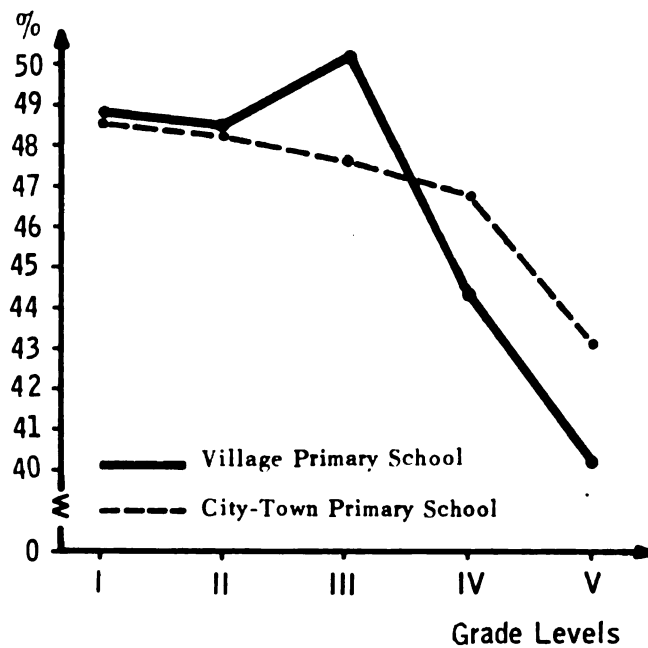
Table 14.\* Number of Primary School Students and Percentages of Girls at Each Grade Level in Usak Province in 1970-1971

Grades	City-Town Primary Schools		Village Primary Schools		Total	
	Girls %	Total N	Girls %	Total N	Girls %	Total N
I	48.6	2,154	48.8	5,924	48.7	8,078
II	48.3	1,883	48.4	4,686	48.3	6,569
III	47.7	1,959	50.1	4,208	49.4	6,167
IV	46.7	2,193	44.3	4,945	45.1	7,138
V	43.1	1,904	41.3	3,896	41.9	5,800
Total	46.9	10,093	46.8	23,659	46.8	33,752

\* Statistical Documents of the Education Directorate of Usak Province.

GRAPH 3

Percentages of Girls in the Total Number of Village and City-Town Primary School Students by Grade Level in Usak Province in 1970-1971

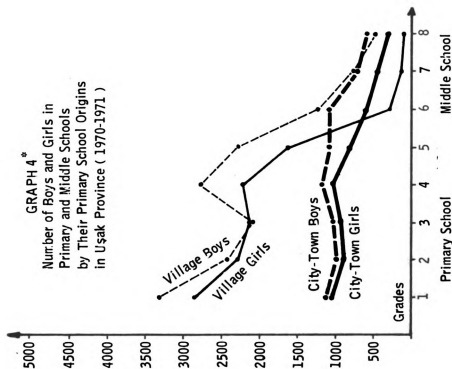


Note: The balance to 100% will be the percentage of village or city-town boys at each grade.



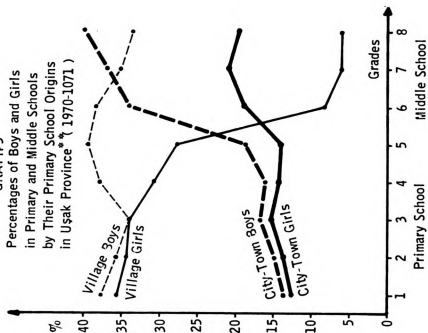
GRAPH 4 \*

Number of Boys and Girls in  
Primary and Middle Schools  
by Their Primary School Origins  
in Uşak Province ( 1970-1971 )



GRAPH 5 \*

Percentages of Boys and Girls  
in Primary and Middle Schools  
by Their Primary School Origins  
in Uşak Province \* ( 1970-1971 )



\* Statistical Documents of Education Directorate of Uşak Province

\*\* The Percentages for various Primary School Origins at a given grade level will add up to 100%

## PART II

Comparative Data on Turkey's and Usak Province's  
Middle School Populations Based on the  
Objectives Stated in Chapter Three

A. Transition Proportions from Primary into  
Middle Schools in Turkey and Usak  
Province

Table 15 gives the numbers and percentages of 1969-1970 Primary Graduates, 1970-1971 middle school new enrollments and the transition proportions into middle schools (e.g., proportion of primary school graduates who enroll in middle school) in Turkey and Usak by type of primary school graduated and sex. These figures are also graphed in Graphs 6 and 7, on page 249. One can easily follow the better representation of Usak's village girls and boys in the middle schools than the whole of Turkey's village girls and boys although they are still under-represented.

B. Student Body Composition in Middle Schools  
of Turkey and Usak Province

Table 16A presents the number of middle school students and percentages of girls by type of primary school graduated at each level of middle school in Turkey at the beginning of 1970-1971 school year. Table 17A presents the same figures for Usak Province. Percentages of girls in Tables 16A and 17A are also illustrated in Graph 8A. The differences between the percentages of boys and girls in

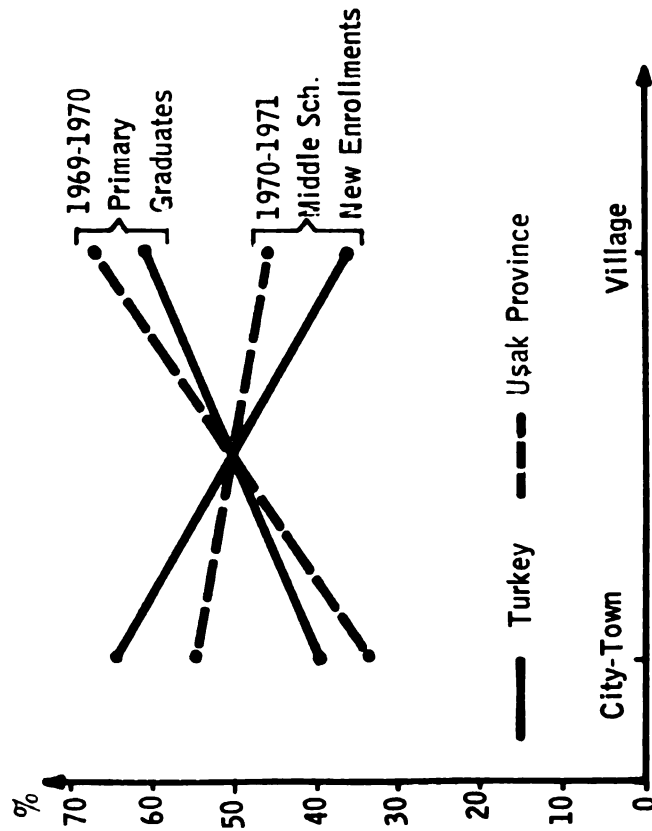
Table 15.\* Primary School Graduates, Middle School New Enrollments and Transition Proportions Into Middle Schools, by Type of Primary School and Sex

Type of Primary School	Sex	1969-1970		1970-1971		Transition Proportions %
		Primary		Middle School		
		Graduates		New Enrollment		
Graduates		N	%	N	%	
<u>Turkey</u>						
City-Town	M	156,431	56.0	136,383	67.2	87.2
	F	122,850	44.0	66,508	32.8	54.1
	T	279,281	100.0	202,891	100.0	72.6
	%	39.3		64.1		
Village	M	279,609	64.8	96,443	85.0	34.5
	F	152,093	35.2	16,977	15.0	11.2
	T	431,702	100.0	113,420	100.0	26.3
	%	60.7		35.9		
Total	M	436,040	61.3	232,826	73.6	53.4
	F	274,943	38.7	83,485	26.4	30.4
	T	710,983	100.0	316,311	100.0	44.5
	%	100.0		100.0		
<u>Usak Province</u>						
City-Town	M	987	56.9	872	62.1	88.3
	F	748	43.1	533	37.9	71.3
	T	1,735	100.0	1,405	100.0	81.0
	%	33.4		54.1		
Village	M	1,987	57.4	964	80.9	48.5
	F	1,473	42.6	228	19.1	15.5
	T	3,460	100.0	1,192	100.0	37.3
	%	66.6		45.9		
Total	M	2,974	57.2	1,836	70.7	61.7
	F	2,221	42.8	761	29.3	34.3
	T	5,195	100.0	2,597	100.0	50.0
	%	100.0		100.0		

\*1. Statistical Documents of Education Directorate of Usak Province; 2. State Statistical Institute, 1970-1971 Secondary School Statistics; 3. Mustafa Aydin, op. cit.

GRAPH 6

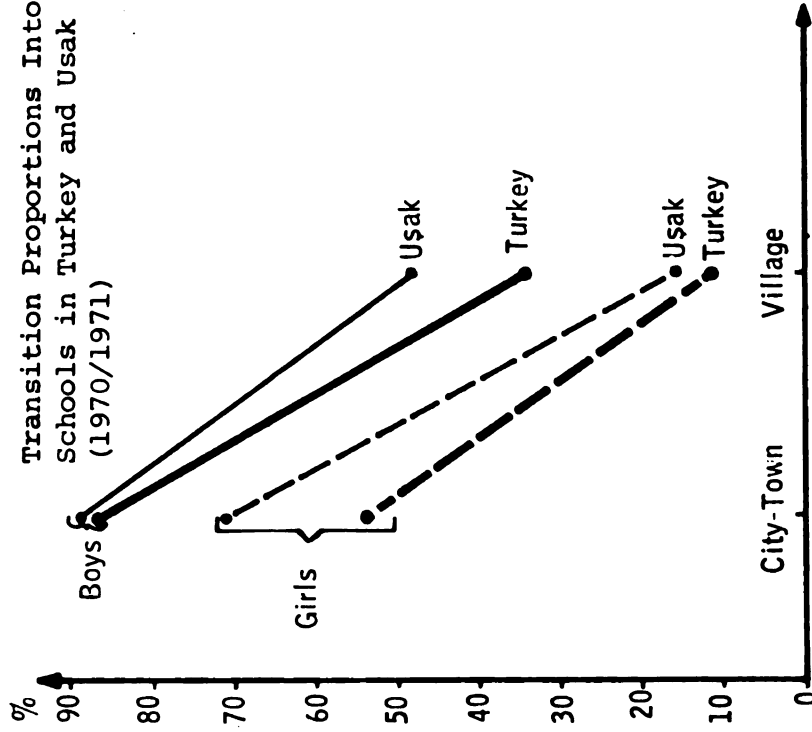
Percentages of 1969-1970 Primary Graduates and 1970-1971 Middle School New Enrollments in Turkey and Usak



Type of Primary School Graduates

GRAPH 7

Transition Proportions Into Middle Schools in Turkey and Usak (1970/1971)



Type of Primary School Graduates

Table 16A.\* Number of Middle School Students and Percentages of Girls by Type of Primary School Graduated and Grade Level in Turkey at the Beginning of 1970-1971 School Year

Type of Primary School Graduated	First Grade		Second Grade		Third Grade		Total	
	Girls %	Total N	Girls %	Total N	Girls %	Total N	Girls %	Total N
City-Town	31.3	245,548	32.8	160,339	33.0	108,595	32.2	514,482
Village	15.2	136,950	16.2	73,861	15.7	47,102	15.6	257,913
Total	25.6	382,498	27.5	234,200	27.8	155,697	26.6	772,395

\*State Statistical Institute, Secondary School Statistics at the Beginning of 1970-1971 School Year (non-published).

Note: The balance to 100% will be the percentage of boys.

Table 17A.\* Number of Middle School Students and Percentages of Girls by Type of Primary School Graduated and Grade Level of Usak Province at the Beginning of 1970-1971 School Year

Type of Primary School Graduated	First Grade		Second Grade		Third Grade		Total	
	Girls %	Total N	Girls %	Total N	Girls %	Total N	Girls %	Total N
City-Town	35.5	1,668	36.1	1,137	32.8	877	35.1	3,682
Village	18.7	1,498	16.1	822	16.7	594	17.5	2,914
Total	27.5	3,166	27.7	1,959	26.3	1,471	27.3	6,596

\*Same source as Table 16A.

Table 16B.\* Number of Middle School Students and Percentages of Village Primary School Graduates by Sex and Grade Level in Turkey at the Beginning of 1970-1971 School Year

Type of Primary School Graduated	First Grade			Second Grade			Third Grade			Total			
	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys		
	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total		
Village	%	21.2	40.8	35.8	18.5	36.5	31.5	17.1	35.3	30.3	19.5	38.4	33.4
Total	N	98,019	784,479	382,498	64,498	169,702	234,200	43,202	112,495	155,697	205,719	566,676	772,395

\* Same source as Table 16A.

Note: The balance to 100% will be the percentage of city-town primary school graduates.

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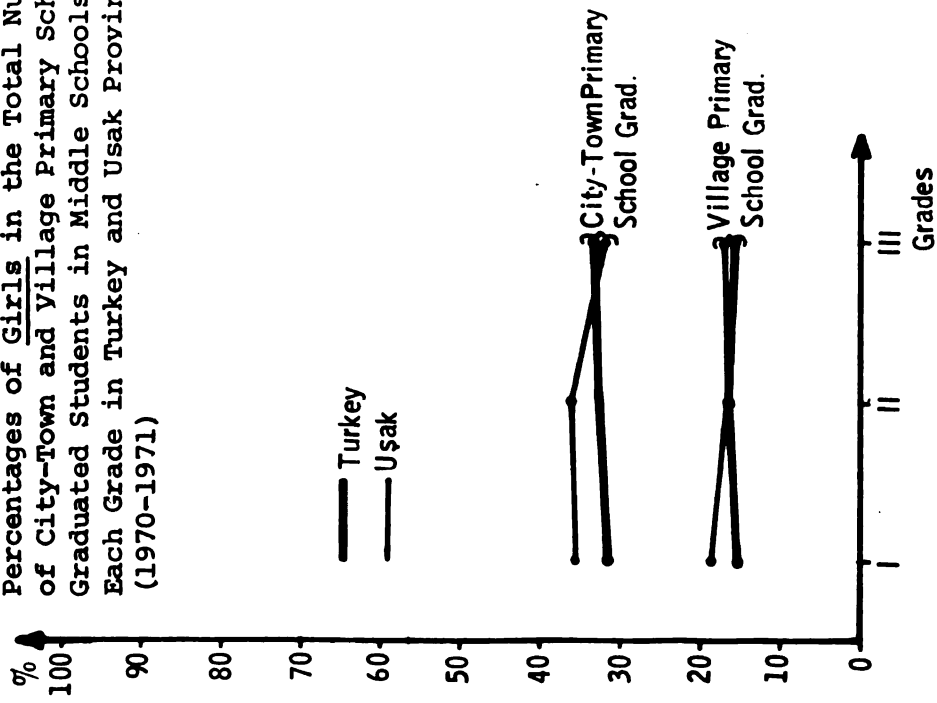
Table 17B.\* Number of Middle School Students and Percentages of Village Primary School Graduates by Sex and Grade Level in Usak Province at the Beginning of 1970-1971 School Year

Type of Primary School Graduated	First Grade			Second Grade			Third Grade			Total			
	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total	
Village	%	32.1	53.1	47.3	24.3	48.7	42.0	25.6	45.7	40.4	28.4	50.1	44.2
Total	N	872	2,294	3,166	543	1,416	1,959	387	1,084	1,471	1,802	4,794	6,596

\* Same source as Table 16A.

GRAPH 8A

Percentages of Girls in the Total Number of City-Town and Village Primary School Graduated Students in Middle Schools at Each Grade in Turkey and Usak Province (1970-1971)



GRAPH 8B

Percentages of Village Primary School Graduated Boys and Girls in the Total Number of Middle School Boys and Girls in Each Grade in Turkey and Usak (1970-1971)

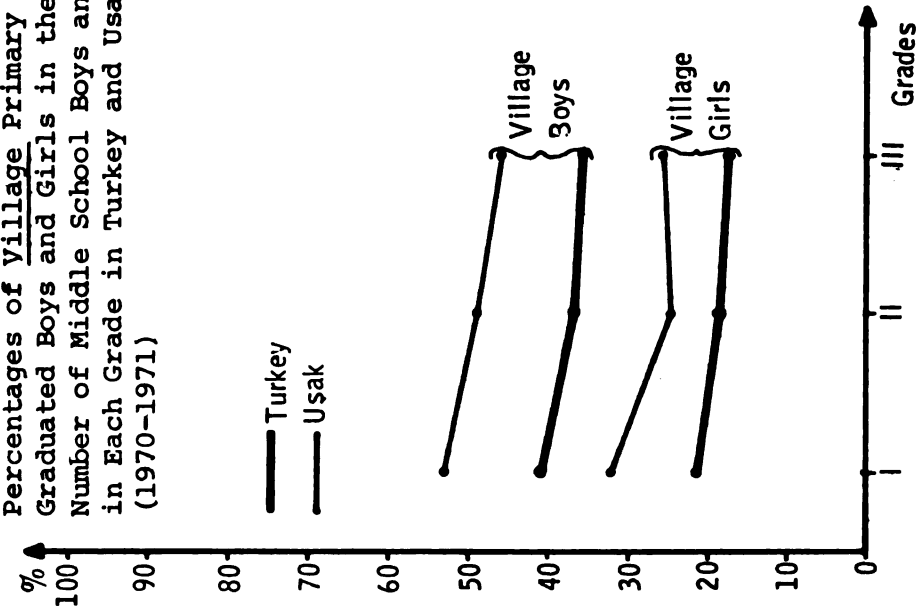


Table 18A.\* The Difference Between the Percentages of Boys and Girls by Type of Primary School Graduated and Grade Level in Turkey and Usak Province at the Beginning of 1970-1971 School Year

Population	Type of Primary School Graduated	Grade Level			Total
		I	II	III	
Turkey	City-Town	37.0	34.4	34.0	35.6
	Village	69.6	67.6	68.6	68.8
	Total	48.8	45.0	44.4	46.8
Usak Province	City-Town	29.0	27.8	34.4	29.8
	Village	62.6	67.8	66.6	65.0
	Total	45.0	44.6	47.4	45.4

\* Computed as: % of Boys-% of Girls.

GRAPH 9A

The Difference Between the Percentages of Boys and Girls by Type of Primary School Graduated and Grade Level in Turkey and Usak Province At the Beginning of 1970-1971 School Year

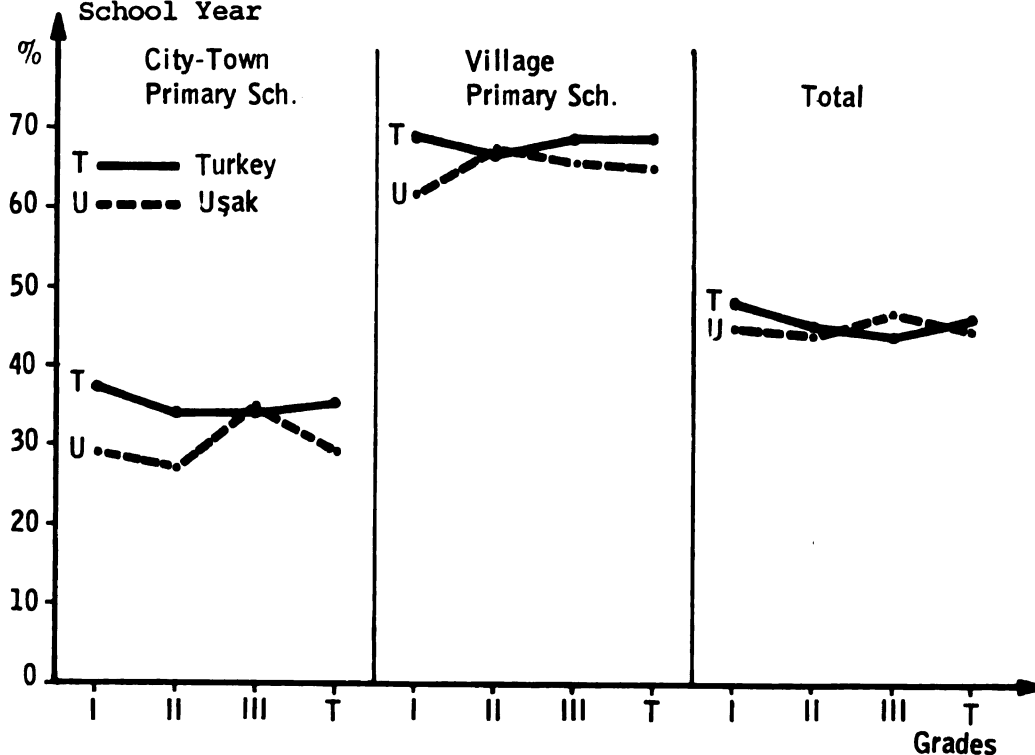




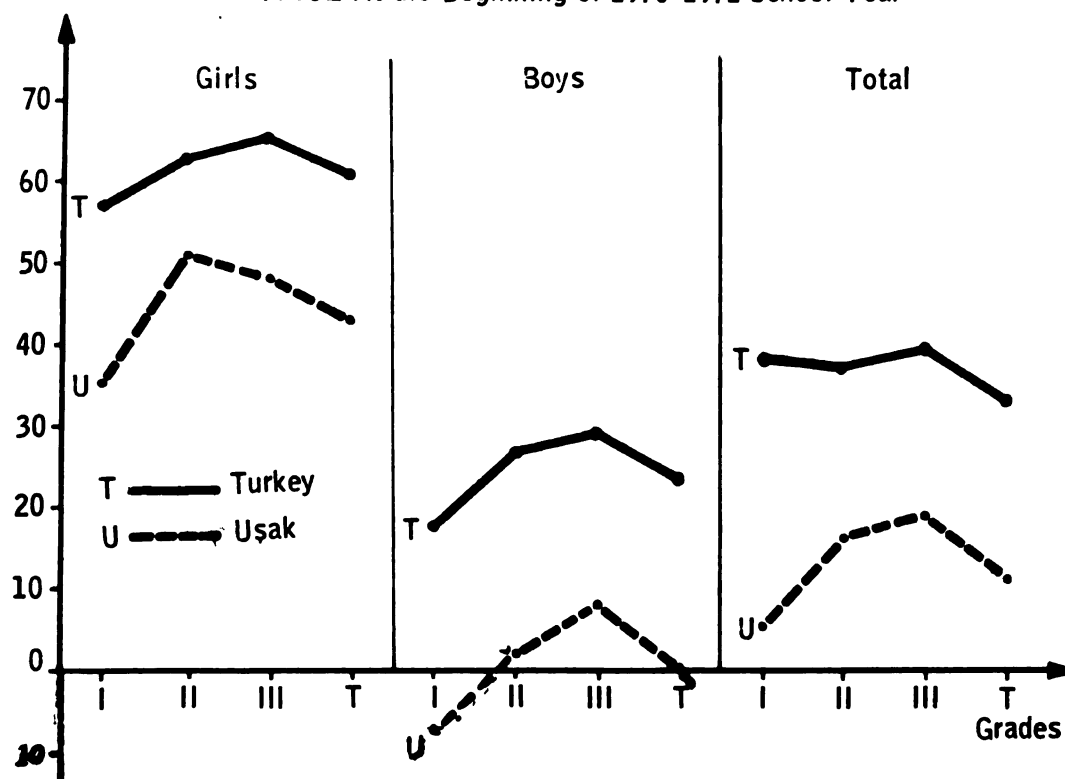
Table 18B. The Difference Between the Percentages of City-Town and Village Primary School Graduates by Sex and Grade Level in Turkey and Usak Province at the Beginning of 1970-1971 School Year

Population	Sex	Grade Level			Total
		I	II	III	
Turkey	Girls	57.6	63.0	65.8	61.0
	Boys	18.4	27.0	29.4	23.2
	Total	38.4	37.0	39.4	33.2
Usak Province	Girls	35.8	51.4	48.8	43.2
	Boys	-6.2*	2.6	8.6	-0.2*
	Total	5.4	16.0	19.2	11.6

\* To the advantage of Village Primary School Graduated Boys (e.g., % of City-Town Boys-% Village Boys gives a negative value).

GRAPH 9B

The Difference Between the Percentages of CITY-TOWN and VILLAGE Primary School Graduates by Sex and Grade Level in TURKEY and USAK PROVINCE At the Beginning of 1970-1971 School Year



Tables 16A and 17A are given in Table 18A and illustrated in Graph 9A.

Tables 16B and 17B present the number of boys and girls in middle schools, in Turkey and Usak Province and percentages of village primary school graduates by grade level. The percentages of village primary school graduated girls and boys in the total number of students in each group are also illustrated in Graph 8B. The difference between the percentages of city-town and village primary school graduates in Tables 16B and 17B are given in Table 18B and illustrated in Graph 9B.

C. Transition Within Middle Schools in Turkey and Usak Province

1) Dropouts

Number of middle school students at the beginning of 1970-1971 school year and the percentages of dropouts are given in Table 19 for Turkey and Usak. The percentages are also illustrated in Graph 10.

2) Failures

Number of middle school students at the end of instructions in 1970-1971 school year and percentages of failed students are shown in Table 20 and they are illustrated in Graph 11.

Table 19.\* Number of Middle School Students at the Beginning of School Year and the Percentages of Dropouts by Sex and Grade Level in Turkey and Usak Province (1970-1971)

Grades	Destination	Turkey			Usak Province			
		Girls	Boys	Total	Girls	Boys	Total	
I	Drop-out	%	10.70	15.42	14.18	4.93	3.97	4.23
	Total	N	108,324	304,487	412,811	872	2,294	3,166
II	Drop-out	%	11.65	16.59	15.20	2.34	4.03	3.55
	Total	N	76,260	194,688	270,948	543	1,416	1,959
III	Drop-out	%	18.28	12.60	14.23	2.59	0.18	0.82
	Total	N	51,192	127,677	178,869	387	1,084	1,471
Total	Drop-out	%	12.65	15.21	14.51	3.64	3.13	3.27
	Total		235,776	626,852	862,628	1,802	4,794	6,596

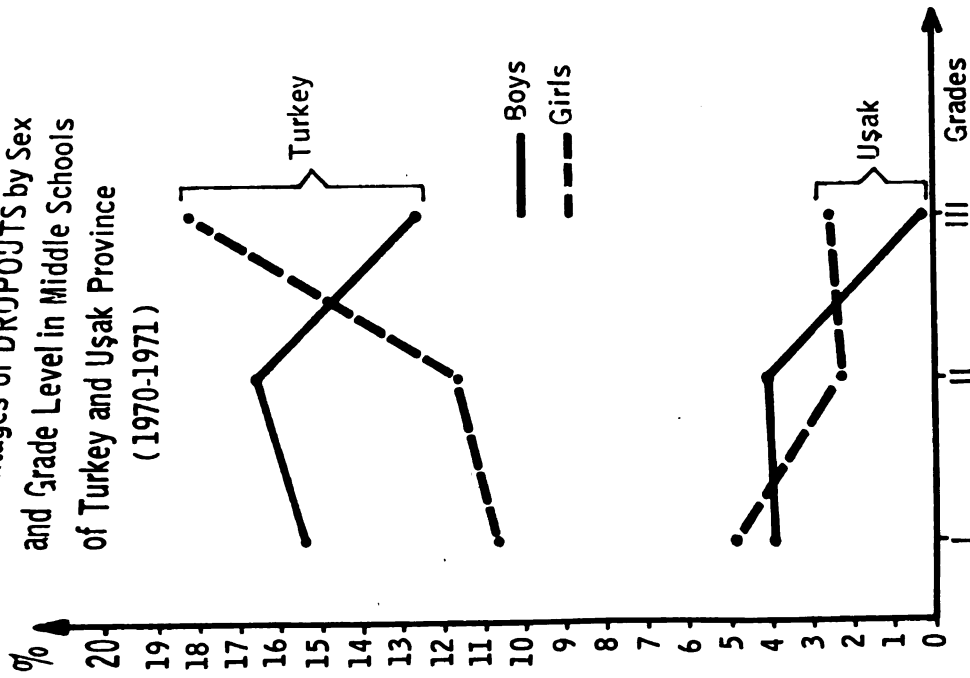
\* 1) Turkey : MEB, Orta Öğretim Yıllığı, 1970-1971, p. 155; Usak : State Statistical Institute, unpublished documents. 2) Drop-outs are found as the difference between the number of students at the beginning of school year and at the end of instruction. It should be noted that for Usak figures, students who transferred out or into the province middle schools are not eliminated.

Table 20.\* Number of Middle School Students at the End of Instructions and the Percentages of Failed Students by Sex and Grade Level in Turkey and Usak Province (1970-1971)

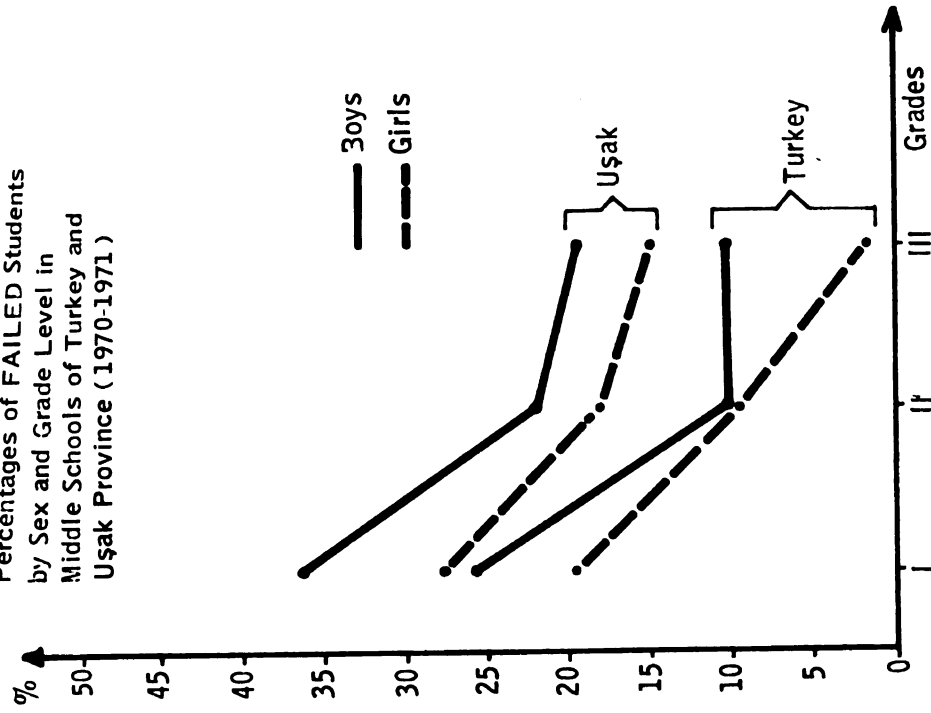
Grades	Destination	Turkey			Usak Province			
		Girls	Boys	Total	Girls	Boys	Total	
I	Failed	%	19.55	25.50	23.87	27.50	36.13	35.95
	Total	N	96,728	257,536	354,264	829	2,203	3,032
II	Failed	%	9.74	10.11	10.00	18.11	21.93	20.86
	Total	N	67,378	162,384	229,762	530	1,359	1,889
III	Failed	%	1.94	10.32	8.04	14.85	19.50	19.30
	Total	N	41,833	111,587	153,420	377	1,082	1,459
Total	Failed	%	12.76	17.61	16.26	21.89	29.52	27.45
	Total	N	205,939	531,507	229,762	1,736	4,644	6,380

\* 1) Same sources as Table 19. 2) Failed students are found as the differences between the number of students at the end of instruction and the number of students passed.

GRAPH 10  
Percentages of DROPOUTS by Sex  
and Grade Level in Middle Schools  
of Turkey and Uşak Province  
(1970-1971)



GRAPH 11  
Percentages of FAILED Students  
by Sex and Grade Level in  
Middle Schools of Turkey and  
Uşak Province (1970-1971)



## Summary Outcomes of Part II

### A. New Enrollments in Middle Schools

(Hypothesis No. 1a, 1b and 2)

As expected by the hypotheses (code numbers cited above) the data presented in Table 15 and Graph 6 show that:

1. In Turkey, the number and percentages of middle school new enrolled students,

a) are less for village primary school graduates than for city-town primary school graduates, and

b) are less for girls than boys.

2. In Usak Province, the differences between percentages of students in different classes (by sex and type of primary school graduated) are less than the national figures of the same school year. But they still are less for village primary school graduates and girls than for city and town primary school graduates and boys.

### B. Student Body Composition in Middle Schools

(Hypothesis No. 3a, 3b and 4)

As expected by the hypotheses (code numbers cited above) the data presented in Tables 16A,B, 17A,B, 18A,B, and Graphs 8A,B and 9A,B show that:

3. In Turkey's middle schools

a) the number and percentages of students are less for village primary school graduates than for city-town primary school graduates,

- b) are less for girls than for boys, and
- c) the proportional differences between groups with village and city-town primary school background increase as the grade level increases to the disadvantage of the village primary school graduates.

4. In Usak Province's middle schools, in general, the differences between the percentages of girls and boys and between the percentages of city-town and village primary school graduates are less than in the national figures of the same school year with the following exceptions:

- While the difference between the percentages of girls and boys is 67.6% for Turkey's village primary school graduated second graders, it is 67.8% for the respective group in Usak Province; while it is 34.0% for Turkey's city-town primary school graduated third graders, it is 34.4% for the respective groups in Usak Province; while it is 44.4% for Turkey's total third graders, it is 47.4% for respective group in Usak Province.

- The difference between the percentages of city-town and village primary school graduates is to the advantage of first grade village primary school graduated boys and total village primary school graduated boys in Usak middle schools. It means there are more village boys than city-town boys in these two sub-populations.

### C. Transition within Middle Schools

(Hypothesis No. 5a, 5b, 5c)

5. The data collected based on the hypotheses of the study (code numbers cited above) are presented in Tables 19 and 20, and in Graphs 10 and 11. They show that in Turkey's and Usak Province's middle schools:

- a) there is a constant difference between the sexes in terms of percentages of destinations (failed-dismissed and drop-out) through all grades in Turkey and Usak Province contrary to the expectation in Hypothesis 5a,
- b) contrary to the expectation stated by Hypothesis 5b, the percentage values of drop-outs do not show a constant decrease as the grade level increases. But, as expected, the percentage values of failing decreases as the grade level increases for Turkey's girls and totals, and for both sexes of Usak Province. For Turkey's boys we do not find the same thing,
- c) as expected by Hypothesis 5c, the data presented in the respective tables and graphs show that the percentage values in the destinations are different for Turkey and Usak Province middle schools. Higher values are found in failure and dismissed destinations for Usak Province than for Turkey as expected but, contrary to the expectation, higher values of drop-out are found in Turkey than for Usak Province.

### PART III

#### Presentation of Sample Data

##### Introduction

Based on the objectives stated in Chapter III, and factors (independent variables) included in the study, the sample data collected are presented in this part in seven sections.



Section A presents the data based on the factor, type of primary school graduated; Section B, sex; Section C, level of father's education; Section D, level of mother's education; Section E, number of previous failures; Section F, number of teachers at primary school from which graduated; and Section G, type of middle school attending and grade level.

There are two factors that seem important in terms of equality of educational opportunity to transfer into middle school in Turkey: sex and type of primary school from which the students graduated. Both factors make a big difference in the access to middle school. The researcher was interested in investigating if these two factors still make a difference in the transfer patterns within middle school, together with the effect of the factor concerned. Therefore, the data on each factor are given separately for sex and for type of primary school from which the students graduated. In the absence of such a grouping, we might attribute the difference that is related to the sex or to the type of primary school from which graduated merely to the factor concerned.

In addition to this, the data also are given separately for each grade level and type of middle school attending. In this way, grouping and sub-grouping the population in each section which concerns only one particular factor as

an independent variable, gave us some sort of a control over the findings.

The first two sections which includes two factors (sex and type of primary school from which graduated) are reported together, since, firstly, sex is accepted as an independent variable and type of primary school graduated as a sub-population, and, secondly, visa versa.

At the beginning of each section, a cover page is used to introduce the content of the section briefly and to refer to the related tables and graphs.

The data is presented in three groups in each section.

1. The first group presents the data on the composition of the students in two tables. The first table gives the percentages of girls and boys or village and city-town primary school graduates at each level of the factor concerned. The second table gives the percentages of girls on the village primary school graduates in the total number of students at each level of the factor concerned. Then the data presented in these tables are illustrated in graphic form. Lastly, the results of Chi-square Test for the student composition data are given in table form.

2. The data on the Failing and Passing results are given (by reporting only the percentages of failing) in the second group which has three sub-groups. The first subgroup consists of data on the factor concerned by sex, for each grade level and the type of middle school attending.

Four separate tables are presented one for each grade and one for grades total (all grades). The second sub-group presents the same data by type of primary school from which graduated, again in four tables. At the end of each sub-group the data on the tables also are presented in graphic form. In the third sub-group the results of Chi-square Test are presented in table form (one or two tables).

3. The findings of the study, based on the obtained chi-square values, for each section are presented in the third sub-group. This sub-group has two sub-groups. Firstly, the major finding is explained, the related hypothesis is given in null form and it is cited by the code number used for that hypothesis in Chapter I. Secondly, the deviations on the levels of the factor concerned are summarized in table form for those sub-populations for which the obtained chi-square values are found to be significant.

This order is kept constant through all sections in order to make it easier for the reader to follow. In addition to this, the following are concerned.

The graphs do not give any additional information; they simply repeat the same information given in the tables in an illustrative form, but they are easier to follow. Some readers might find it satisfactory to follow only the graphs and do not want to go into the tables. Some might prefer to follow the figures from the tables or both. It is also true that graphs catch the attention easily on

important points. When it happens, the reader might go into the related tables and Chi-square Test results to check the figures more closely.

As pointed out once more earlier, the tables and the graphs presented tell to the reader much more than we can explain. But it is also expected to explain the important points that the figures in the tables indicate. In this study, which has 96 tables (together with B forms), the researcher has thought that the written form summaries of the tables and the findings could be too cumbersome and boring. Therefore, deviations on the levels of the factor concerned in each section are summarized in table form, based on the percentage values presented in the related tables for those population sub-groups for which the obtained chi-square values are found to be significant. These summary tables are given at the end of each section under the heading of "other findings".

#### Section A

Type of primary school from which the students graduated.

The data on the factor type of primary school are presented in the following order:

1. The student body composition data are presented in Tables 21A-B (sex factor is used as sub-population). The same data are illustrated in Graphs 12A-B. The results

of Chi-square Test is given in Table 22.

2. Percentages of failed students by type of primary school are presented in Tables 23-26 and illustrated in Graphs 13A-B-C.

3. The results of Chi-square Test are given in Table 31A, and the findings are presented. The deviations of failing are given in Table 31B.

Table 21A. Vertical Percentages of Girls by Type of Primary School Graduated, Type of Middle School Attending and Grade Level

Sex		First Grade			Second Grade			Third Grade			
		CT*	V**	Total	CT	V	Total	CT	V	Total	
City Middle School	Girls	%	36.64	16.28	29.14	38.55	9.71	28.78	40.20	10.96	31.11
	Total	N	958	559	1517	664	340	1004	505	228	733
-----											
Town Middle School	Girls	%	38.66	13.25	28.22	39.15	10.68	29.11	25.22	5.80	16.11
	Total	N	238	166	404	189	103	292	111	69	180
-----											
Middle School	Girls	%	37.04	15.59	28.94	38.69	9.93	28.86	37.01	9.80	28.15
	Total	N	1196	725	1921	853	443	1296	616	297	913

Note: The balance to 100% will be the percentage of boys.

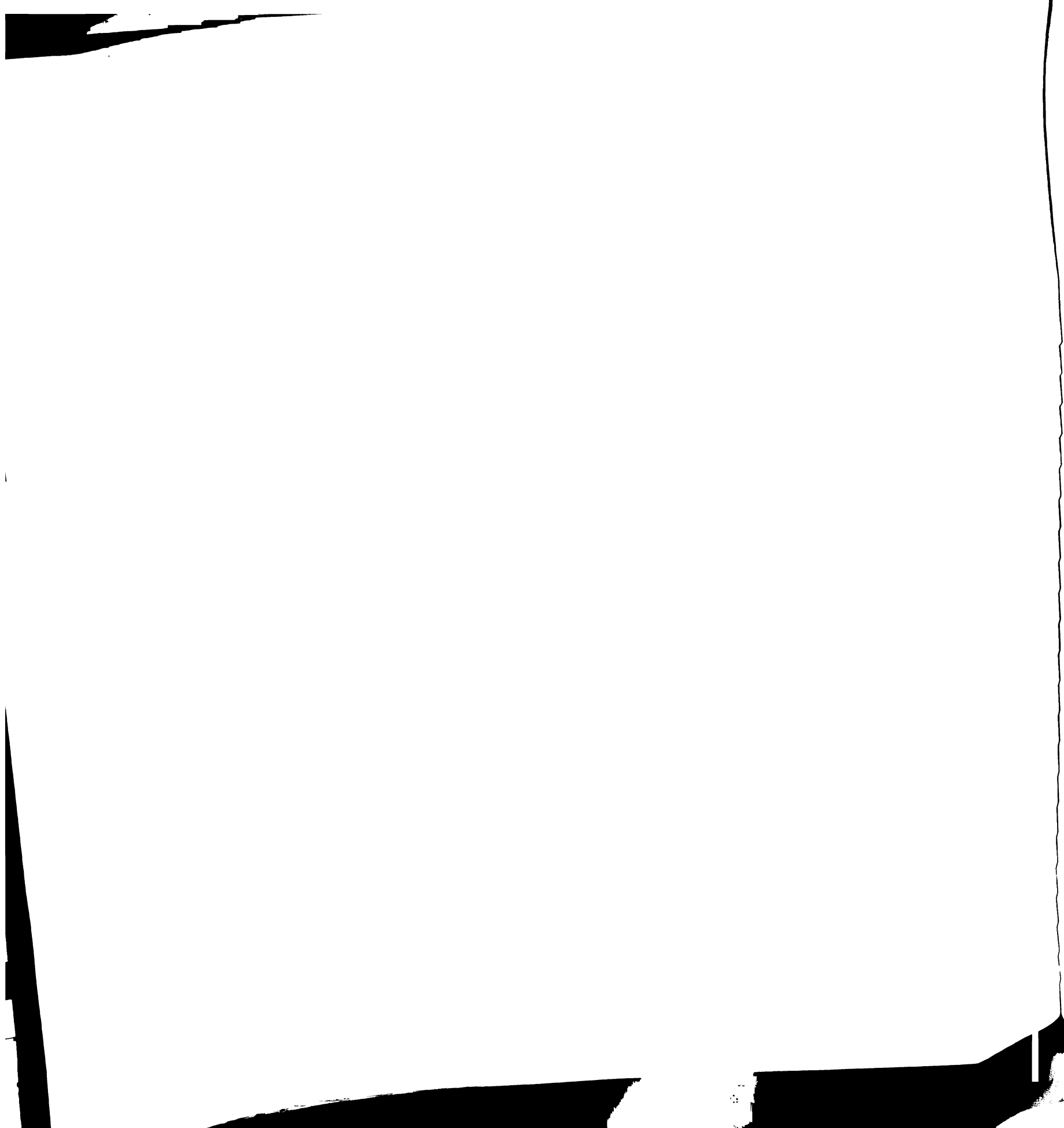
\*CT = City-Town Primary School Graduates

\*\*V = Village Primary School Graduates

Table 21B. Horizontal Percentages of Village Primary School Graduates by Sex, Type of Middle School and Grade Level.

Sex	First Grade			Second Grade			Third Grade		
	V	%	Total N	V	%	Total N	V	%	Total N
City Middle School	Girls	20.59	442	11.42	289	10.96	228		
	Boys	43.53	1075	42.94	715	40.20	505		
	Total	36.85	1517	33.86	1004	31.11	733		
Town Middle School	Girls	19.30	114	12.94	85	13.79	29		
	Boys	49.66	290	44.44	207	43.05	151		
	Total	41.09	404	35.27	292	38.33	180		
Middle School Total	Girls	20.32	556	11.76	374	11.28	257		
	Boys	44.84	1365	43.28	922	40.85	656		
	Total	37.74	1921	34.18	1296	32.53	913		

Note: The balance to 100% will be the percentage of city-town primary school graduates.





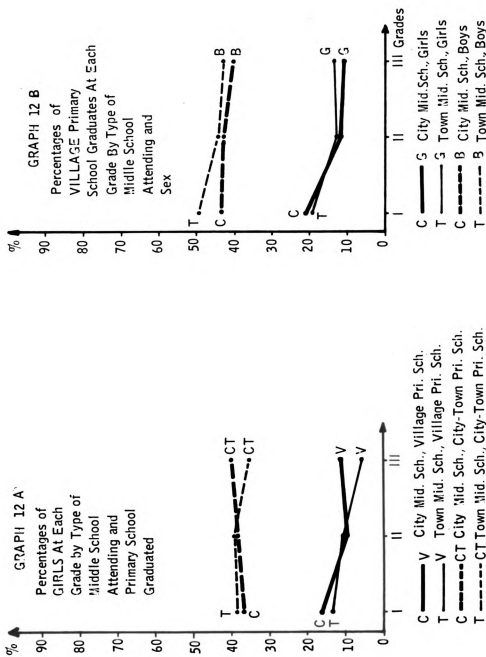


Table 22. Results of Chi-square Test of Significance Between Sex and Type of Primary School Graduated by Type of Middle School Attending and Grade Level

Type of Middle School	Grade Level		
	First	Second	Third
City	70.87*	91.29*	62.64*
Town	31.15*	26.19*	8.81*
Total	101.02*	117.43*	73.56*

\*  $P < .05$ , d.f. = 1

Table 23. Percentages of Failed Students by Type of Primary School Graduated for Sex and Type of Middle School Attending

Type of Primary School	Girls		FIRST GRADE Boys		Total		
	Failed %	Total N	Failed %	Total N	Failed %	Total N	
City Middle School	City-Town	20.80	351	33.11	607	28.60	958
	Village	21.98	91	38.46	468	35.78	559
	Total	21.04	442	35.44	1075	31.25	1517
Town Middle School	City-Town	30.43	92	41.10	146	36.97	238
	Village	22.73	22	43.06	144	40.36	166
	Total	28.95	114	42.07	290	38.37	404
Middle School Total	City-Town	22.80	443	34.66	753	30.27	1196
	Village	22.12	113	39.54	612	36.83	725
	Total	22.66	556	36.85	1365	32.74	1921

Note: The balance to 100% will be the percentage of "passed" students in that sub-population.

Table 24. Percentages of Failed Students by Type of Primary School Graduated for Sex and Type of Middle School Attending

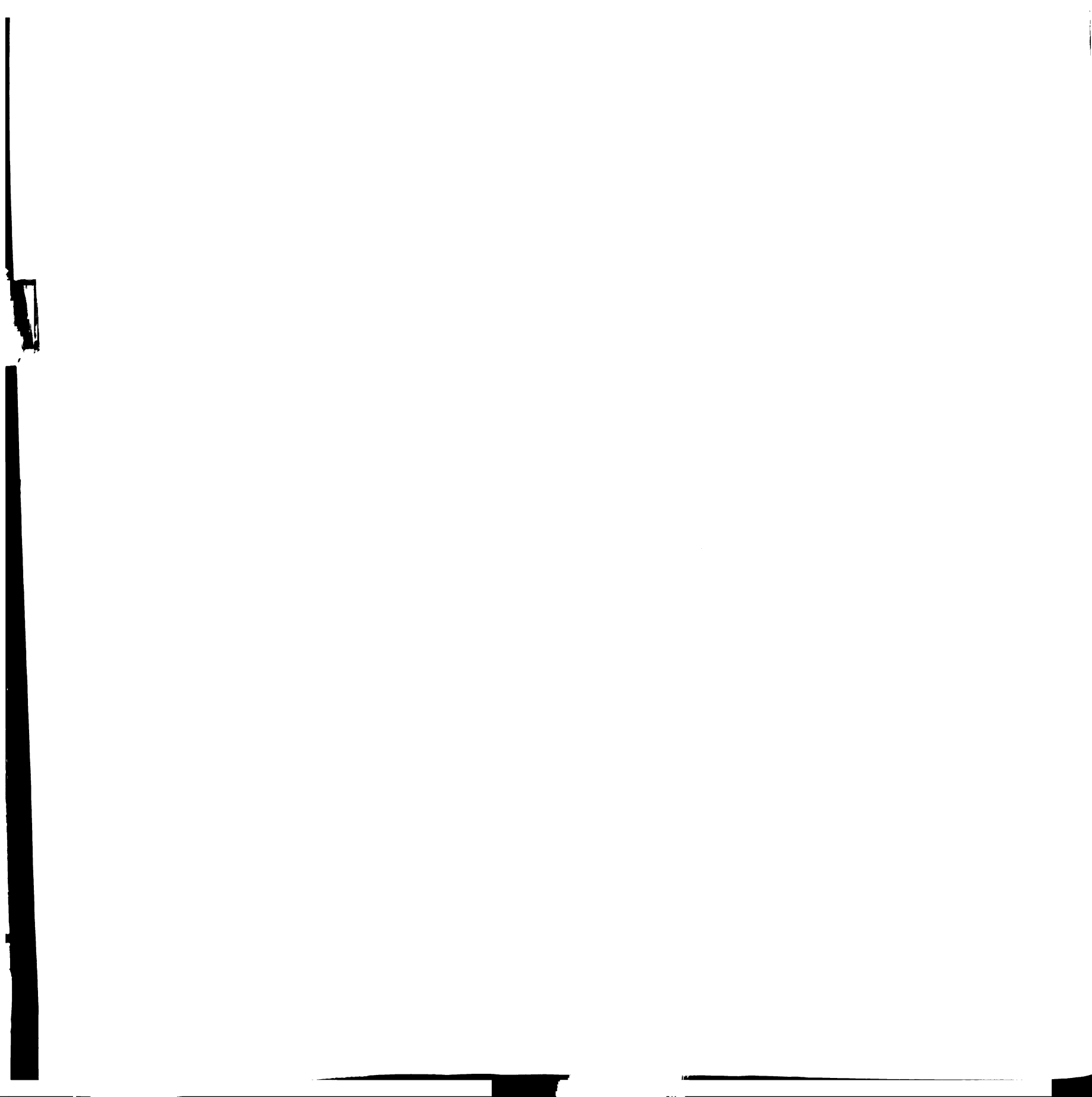
		SECOND GRADE					
	Type of Primary School	Girls		Boys		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	City-Town	16.80	256	20.59	408	19.13	664
	Village	18.18	33	33.55	307	32.06	340
	Total	16.96	289	26.15	715	23.51	1004
Town Middle School	City-Town	24.32	74	23.48	115	23.81	189
	Village	27.27	11	20.65	92	21.36	103
	Total	24.71	85	22.22	207	22.95	292
Middle School Total	City-Town	18.48	303	21.22	523	20.16	853
	Village	20.45	44	30.58	399	29.57	443
	Total	18.72	374	25.27	922	23.38	1296

Table 25. Percentages of Failed Students by Type of Primary School Graduated for Sex and Type of Middle School Attending

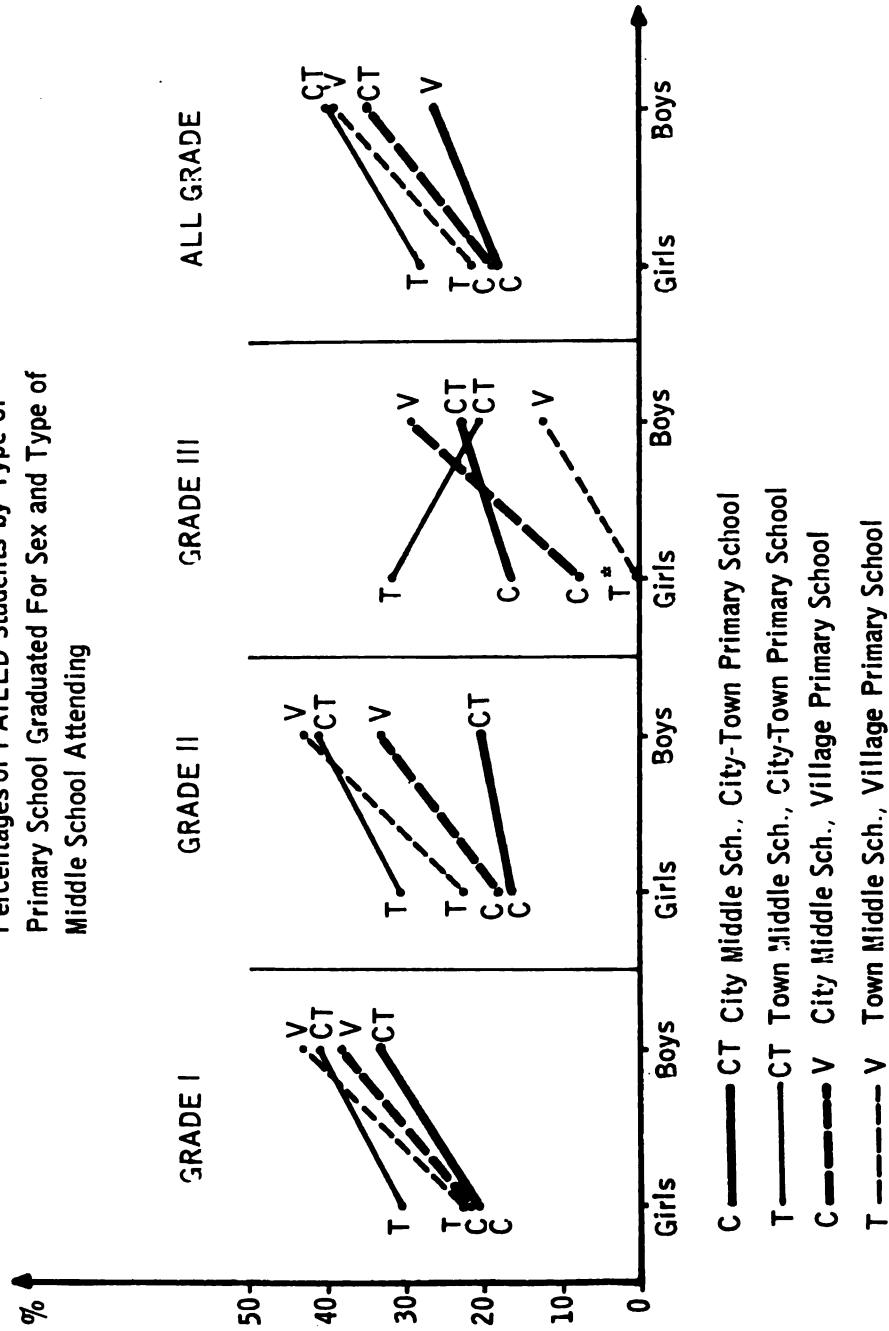
Type of Primary School	THIRD GRADE						
	Girls		Boys		Total		
	Failed %	Total N	Failed %	Total N	Failed %	Total N	
City Middle School	City-Town	16.75	203	22.85	302	20.40	505
	Village	8.00	25	29.56	203	27.19	228
	Total	15.79	228	25.54	505	22.51	733
Town Middle School	City-Town	32.00	25	20.93	86	23.42	111
	Village	0.00	4	12.31	65	11.59	69
	Total	27.59	29	17.22	151	18.89	180
Middle School Total	City-Town	18.42	228	22.42	388	20.94	616
	Village	6.90	29	25.37	268	23.57	297
	Total	17.12	257	23.63	656	21.80	913

Table 26. Percentages of Failed Students by Type of Primary School Graduated for Sex and Type of Middle School Attending

		ALL GRADES					
Type of Primary School	Type of Middle School	Girls		Boys		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	City-Town	18.52	810	26.88	1317	23.70	2127
	Village	18.79	149	35.07	978	32.92	1127
	Total	18.56	959	30.37	2295	26.89	3254
-----							
Town Middle School	City-Town	28.27	191	30.26	347	29.55	538
	Village	21.62	37	29.57	301	28.70	338
	Total	27.19	228	29.94	648	29.22	876
-----							
Middle School Total	City-Town	20.38	1001	27.58	1664	24.88	2665
	Village	19.35	186	33.78	1279	31.95	1465
	Total	20.22	1187	30.28	2943	27.38	4130

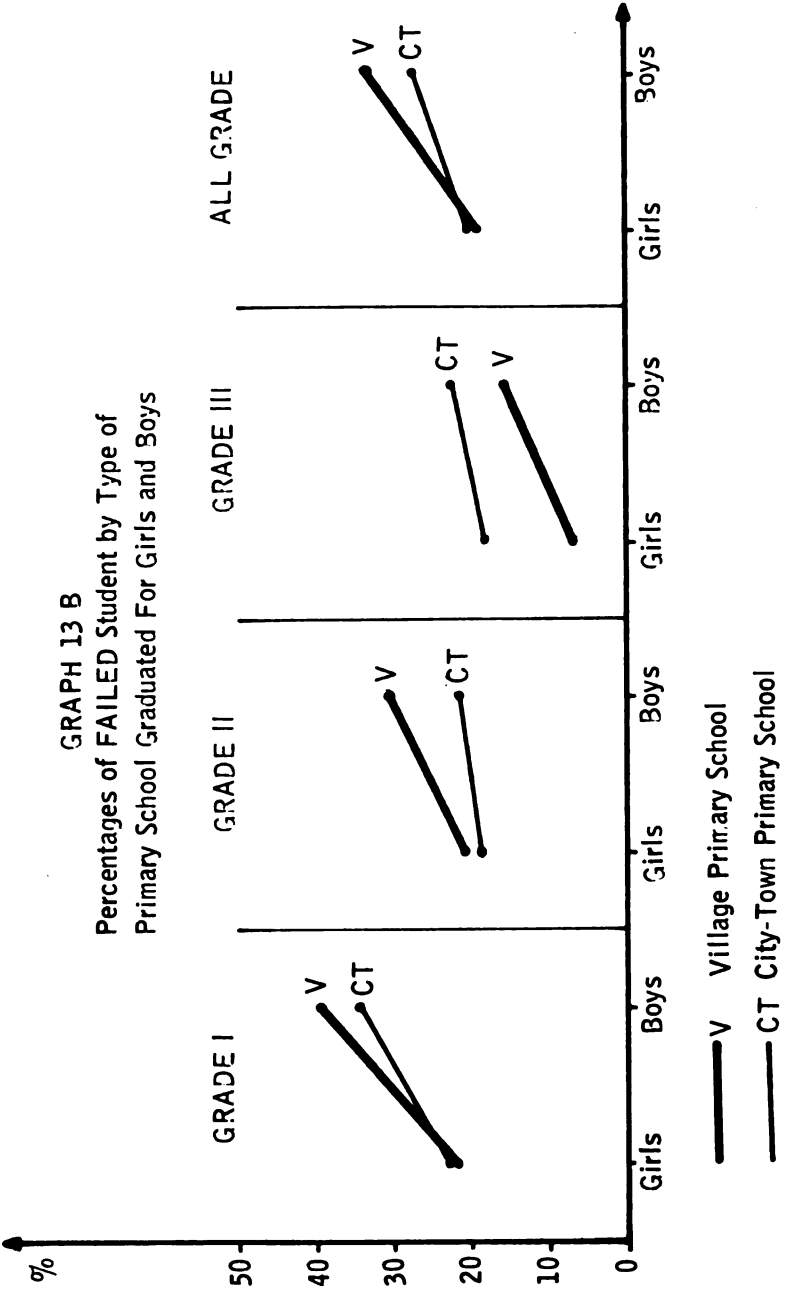


GRAPH 13 A  
Percentages of FAILED Students by Type of  
Primary School Graduated For Sex and Type of  
Middle School Attending

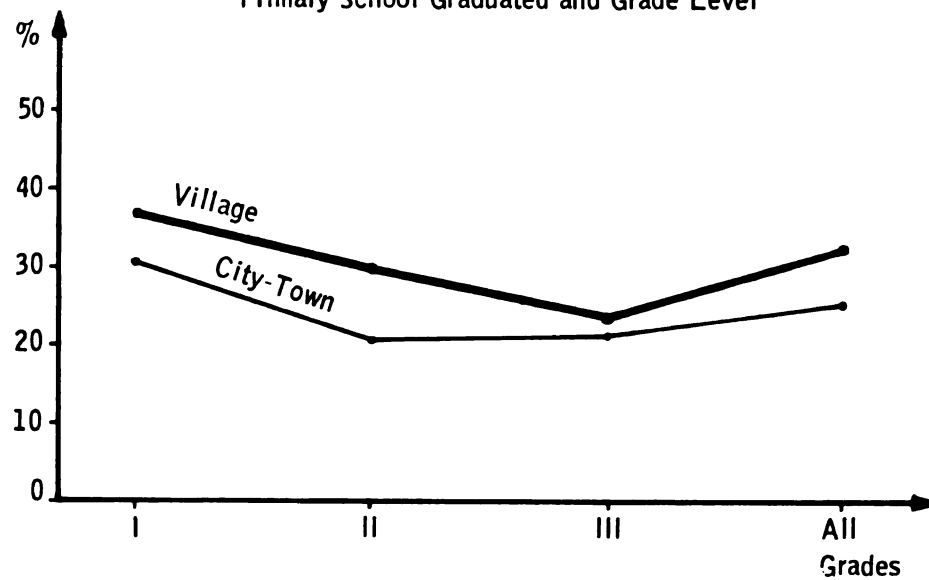


\* Total cell value is 4, no failed Students





GRAPH 13 C  
Percentages of FAILED Students by Type of  
Primary School Graduated and Grade Level



Key: Village = Village Primary School Graduates  
City-Town = City-Town Primary School Graduates

Section B

The data on the factor sex are presented in the following order:

1. The student body composition data presented in Section A represents Section B too.
2. Percentages of failed students by sex are presented in Tables 27-30 and illustrated in Graphs 14A-B-C.
3. The results of Chi-square Test are given in Table 32A, and the findings are presented. The deviations of failing are given in Table 32B.

Table 27. Percentages of Failed Students by Sex for Type of Primary School Graduates and Middle School Attending

FIRST GRADE						
Sex	CT* Primary School Graduates		V** Primary School Graduates		Total	
	Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	Girls	351	21.98	91	21.04	442
	Boys	607	38.46	468	35.44	1075
	Total	958	35.78	559	31.25	1517
Town Middle School	Girls	92	22.73	22	28.95	114
	Boys	146	43.06	144	42.07	290
	Total	238	40.36	166	38.37	404
Middle School Total	Girls	443	22.12	113	22.66	556
	Boys	753	39.54	612	36.85	1365
	Total	1196	36.83	725	32.74	1921

Note: The balance to 100% will be the percentage of passed students.

\*CT = City-Town

\*\*V = Village

Table 28. Percentages of Failed Students by Sex for Type of Primary School Graduates and Middle School Attending

SECOND GRADE						
Sex	CT Primary School Graduates		V Primary School Graduates		Total	
	Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	Girls	256	16.80	33	16.96	289
	Boys	408	33.55	307	26.15	715
	Total	664	32.06	340	23.51	1004
Town Middle School	Girls	74	27.27	11	24.71	85
	Boys	115	20.65	92	22.22	207
	Total	189	21.36	103	22.95	292
Middle School Total	Girls	330	20.45	44	18.72	374
	Boys	523	30.58	399	25.27	922
	Total	853	29.57	443	23.38	1296

Table 29. Percentages of Failed Students by Sex for Type of Primary School Graduates and Middle School Attending

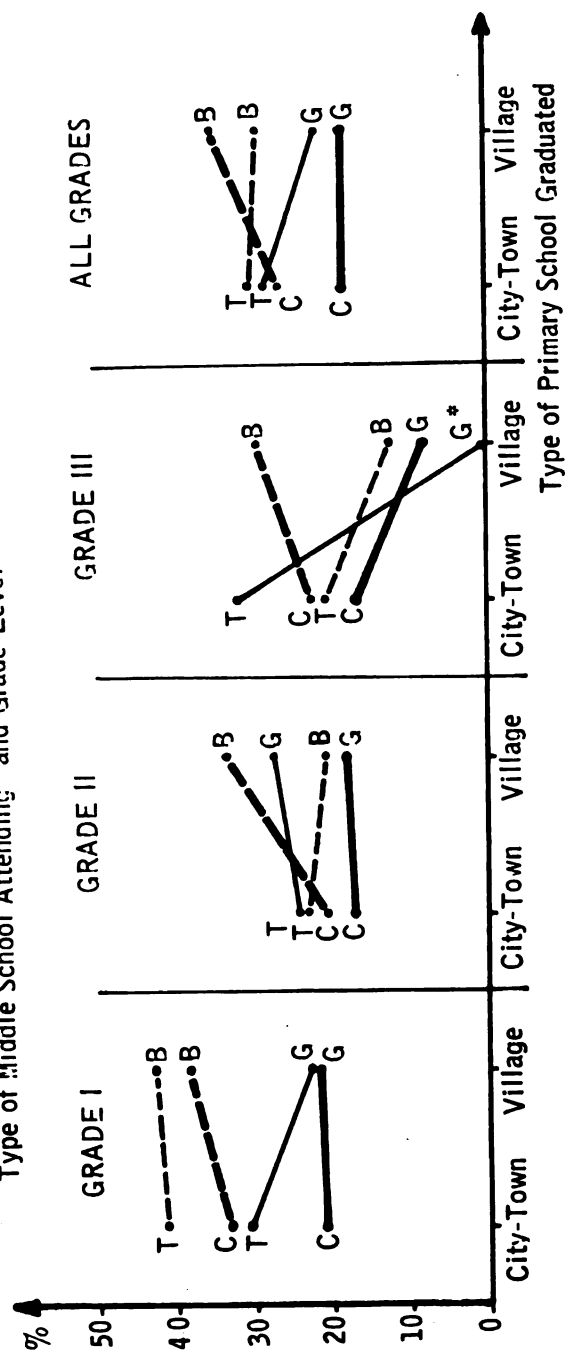
		THIRD GRADE					
Sex		CT Primary School Graduates		V Primary School Graduates		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	Girls	16.75	203	8.00	25	15.79	228
	Boys	22.85	302	29.56	203	25.54	505
	Total	20.40	505	27.19	228	22.51	733
<hr/>							
Town Middle School	Girls	32.00	25	0.00	4	27.59	29
	Boys	20.93	86	12.31	65	17.22	151
	Total	23.42	111	11.59	69	18.89	180
<hr/>							
Middle School Total	Girls	18.42	228	6.90	29	17.12	257
	Boys	22.42	388	25.37	268	23.63	656
	Total	20.94	616	23.57	297	21.80	913

Table 30. Percentages of Failed Students by Sex for Type of Primary School Graduated and Middle School Attending

		ALL GRADES					
Sex		CT Primary School Graduates		V Primary School Graduates		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	Girls	18.52	810	18.79	149	18.56	959
	Boys	26.88	1317	35.07	978	30.37	2295
	Total	23.70	2127	32.92	1127	26.89	3254
Town Middle School	Girls	28.27	191	21.62	37	27.19	228
	Boys	30.26	347	29.57	301	29.94	648
	Total	29.55	538	28.70	338	29.22	876
Middle School Total	Girls	20.38	1001	19.35	186	20.22	1187
	Boys	27.58	1664	33.78	1279	30.28	2943
	Total	24.88	2665	31.95	1465	27.38	4130

GRAPH 14 A

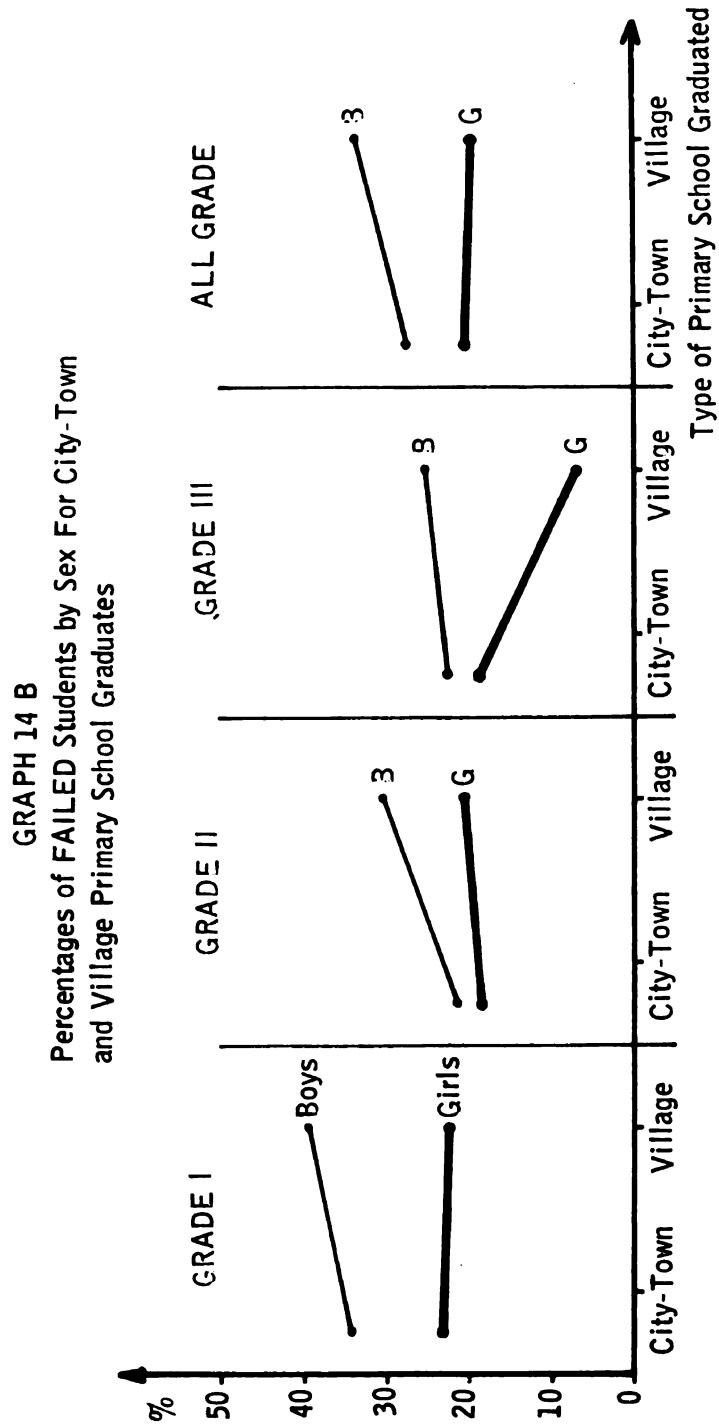
Percentages of FAILED Students by Sex, For Type of Primary School Graduated,  
Type of Middle School Attending and Grade Level



- G City Middle School, Girls
- G Town Middle School, Girls
- -•- - B City Middle School, Boys
- -○- - B Town Middle School, Boys

\* Total cell value is 4; no failed student





GRAPH 14 C  
Percentages of FAILED Students by  
Sex and Grade Level

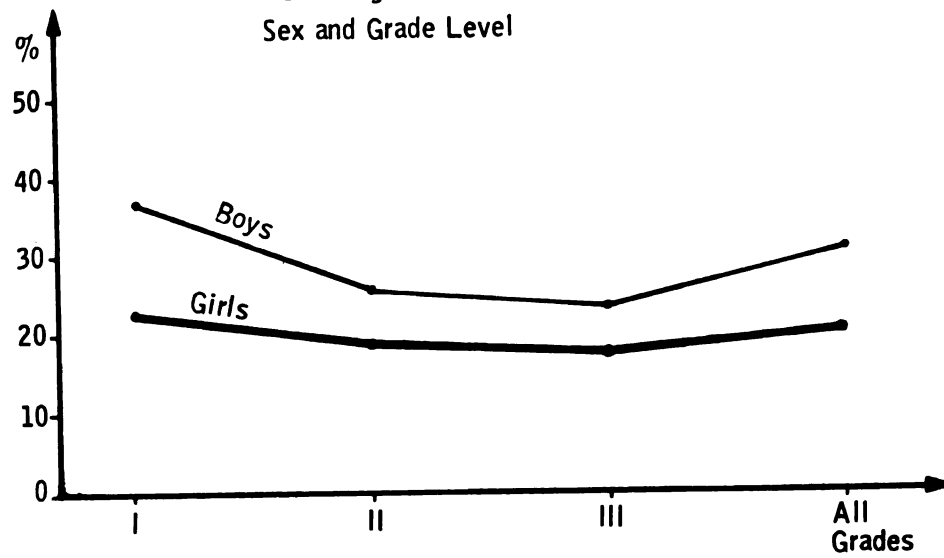


Table 31A. Results of Chi-square Test of Significance Between Type of Primary School Graduated and Success by Sex and Type of Middle School Attending

Grade	Type of Middle School	Girls	Boys	Total
I	City	.06	3.30	8.46*
	Town	.51	.11	.47
	Total	.02	3.46	8.82*
II	City	.04	15.24*	20.92*
	Town	-. -	.24	.23
	Total	.10	10.48*	14.40*
III	City	-. -	2.87	4.16*
	Town	-. -	1.93	3.89*
	Total	-. -	.76	.81
ALL	City	.01	17.81*	31.88*
	Town	.69	.04	.07
	Total	.10	13.14*	23.74*

\*  $P < .05$ , d.f. = 1

Key: -. - = no test performed because of the cell(s) with less than five expected value or zero.

**Table 32A. Results of Chi-square Tests of Significance Between Sex and Success by Type of Middle School Attending, Primary School Graduated and Grade Level**

Grade	Type of Middle School	City Town Primary School	Village Primary School	Total
I	City	16.52*	9.01*	30.24*
	Town	2.75	3.28	5.96*
	Total	18.59*	12.44*	36.11
II	City	1.46	3.23	9.69*
	Town	.02	-. -	.21
	Total	.94	1.95	6.38*
III	City	2.78	5.22*	8.57*
	Town	1.32	-. -	1.71
	Total	1.39	4.96*	4.59*
ALL	City	19.39*	15.52*	47.98*
	Town	.23	1.02	.61
	Total	17.36*	15.53*	43.01*

\*  $P < .05$ , d.f. = 1

## Summary Outcomes of Part III A and B

### A. Type of Primary School Graduated and Success

#### 1. The major finding

##### a. The null hypothesis (Hypothesis No. 6a)

The type of primary school graduated of the students is not related to their success in middle schools.

##### b. Obtained statistics and finding

$$\chi^2_{(.05) \text{ 1 d.f.}} = 3.84$$

$$\text{Obtained } \chi^2 = 23.74$$

Therefore, the null hypothesis is rejected.

##### c. Direction of deviation in Table 26 shows that the students graduated from village primary schools are more likely to be failing in middle schools than the students graduated from city-town primary schools as expected by Hypothesis No. 6a.

#### 2. Other findings

Sub-groups for which the obtained chi-square values (presented in Table 31A) are significant, are listed and the deviations for each sub-group (presented in Tables 23, 24, 25, and 26) are shown in Table 31B. The students' background factors (type of primary school graduated) that are found to be significantly related to success in middle school for listed sub-groups are marked under two column heads; the level of the factor with the higher percentage of failing is put under 1st, and the lower percentage of failing is put under 2nd.

### B. Sex and Success

#### 1. The major finding

##### a. The null hypothesis (Hypothesis No. 6b) sex is not related to success in middle school.

## b. Obtained statistics and finding

$$\chi^2 (.05) 1 \text{ d.f.} = 3.84$$

$$\text{Obtained } \chi^2 = 43.01$$

Therefore, the null hypothesis is rejected.

c. Direction of the deviation presented in Table 20 shows that boys are more likely to be failing in middle schools than the girls as against the expectation in Hypothesis 6b.

## 2. Other findings

Sub-groups for which the obtained chi-square values, presented in Table 32A, were significant are listed and deviations for each sub-group (presented in Tables 27, 28, 29 and 30) are shown in Table 32B.

The students' background factors (sex) that are found to be significantly related to success in middle school for listed sub-groups are marked under two column heads; the level of the factor with the higher percentage of failing is put under 1st, and lower percentage of failing is put under 2nd.

**Table 31B.** The Rank Order of the Deviations of Failing by Type of Primary School from Which Graduated in Those Sub-populations for Which the Obtained Chi-square Test Values are Found to be Significant

Grade	Type of Middle School	Sex	The Rank Order of Percentages of Failing	
			1st (Higher)	2nd (Lower)
I	City	Total	V	CT
	Total	Total	V	CT
II	City	Boys	V	CT
	City	Total	V	CT
	Total	Boys	V	CT
	Total	Total	V	CT
III	City	Total	V	CT
	Town	Total	CT	V
ALL	City	Boys	V	CT
	City	Total	V	CT
	Total	Boys	V	CT
	Total	Total	V	CT

**Key:** V = Village primary school graduates  
 CT = City-Town primary school graduates

**Table 32B.** The Rank Order of Deviations of Failing by Sex in Those Sub-populations for Which the Obtained Chi-square Test Values are Found to be Significant

Grade	Type of Middle School	Type of Primary School	The Rank Order of Percentages of Failing	
			1st (Higher)	2nd (Lower)
I	City	City-Town	B	G
	City	Village	B	G
	City	Total	B	G
	Town	Total	B	G
	Total	City-Town	B	G
	Total	Village	B	G
	Total	Total	B	G
II	City	Total	B	G
	Total	Total	B	G
III	City	Village	B	G
	City	Total	B	G
	Total	Village	B	G
	Total	Total	B	G
ALL	City	City-Town	B	G
	City	Village	B	G
	City	Total	B	G
	Total	City-Town	B	G
	Total	Village	B	G
	Total	Total	B	G

**Key:** B = Boys  
G = Girls



## Section C

### Level of Father's Education

#### Introduction

The data on the factor, level of father's education, are presented in the following order:

1. The student body composition data by level of father's education and sex are presented in Tables 33A and 33B. The same data are illustrated in Graphs 15A-B-C.

The result of Chi-square Test is given in Table 34.

2. The percentages of failed students by level of father's education and sex are presented in Tables 35-38, and illustrated in Graphs 16A-B.

3. The student body composition data by level of father's education and type of primary school from which graduated are presented in Tables 39A and 39B. The data also are illustrated in Graphs 17A-B. The results of Chi-square Test are shown in Table 40.

4. The percentages of failed students by level of father's education and type of primary school from which graduated are presented in Tables 41-44, and illustrated in Graphs 18A-B-C.

5. The results of Chi-square Test are given in Table 45A, and the findings are presented . Deviations of failing are given in Table 45B.

Table 33A. Vertical Percentages of Students At Each Level of Father's Education for Girls and Boys by Type of Middle School and Grade Level

Level of Father's Education	FIRST GRADE			SECOND GRADE			THIRD GRADE			
	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total	
City Middle School	I	6.56	14.13	11.93	3.81	12.45	9.96	3.95	10.49	8.46
	II	74.43	75.82	75.42	72.66	74.41	73.90	57.02	76.24	70.26
	III	3.62	3.07	3.23	9.00	4.61	5.88	16.66	6.14	9.41
	IV	12.90	5.86	7.91	13.15	7.55	9.16	21.49	5.15	10.23
	CN	2.49	1.12	15.16	1.38	0.98	1.10	0.88	1.98	1.64
	Total	442	1075	1517	289	715	1004	228	505	733
Town Middle School	I	2.63	12.08	9.41	7.06	16.42	13.70	6.90	15.89	14.45
	II	85.09	82.76	83.42	75.29	75.85	75.68	65.52	80.80	78.33
	III	6.14	1.72	2.97	1.18	2.90	2.40	6.89	1.32	2.22
	IV	5.26	1.72	2.72	12.94	2.90	5.82	17.24	1.99	4.45
	CN	0.88	1.72	1.48	3.53	1.93	2.40	3.45	0.00	0.55
	Total	114	290	404	85	207	292	29	151	180
Middle School Total	I	5.75	13.70	11.40	4.55	13.34	10.80	4.28	11.74	9.64
	II	76.62	77.29	77.10	73.26	74.73	74.31	57.98	77.29	71.85
	III	4.14	2.79	3.18	7.22	4.23	5.09	15.56	5.03	8.00
	IV	11.33	4.98	6.81	13.10	6.51	8.41	21.01	4.42	9.09
	CN	2.16	1.24	1.51	1.87	1.19	1.39	1.17	1.52	1.42
	Total	556	1365	1921	374	922	1296	257	656	913

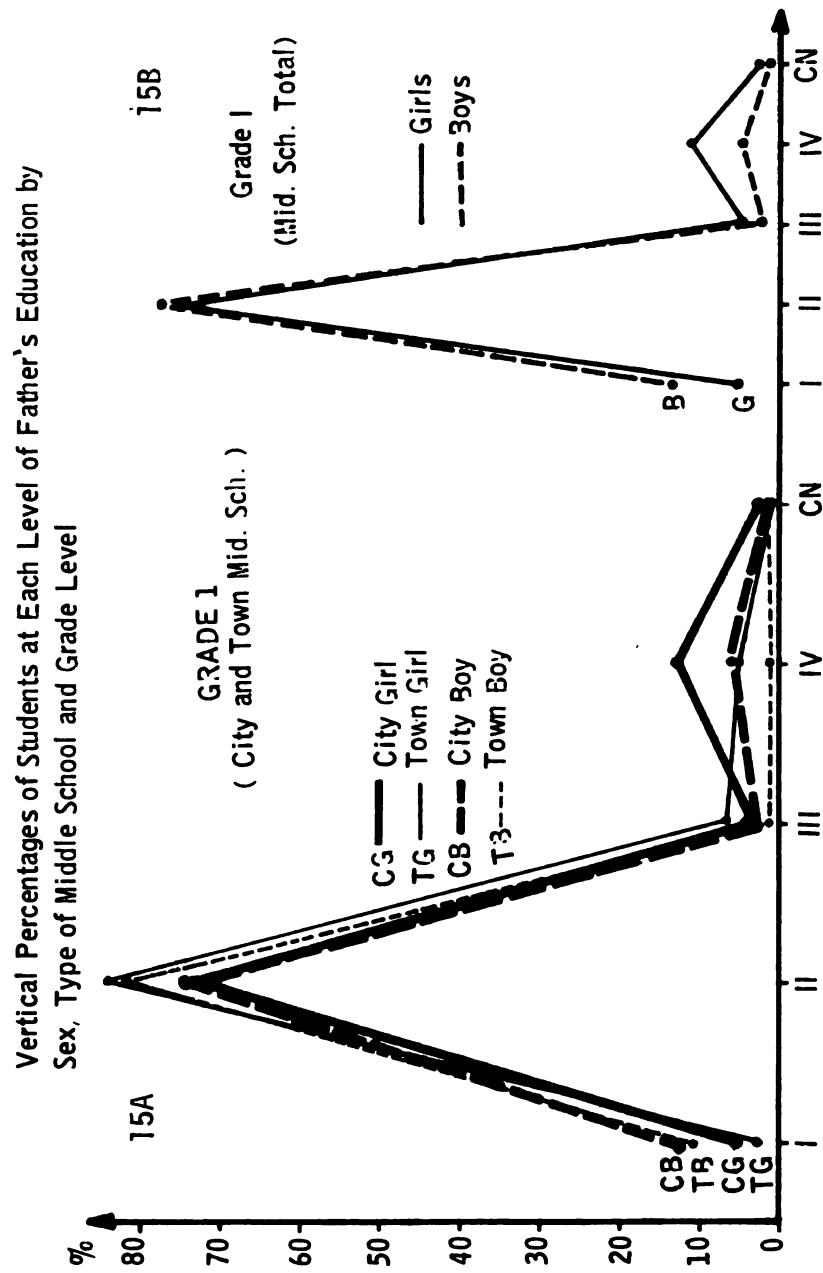
Key: I = Illiterate; II = Literate, some primary school or graduation; III = Some middle school or graduation; IV = Some high school, graduation or more; CN = Could not be determined.

Table 33B. Horizontal Percentages of Girls at Each Level of Father's Education by Type of Middle School Attending and Grade Level.

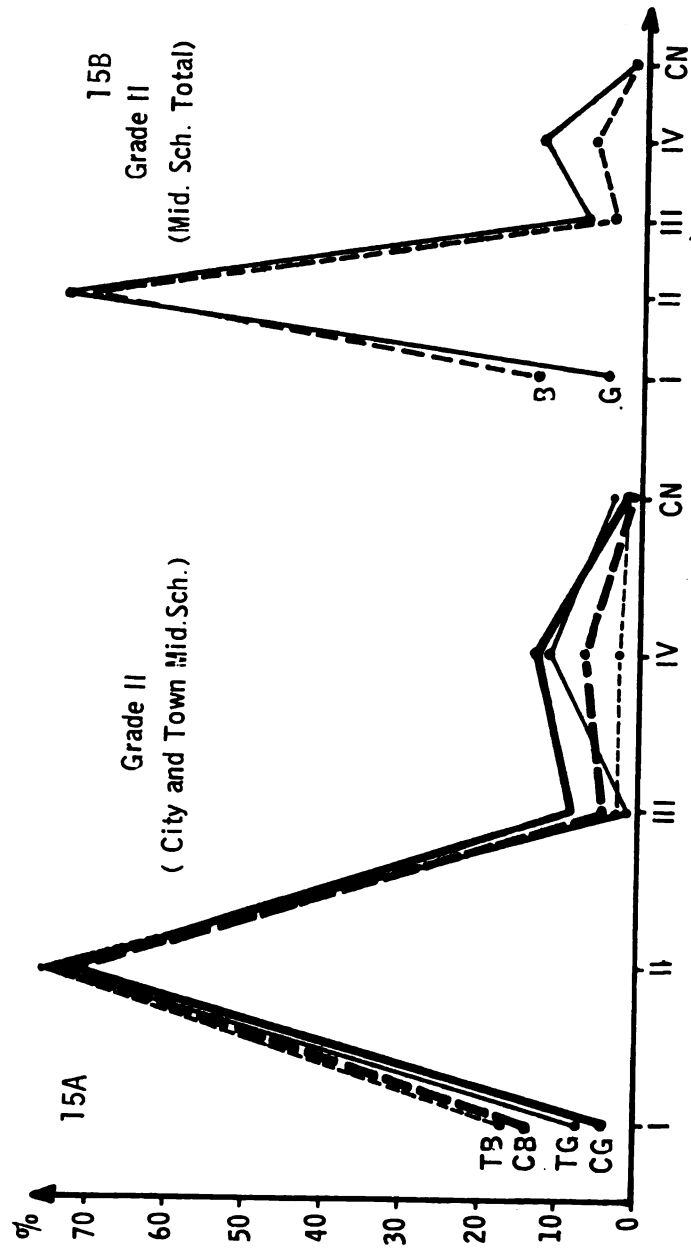
	Level Father's Education	FIRST GRADE		SECOND GRADE		THIRD GRADE	
		Girls %	Total N	Girls %	Total N	Girls %	Total N
City Middle School	I	16.02	181	11.00	100	14.52	62
	II	28.76	1144	28.30	742	25.24	515
	III	32.65	49	44.07	59	55.07	69
	IV	47.50	120	41.30	92	65.33	75
	CN	47.82	23	36.37	11	16.67	12
	Total	29.14	1517	28.78	1004	31.11	733
Town Middle School	I	7.89	38	15.00	40	7.69	26
	II	28.78	337	28.96	221	13.48	141
	III	58.33	12	14.29	7	50.00	4
	IV	54.55	11	64.71	17	62.50	8
	CN	16.67	6	42.86	7	100.00	1
	Total	28.22	404	29.11	292	16.11	180
Middle School Total	I	14.61	219	12.14	140	12.50	88
	II	28.76	1481	28.45	963	22.71	656
	III	37.70	61	40.91	66	54.79	73
	IV	48.09	131	44.95	109	65.06	83
	CN	41.38	29	38.89	18	23.08	13
	Total	28.94	1921	28.86	1296	28.15	913

Note: The balance to 100% will be the percentage of boys.

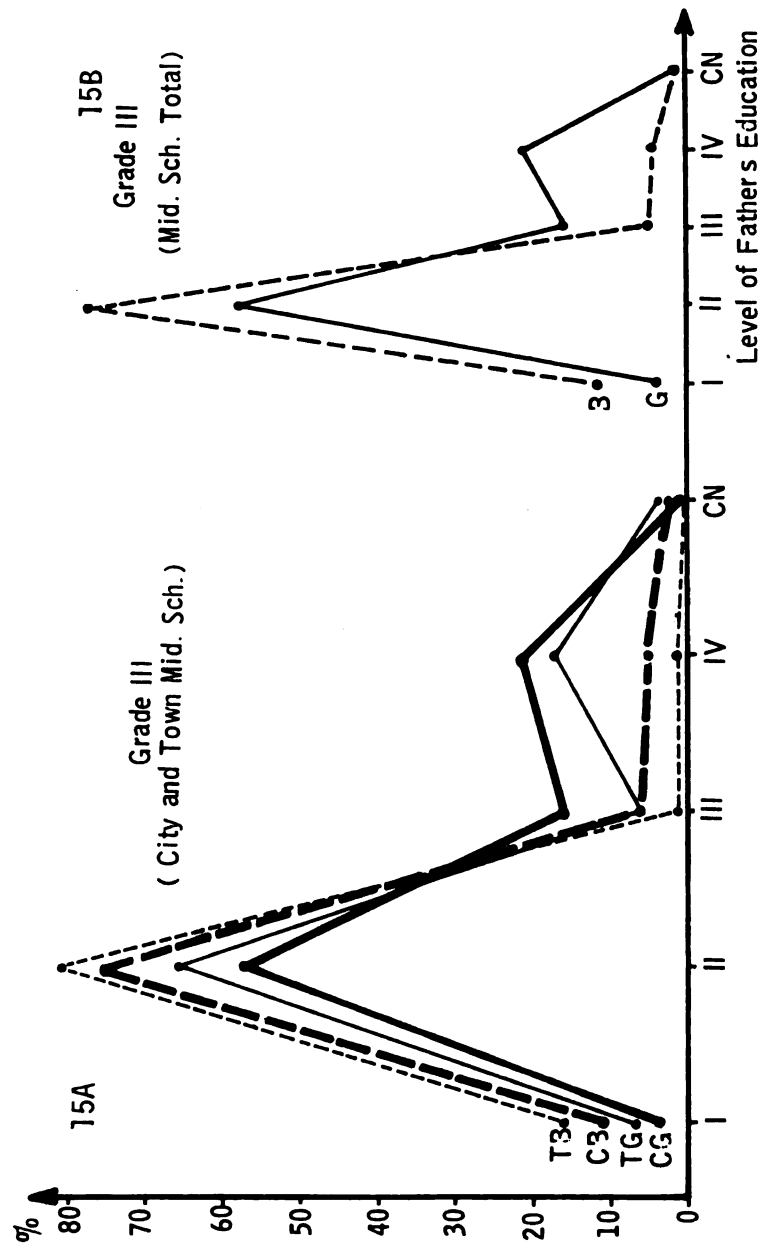
GRAPH 15



GRAPH 15--Continued

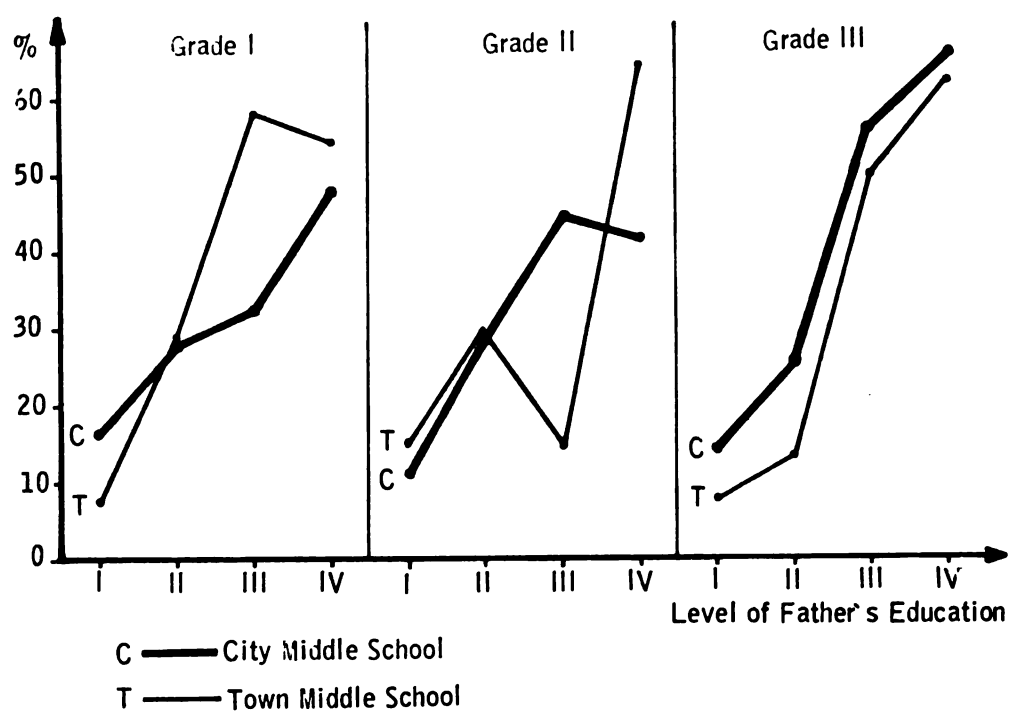


GRAPH 15--Continued



GRAPH 15C

Percentages of GIRLS At Each Level of Father's Education  
by Type of Middle School and Grade Level



**Table 34. Results of Chi-square Test of Significance Between Sex and Level of Father's Education by Type of Middle School Attending and Grade Level**

Type of Middle School	GRADE LEVEL		
	First	Second	Third
City	35.19*	29.32*	75.38*
Town	16.87*	5.13	18.64*
Total	47.68*	37.65*	101.61*

\*  $P < .05$ , d.f. = 3



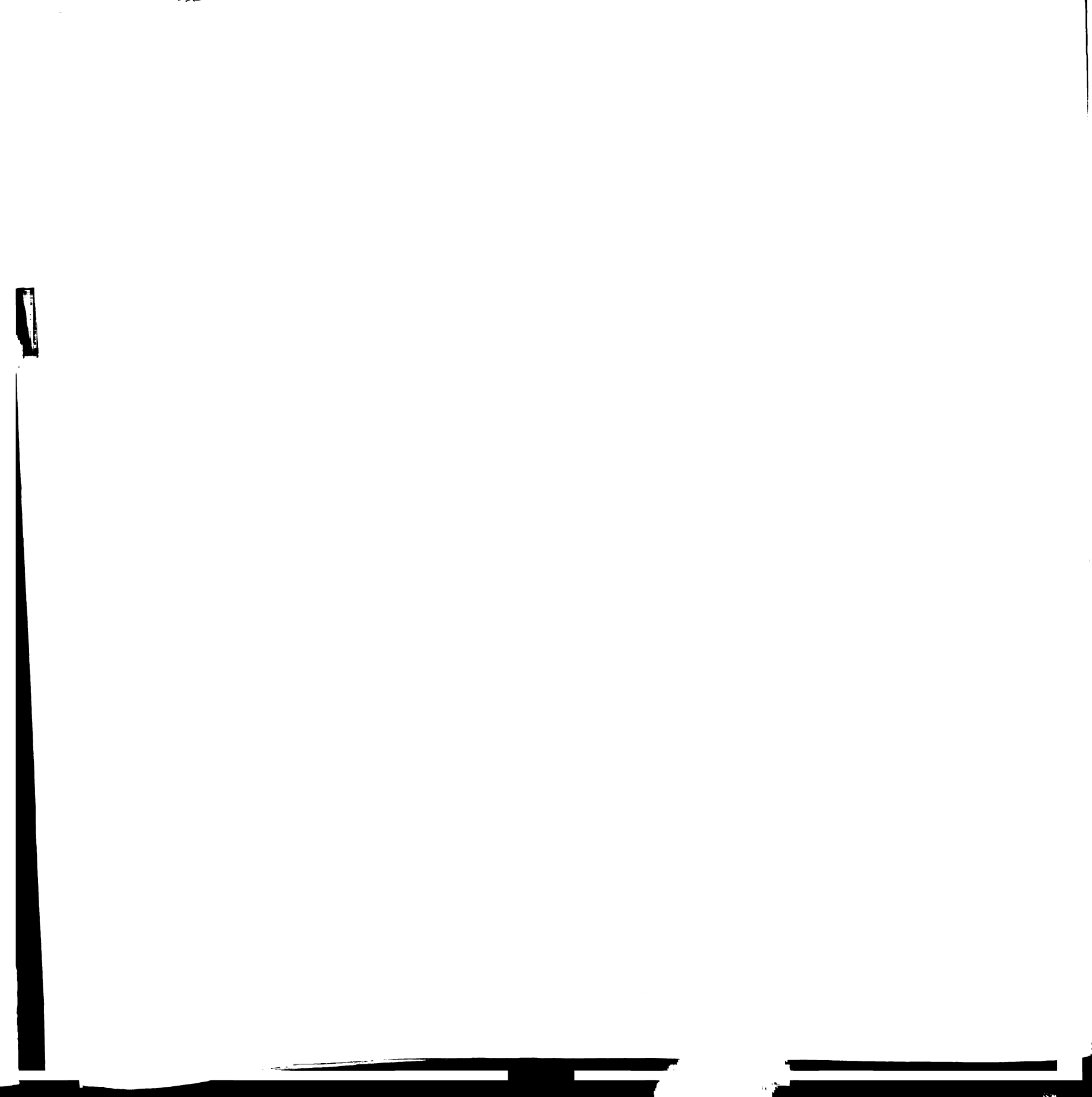


TABLE 35. Percentages of Failed Students at Each Level of Father's Education by Sex and Type of Middle School Attending

	Level of Father's Education	FIRST GRADE					
		Girls			Boys		
		Failed %	Total N		Failed %	Total N	Total Failed % Total N
City	I	41.38	29		46.05	152	45.30 181
Middle	II	20.97	329		35.58	815	31.38 1144
School	III	12.50	16		9.09	33	10.20 49
	IV	12.28	57		9.52	63	10.83 120
	CN	27.28	11		100.00	12	65.21 23
	Total	21.04	442		35.44	1075	31.25 1517
<hr/>							
Town	I	33.33	3		45.71	35	44.74 38
Middle	II	28.87	97		41.67	240	37.98 337
School	III	42.86	7		60.00	5	50.00 12
	IV	0.00	6		20.00	5	9.09 11
	CN	100.00	1		60.00	5	50.00 6
	Total	28.95	114		42.07	290	38.37 404
<hr/>							
Middle	I	40.63	32		45.99	187	45.21 219
School	II	22.77	426		36.97	1055	32.88 1481
Total	III	21.74	23		15.79	38	18.03 61
	IV	11.11	63		10.29	68	10.69 131
	CN	33.33	12		82.36	17	62.07 29
	Total	22.66	556		36.85	1365	32.74 1921

Note: The balance to 100% will be the percentage of passed students.

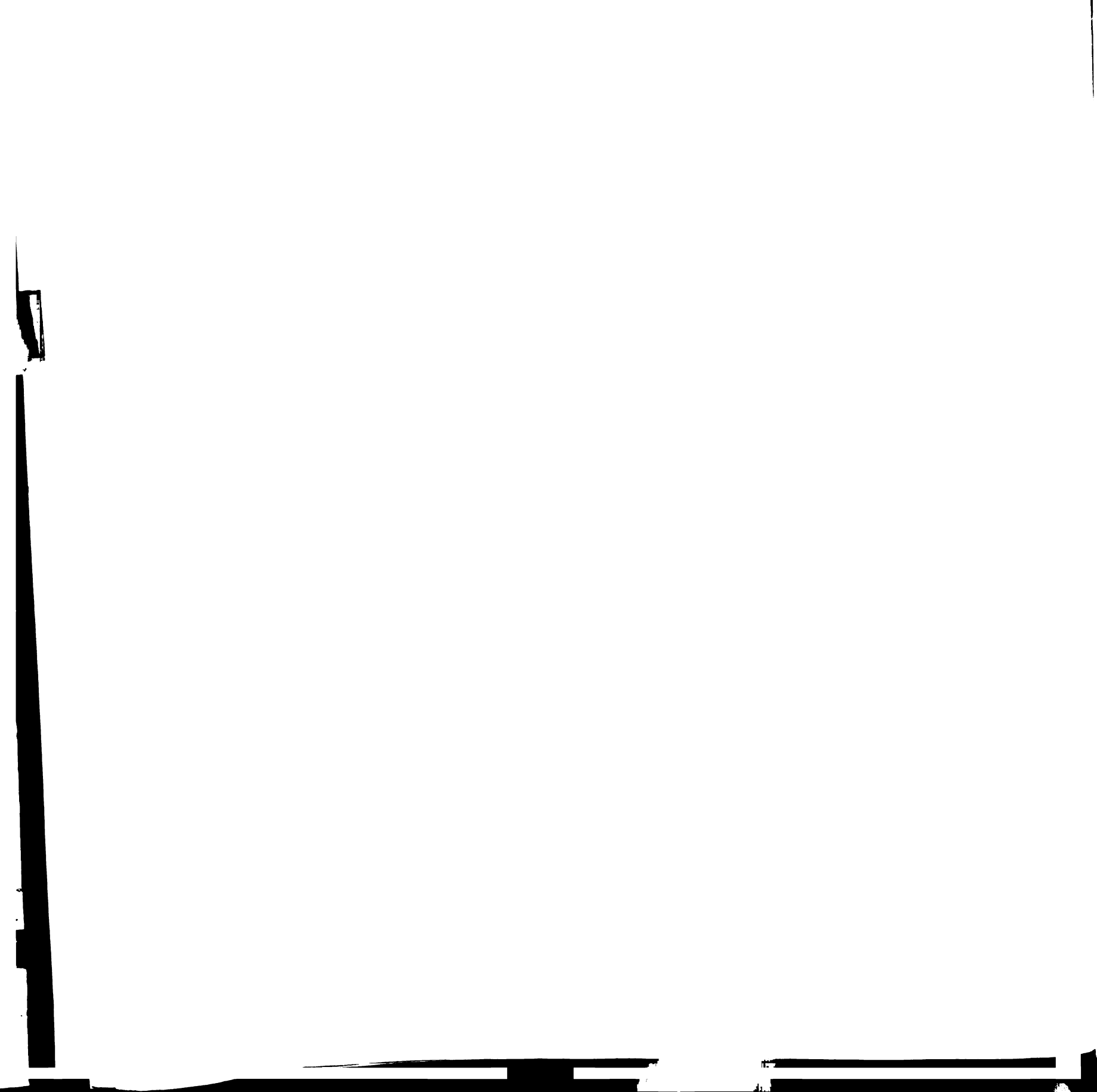


Table 36. Percentages of Failed Students at Each Level of Father's Education by Sex and Type of Middle School Attending

		SECOND GRADE					
Level of Father's Education		Girls		Boys		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	I	27.27	11	29.21	89	29.00	100
	II	16.67	210	26.50	532	23.72	742
	III	19.23	26	27.27	33	23.73	59
	IV	10.53	38	18.52	54	15.22	92
	CN	50.00	4	14.29	7	27.27	11
	Total	16.96	289	26.15	715	23.51	1004
Town Middle School	I	16.67	6	23.53	34	22.50	40
	II	31.25	64	22.29	157	24.89	221
	III	0.00	1	16.67	6	14.29	7
	IV	0.00	11	16.67	6	5.88	17
	CN	0.00	3	25.00	4	14.29	7
	Total	25.00	85	22.22	207	22.95	292
Middle School Total	I	23.53	17	27.64	123	27.14	140
	II	20.07	274	25.54	689	23.99	963
	III	18.52	27	25.64	39	22.73	66
	IV	8.16	49	18.33	60	13.76	109
	CN	28.58	7	18.19	11	22.22	18
	Total	18.72	374	25.27	922	23.38	1296

Table 37. Percentages of Failed Students at Each Level of Father's Education by Sex and Type of Middle School Attending

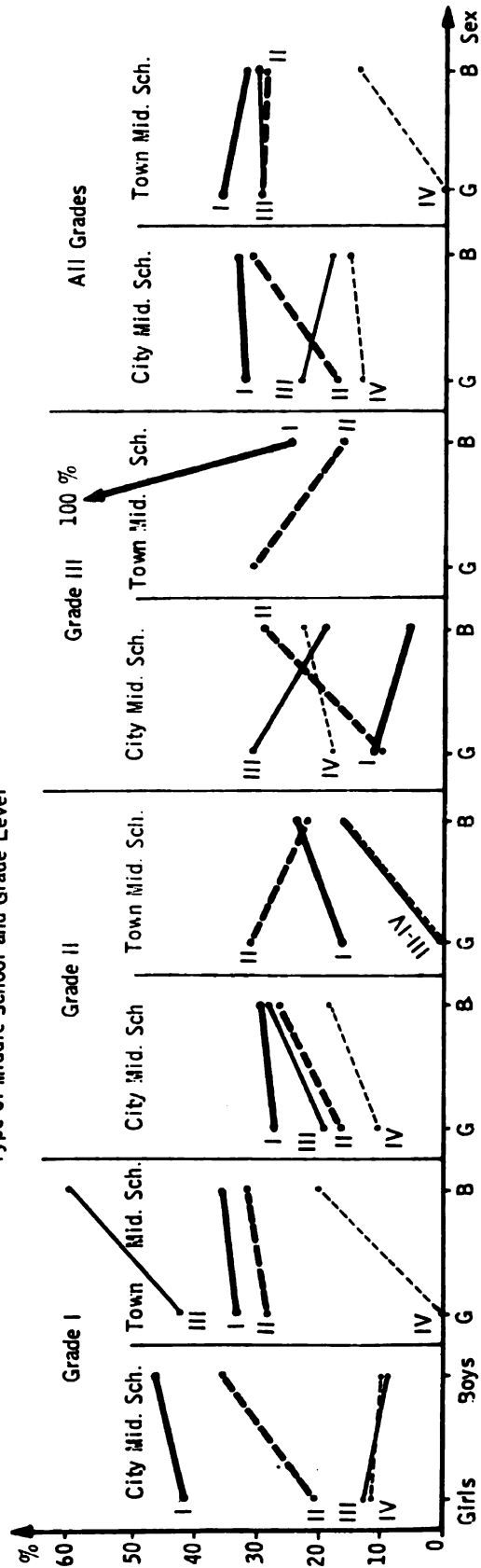
		THIRD GRADE					
City	Level of Father's Education	Girls		Boys		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
Middle School	I	11.11	9	5.66	53	6.45	62
	II	10.77	130	29.09	385	24.47	515
	III	31.58	38	19.35	31	26.09	69
	IV	18.37	49	23.08	26	20.00	75
	CN	0.00	2	20.00	10	16.67	12
	Total	15.79	228	25.54	505	22.51	733
<hr/>							
Town Middle School	I	100.00	2	25.00	24	30.77	26
	II	31.58	19	16.39	122	18.44	141
	III	0.00	2	0.00	2	0.00	4
	IV	0.00	5	0.00	3	0.00	8
	CN	0.00	1	0.00	0	0.00	1
	Total	27.59	29	17.22	151	18.89	180
<hr/>							
Middle School Total	I	27.27	11	11.69	77	13.64	88
	II	13.42	149	26.04	507	23.17	656
	III	30.00	40	18.18	33	24.66	73
	IV	16.67	54	20.69	29	18.07	83
	CN	0.00	3	20.00	10	15.38	13
	Total	17.12	257	23.63	656	21.80	913

Table 38. Percentages of Failed Students at Each Level of Father's Education by Sex and Type of Middle School Attending

		ALL GRADES					
	Level of Father's Education	Girls		Boys		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	I	32.65	49	33.67	294	33.53	343
	II	17.64	669	31.35	1732	27.53	2401
	III	23.75	80	18.56	97	20.90	177
	IV	13.89	144	15.38	143	14.63	287
	CN	29.41	17	51.72	29	43.48	46
	Total	18.56	959	30.37	2295	26.89	3254
<hr/>							
Town Middle School	I	36.36	11	32.26	93	32.69	104
	II	30.00	180	29.87	519	29.90	699
	III	30.00	10	30.77	13	30.43	23
	IV	0.00	22	14.29	14	5.56	36
	CN	20.00	5	33.33	9	28.57	14
	Total	27.19	228	29.94	648	29.22	876
<hr/>							
Middle School	I	33.33	60	33.33	387	33.33	447
	II	20.26	849	31.01	2251	28.08	3100
	III	24.44	90	20.00	110	22.00	200
	IV	12.05	166	15.29	157	13.62	323
	CN	27.28	22	47.37	38	40.00	60
	Total	20.22	1187	30.28	2943	27.38	4130

GRAPH 16A

Percentages of FAILED Students At Each Level of Father's Education by Sex,  
Type of Middle School and Grade Level



GRAPH 16B

Percentages of FAILED Students At Each Level of  
Father's Education by Sex and Grade Level

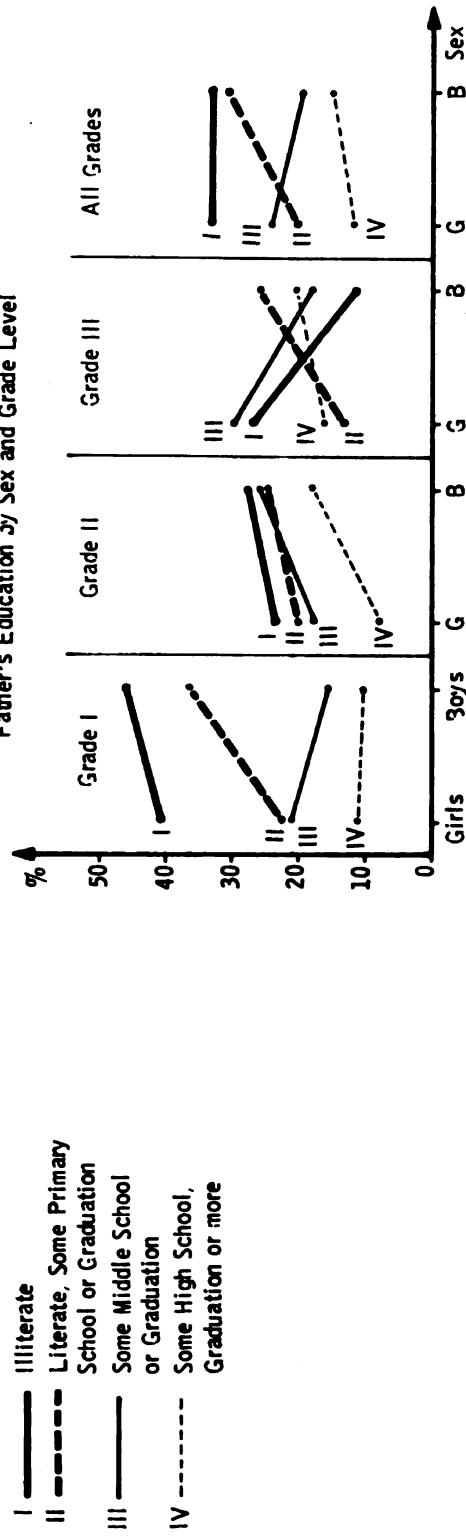


Table 39A. Vertical Percentages of Students at Level of Father's Education for City-Town and Village Primary School Graduates by Type of Middle School Attending and Grade Level

Level of Father's Education	FIRST GRADE			SECOND GRADE			THIRD GRADE			
	CT*	V**	Total	CT	V	Total	CT	V	Total	
City Middle School	I	8.87	17.17	11.93	6.93	15.88	9.96	6.73	12.28	8.46
	II	72.65	80.14	75.42	70.63	80.30	73.90	65.15	81.58	70.26
	III	4.80	0.54	3.23	8.13	1.47	5.88	13.07	1.32	9.41
	IV	12.11	0.72	7.91	13.40	0.88	9.16	13.86	2.19	10.23
	CN	1.57	1.43	1.51	0.91	1.47	1.10	1.19	2.63	1.64
	Total	958	559	1517	664	340	1004	505	228	733
Town Middle School	I	6.72	13.25	9.41	13.76	13.59	13.70	12.61	17.39	14.45
	II	84.46	81.93	83.42	72.49	81.56	75.68	76.58	81.16	78.33
	III	3.78	1.81	2.97	3.17	0.97	2.40	3.60	0.0	2.22
	IV	4.20	0.60	2.72	8.46	0.97	5.82	6.31	1.45	4.45
	CN	0.84	2.41	1.48	2.12	2.91	2.40	0.90	0.00	0.55
	Total	238	166	404	189	103	292	111	69	180
Middle School	I	8.44	16.28	11.40	8.44	15.35	10.80	7.79	13.47	9.64
	II	75.00	80.55	77.10	71.04	80.59	74.31	67.21	81.48	71.85
	III	4.60	0.83	3.18	7.04	1.35	5.09	11.36	1.01	8.00
	IV	10.54	0.69	6.81	12.31	0.90	8.41	12.50	2.02	9.09
	CN	1.42	1.65	1.51	1.17	1.81	1.39	1.14	2.02	1.42
	Total	1196	725	1921	853	443	1296	616	297	913

\* CT = City-Town Primary School Graduates

\*\* V = Village Primary School Graduates

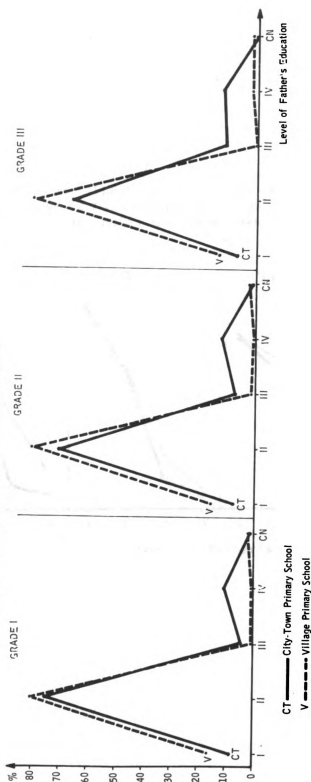


Table 39B. Horizontal Percentages of Village Primary School Graduates at Each Level of Father's Education by Type of Middle School Attending and Grade Level

Level of Father's Education		FIRST GRADE		SECOND GRADE		THIRD GRADE	
		V %	Total N	V %	Total N	V %	Total N
City Middle School	I	53.03	181	54.00	100	45.17	62
	II	39.17	1144	36.80	742	36.11	515
	III	6.12	49	8.48	59	4.34	69
	IV	3.33	120	3.27	92	6.67	75
	CN	34.79	23	45.46	11	50.00	12
	Total	36.84	1517	33.87	1004	31.10	733
<hr/>							
Town Middle School	I	57.90	38	35.00	40	46.16	26
	II	40.36	337	38.00	221	39.71	141
	III	25.00	12	14.29	7	0.00	4
	IV	9.10	11	5.89	17	12.50	8
	CN	66.67	6	42.86	7	0.00	1
	Total	41.09	404	35.28	292	38.33	180
<hr/>							
Middle School Total	I	53.89	219	48.58	140	45.46	88
	II	39.43	1481	37.08	963	36.90	656
	III	9.83	61	9.10	66	4.10	73
	IV	3.81	131	3.67	109	7.22	83
	CN	41.38	29	44.44	18	46.16	13
	Total	37.74	1921	34.19	1296	32.53	913

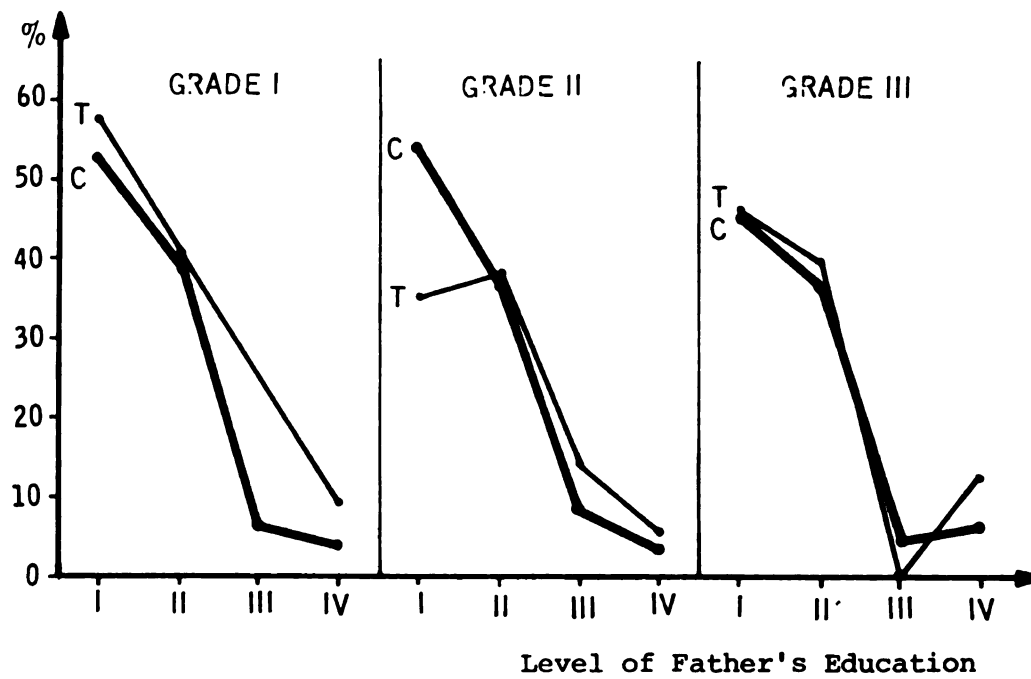
Note: The balance to 100% will be the percentage of City-Town primary school graduates.

GRAPH 17A  
Vertical Percentages of Students At Each Level of Father's Education for City-Town and Village  
Primary School Graduates by Grade Level (Middle School Total)



GRAPH 17B

Percentages of VILLAGE Primary School Graduates  
at Each Level of Father's Education by Type of  
Middle School Attending and Grade Level



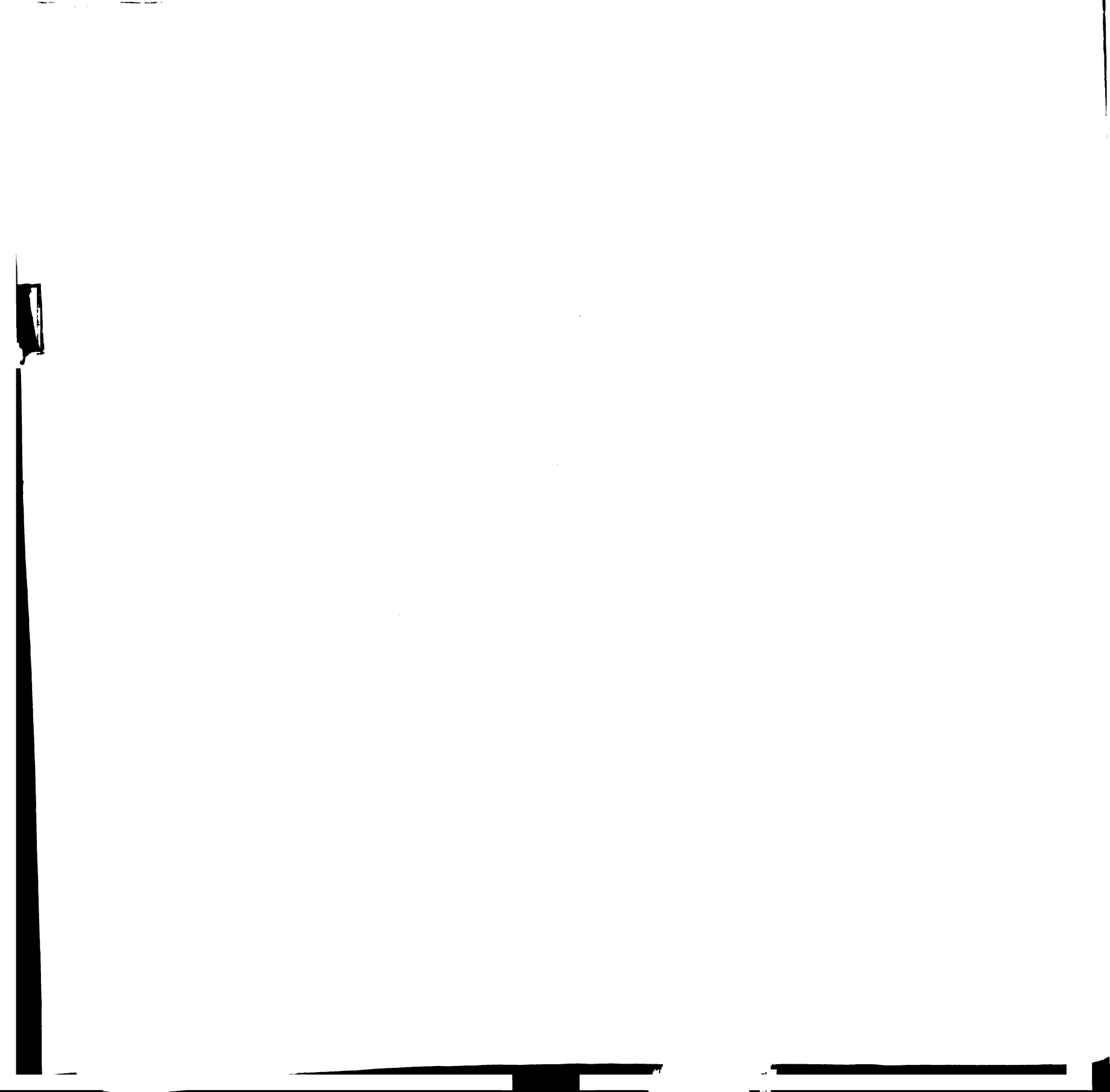


Table 40. Results of Chi-square Test of Significance Between Type of Primary School Graduated (City-Town, Village) and Level of Father's Education by Type of Middle School Attending and Grade Level

Type of Middle School	Grade Level		
	First	Second	Third
City	100.42*	76.53*	55.99*
Town	.-	.-	.-
Total	110.52*	80.19*	63.64*

\*  $P < .05$ , d.f. = 3

Note: -.- = No test is applied due to the cell(s) with small or zero value.

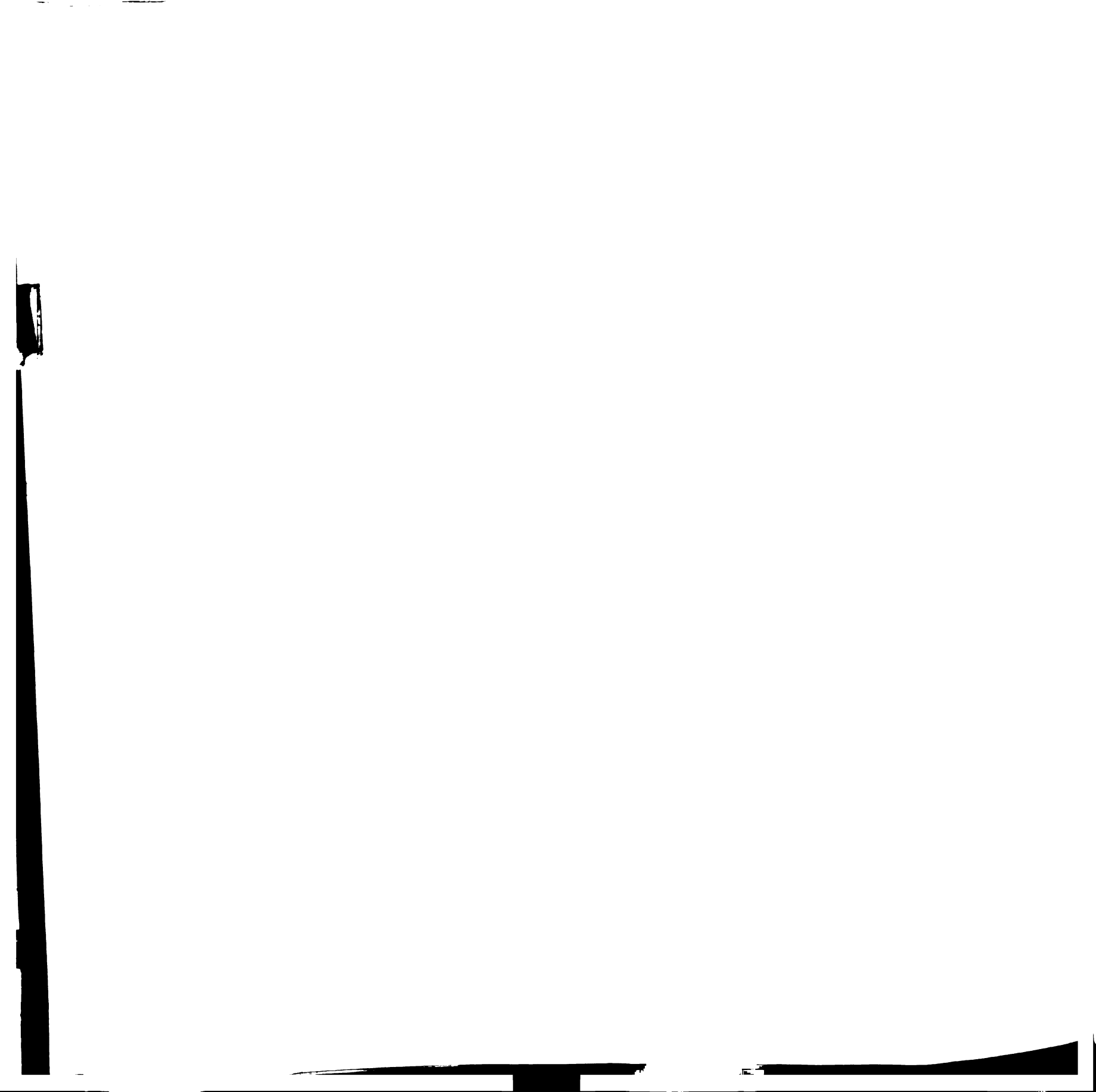


Table 41. Percentages of Failed Students at Each Level of Father's Education by Type of Primary School Graduated and Type of Middle School

		FIRST GRADE					
Level of Father's Education		City-Town Primary School		Village Primary School		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	I	43.53	85	46.88	96	45.30	181
	II	30.60	696	32.59	448	31.38	1144
	III	8.70	46	33.33	3	10.20	49
	IV	10.34	116	25.00	4	10.83	120
	CN	53.33	15	87.50	8	65.22	23
	Total	28.60	958	35.78	559	31.25	1517
<hr/>							
Town Middle School	I	43.75	16	45.45	22	44.74	38
	II	37.31	201	38.97	136	37.98	337
	III	44.44	9	66.67	3	50.00	12
	IV	10.00	10	0.00	1	9.09	11
	CN	50.00	2	50.00	4	50.00	6
	Total	36.97	238	40.36	166	38.37	404
<hr/>							
Middle School Total	I	43.56	101	46.61	118	45.21	219
	II	32.11	897	34.08	584	32.88	1481
	III	14.55	55	50.00	6	18.03	61
	IV	10.32	126	20.00	5	10.69	131
	CN	52.94	17	75.00	12	62.07	29
	Total	30.27	1196	36.83	725	32.74	1921

Note: The balance to 100% will be the percentages of passed students.

Table 42. Percentages of Failed Students at Each Level of Father's Education by Type of Primary School Graduated and Type of Middle School

		SECOND GRADE					
	Level of Father's Education	City-Town Primary School		Village Primary School		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	I	21.74	46	35.19	54	29.00	100
	II	19.40	469	31.14	273	23.72	742
	III	20.37	54	60.00	5	23.73	59
	IV	14.61	89	33.33	3	15.22	92
	CN	33.33	6	20.00	5	27.27	11
	Total	19.13	664	32.06	340	23.51	1004
<hr/>							
Town Middle School	I	19.23	26	28.57	14	22.50	40
	II	27.01	137	21.43	84	24.89	221
	III	16.67	6	0.00	1	14.29	7
	IV	6.25	16	0.00	1	5.88	17
	CN	25.00	4	0.00	3	14.29	7
	Total	23.81	189	21.36	103	22.95	292
<hr/>							
Middle School Total	I	20.83	72	33.82	68	27.14	140
	II	21.12	606	28.85	357	23.99	963
	III	20.00	60	50.00	6	22.73	66
	IV	13.33	105	25.00	4	13.76	109
	CN	30.00	10	12.50	8	22.22	18
	Total	20.16	853	29.57	443	23.38	1296



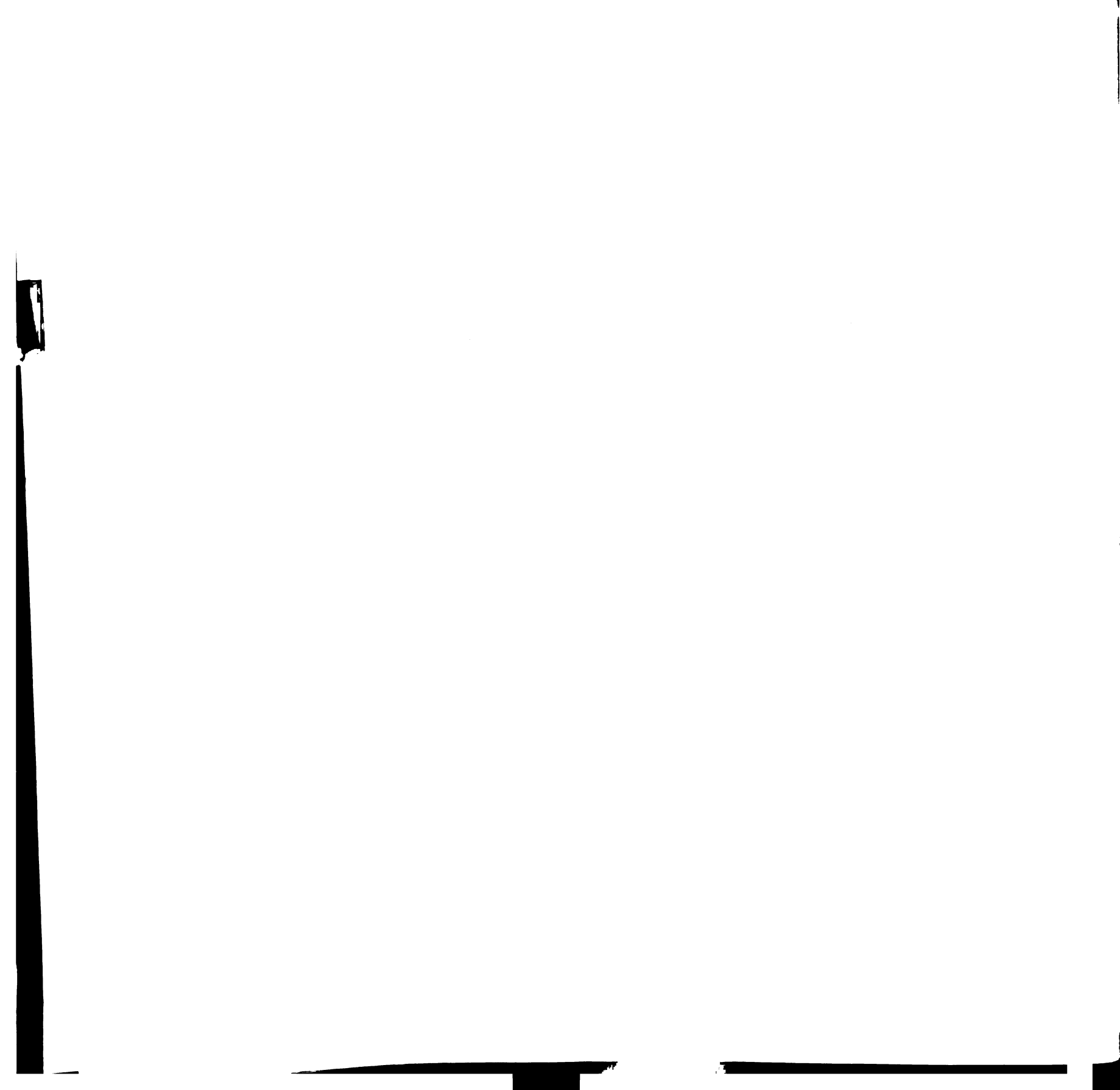


Table 43. Percentages of Failed Students at Each Level of Father's Education by Type of Primary School Graduated and Type of Middle School

THIRD GRADE						
Level of Father's Education	City-Town Primary School		Village Primary School		Total	
	Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School						
I	11.76	34	0.00	28	6.45	62
II	20.06	329	32.26	186	24.47	515
III	27.27	66	0.00	3	26.09	69
IV	18.57	70	40.00	5	20.00	75
CN	33.33	6	0.00	6	16.67	12
Total	20.40	505	27.19	228	22.51	733
Town Middle School						
I	50.00	14	8.33	12	30.77	26
II	22.35	85	12.50	56	18.44	141
III	0.00	4	0.00	0	0.00	4
IV	0.00	7	0.00	1	0.00	8
CN	0.00	1	0.00	0	0.00	1
Total	23.42	111	11.59	69	18.89	180
Middle School Total						
I	22.92	48	2.50	40	13.64	88
II	20.53	414	27.69	242	23.17	656
III	25.71	70	0.00	3	24.66	73
IV	16.88	77	33.33	6	18.07	83
CN	28.57	7	0.00	6	15.38	13
Total	20.94	616	23.57	297	21.80	913

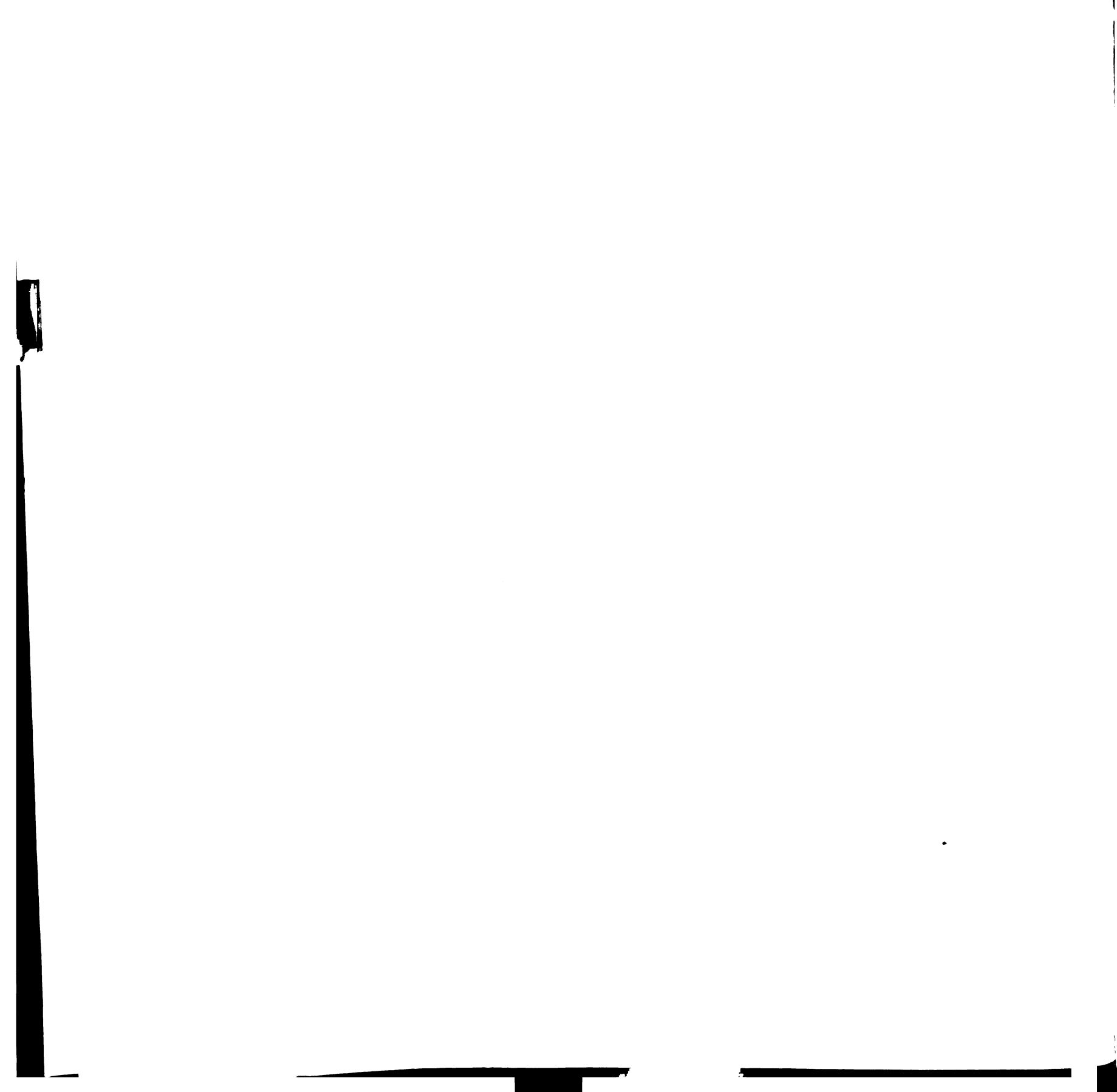


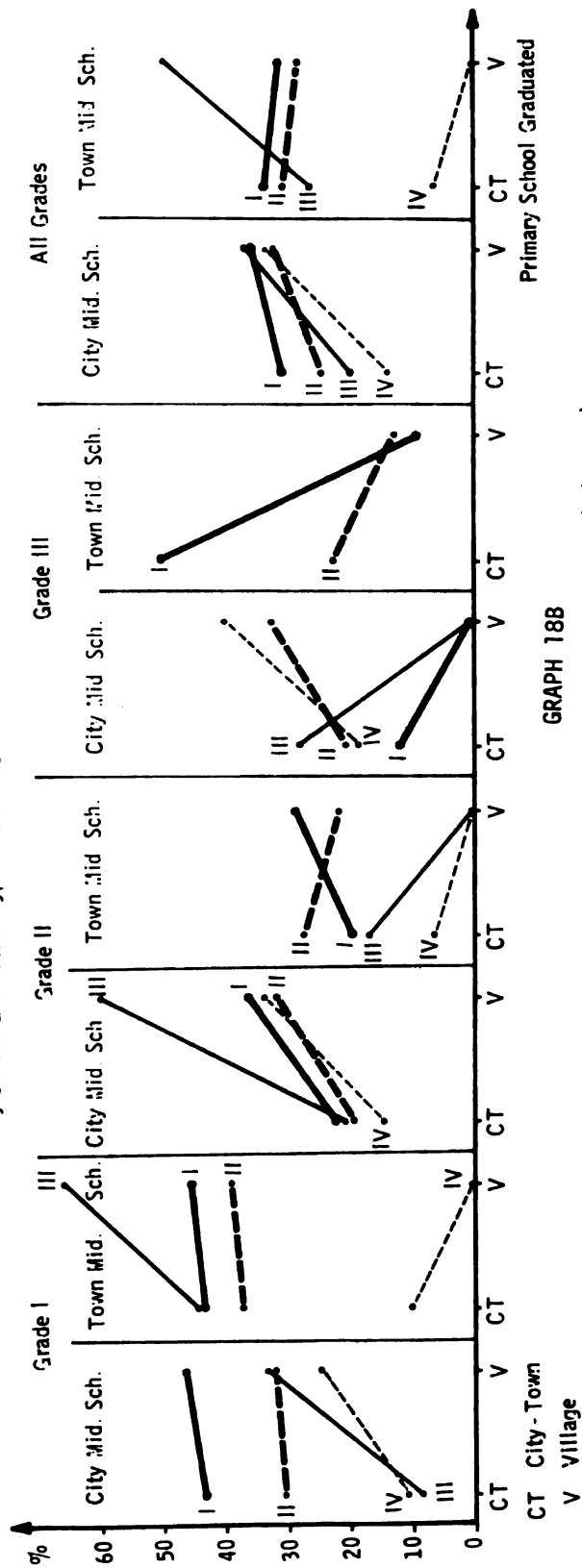
Table 44. Percentages of Failed Students at Each Level of Father's Education by Type of Primary School Graduated and Type of Middle School

ALL GRADES									
Level of Father's Education	City-Town Primary School			Village Primary School			Total		
	Failed %	Total N		Failed %	Total N		Failed %	Total N	
City Middle School									
I	30.91	165		35.96	178		33.53	343	
II	24.77	1494		32.08	907		27.53	2401	
III	19.88	166		36.36	11		20.90	177	
IV	13.82	275		33.33	12		14.63	287	
CN	44.44	27		42.11	19		43.48	46	
Total	23.70	2127		32.92	1127		26.89	3254	
Town Middle School									
I	33.93	56		31.25	48		32.69	104	
II	30.97	423		28.26	276		29.90	699	
III	26.32	19		50.00	4		30.43	23	
IV	6.06	33		0.00	3		5.56	36	
CN	33.33	7		28.57	7		28.57	14	
Total	29.55	538		28.70	338		29.22	876	
Middle School Total									
I	31.67	221		34.96	226		33.33	447	
II	26.13	1917		31.24	1181		28.08	3098	
III	20.54	185		40.00	15		22.00	200	
IV	12.99	308		26.67	15		13.62	323	
CN	41.18	34		38.46	26		40.00	60	
Total	24.88	2665		31.95	1465		27.38	4130	



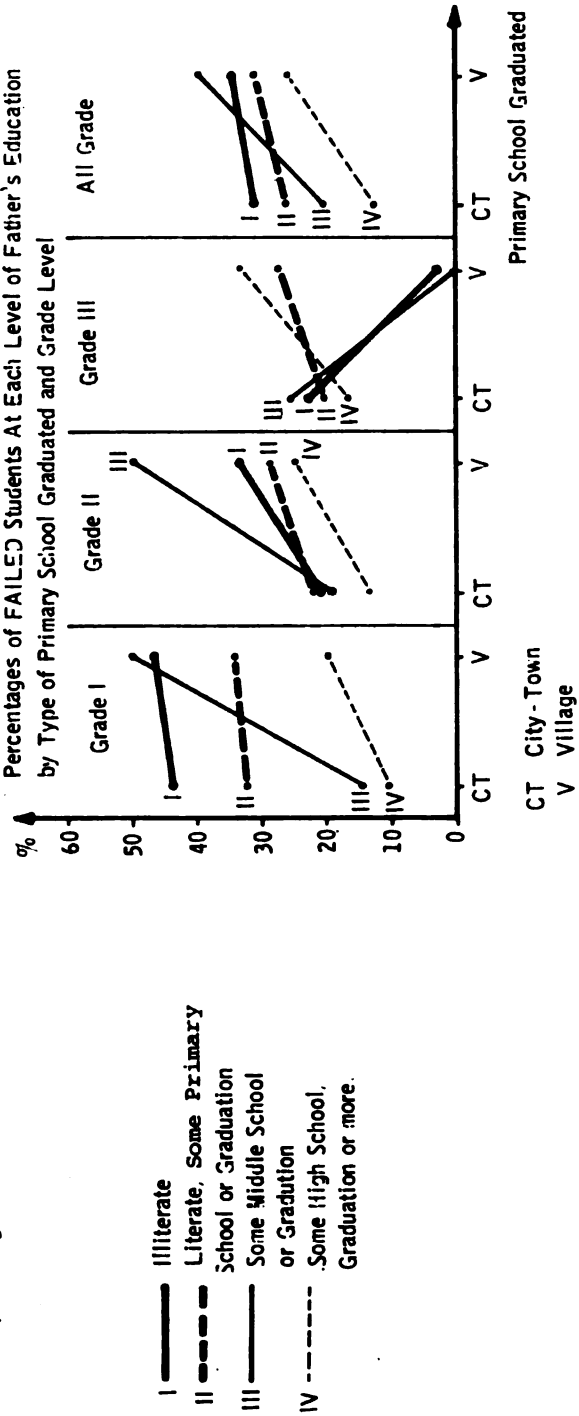
GRAPH 18A

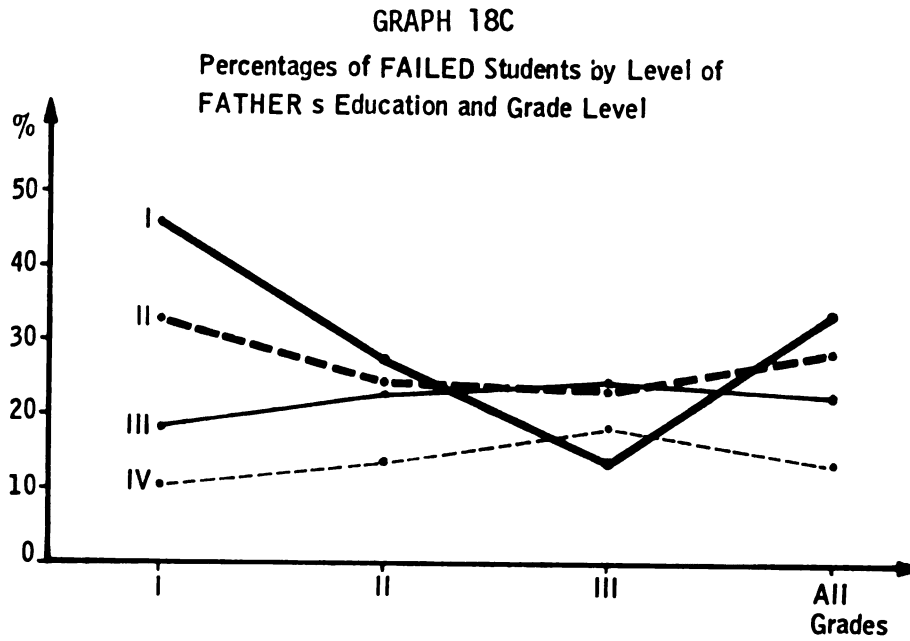
Percentages of FAILED Students At Each Level of Father's Education by Type of Primary School Graduated Type of Middle School and Grade Level



GRAPH 18B

Percentages of FAILED Students At Each Level of Father's Education by Type of Primary School Graduated and Grade Level





Key: I = Illiterate  
 II = Literate, some primary school or graduation  
 III = Some middle school or graduation  
 IV = Some high school, graduation or more

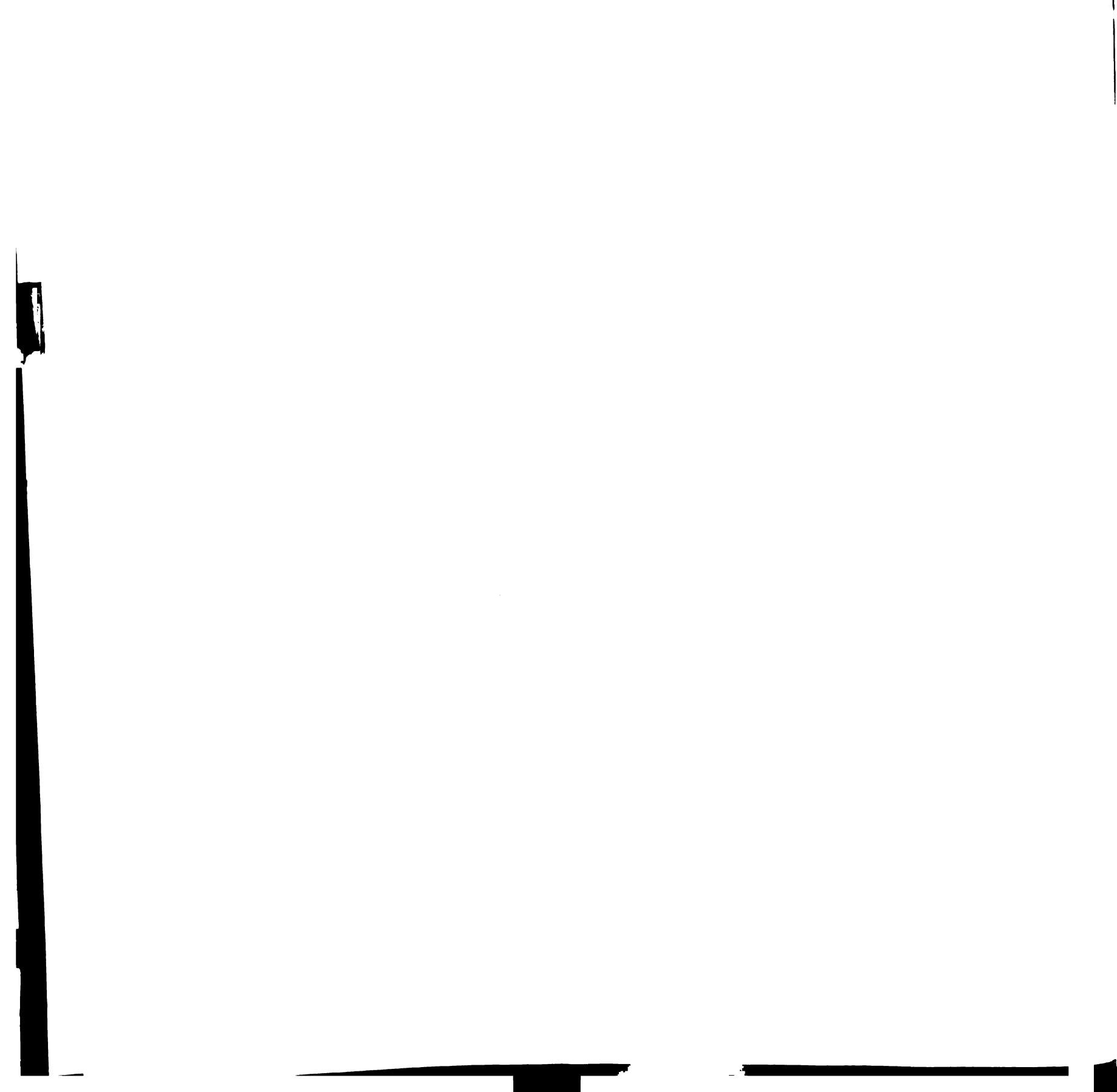




Table 45A. Results of Chi-square Test of Significance Between Level of Father's Education and Success by Sex, Type of Primary School Graduated, Type of Middle School and Grade Level

Grades	Type of Middle School	Sex		Type of Primary School		
		Girls	Boys	Graduated		Total
				City-Town	Village	
I	City	10.61*	36.09*	38.75*	7.27	68.95*
	Town	-.-	1.87	3.67	-.-	5.35
	Total	10.76*	34.61*	40.29*	7.74	50.58*
II	City	2.06	2.11	1.46	2.13	5.22
	Town	-.-	0.25	3.96	-.-	3.54
	Total	4.20	1.92	3.42	1.89	6.95
III	City	9.91*	14.23*	3.66	-.-	11.03*
	Town	-.-	-.-	-.-	-.-	-.-
	Total	6.85	8.38	1.89	-.-	5.17
ALL	City	10.38*	23.93*	21.96*	1.08	33.44*
	Town	-.-	1.88	9.76*	-.-	10.52*
	Total	14.32*	24.53*	32.37*	1.85	42.47*

\*  $P < .05$ , d.f. = 3

Note: -. = no test is applied due to the cell(s) with small or zero value.

### Summary Outcomes of Part III C

#### A. Level of Father's Education and Success

##### 1. The major finding

##### a. The null hypotheses (Hypothesis No. 6c)

The level of father's education of the students is not related to their success in middle school.

##### b. Obtain statistics and the finding

$$\chi^2 (.05) \text{ 3 d.f.} = 7.82$$

$$\text{Obtained } \chi^2 = 42.47$$

Therefore, the null hypothesis is rejected.

##### c. Direction of the deviation

Related data presented in Table 38 and Table 44 show that the students who have fathers with lower levels of education are more likely to be failing in middle school than the students whose fathers have higher levels of education as expected by hypothesis No. 6c.

##### 2. Other findings

Sub-groups for which the obtained  $\chi^2$  values (presented in Table 45A are significant) are listed and the deviations for each sub-group (presented in Tables 35,36,37 and 38) are shown in Table 45B. The students' background factor (level of father's education) that are found to be significantly related to success in middle school for listed sub-groups are marked under four column heads; the level of father's education with the highest percentage of failing is put under 1st, and the lowest percentage of failing is put under 4th.

Table 45B. The Rank Order of the Deviations of Failing in Middle School by the Level of Father's Education in Those Sub-populations for Which the Obtained Chi-square Test Value is Found to be Significant

Grade	Type of Middle School	Sex or Type of Primary School	The Rank Order of Percentages of Failing*			
			1st	2nd	3rd	4th
I	City	Girls	I	II	III	IV
	City	Boys	I	II	IV	III
	City	Total	I	II	IV	III
	Total	Girls	I	II	III	IV
	Total	Boys	I	II	III	IV
	Total	Total	I	II	III	IV
III	City	Girls	III	IV	I	II
	City	Boys	II	IV	III	I
	City	Total	III	II	IV	I
	Total	Boys	II	IV	III	I
All Grades	City	Girls	I	III	II	IV
	City	Boys	I	II	III	IV
	City	Total	I	II	III	IV
	Town	Total	I	III	II	IV
	Total	Girls	I	III	II	IV
	Total	Boys	I	II	III	IV
	Total	Total	I	II	III	IV
I	City	City-Town	I	II	III	IV
	Total	City-Town	I	II	III	IV
All Grades	City	City-Town	I	II	III	IV
	Town	City-Town	I	II	III	IV

\*Ordered from 1st to 4th by decreasing percentages of failure.

Key: I = Illiterate  
 II = Literate, some primary school or graduation  
 III = Some middle school or graduation  
 IV = Some high school, graduation or more

## Section D

### Level of Mother's Education

#### Introduction

The data on the factor, level of mother's education, are presented in the following order:

1. The student composition data by level of mother's education and sex are presented in Tables 46A-B. The same data are illustrated in Graphs 19A-B-C. The results of Chi-square Test are given in Table 47.
2. The percentages of failed students by level of mother's education and sex are presented in Tables 48-51, and illustrated in Graphs 20A-B.
3. The student body composition data by level of mother's education and type of primary school from which graduated are presented in Tables 52A-B. The data also are illustrated in Graphs 21A-B-C. The results of Chi-square Test are shown in Table 53.
4. The percentage of failed students by level of mother's education and type of primary school from which graduated are presented in Tables 54-57, and illustrated in Graphs 22A-B-C.
5. The results of Chi-square Test are given in Table 58A, and the findings are presented. Deviations of failing are given in Table 58B.

Table 46A. Vertical Percentages of Students at Each Level of Mother's Education for Girls and Boys by Type of Middle School Attending and Grade Level

	Level of Mother's Education	First Grade			Second Grade			Third Grade		
		Girls		Total	Girls		Total	Girls		Total
		Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total
City	I	47.51	63.44	58.80	32.22	55.80	49.30	26.76	51.09	43.52
Middle	II	47.06	31.44	36.99	59.86	40.84	46.32	61.40	42.77	48.57
School	III	2.04	1.02	1.32	3.81	1.12	1.89	5.70	1.39	2.73
	IV	2.04	0.84	1.19	2.42	0.84	1.30	2.63	0.59	1.23
	CN	1.35	3.26	2.70	0.69	1.40	1.19	3.51	4.16	3.95
	Total	442	1075	1517	289	715	1004	228	505	733
Town	I	59.65	74.14	70.05	55.29	74.88	69.18	72.41	66.23	67.22
Middle	II	37.72	23.79	27.72	41.18	23.19	28.42	20.69	27.81	26.67
School	III	0.00	0.69	0.50	2.35	0.00	0.67	3.45	0.00	0.57
	IV	0.00	0.00	0.00	0.00	0.48	0.34	0.00	0.00	0.00
	CN	2.63	1.38	1.73	1.18	1.45	1.36	3.45	5.96	5.55
	Total	114	290	404	85	207	292	29	151	180
Middle	I	50.00	65.71	61.17	38.24	60.09	53.78	31.91	54.57	48.19
School	II	45.14	29.82	34.25	55.61	36.87	42.28	56.81	39.33	44.25
Total	III	1.62	0.95	1.14	3.48	0.87	1.62	5.45	1.07	2.30
	IV	1.62	0.66	0.94	1.87	0.76	1.08	2.33	0.46	0.99
	CN	1.62	2.86	2.50	0.80	1.41	1.24	3.50	4.57	4.27
	Total	556	1365	1921	374	922	1296	257	656	913

Key: I = Illiterate; II = Literate, some primary school or graduation; III = Some middle school or graduation; IV = Some high school, graduation and more; CN = Could not be determined.

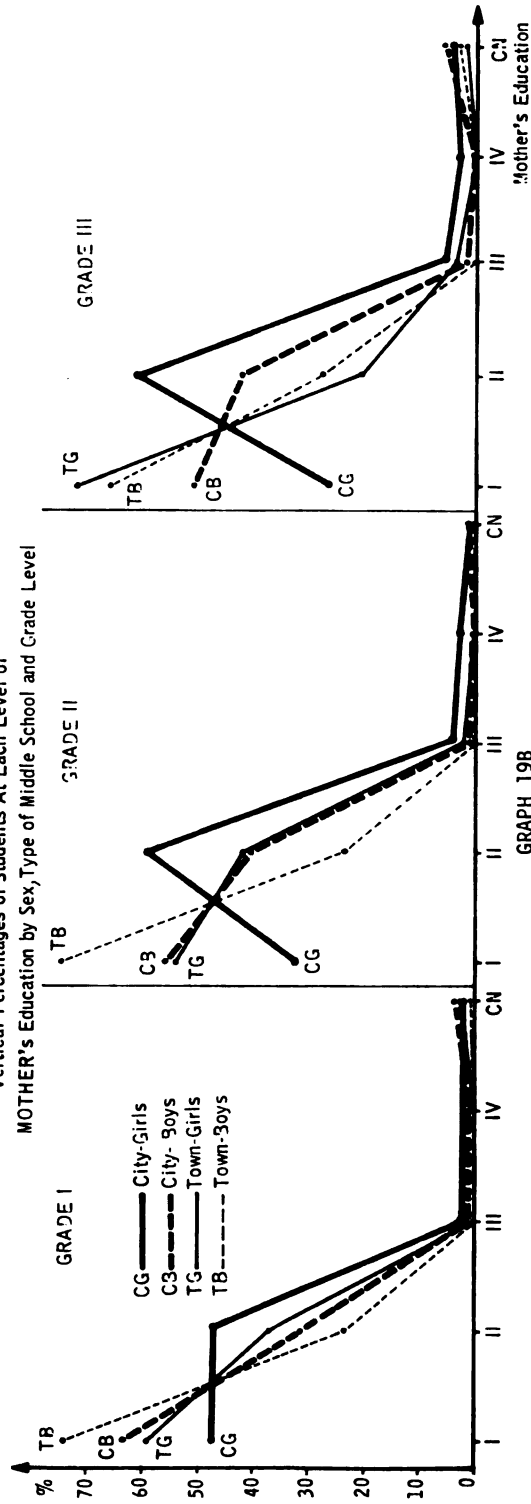
Table 46B. Horizontal Percentages of Girls at Each Level of Mother's Education by Type of Middle School Attending and Grade Level

	Level of Mother's Education	First Grade		Second Grade		Third Grade	
		Girls %	Total N	Girls %	Total N	Girls %	Total N
City Middle School	I	23.54	892	19.39	495	19.12	319
	II	38.10	546	37.20	465	39.33	356
	III	45.00	20	57.89	19	65.00	20
	IV	50.00	18	53.85	13	66.67	9
	CN	14.63	41	16.67	12	27.59	29
	Total	29.14	1517	28.78	1004	31.11	733
Town Middle School	I	24.03	283	23.27	202	17.36	121
	II	38.39	112	42.17	83	12.50	48
	III	0.00	2	100.00	2	100.00	1
	IV	0.00	0	0.00	1	0.00	0
	CN	42.86	7	25.00	4	10.00	10
	Total	28.22	404	29.11	292	16.11	180
Middle School Total	I	23.66	1175	20.52	697	18.64	440
	II	38.15	658	37.96	548	36.14	404
	III	40.91	22	61.90	21	66.67	21
	IV	50.00	18	50.00	14	66.67	9
	CN	18.75	48	18.75	16	23.08	39
	Total	28.94	1921	28.86	1296	28.15	913

Note: The balance to 100% will be the percentage of boys.

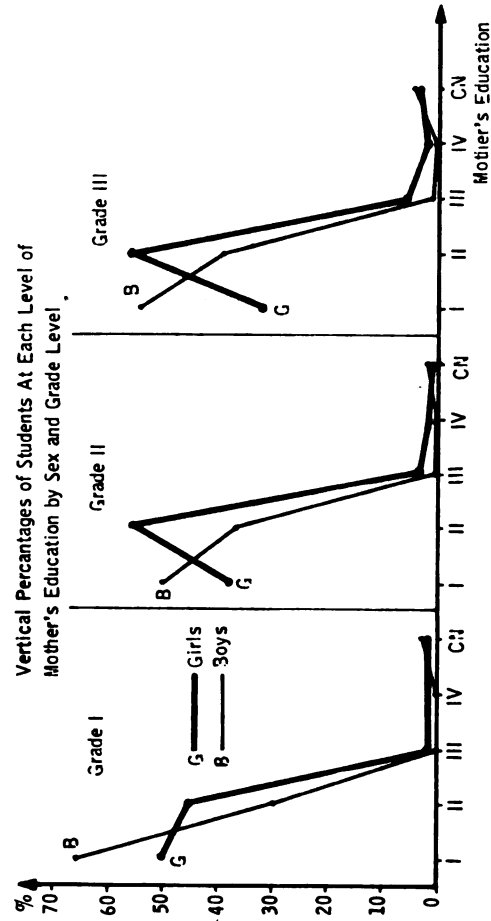
GRAPH 19A

Vertical Percentages of Students At Each Level of  
MOTHER'S Education by Sex, Type of Middle School and Grade Level



GRAPH 19B

Vertical Percentages of Students At Each Level of  
Mother's Education by Sex and Grade Level



GRAPH 19C

Horizontal Percentages of GIRLS At Each Level of Mother's Education by Type of Middle School Attending and Grade Level

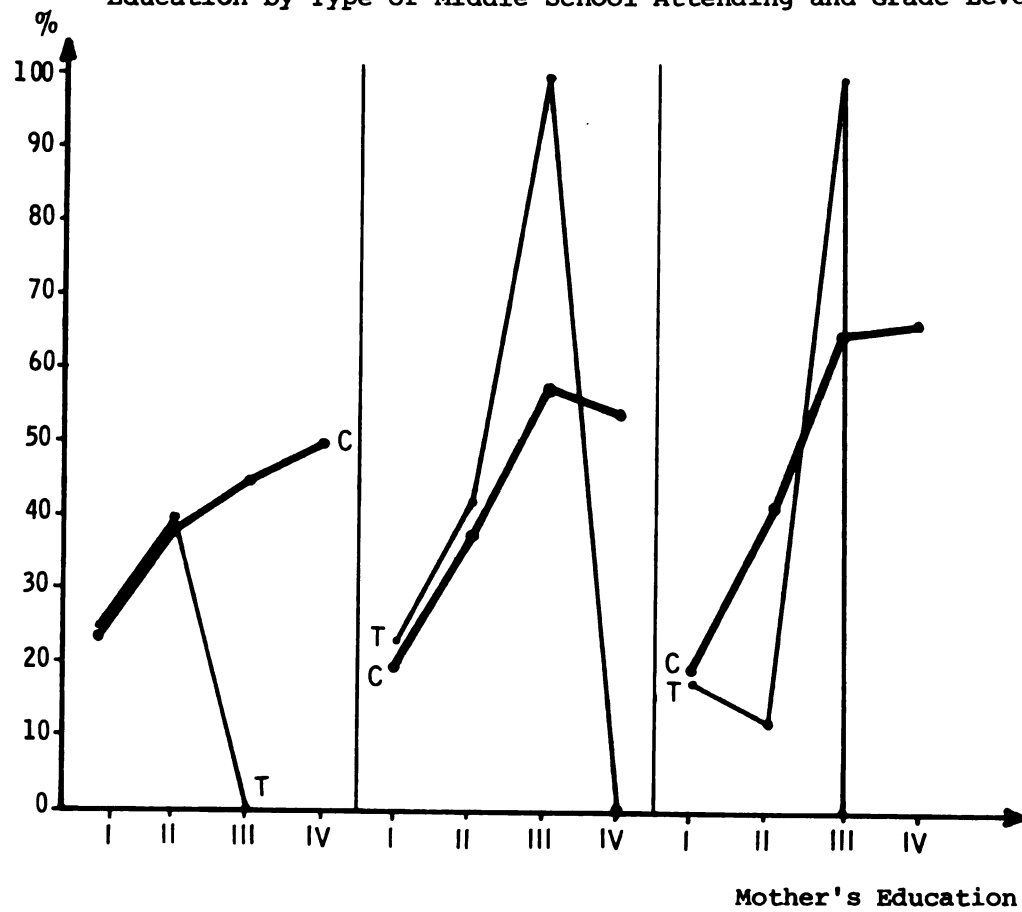




Table 47. Results of Chi-square Test of Significance Between Sex and Level of Mother's Education by Type of Middle School Attending and Grade Level

Type of Middle School	Grade Level		
	First	Second	Third
City	40.53*	49.05*	48.50*
Town	.-	.-	.-
Total	48.14*	59.77*	54.16*

\*P < .05, d.f. = 3

Note: .- = No test is applied due to the cell(s) with small or zero value.



Table 48. Percentages of Failed Students at Each Level of Mother's Education by Sex and Type of Middle School Attending

FIRST GRADE								
Level of Mother's Education	Girls		Boys		Total		Total	
	Failed %	Total N	Failed %	Total N	Failed %	Total N	Failed %	Total N
City								
I	22.86	210	37.98	682	34.42	892		
II	19.23	208	29.88	338	25.82	546		
III	11.11	9	9.09	11	10.00	20		
IV	0.00	9	0.00	9	0.00	18		
CN	66.67	6	57.14	35	58.53	41		
Total	21.04	442	35.44	1075	31.25	1517		
Town								
I	36.76	68	45.12	215	43.11	283		
II	13.95	43	33.33	69	25.89	112		
III	0.00	0	0.00	2	0.00	2		
IV	0.00	0	0.00	0	0.00	0		
CN	66.67	3	50.00	4	57.14	7		
Total	28.95	114	42.07	290	38.37	404		
Middle School Total								
I	26.26	278	39.69	897	36.51	1175		
II	18.33	251	30.47	407	25.84	658		
III	11.11	9	7.69	13	9.09	22		
IV	0.00	9	0.00	9	0.00	18		
CN	66.67	9	56.41	39	58.33	48		
Total	22.66	556	36.85	1365	32.74	1921		

Note: The balance to 100% will be the percentage of passed students.

Table 49. Percentages of Failed Students at Each Level of Mother's Education by Sex and Type of Middle School Attending

SECOND GRADE									
	Level of Mother's Education	Girls		Boys		Total		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	I	18.75	96	29.07	399	27.07	495		
	II	16.76	173	22.26	292	20.22	465		
	III	9.09	11	25.00	8	15.79	19		
	IV	0.00	7	0.00	6	0.00	13		
	CN	50.00	2	40.00	10	41.67	12		
	Total	16.96	289	26.15	715	23.51	1004		
Town Middle School	I	27.66	47	23.87	155	24.75	202		
	II	20.00	35	12.50	48	15.66	83		
	III	0.00	2	0.00	0	0.00	2		
	IV	0.00	0	0.00	1	0.00	1		
	CN	100.00	1	100.00	3	100.00	4		
	Total	25.00	85	22.22	207	22.95	292		
Middle School Total	I	21.68	143	27.62	554	26.40	697		
	II	17.31	208	20.88	340	19.53	548		
	III	7.69	13	25.00	8	14.29	21		
	IV	0.00	7	0.00	7	0.00	14		
	CN	66.67	3	53.84	13	56.25	16		
	Total	18.72	374	25.27	922	23.38	1296		

Table 50. Percentages of Failed Students at Each Level of Mother's Education by Sex and Type of Middle School Attending

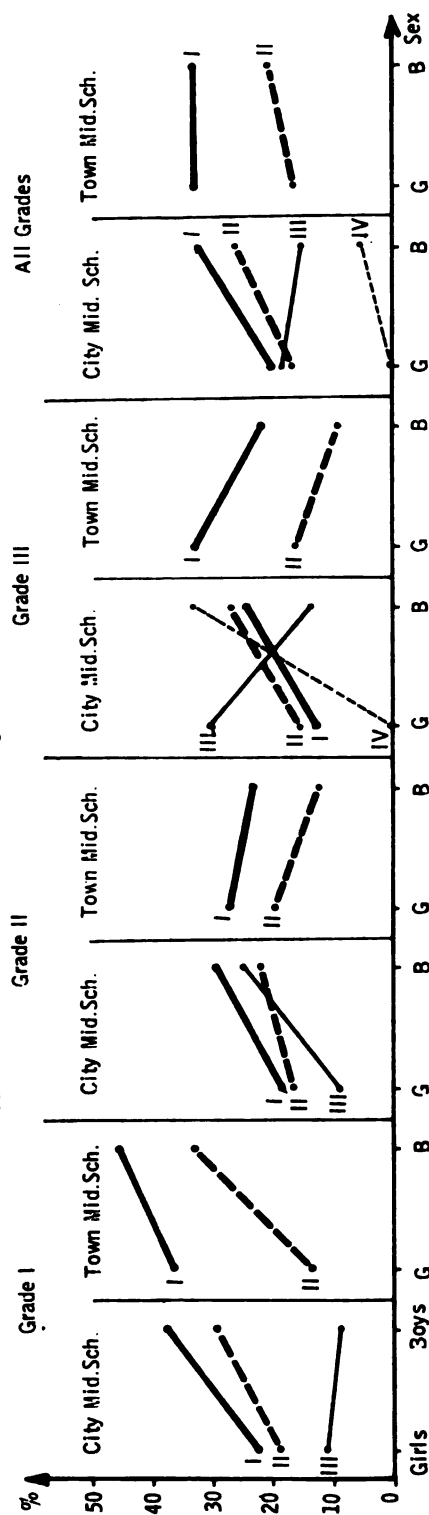
THIRD GRADE								
Level of Mother's Education	Girls		Boys		Total		Total	
	Failed %	Total N	Failed %	Total N	Failed %	Total N	Failed %	Total N
City								
I	13.11	61	24.42	258	22.26	319		
II	15.71	140	27.31	216	22.75	356		
III	30.77	13	14.29	7	25.00	20		
IV	0.00	6	33.33	3	11.11	9		
CN	25.00	8	23.80	21	24.13	29		
Total	15.79	228	25.54	505	22.51	733		
Town								
I	33.33	21	22.00	100	23.97	121		
II	16.67	6	9.52	42	10.42	48		
III	0.00	1	0.00	0	0.00	1		
IV	0.00	0	0.00	0	0.00	0		
CN	0.00	1	0.00	9	0.00	10		
Total	27.59	29	17.22	151	18.89	180		
Middle								
I	18.29	82	23.74	358	22.73	440		
II	15.75	146	24.42	258	21.18	404		
III	28.57	14	14.29	7	23.81	21		
IV	0.00	6	33.33	3	11.11	9		
CN	22.22	9	16.67	30	17.94	39		
Total	17.12	257	23.63	656	21.80	913		

Table 51. Percentages of Failed Students at Each Level of Mother's Education by Sex and Type of Middle School Attending

ALL GRADES									
Level of Mother's Education	Girls		Boys		Total		Total		N
	Failed %	Total N	Failed %	Total N	Failed %	Total N	Failed %	Total N	
City									
I	20.16	367	32.71	1339	30.01	1706			
II	17.47	521	26.60	846	23.12	1367			
III	18.18	33	15.38	26	16.95	59			
IV	0.00	22	5.56	18	2.50	40			
CN	43.75	16	43.93	66	43.90	82			
Total	18.56	959	30.37	2295	26.89	3254			
Town									
I	33.09	136	33.19	470	33.19	606			
II	16.67	84	20.75	159	19.34	243			
III	0.00	3	0.00	2	0.00	5			
IV	0.00	0	0.00	1	0.00	1			
CN	60.00	5	31.25	16	38.10	21			
Total	27.19	228	29.94	648	29.22	876			
Middle School Total									
I	23.66	503	32.84	1809	30.84	2312			
II	17.36	605	25.67	1005	22.55	1610			
III	16.67	36	14.29	28	15.63	64			
IV	0.00	22	5.26	19	2.44	41			
CN	47.61	21	41.47	82	42.71	103			
Total	20.22	1187	30.28	2943	27.38	4130			

GRAPH 20A

Percentages of FAILED Students At Each Level of Mother's Education  
by Sex, Type of Middle School Attending and Grade Level



GRAPH 20B

Percentages of FAILED Students At Each Level  
of Mother's Education by Sex and Grade Level

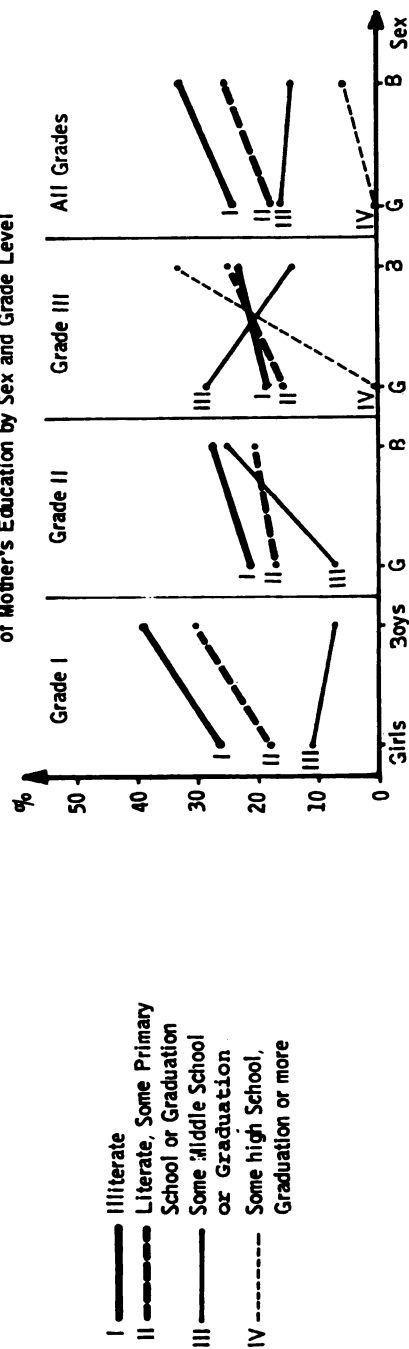


Table 52A. Vertical Percentages of Students at Each Level of Mother's Education for City-Town and Village Primary School Graduates by Type of Middle School Attending and Grade Level

Level of Mother's Education	First			Second			Third			
	CT*	V*	Total	CT	V	Total	CT	V	Total	
City Middle School	I %	48.54	76.39	58.80	36.74	73.82	49.30	34.85	62.72	43.52
	II %	45.62	19.50	36.99	57.68	24.12	46.32	56.83	30.26	48.57
	III %	1.98	0.18	1.32	2.86	0.00	1.89	3.76	0.44	2.73
	IV %	1.88	0.00	1.19	1.96	0.00	1.30	1.59	0.44	1.23
	CN %	1.98	3.93	2.70	0.76	2.06	1.19	2.97	6.14	3.95
	Total	958	559	1517	664	340	1004	505	228	733
Town Middle School	I %	65.55	76.51	70.05	62.43	81.55	69.18	67.57	66.67	67.22
	II %	32.77	20.48	27.72	34.39	17.48	28.42	30.63	20.29	26.67
	III %	0.42	0.60	0.50	1.06	0.00	0.67	0.90	0.00	0.57
	IV %	0.00	0.00	0.00	0.53	0.00	0.34	0.00	0.00	0.00
	CN %	1.26	2.41	1.73	1.59	0.97	1.36	0.90	13.04	5.55
	Total	238	166	404	189	103	292	111	69	180
Middle School Total	I %	51.92	76.41	61.17	42.44	75.62	53.78	40.75	63.64	48.19
	II %	43.14	19.59	34.25	52.52	22.57	42.28	52.11	27.94	44.25
	III %	1.67	0.28	1.14	2.45	0.00	1.62	3.25	0.34	2.30
	IV %	1.51	0.00	0.94	1.64	0.00	1.08	1.30	0.34	0.99
	CN %	1.76	3.72	2.50	0.94	1.81	1.24	2.59	7.74	4.27
	Total	1196	725	1921	853	443	1296	616	297	913

\* CT = City-Town Primary School Graduates; V = Village



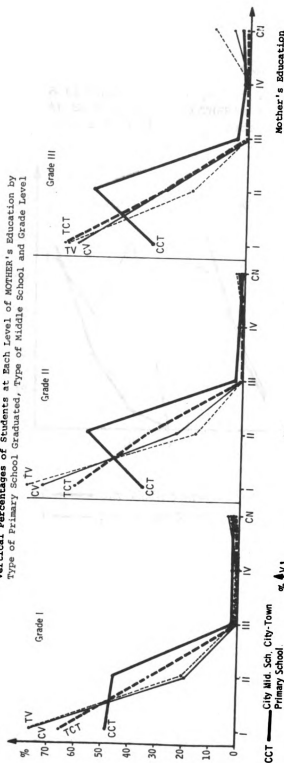
Table 52B. Horizontal Percentages of Village Primary School Graduates at Each Level of Mother's Education by Type of Middle School Attending and Grade Level

Level of Mother's Education	First		Second		Third		
	V %	Total N	V %	Total N	V %	Total N	
City Middle School	I	47.87	892	50.70	495	44.82	319
	II	19.97	546	17.63	465	19.39	356
	III	5.00	20	0.00	19	5.00	20
	IV	0.00	18	0.00	13	11.11	9
	CN	53.66	41	58.33	12	48.28	29
	Total	36.84	1517	33.87	1004	31.10	733
Town Middle School	I	44.88	283	41.59	202	38.01	121
	II	30.36	112	21.69	83	29.17	48
	III	50.00	2	0.00	2	0.00	1
	IV	0.00	0	0.00	1	0.00	0
	CN	57.14	7	25.00	4	90.00	10
	Total	41.09	404	35.28	292	38.33	180
Middle School Total	I	47.14	1175	48.07	697	42.96	440
	II	21.59	658	18.24	548	20.54	404
	III	9.10	22	0.00	21	4.77	21
	IV	0.00	18	0.00	14	11.11	9
	CN	56.25	48	50.00	16	58.98	39
	Total	37.74	1921	34.19	1296	32.53	913

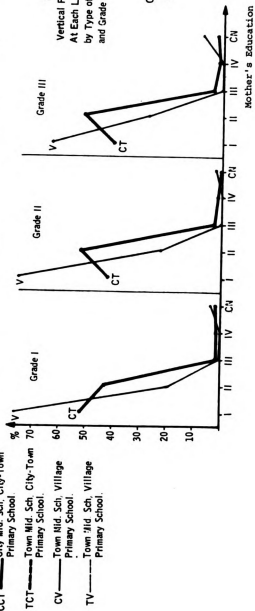
Note: The balance to 100% will be the percentage of City-Town primary school graduates.

GRAPH 21A

Vertical Percentages of Students at Each Level of MOTHER'S Education by Type of Primary School Graduated, Type of Middle School and Grade Level



**GRAPH 21B**  
**Vertical Percentages of Students**  
**At Each Level of Mother's Education**  
**by Type of Primary School Graduated**  
**and Grade Level**



GRAPH 21C

Horizontal Percentages of VILLAGE Primary School Graduates  
At Each Level of MOTHER's Education by Type of Middle  
School Attending And Grade Level

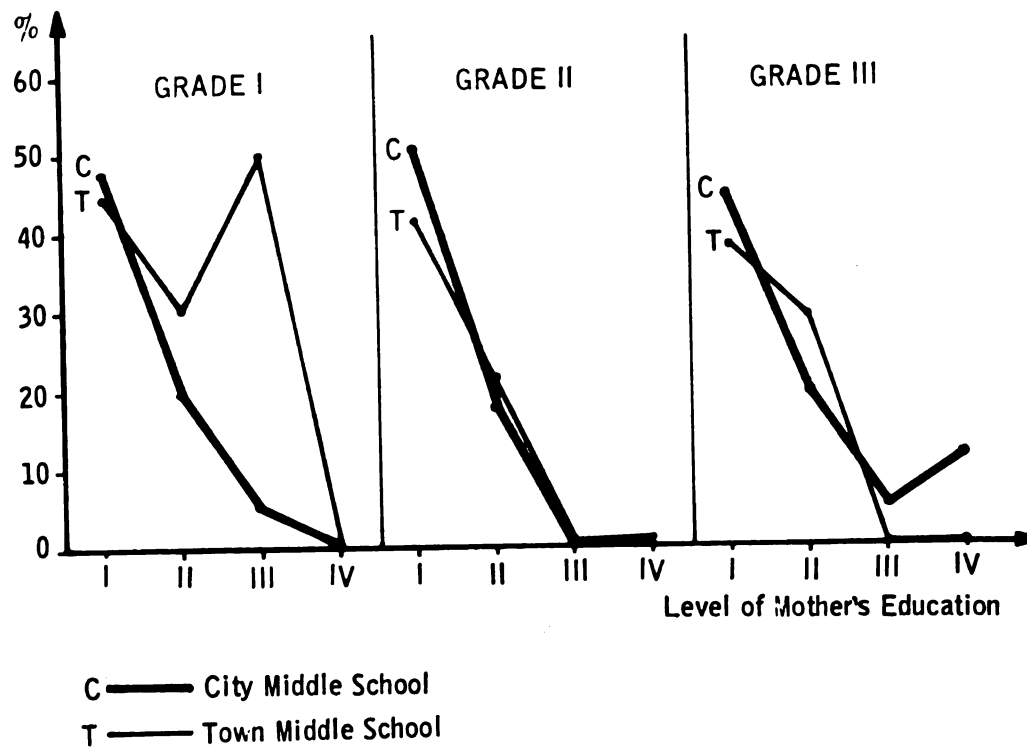


Table 53. Results of Chi-square Test of Significance Between the Type of Primary School Graduated and Level of Mother's Education by Type of Middle School Attending and Grade Level

Type of Middle School	Grade Level		
	First	Second	Third
City	.-	.-	.-
Town	.-	.-	.-
Total	.-	.-	.-

Note: -.- = No test is applied due to the cell(s) with small or zero value.

Table 54. Percentages of Failed Students at Each Level of Mother's Education by Type of Primary School Graduated and Type of Middle School Attending

FIRST GRADE						
Level of Mother's Education	City-Town Primary School		Village Primary School		Total	
	Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School						
I	32.04	465	37.00	427	34.42	892
II	25.86	437	25.69	109	25.82	546
III	5.26	19	100.00	1	10.00	20
IV	0.00	18	0.00	0	0.00	18
CN	57.89	19	59.09	22	58.53	41
Total	28.60	958	35.78	559	31.25	1517
Town Middle School						
I	43.59	156	42.52	127	43.11	283
II	24.36	78	29.41	34	25.89	112
III	0.00	1	0.00	1	0.00	2
IV	0.00	0	0.00	0	0.00	0
CN	33.33	3	75.00	4	57.14	7
Total	36.97	238	40.36	166	38.37	404
Middle School Total						
I	34.94	621	38.27	554	36.51	1175
II	25.68	516	26.76	142	25.84	658
III	5.00	20	50.00	2	9.09	22
IV	0.00	18	0.00	0	0.00	18
CN	57.14	21	59.26	27	58.33	48
Total	30.27	1196	36.83	725	32.74	1921

Note: The balance to 100% will be the percentage of passed students.

Table 55. Percentages of Failed Students at Each Level of Mother's Education by Type of Primary School Graduated and Type of Middle School Attending

SECOND GRADE									
City Middle School	Level of Mother's Education	City-Town Primary School		Village Primary School		Total		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	I	20.90	244	33.07	251	27.07	495		
	II	18.54	383	28.05	82	20.22	465		
	III	15.79	19	0.00	0	15.79	19		
	IV	0.00	13	0.00	0	0.00	13		
	CN	40.00	5	42.86	7	41.67	12		
	Total	19.13	664	32.06	340	23.51	1004		
-----									
Town Middle School	I	25.42	118	23.81	84	24.75	202		
	II	18.46	65	5.56	18	15.66	83		
	III	0.00	2	0.00	0	0.00	2		
	IV	0.00	1	0.00	0	0.00	1		
	CN	100.00	3	100.00	1	100.00	4		
	Total	23.81	189	21.36	103	22.95	292		
-----									
Middle School Total	I	22.38	362	30.75	335	26.40	697		
	II	18.53	448	24.00	100	19.53	548		
	III	14.29	21	0.00	0	14.29	21		
	IV	0.00	14	0.00	0	0.00	14		
	CN	62.50	8	50.00	8	56.25	16		
	Total	20.16	853	29.57	443	23.38	1296		

Table 56. Percentages of Failed Students at Each Level of Mother's Education by Type of Primary School Graduated and Type of Middle School Attending

		THIRD GRADE					
Level of Mother's Education		City-Town Primary School		Village Primary School		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School,	I	17.05	176	28.67	143	22.26	319
	II	21.60	287	27.54	69	22.75	356
	III	26.32	19	0.00	1	25.00	20
	IV	12.50	8	0.00	1	11.11	9
	CN	33.33	15	14.29	14	24.13	29
	Total	20.40	505	27.19	228	22.51	733
<hr/>							
Town Middle School	I	29.33	75	15.22	46	23.97	121
	II	11.76	34	7.14	14	10.42	48
	III	0.00	1	0.00	0	0.00	1
	IV	0.00	0	0.00	0	0.00	0
	CN	0.00	1	0.00	9	0.00	10
	Total	23.42	111	11.59	69	18.89	180
<hr/>							
Middle School Total	I	20.72	251	25.40	189	22.73	440
	II	20.56	321	24.10	83	21.18	404
	III	25.00	20	0.00	1	23.81	21
	IV	12.50	8	0.00	1	11.11	9
	CN	31.25	16	8.70	23	17.94	39
	Total	20.94	616	23.57	297	21.80	913

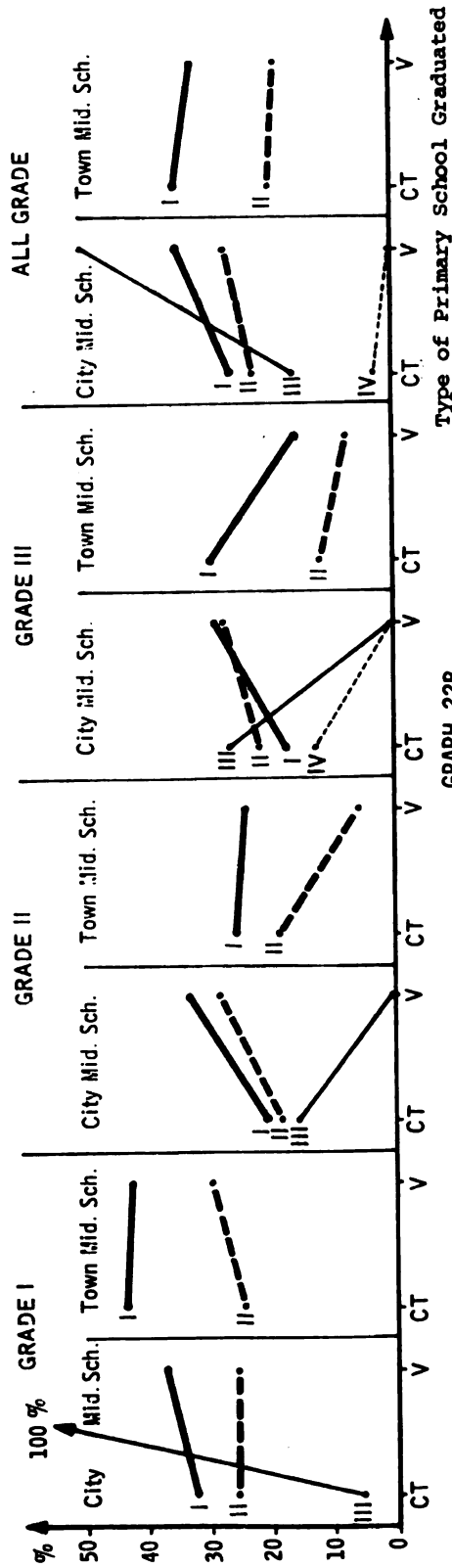
Table 57. Percentages of Failed Students at Each Level of Mother's Education by Type of Primary School Graduated and Type of Middle School Attending

ALL GRADES							
	Level of Mother's Education	City-Town Primary School		Village Primary School		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	I	25.99	885	34.35	821	30.01	1706
	II	22.22	1107	26.92	260	23.12	1367
	III	15.79	57	50.00	2	16.95	59
	IV	2.56	39	0.00	1	2.50	40
	CN	46.15	39	41.86	43	43.90	82
	Total	23.70	2127	32.92	1127	26.89	3254
Town Middle School	I	34.38	349	31.52	257	33.17	606
	II	19.77	177	18.18	66	19.34	243
	III	0.00	4	0.00	1	0.00	5
	IV	0.00	1	0.00	0	0.00	1
	CN	57.14	7	28.57	14	38.10	21
	Total	29.55	538	28.70	338	29.22	876
Middle School Total	I	28.36	1234	33.67	1078	30.84	2312
	II	21.88	1284	25.15	326	22.55	1610
	III	14.75	61	33.33	3	15.63	64
	IV	2.50	40	0.00	1	2.44	41
	CN	47.83	46	38.60	57	42.71	103
	Total	24.88	2665	31.95	1465	27.38	4130



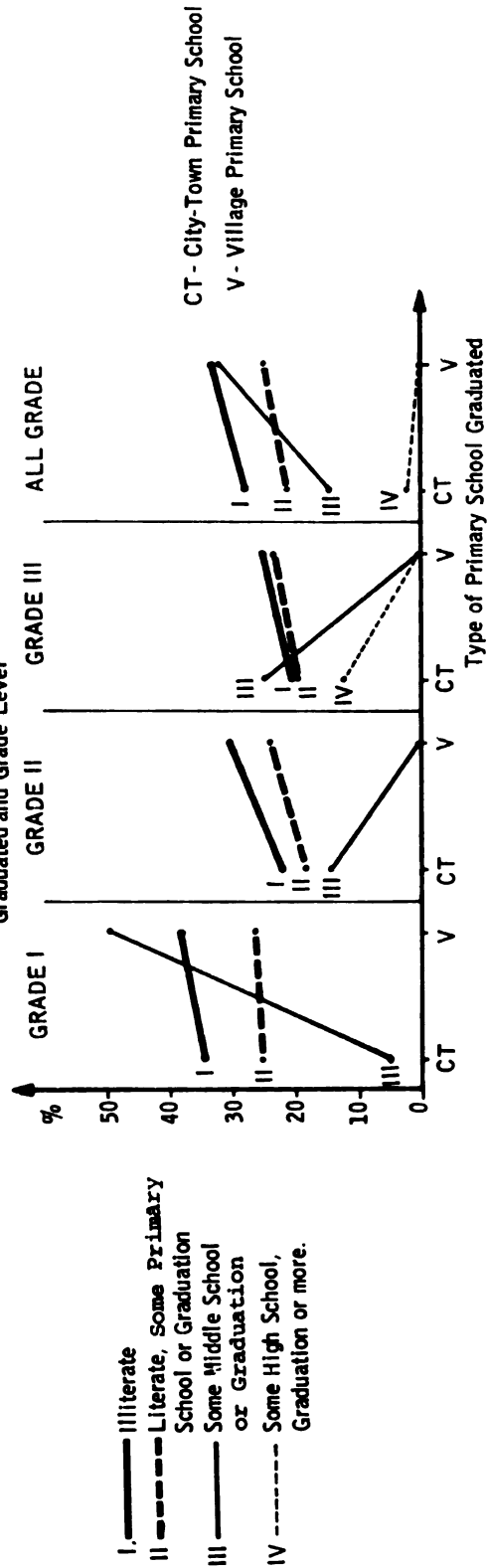
GRAPH 22A

Percentages of FAILED Students At Each Level of Mother's Education by Type of Primary School Graduated, Type of Middle School and Grade Level



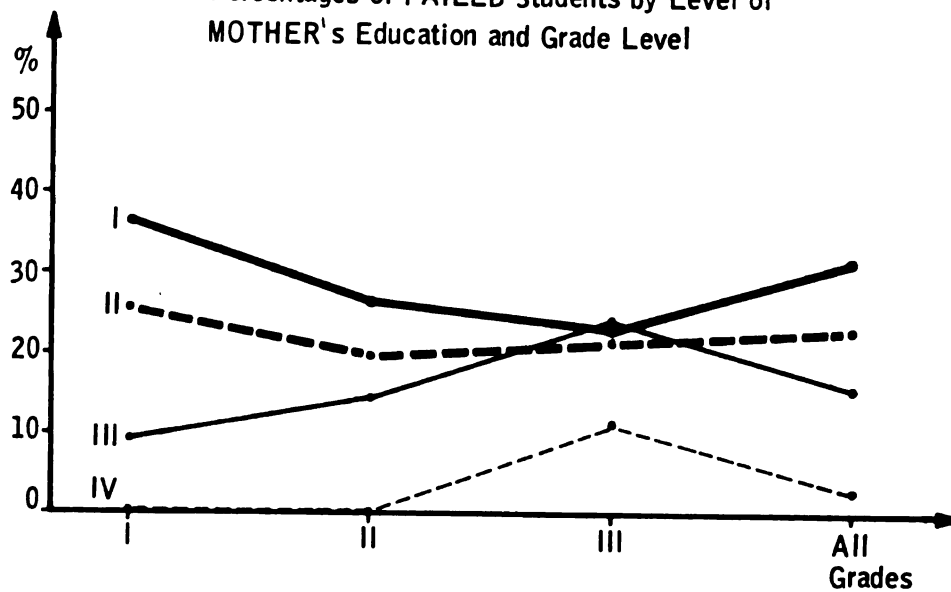
GRAPH 22B

Percentages of FAILED Students At Each Level of Mother's Education by Type of Primary School Graduated and Grade Level



GRAPH 22C

Percentages of FAILED Students by Level of  
MOTHER's Education and Grade Level



Key: I = Illiterate

II = Literate, some primary school or graduation

III = Some middle school or graduation

IV = Some high school, graduation or more

Table 58A. Results of Chi-square Test of Significance Between Level of Mother's Education and Success by Sex, Type of Primary School Graduated, Type of Middle School Attending and Grade Level

Grades	Type of Middle School	Sex		Type of Primary School Graduated		
		Girls	Boys	City-Town	Village	Total
I	City	-.-	-.-	-.-	-.-	-.-
	Town	6.81+*	-.-	-.-	-.-	-.-
	Total	-.-	-.-	-.-	-.-	-.-
II	City	-.-	-.-	-.-	-.-	-.-
	Town	-.-	-.-	-.-	-.-	-.-
	Total	-.-	-.-	-.-	-.-	-.-
III	City	-.-	-.-	-.-	-.-	.77
	Town	-.-	3.08*	-.-	-.-	-.-
	Total	-.-	-.-	-.-	-.-	.92
All Grades	City	-.-	17.13+	15.49+	-.-	33.47+
	Town	-.-	-.-	-.-	-.-	-.-
	Total	-.-	24.74+	28.32+	-.-	50.25+

+ P < .05, d.f. = 3

\* Computed with 1 d.f.

Note: -. = No test is applied due to the cell(s) with small or zero value.

Table 58B. The Rank Order of the Deviations of Failing in Middle School by the Level of Mother's Education in Those Sub-populations for Which the Obtained Chi-square Test Value is Found to Be Significant

Grade	Type of Middle School	Sex or Type of Primary School	The Rank Order of Percentages of Failing*			
			1st	2nd	3rd	4th
I	Town	Girls	I	II		
III	Town	Boys	I	II		
All Grades	City	Boys	I	II	III	IV
	City	Total	I	II	III	IV
	Total	Boys	I	II	III	IV
	Total	Total	I	II	III	IV
All Grades	City	City-Town	I	II	III	IV
	Total	City-Town	I	II	III	IV

\*Ordered from 1st to 4th by decreasing percentages of failure.

Key: I = Illiterate  
 II = Literate, some primary school or graduation  
 III = Some middle school or graduation  
 IV = Some high school, graduation or more

### Summary Outcomes of Part III D

#### A. Level of Mother's Education and Success

##### 1. The major finding

###### a. The null hypothesis (Hypothesis No. 6d)

The level of Mother's Education of the students is not related to their success in middle school.

###### b. Obtain statistics and finding

$$\chi^2 (.05) \text{ 3 d.f.} = 7.82$$

$$\text{Obtained } \chi^2 = 50.25$$

Therefore, the null hypothesis is rejected.

###### c. Direction of the deviation

Related data presented in Tables 51 and 57 show that the students who have mothers with lower levels of education are more likely to be failing in middle school than the students whose mothers have higher levels of education, as expected by Hypothesis No. 6d.

##### 2. Other findings

Sub-groups for which the obtained  $\chi^2$  values (presented in Table 58A) are significant, are listed and the deviations for each sub-groups (presented in Tables 48, 50, 71 and 57) are shown in Table 58B. The students' background factor (level of mother's education) that are found to be significantly related to success in middle school for listed sub-groups are marked under four column heads; the level of mother's education with the highest percentage of failing is put under 1st, and the lowest percentage of failing is put under 4th.

## Section E

### Number of Previous Failures

#### Introduction

As explained in Chapter I (see page 42, in this study), failure in the present school year, 1970-1971, is used as a dependent variable; but the failure(s) that has happened to a student in the previous years in middle school, then it was assumed that in 1970-1971 school year it works as an independent variable and may be related to the failure in this school year. So in this study, the failure in 1970-1971 school year is used as a dependent variable, but the previous years' failure(s) as an independent variable. The failure(s) that had happened to a student in primary school is not taken into consideration.

The number of sub-levels of the factor, number of previous failures, increases as the grade level increases due to the promotion regulation in the Turkish middle schools. In this study the students with two or three previous failures are counted in the same level at the second grade, and the students with three and more previous failures are counted in the same level at the third grade. Therefore, the factor has two levels at the first grade, three levels at the second grade, and four levels at the third grade. As a result, this section does not have a separate table for the combined population (e.g., the total of all grades).

The data on the factor, number of previous failures, are presented in the following order:

1. The student composition data by level of number of previous failures and sex are presented in Tables 59A-B. The same data are illustrated in Graphs 23A-B. The results of Chi-square Test are given in Table 60.

2. The percentages of failed students by level of number of previous failures and sex are presented in Tables 61-63, and illustrated in Graphs 24A-B.

3. The student body composition data by level of number of previous failures and type of primary school from which graduated are presented in Tables 64A-B. The data also are illustrated in Graphs 25A-B. The results of Chi-square Test are given in Table 65.

4. The percentage of failed students by level of number of previous failures and type of primary school graduated are presented in Tables 66-68, and illustrated in Graphs 26A-B-C.

5. The results of Chi-square Test are given in Table 69A, and the findings are presented. Deviations of failing are given in Table 69B.

Table 59A. Vertical Percentages of Girls and Boys at Each Level of Number of Previous Failures by Type of Middle School Attending and Grade Level

		First Grade			Second Grade			Third Grade		
		Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total
City Middle School	Number of Previous Failures									
	None	78.96	73.77	75.29	69.89	68.25	68.72	67.98	57.22	60.58
	1	21.04	26.23	24.71	27.69	23.49	24.70	23.68	23.17	23.32
	2	-	-	-	2.42	8.26	6.58	6.14	11.49	9.82
	3	-	-	-	-	-	-	2.20	8.12	6.28
Total		442	1075	1517	289	715	1004	228	505	733
Town Middle School	None	89.48	83.44	85.14	77.64	58.45	64.04	51.73	51.00	51.11
	1	10.52	16.56	14.86	18.83	37.68	32.19	37.93	32.45	33.33
	2	-	-	-	3.53	3.87	3.77	10.34	16.55	15.56
	3	-	-	-	-	-	-	0.00	0.00	0.00
	Total	114	290	404	85	207	292	29	151	180
Middle School	None	81.11	75.82	77.36	71.65	66.05	67.67	66.14	55.79	58.70
	1	18.89	24.18	22.64	25.67	26.68	26.39	25.29	25.30	25.30
	2	-	-	-	2.68	7.27	5.94	6.62	12.65	10.96
	3	-	-	-	-	-	-	1.95	6.26	5.04
	Total	556	1365	1921	374	922	1296	257	656	913

Key: First Grade: None = no previous failure; 1 = one previous failure

Second Grade: None = no previous failure; 1 = one previous failure; 2 = 2 or 3 previous failures

Third Grade: None = no previous failure; 1 = one previous failure; 2 = two previous failures;

3 = Three or more previous failures



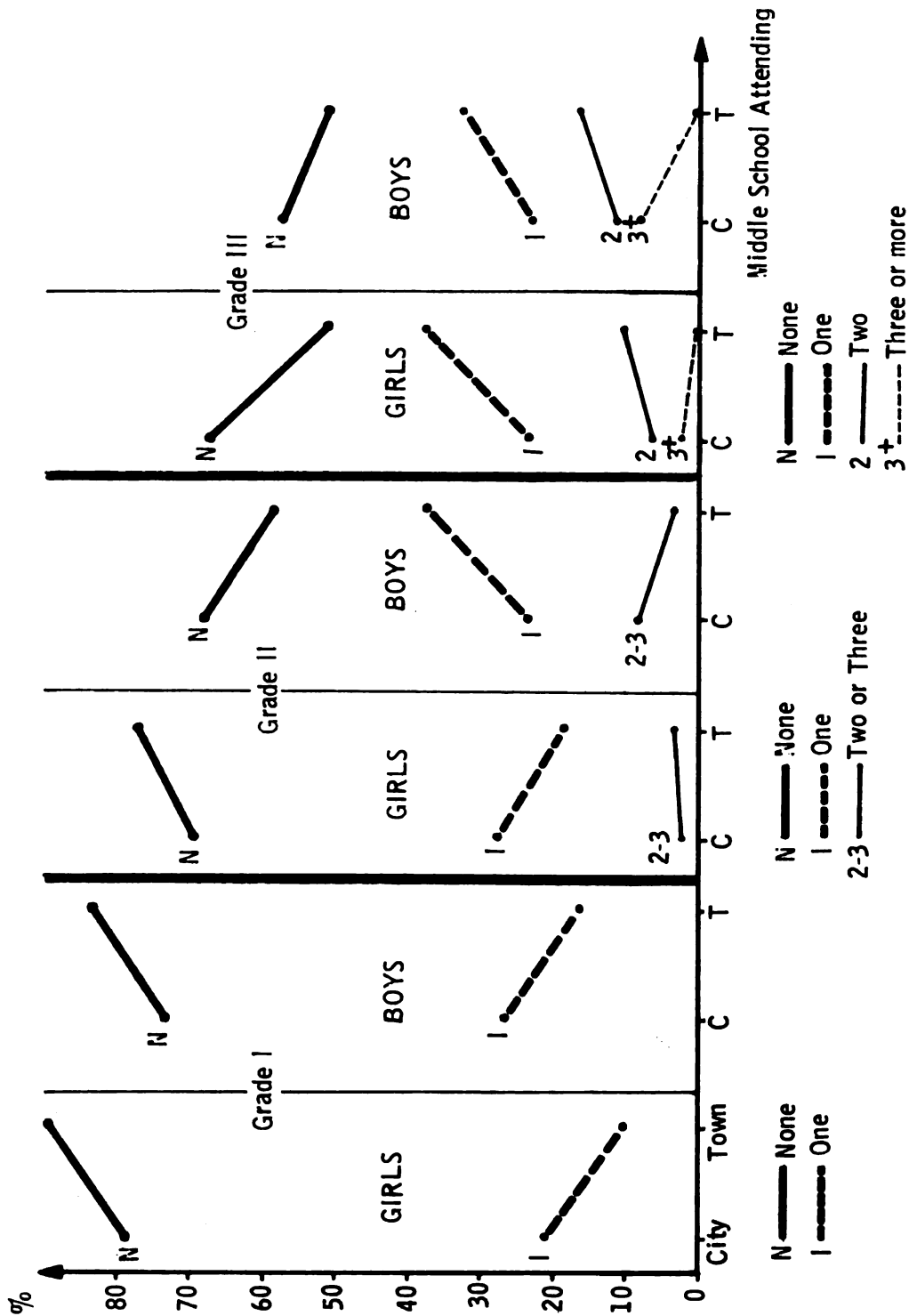
Table 59B. Horizontal Percentages of Girls at Each Level of Number of Previous Failures by Type of Middle School and Grade Level

	Number of Previous Failures	First Grade		Second Grade		Third Grade	
		Girls %	Total N	Girls %	Total N	Girls %	Total N
City Middle School	None	30.56	1142	29.28	690	34.91	444
	1	24.80	375	32.26	248	31.58	171
	2	-	-	10.61	66	19.44	72
	3	-	-	-	-	10.87	46
	Total	29.14	1517	28.78	1004	31.11	733
-----							
Town Middle School	None	29.65	344	35.29	187	16.30	92
	1	20.00	60	17.02	94	18.33	60
	2	-	-	27.27	11	10.71	28
	3	-	-	-	-	0.00	0
	Total	28.22	404	29.11	292	16.11	180
-----							
Middle School Total	None	30.35	1486	30.56	877	31.72	536
	1	24.14	435	28.07	342	28.14	231
	2	-	-	12.99	77	17.00	100
	3	-	-	-	-	10.87	46
	Total	28.94	1921	28.86	1296	28.15	913

Note: The balance to 100% will be the percentage of boys.

GRAPH 23A

Vertical Percentages of GIRLS and BOYS at Each Level of Number of Previous Failures by Type of Middle School and Grade Level



**GRAPH 23B**  
**Horizontal Percentages of GIRLS At Each Level of Number of Previous Failures by Type of Middle School and Grade Level**

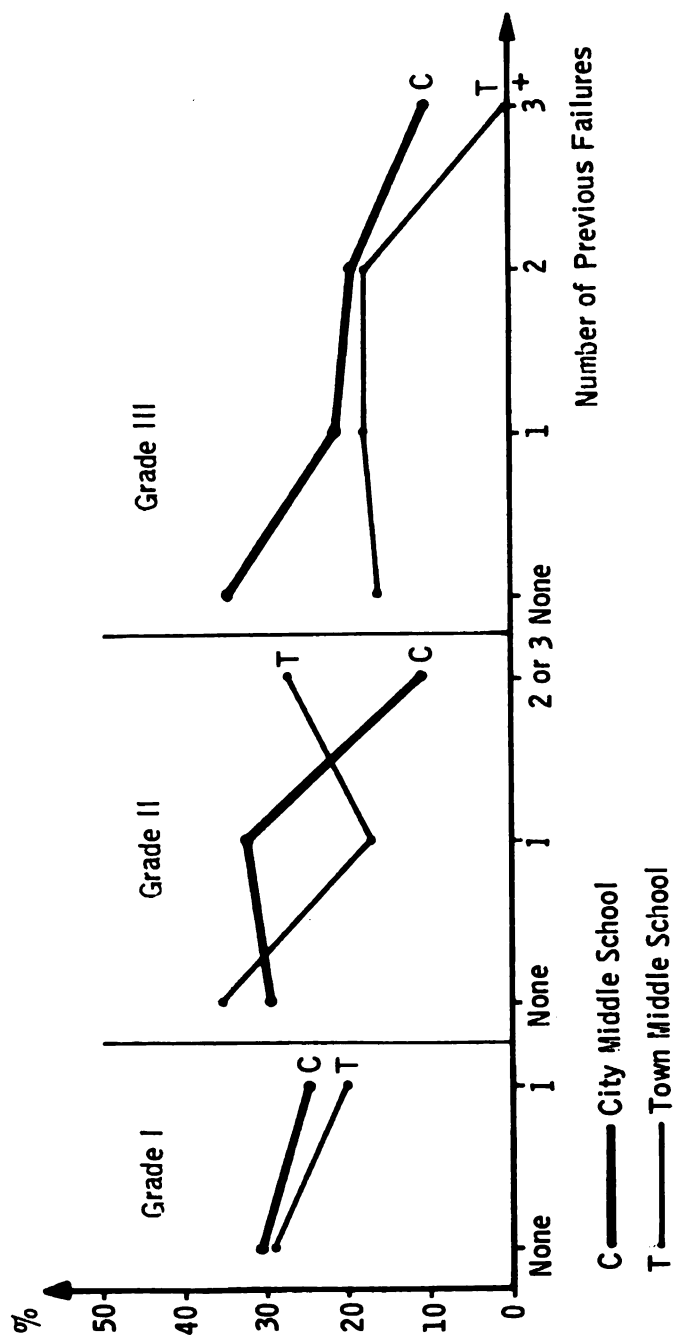


Table 60. Results of Chi-square Test of Significance Between Sex and Number of Previous Failures by Type of Middle School Attending and Grade Level

Type of Middle School	Grade Level		
	First <sup>(1)</sup>	Second <sup>(2)</sup>	Third <sup>(3)</sup>
City	4.54*	12.18*	16.38*
Town	2.35	-.-	-.-
Total	6.31*	10.79*	16.31*
*P < .05	(1)d.f. = 1	(2)d.f. = 2	(3)d.f. = 3

Table 61. Percentages of Failed Students at Each Level of Number of Previous Failures by Sex and Type of Middle School

FIRST GRADE								
	Number of Previous Failures	Girls		Boys		Total		Total N
		Failed %	Total N	Failed %	Total N	Failed %	Total N	
City Middle School	None	22.06	349	40.93	793	35.03	1142	
	1	17.20	93	20.57	282	19.73	375	
	Total	21.04	442	35.44	1075	31.25	1517	
Town Middle School	None	29.41	102	40.50	242	37.21	344	
	1	25.00	12	50.00	48	45.00	60	
	Total	28.95	114	42.07	290	38.37	404	
Middle School Total	None	23.73	451	40.68	1035	35.53	1486	
	1	18.10	105	24.85	330	23.22	435	
	Total	22.66	556	36.85	1365	32.74	1921	

Note: The balance to 100% will be the percentage of passed students.

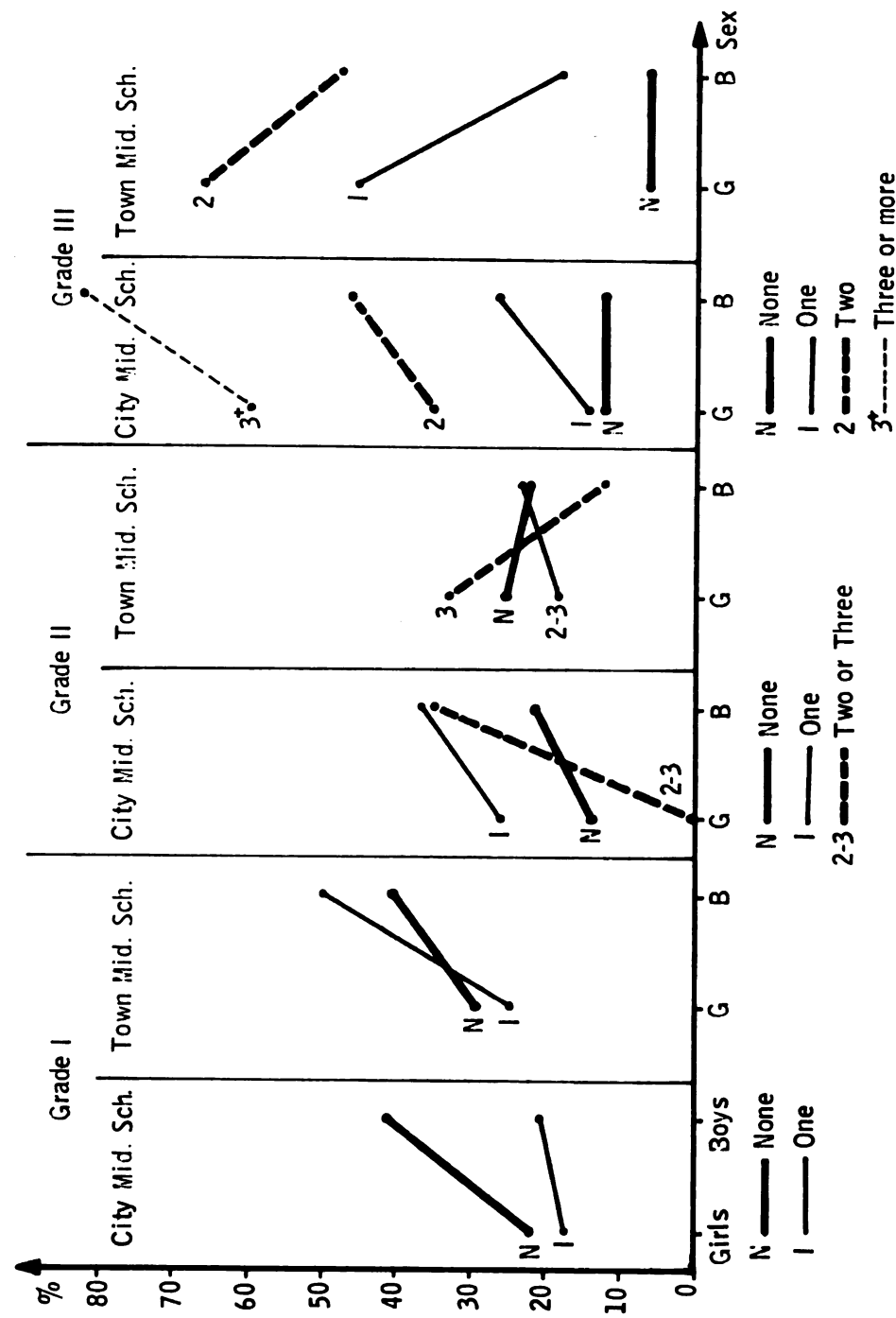
Table 62. Percentages of Failed Students at Each Level of Number of Previous Failures by Sex and Type of Middle School

		SECOND GRADE					
	Number of Previous Failures	Girls		Boys		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	None	13.86	202	21.31	488	19.13	690
	1	26.25	80	36.90	168	33.47	248
	2-3	0.00	7	35.59	59	31.82	66
	Total	16.96	289	26.15	715	23.51	1004
-----							
Town Middle School	None	25.76	66	22.31	121	23.53	187
	1	18.75	16	23.08	78	22.34	94
	2-3	33.33	3	12.50	8	18.18	11
	Total	24.71	85	22.22	207	22.95	292
-----							
Middle School Total	None	16.79	268	21.51	609	20.07	877
	1	25.00	96	32.52	246	30.41	342
	2-3	10.00	10	32.84	67	29.87	77
	Total	18.72	374	25.27	922	23.38	1296

Table 63. Percentages of Failed Students at Each Level of Number of Previous Failures by Sex and Type of Middle School

THIRD GRADE									
	Number of Previous Failures	Girls		Boys		Total		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	None	12.90	155	12.80	289	12.84	444		
	1	14.81	54	26.50	117	22.81	171		
	2	35.71	14	46.55	58	44.44	72		
	3+	60.00	5	82.93	41	80.43	46		
	Total	15.79	228	25.54	505	22.51	733		
-----									
Town Middle School	None	6.67	15	6.49	77	6.52	92		
	1	45.45	11	18.37	49	23.33	60		
	2	66.67	3	48.00	25	50.00	28		
	3+	0.00	0	0.00	0	0.00	0		
	Total	27.59	29	17.22	151	18.89	180		
-----									
Middle School Total	None	12.35	170	11.48	366	11.75	536		
	1	20.00	65	24.10	166	22.94	231		
	2	41.18	17	46.99	83	46.00	100		
	3+	60.00	5	82.93	41	80.43	46		
	Total	17.12	257	23.63	656	21.80	913		

GRAPH 24A  
Percentages of FAILED Students At Each Level of Number  
of Previous Failures by Sex, Type of Middle School and Grade Level





GRAPH 24B

Percentages of FAILED Students At Each Level of  
Number of Previous Failures by Sex and Grade Level

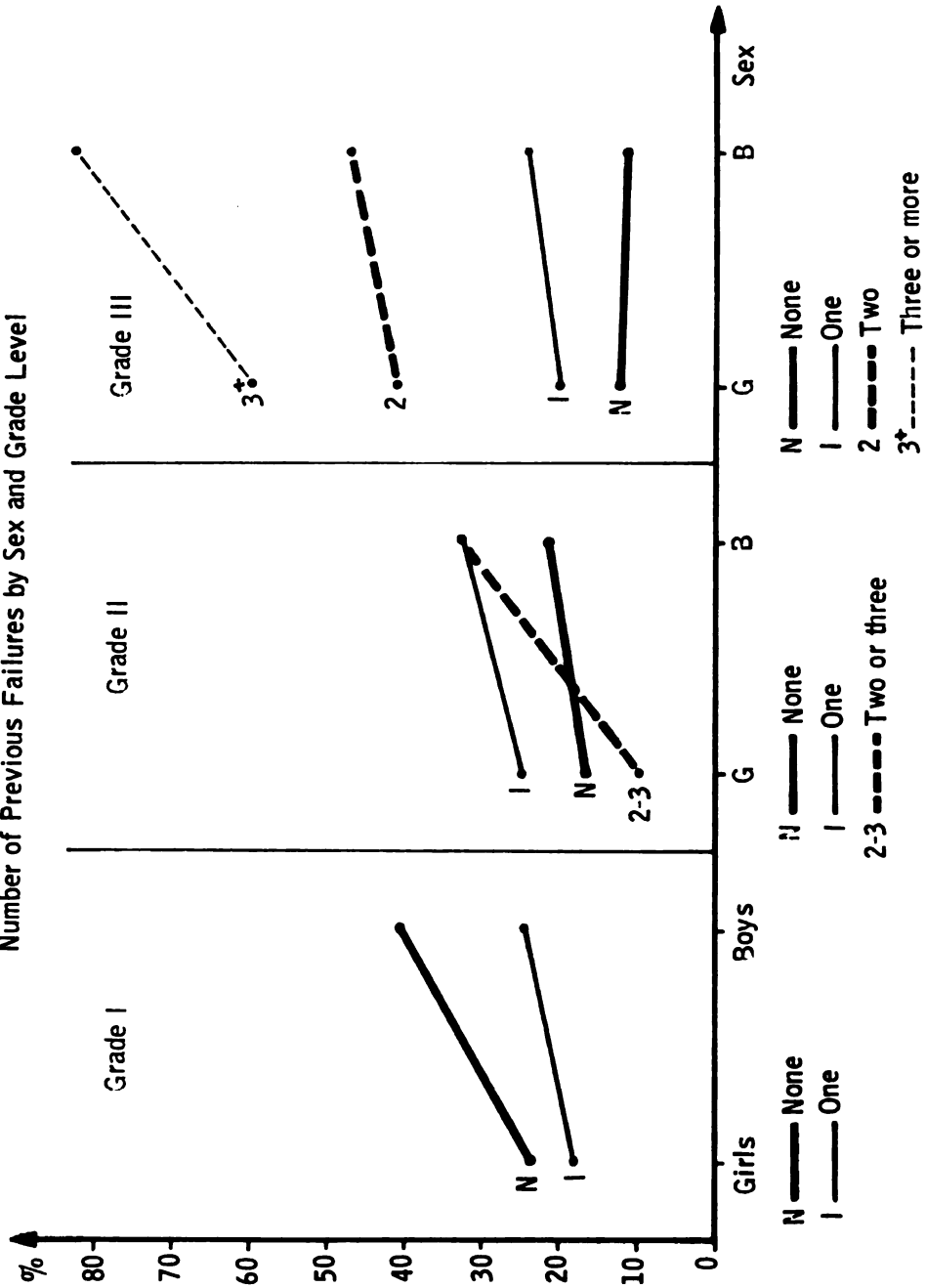


Table 64A. Vertical Percentages of City-Town and Village Primary School Graduates at Each Level of Number of Previous Failures by Type of Middle School Attending and Grade Level

	Number of Previous Failures	First Grade			Second Grade			Third Grade		
		CT*	V**	Total	CT	V	Total	CT	V	Total
		%	%	N	%	%	N	%	%	N
City Middle School	None	77.13	72.10	75.29	69.42	67.36	68.72	64.55	51.75	60.58
	1	22.87	27.90	24.71	24.70	24.70	24.70	24.16	21.49	23.32
	2	-	-	-	5.88	7.94	6.58	8.12	13.60	9.82
	3	-	-	-	-	-	-	3.17	13.16	6.28
	Total	958	559	1517	664	340	1004	505	228	733
Town Middle School	None	88.23	80.72	85.14	64.02	64.08	64.04	46.85	57.97	51.11
	1	11.77	19.28	14.86	31.75	33.01	32.19	36.08	28.99	33.33
	2	-	-	-	4.23	2.91	3.77	17.12	13.04	15.56
	3	-	-	-	-	-	-	0.00	0.00	0.00
	Total	238	166	404	189	103	292	111	69	180
Middle School Total	None	79.34	74.07	77.36	68.22	66.59	67.67	61.36	53.20	58.70
	1	20.66	25.93	22.64	26.27	26.64	26.39	26.30	23.23	25.30
	2	-	-	-	5.51	6.77	5.94	9.74	13.47	10.96
	3	-	-	-	-	-	-	2.60	10.10	5.04
	Total	1196	725	1921	853	443	1296	616	297	913

\*CT. = City-Town Primary School Graduates

\*\*V = Village

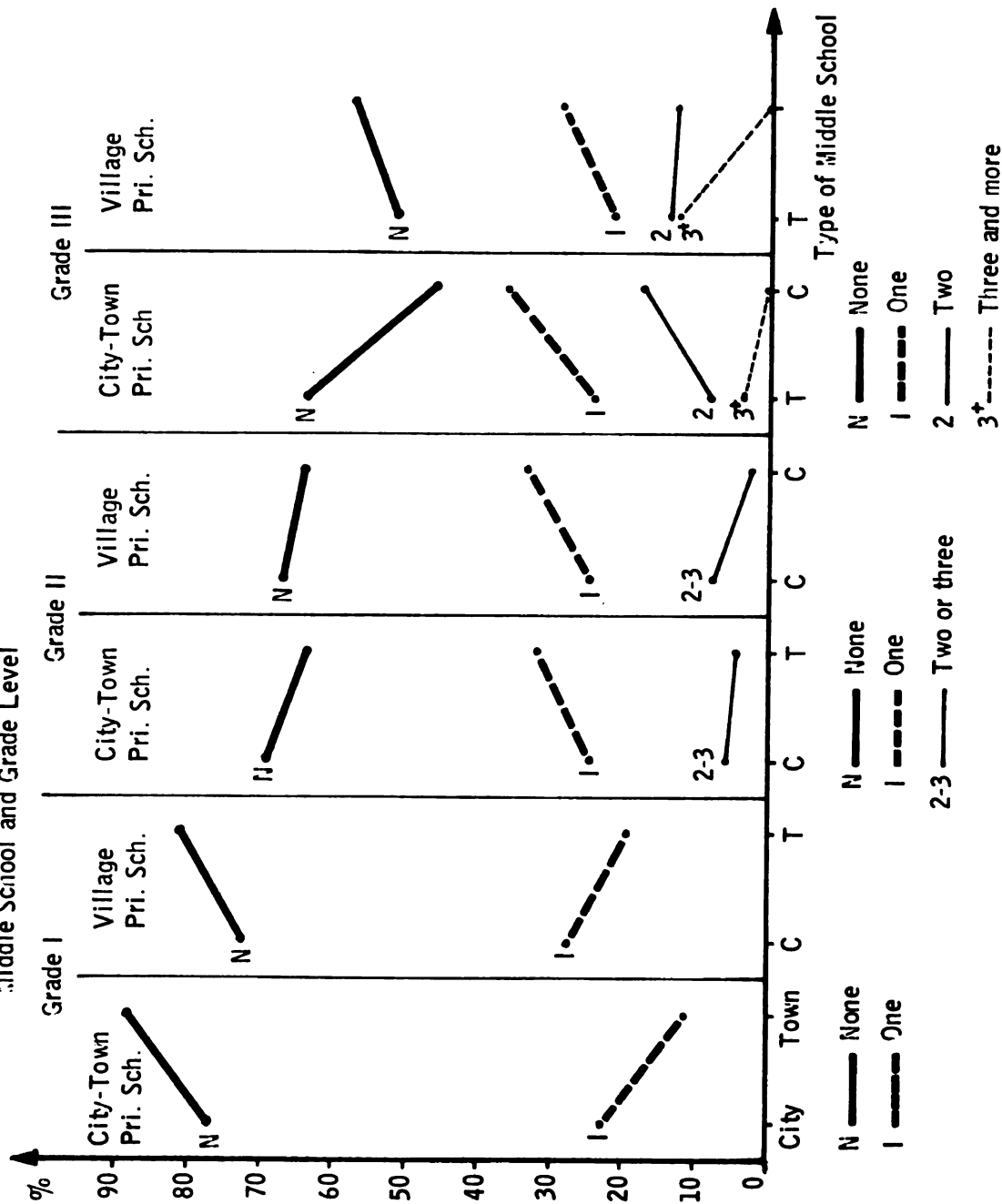
Key: See the key in Table 59A.

Table 64B. Horizontal Percentages of Village Primary School Graduates at Each Level of Number of Previous Failures by Type of Middle School Attending and Grade Level

	Number of Previous Failures	First Grade		Second Grade		Third Grade	
		V	%	V	%	V	%
City Middle School	None	35.29		33.19		26.58	
	1	41.60		33.88		28.66	
	2	-		40.90		43.06	
	3	-		-		65.21	
	Total	36.84		33.87		31.10	
Town Middle School	None	38.96		35.30		43.48	
	1	53.33		36.18		33.33	
	2	-		27.28		32.14	
	3	-		-		0.00	
	Total	41.09		35.28		38.33	
Middle School Total	None	36.13		33.63		29.48	
	1	43.21		34.50		29.88	
	2	-		38.97		40.00	
	3	-		-		65.21	
	Total	37.74		34.19		32.53	

GRAPH 25A

Vertical Percentages of CITY-TOWN and VILLAGE PRIMARY SCHOOL  
Graduates At Each Level of Number of Previous Failures by Type of  
Middle School and Grade Level



**GRAPH 25B**  
**Horizontal Percentages of VILLAGE PRIMARY School Graduates**  
**At Each Level of Previous Failures by Type of**  
**Middle School and Grade Level**

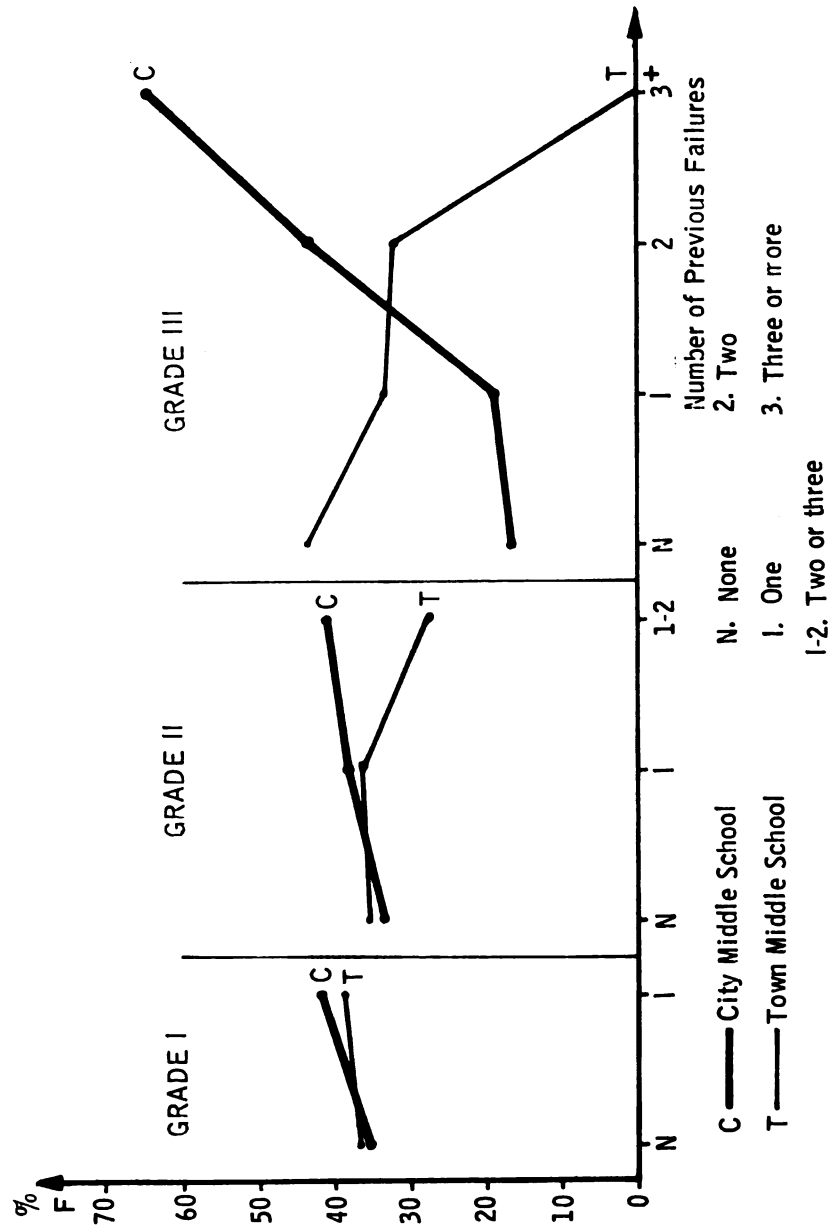


Table 65. Results of Chi-square Test of Significance Between Type of Primary School Graduated and Number of Previous Failures by Type of Middle School Graduated and Grade Level

Type of Middle School	Grade Level		
	First <sup>(1)</sup>	Second <sup>(2)</sup>	Third <sup>(3)</sup>
City	4.83*	1.60	34.50*
Town	4.36*	-. -	2.12
Total	7.18*	.91	27.96*
*P < .05	(1)d.f. + 1	(2)d.f. = 2	(3)d.f. = 3

Table 66. Percentages of Failed Students at Each Level of Number of Previous Failures by Type of Primary School Graduated and Type of Middle School

FIRST GRADE									
	Number of Previous Failures	City-Town Primary School		Village Primary School		Total		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	None	31.80	739	40.94	403	35.03	1142		
	1	17.81	219	22.44	156	19.73	375		
	Total	28.60	958	35.78	559	31.25	1517		
<hr/>									
Town Middle School	None	35.71	210	39.55	134	37.21	344		
	1	46.43	28	43.75	32	45.00	60		
	Total	36.97	238	40.36	166	38.37	404		
<hr/>									
Middle School Total	None	32.67	949	40.60	537	35.53	1486		
	1	21.05	247	26.06	188	23.22	435		
	Total	30.27	1196	36.83	725	32.74	1921		

Table 67. Percentages of Failed Students at Each Level of Number of Previous Failures by Type of Primary School Graduated and Type of Middle School

SECOND GRADE							
	Number of Previous Failures	City-Town Primary School		Village Primary School		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	None	14.75	461	27.95	229	19.13	690
	1	30.49	164	39.29	84	33.47	248
	2-3	23.08	39	44.44	27	31.82	66
	Total	19.13	664	32.06	340	23.51	1004
<hr/>							
Town Middle School	None	24.79	121	21.21	66	23.53	187
	1	21.67	60	23.53	34	22.34	94
	2-3	25.00	8	0.00	3	18.18	11
	Total	23.81	189	21.36	103	22.95	292
<hr/>							
Middle School Total	None	16.84	582	26.44	295	20.07	877
	1	28.13	224	34.75	118	30.41	342
	2-3	23.40	47	40.00	30	29.87	77
	Total	20.16	853	29.57	443	23.38	1296

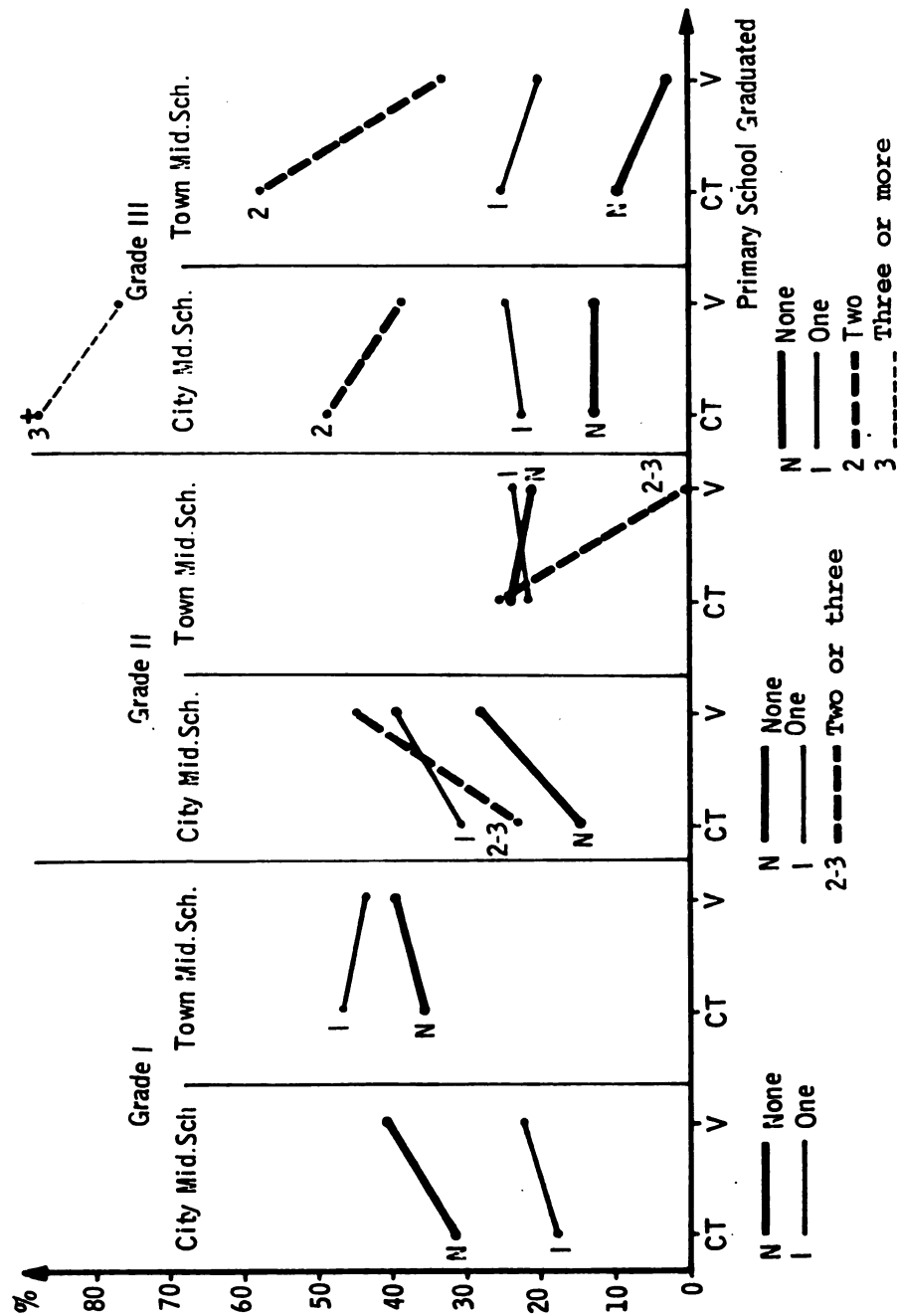


Table 68. Percentages of Failed Students at Each Level of Number of Previous Failures by Type of Primary School Graduated and Type of Middle School

THIRD GRADE									
	Number of Previous Failures	City-Town Primary School		Village Primary School		Total		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	None	12.88	326	12.71	118	12.84	444		
	1	22.13	122	24.49	49	22.81	171		
	2+	48.78	41	38.71	31	44.44	72		
	3	87.50	16	76.67	30	80.43	46		
	Total	20.40	505	27.19	228	22.51	733		
-----									
Town Middle School	None	9.62	52	2.50	40	6.52	92		
	1	25.00	40	20.00	20	23.33	60		
	2+	57.89	19	33.33	9	50.00	28		
	3	0.00	0	0.00	0	0.00	0		
	Total	23.42	111	11.59	69	18.89	180		
-----									
Middle School Total	None	12.43	378	10.13	158	11.75	536		
	1	22.84	162	23.19	69	22.94	231		
	2+	51.67	60	37.50	40	46.00	100		
	3	87.50	16	76.67	30	80.43	46		
	Total	20.94	616	23.57	297	21.80	913		

GRAPH 26A

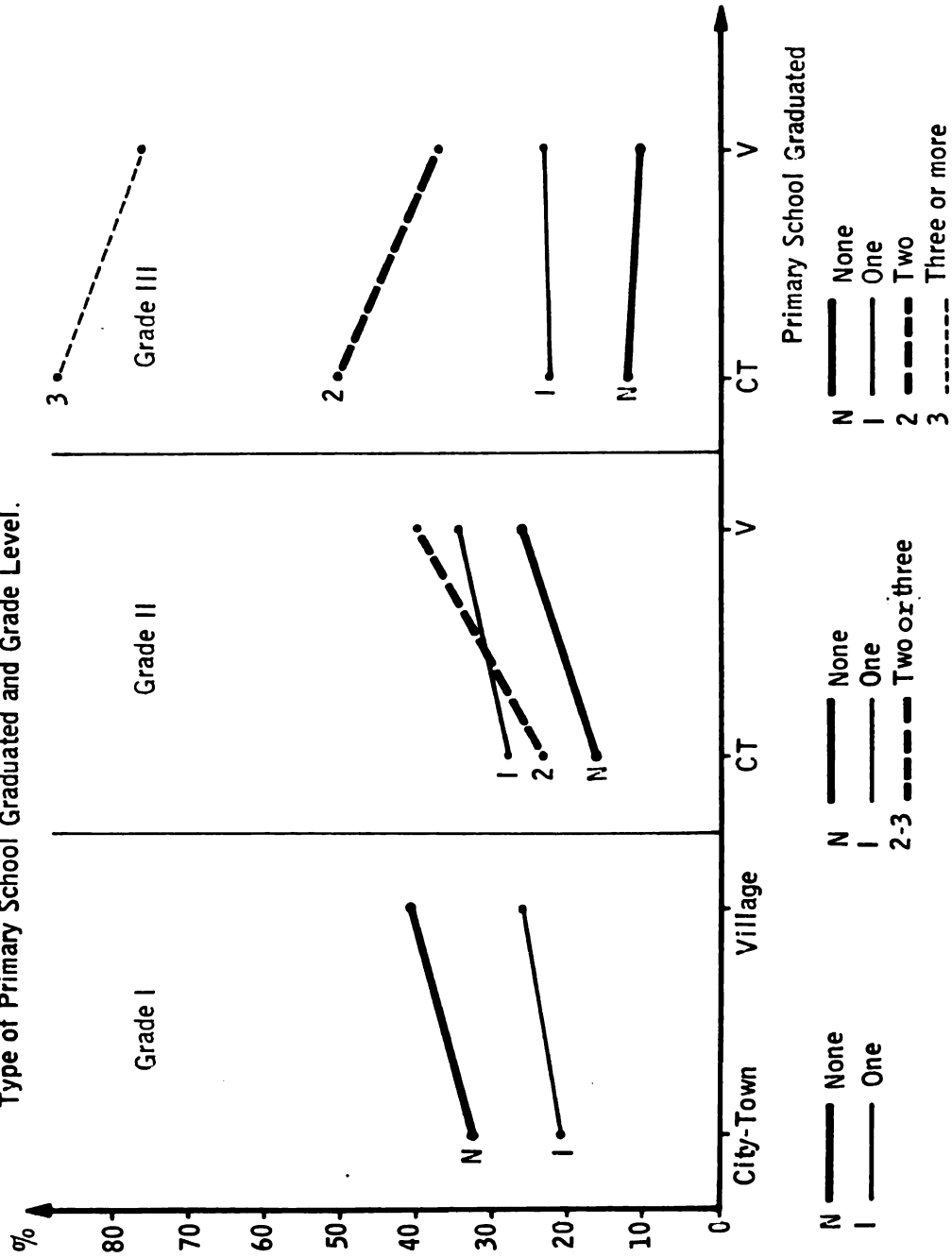
Percentages of FAILED Students at Each Level of Number of Previous Failures by Type of Primary School Graduated, Type of Middle School and Grade Level

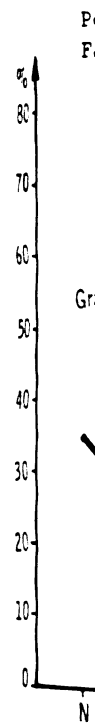


Percentages of FAILED Students at Each Level of Number of Previous Failures by  
Type of Primary School Graduated and Grade Level.

GRAPH 26B

Percentages of FAILED Students at Each Level of Number of Previous Failures by Type of Primary School Graduated and Grade Level.





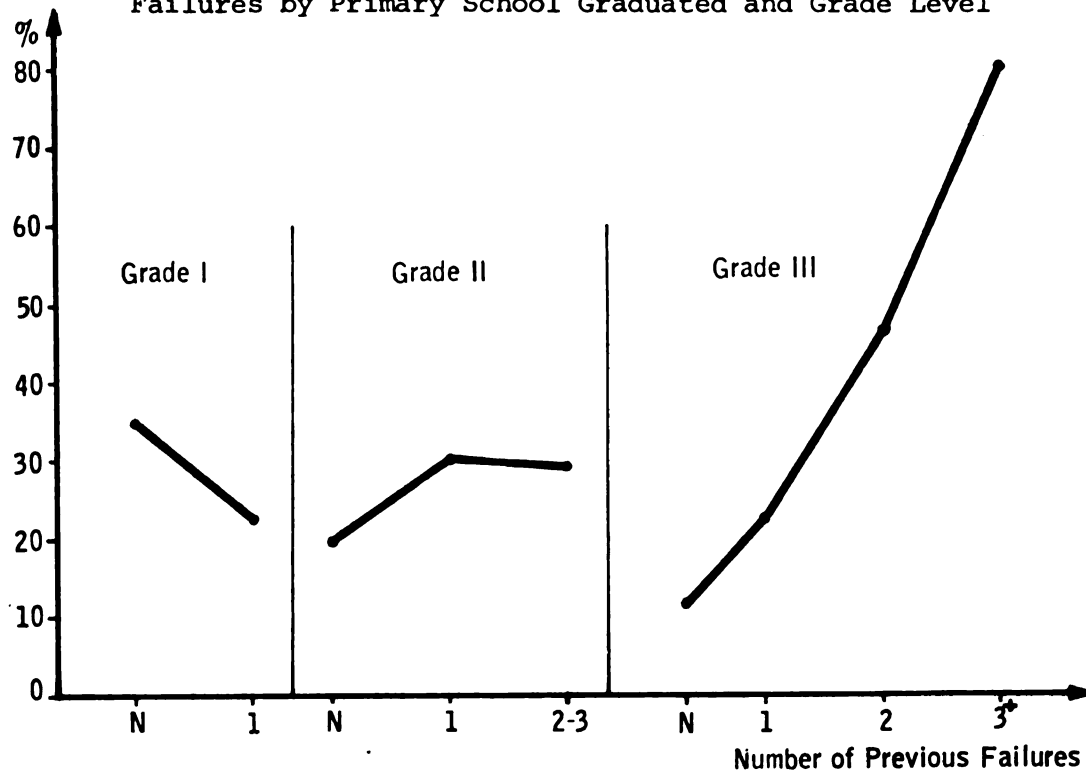
Key: First  
N =  
1 =

Second  
N =  
1 =  
2-3

Thin  
N =  
1 =  
2 =  
3+ =

GRAPH 26C

Percentages of FAILED Students by Number of Previous Failures by Primary School Graduated and Grade Level



**Key:** First Grade

N = No previous failure

1 = One previous failure

Second Grade

N = No previous failure

1 = One previous failure

2-3 = Two or three previous failures

Third Grade

N = No previous failure

1 = One previous failure

2 = Two previous failures

3+ = Three or more previous failures

Table 69A. Results of Chi-square Test of Significance Between Number of Previous Failures and Successes by Sex, Type of Primary School Graduated, Type of Middle School and Grade Level

[illegible]

Table 69A. Results of Chi-square Test of Significance Between Number of Previous Failures and Success by Sex, Type of Primary School Graduated, Type of Middle School and Grade Level

Grades	Type of Middle School	d.f.	Sex		Type of Primary School			
			Girls	Boys	Graduated		Total	
					City-Town	Village		
I	City	1	1.04	36.97*	16.19*	16.76*	30.73*	
	Town	1	--	1.48	1.22	.19	1.31	
	Total	1	1.54	26.94*	12.52*	12.64*	23.17*	
II	City	2	--	18.70*	19.79*	5.69	23.57*	
	Town	2	.46	.47	.22	--	.20	
	Total	2	3.64	13.44*	13.12*	4.47	16.61*	
III	City	3	12.54*	109.16*	76.28*	51.84*	132.16*	
	Town	3	7.34	22.88*(x)	18.17*(x)	8.76*(x)	27.65*(x)	
	Total	3	16.52*	135.03*	93.90*	67.12*	159.05*	

\*P < .05

(x) Computed with 2 d.f.

Note: -. = No test is applied due to the cell(s) with small or zero value.



Table 69B.

Grade			
	T	M	S
I	C		
	C		
	T		
	T		
II	C		
	C		
	T		
	T		
III	C		
	C		
	C		
	To		
	To		
I	C		
	C		
	To		
	To		
II	Ci		
	To		
III	Ci		
	Ci		
	To		
	To		
	To		

\*Ordered from

Key: See t

**Table 69B. The Rank Order of Deviations of Failing in Middle School by Number of Previous Failures in Those Sub-populations for Which the Obtained Chi-square Test Value is Found to be Significant**

Grade	Type of Middle School	Sex or Type of Primary School	The Rank Order of Percentages of Failing*			
			1st	2nd	3rd	4th
I	City	Boys	None	1		
	City	Total	None	1		
	Total	Boys	None	1		
	Total	Total	None	1		
II	City	Boys	1	2-3	None	
	City	Total	1	2-3	None	
	Total	Boys	2-3	1	None	
	Total	Total	1	2-3	None	
III	City	Girls	3+	2	1	None
	City	Boys	3+	2	1	None
	City	Total	3+	2	1	None
	Total	Girls	3+	2	1	None
	Total	Boys	3+	2	1	None
	Total	Total	3+	2	1	None
I	City	City-Town	None	1		
	City	Village	None	1		
	Total	City-Town	None	1		
	Total	Village	None	1		
II	City	City-Town	1	2-3	None	
	Total	City-Town	1	2-3	None	
III	City	City-Town	3+	2	1	None
	City	Village	3+	2	1	None
	Town	City-Town	2	1	None	
	Town	Village	2	1	None	
	Total	City-Town	3+	2	1	None
	Total	Village	3+	2	1	None

\*Ordered from 1st to 4th by decreasing percentages of failing.

Key: See the key given for Graph 26.

Summary Out

A. Num

1.

Summary Outcomes of Part III EA. Number of Previous Failures and Success

## 1. Major finding

## a. The null hypothesis (Hypothesis No. 6e)

Number of previous failures that the students have experienced in middle school is not related to success in middle school through all grades.

## b. Obtained statistics and the finding

-First graders

$$\chi^2 (.05) \text{ d.f. } 1 = 3.84$$

$$\text{Obtained } \chi^2 = 23.17$$

Therefore, the null hypotheses is rejected.

-Second graders

$$\chi^2 (.05) \text{ d.f. } 2 = 5.99$$

$$\text{Obtained } \chi^2 = 16.61$$

Therefore, the null hypothesis is rejected.

-Third graders

$$\chi^2 (.05) \text{ d.f. } 3 = 7.82$$

$$\text{Obtained } \chi^2 = 159.05$$

Therefore, the null hypothesis is rejected.

## c. Direction of the deviation

Related data presented in Tables 61, 62, 63 and 66, 67, 68 shows that:

-in first grade, the students with no previous failure are more likely to be failing than the students with one previous failure, as against the expectation in hypothesis 6e;

-in second grade, percentage of failing is 20.07 for none, 30.41 for one and 29.87 for two or three previous failure levels;

2. 0

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-in third grade, the students with more previous failures are more likely to be failing than the students with less previous failures as expected by hypothesis 6e.

## 2. Other findings

Sub-groups for which the obtained  $\chi^2$  values (presented in Table 69A) are significant, are listed and the deviations for each sub-group (presented in Tables 61, 62, 62, 66, 67 and 68 are shown in Table 69B). The students background factors (number of previous failures) that are found to be significantly related to success in middle school for listed sub-groups are marked under four heads, ordered from 1st to 4th by decreasing percentages of failures.

Section F

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Section F

Number of Teachers at Primary School from Which  
Graduated

Introduction

This factor is the type of primary school from which graduated in terms of the number of teachers employed by the school during the time that the student attended.

A town primary school has at least five teachers and in general more than five teachers. A city primary school always has more than five teachers depending upon the capacity of the school building. There is not a maximum number of teachers that a primary school could employ. Village primary schools usually have teachers from one to five, but a big village might also have a primary school with more than five teachers. The number of village primary schools with more than five teachers is very small. A big village that has a primary school with six or more teachers might also have a middle school. In this study, a village with a middle school is accepted as a town (see Chapter I, page 52).

In this study, the number of students graduated from primary schools with from one to five teachers would be the village primary school graduates, and the students graduated from primary schools with six or more teachers would be city-town primary school graduates. Therefore, the data are not given in a separate group for the type of primary



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school from which graduated (city, town and village).

The data on the factor, number of teachers at primary school from which graduated, are presented in the following order:

1. The student composition data by level of number of teachers at primary school from which graduated and sex are presented in Tables 70A-B. The same data are illustrated in Graphs 27A-B. The results of Chi-square Test are given in Table 71.

2. The percentages of failed students by level of number of teachers at primary school from which graduated and sex are presented in Tables 72-75, and illustrated in Graphs 28A-B-C-D.

3. The results of Chi-square Test are given in Table 76A, and the findings are presented. Deviations of failing are given in Table 76B and some of the deviations of failing are illustrated in Graph 29.

Table 70A. Vertical Percentages of Girls and Boys by Number of Teachers at Primary School Graduated for Type of Middle School Attending and Grade Levels

	Number of		Third Grade
	First Grade	Second Grade	

Table 70A. Vertical Percentages of Girls and Boys by Number of Teachers at Primary School Graduated for Type of Middle School Attending and Grade Levels

Number of Teachers	First Grade			Second Grade			Third Grade		
	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total
City Middle School									
1	3.61	5.21	4.74	1.73	6.71	5.28	0.44	7.33	5.18
2	4.75	14.04	11.34	2.42	14.97	11.35	4.39	16.43	12.69
3	5.43	11.07	9.43	3.11	9.51	7.67	2.19	8.51	6.55
4	2.27	3.91	3.43	2.08	3.92	3.39	1.75	3.97	3.27
5	4.98	8.47	7.45	3.12	6.57	5.58	3.07	4.16	3.82
6	78.96	57.30	63.61	87.54	58.32	66.73	88.16	59.60	68.49
Total	<u>442</u>	<u>1075</u>	<u>1517</u>	<u>289</u>	<u>715</u>	<u>1004</u>	<u>228</u>	<u>505</u>	<u>733</u>
Town Middle School									
1	3.51	10.67	8.66	3.53	10.15	8.22	6.90	6.62	6.67
2	2.63	8.62	6.93	2.35	7.24	5.82	0.00	9.83	8.33
3	4.39	11.72	9.65	1.18	3.38	2.74	0.00	7.95	6.67
4	5.26	9.66	8.42	2.35	10.63	8.22	0.00	9.93	8.33
5	3.51	12.76	10.15	2.35	14.49	10.96	17.24	10.60	11.67
6	80.70	46.55	56.19	88.24	54.11	64.04	75.86	54.97	58.33
Total	<u>114</u>	<u>290</u>	<u>404</u>	<u>85</u>	<u>207</u>	<u>292</u>	<u>29</u>	<u>151</u>	<u>180</u>
Middle School Total									
1	3.60	6.37	5.57	2.14	7.48	5.94	1.17	7.16	5.48
2	4.32	12.89	10.41	2.41	13.23	10.11	3.89	14.94	11.83
3	5.21	11.21	9.47	2.67	8.14	6.56	1.94	8.38	6.57
4	2.88	5.13	4.48	2.14	5.42	4.47	1.56	5.34	4.27
5	4.67	9.38	8.02	2.94	8.35	6.79	4.67	5.64	5.37
6	79.32	55.02	62.05	87.70	57.38	66.13	86.77	58.54	66.48
Total	<u>556</u>	<u>1365</u>	<u>1921</u>	<u>374</u>	<u>922</u>	<u>1296</u>	<u>257</u>	<u>656</u>	<u>913</u>

**Table 70B. Horizontal Percentages of Girls by Number of Teachers at Primary School Graduated for Type of Middle School Attending and Grade Level**

Number of	First Grade		Second Grade		Third Grade
	Girls	Total	Girls	Total	Girls
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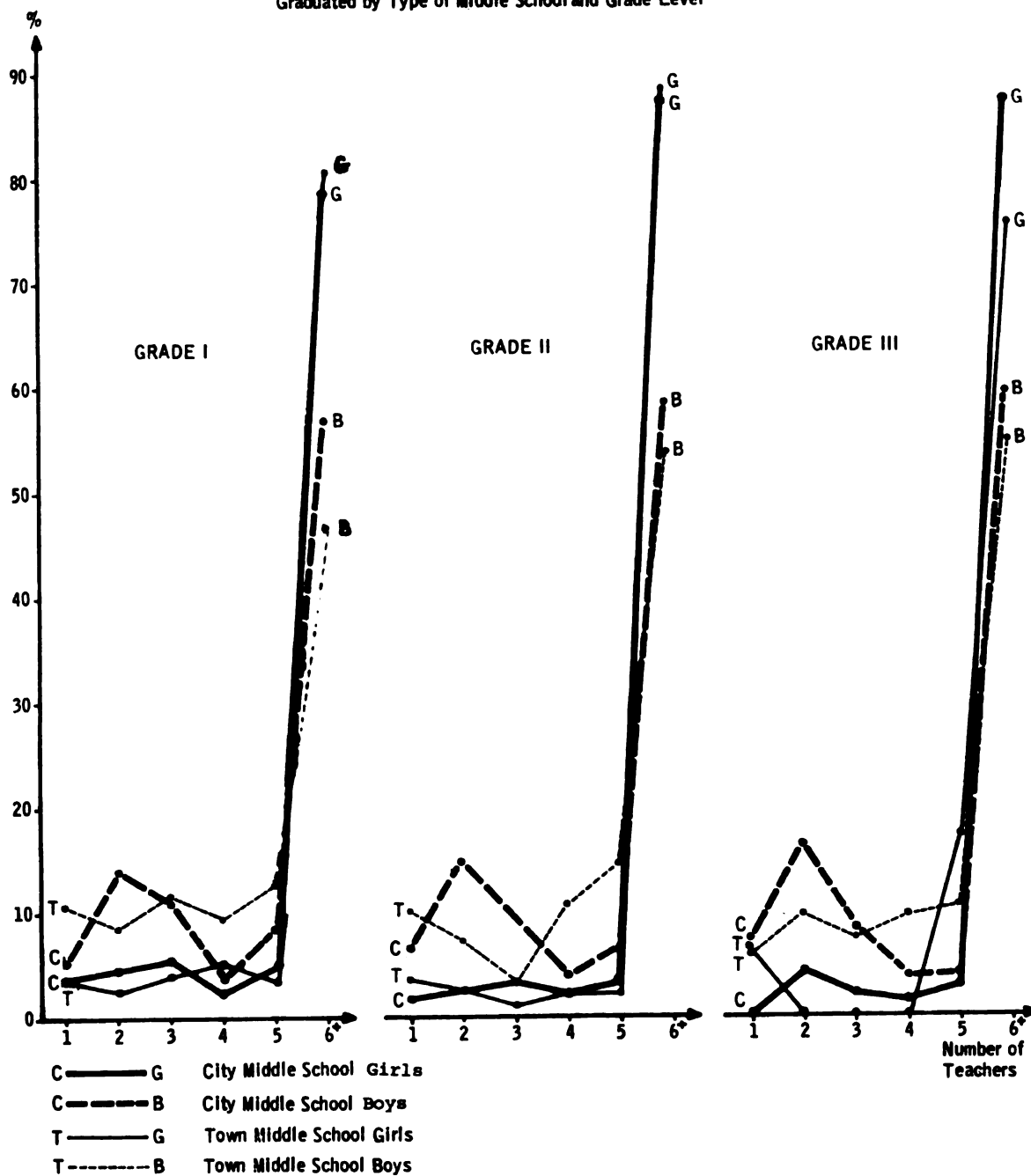
Table 70B. Horizontal Percentages of Girls by Number of Teachers at Primary School Graduated for Type of Middle School Attending and Grade Level

	Number of Teachers	First Grade		Second Grade		Third Grade	
		Girls %	Total N	Girls %	Total N	Girls %	Total N
City Middle School	1	22.22	72	9.43	53	2.63	38
	2	12.21	172	6.14	114	10.75	93
	3	16.78	143	11.69	77	10.42	48
	4	19.23	52	17.65	34	16.67	24
	5	19.47	113	16.07	56	25.00	28
	6+	36.10	965	37.76	670	40.04	502
	Total	29.14	1517	28.78	1004	31.11	733
<hr/>							
Town Middle School	1	11.43	35	12.50	24	16.67	12
	2	10.71	28	11.76	17	0.00	15
	3	12.82	39	12.50	8	0.00	12
	4	17.65	34	8.33	24	0.00	15
	5	9.76	41	6.25	32	23.81	21
	6+	40.53	227	40.11	187	20.95	105
	Total	28.22	404	29.11	292	16.11	180
<hr/>							
Middle School Total	1	18.69	107	10.39	77	6.00	50
	2	12.00	200	6.87	131	9.26	108
	3	15.93	182	11.76	85	8.33	60
	4	18.60	86	13.79	58	10.26	39
	5	16.88	154	12.50	88	24.49	49
	6+	37.00	1192	38.27	857	36.74	607
	Total	28.94	1921	28.86	1296	28.15	913



GRAPH 27A

Vertical Percentages of Girls and Boys At Each  
Level of Number of Teachers At Primary School  
Graduated by Type of Middle School and Grade Level







**GRAPH 27B**  
**Horizontal Percentages of GIRLS At Each Level of Number of Teachers**  
**At Primary School Graduated by Type of Middle School Attending and**  
**Grade Level**

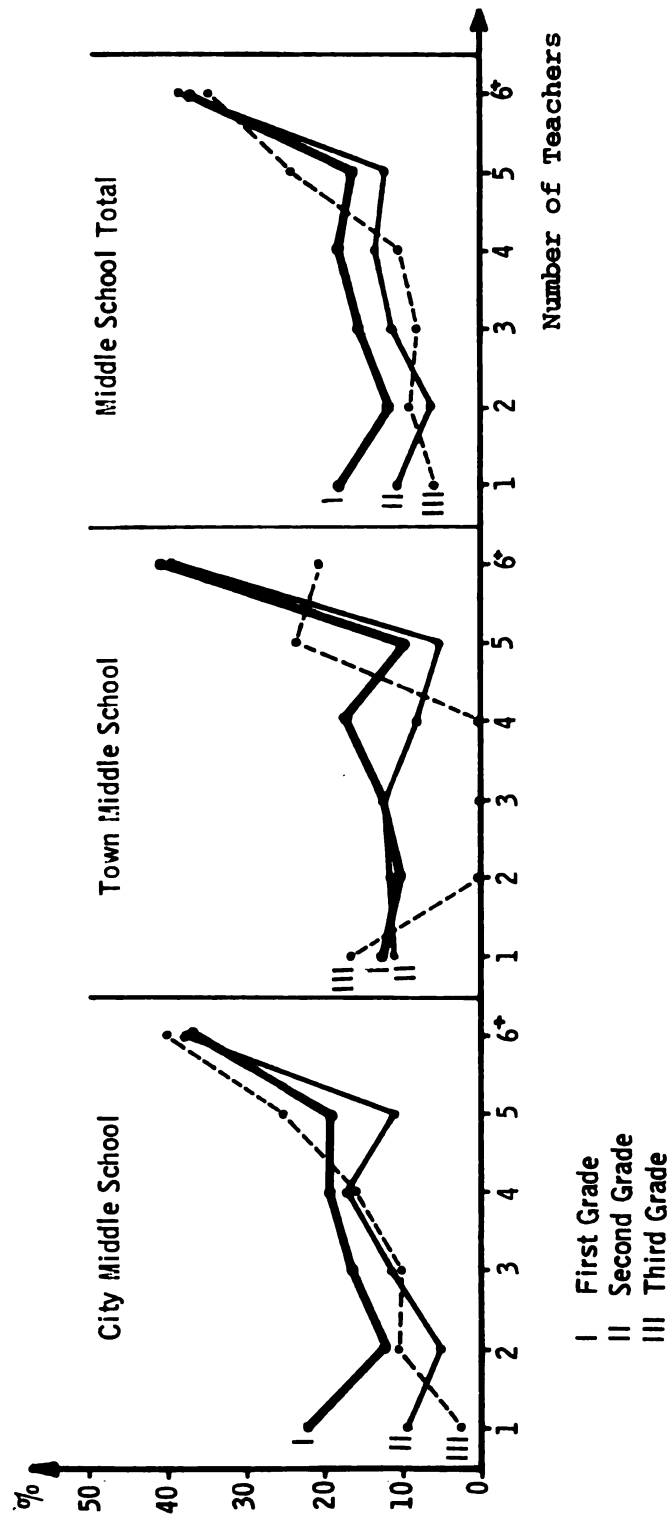


Table 71. R  
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Type of Middle  
School

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City

Town

Total

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\* $P < .05$ , d.

Table 71. Results of Chi-square Test of Significance Between Sex and Number of Teachers at Primary School Graduated

Type of Middle School	Grade Level		
	First	Second	Third
City	66.39*	81.99*	63.46*
Town	39.43*	30.84*	-.-
Total	104.31*	110.62*	71.47*

\* $p < .05$ , d.f. = 5.



Table 72. Percentages of Failed Students by Number of Teachers at Primary School Graduated for Sex and Type of Middle School Attending

FIRST GRADE									
Number of Teachers	Girls			Boys			Total		
	Failed %	Total N		Failed %	Total N		Failed %	Total N	
City Middle School									
1	25.00	16		26.79	56		26.39	72	
2	23.81	21		33.11	151		31.98	172	
3	29.17	24		48.74	119		45.45	143	
4	40.00	10		54.76	42		51.92	52	
5	18.18	22		31.87	91		29.20	113	
6+	19.77	349		33.44	616		28.50	965	
Total	21.04	442		35.44	1075		31.25	1517	
Town Middle School									
1	0.00	4		51.61	31		45.71	35	
2	66.67	3		32.00	25		35.71	28	
3	40.00	5		41.18	34		41.03	39	
4	0.00	6		42.86	28		35.29	34	
5	25.00	4		51.35	37		48.78	41	
6+	30.43	92		39.26	135		35.68	227	
Total	28.95	114		42.07	290		38.37	404	
Middle School Total									
1	20.00	20		35.63	87		32.71	107	
2	29.17	24		32.95	176		32.50	200	
3	31.03	29		47.06	153		44.51	182	
4	25.00	16		50.00	70		45.35	86	
5	19.23	26		37.50	128		34.42	154	
6+	22.00	441		34.49	751		29.87	1192	
Total	22.66	556		36.85	1365		32.74	1921	

Table 73. Percentages of Failed Students by Number of Teachers at Primary School Graduated for Sex and Type of Middle School Attending

SECOND GRADE

Table 73. Percentages of Failed Students by Number of Teachers at Primary School Graduated for Sex and Type of Middle School Attending

SECOND GRADE									
	Number of Teachers	Girls		Boys		Total		Failed %	Total N
		Failed %	Total N	Failed %	Total N	Failed %	Total N		
City Middle School	1	20.00	5	27.08	48	26.42	53		
	2	0.00	7	39.25	107	36.84	114		
	3	33.33	9	39.71	68	38.96	77		
	4	33.33	6	25.00	28	26.47	34		
	5	11.11	9	31.91	47	28.57	56		
	6+	16.60	253	19.90	417	18.66	670		
	Total	16.96	289	26.15	715	23.51	1004		
-----									
Town Middle School	1	33.33	3	14.29	21	16.67	24		
	2	0.00	2	13.33	15	11.76	17		
	3	100.00	1	14.29	7	25.00	8		
	4	50.00	2	13.64	22	16.67	24		
	5	0.00	2	33.33	30	31.25	32		
	6+	24.00	75	24.11	112	24.06	187		
	Total	25.00	85	22.22	207	22.95	292		
-----									
Middle School Total	1	25.00	8	23.19	69	23.38	77		
	2	0.00	9	36.07	122	33.59	131		
	3	40.00	10	37.33	75	37.65	85		
	4	37.50	8	20.00	50	22.41	58		
	5	9.09	11	32.47	77	29.55	88		
	6+	18.29	328	20.79	529	19.84	857		
	Total	18.72	374	25.27	922	23.38	1296		



Table 74. Percentages of Failed Students by Number of Teachers at Primary School Graduated for Sex and Type of Middle School Attending

THIRD GRADE

Table 74. Percentages of Failed Students by Number of Teachers at Primary School Graduated for Sex and Type of Middle School Attending

		THIRD GRADE					
Number of Teachers		Girls		Boys		Total	
		Failed %	Total N	Failed %	Total N	Failed %	Total N
City Middle School	1	0.00	1	24.32	37	23.68	38
	2	0.00	10	30.12	83	26.88	93
	3	40.00	5	34.88	43	35.42	48
	4	0.00	4	20.00	20	16.67	24
	5	14.29	7	14.29	21	14.29	28
	6+	16.42	201	24.25	301	21.12	502
	Total	15.79	228	25.54	505	22.51	733
<hr/>							
Town Middle School	1	0.00	2	10.00	10	8.33	12
	2	0.00	0	20.00	15	20.00	15
	3	0.00	0	16.67	12	16.67	12
	4	0.00	0	13.33	15	13.33	15
	5	0.00	5	12.50	16	9.52	21
	6+	36.36	22	19.28	83	22.86	105
	Total	27.59	29	17.22	151	18.89	180
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Middle School Total	1	0.00	3	21.28	47	20.00	50
	2	0.00	10	28.57	98	25.93	108
	3	40.00	5	30.91	55	31.67	60
	4	0.00	4	17.14	35	15.38	39
	5	8.33	12	13.51	37	12.24	49
	6+	18.39	223	23.18	384	21.42	607
	Total	17.12	257	23.63	656	21.80	913

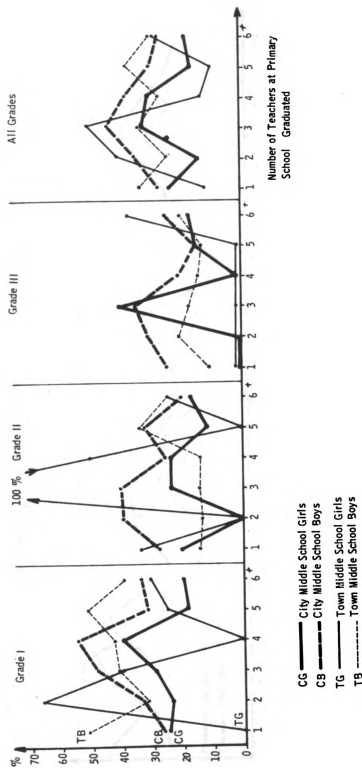
Table 75. Percentages of Failed Students by Number of Teachers at Primary School Graduated for Box and Type of Middle School Attending

Table 75. Percentages of Failed Students by Number of Teachers at Primary School Graduated for Sex and Type of Middle School Attending

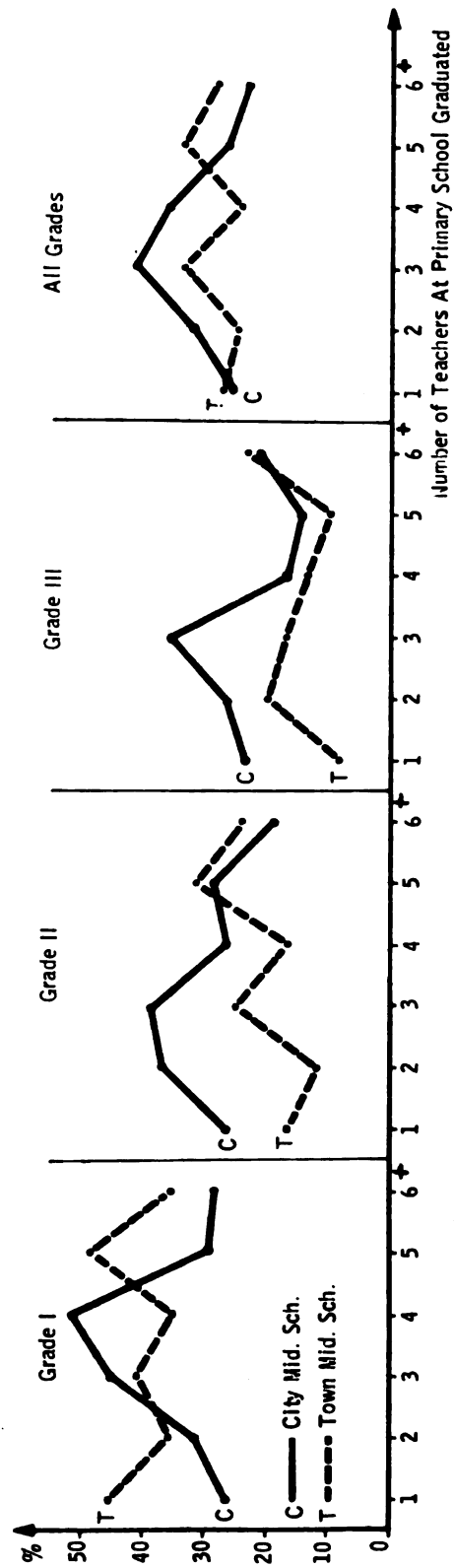
ALL GRADES									
City Middle School	Number of Teachers	Girls		Boys		Total		Failed %	Total N
		Failed %	Total N	Failed %	Total N	Failed %	Total N		
1	1	22.73	22	26.24	141	25.77	163		
2	2	13.16	38	34.31	341	32.19	379		
3	3	31.58	38	43.48	230	41.79	268		
4	4	30.00	20	37.78	90	36.36	110		
5	5	15.79	38	29.56	159	26.90	197		
6+	6+	17.93	803	27.14	1334	23.68	2137		
Total		18.56	959	30.37	2295	26.89	3254		
<hr/>									
Town Middle School	1	11.11	9	32.26	62	29.58	71		
2	2	40.00	5	23.64	55	25.00	60		
3	3	50.00	6	32.08	53	33.90	59		
4	4	12.50	8	26.15	65	24.66	73		
5	5	9.09	11	37.35	83	34.04	94		
6+	6+	28.57	189	29.09	330	28.90	519		
Total		27.19	228	29.94	648	29.22	876		
<hr/>									
Middle School Total	1	19.35	31	28.08	203	26.92	234		
2	2	16.28	43	32.83	396	31.21	439		
3	3	34.09	44	41.34	283	40.37	327		
4	4	25.00	28	32.90	155	31.69	183		
5	5	14.29	49	32.23	242	29.21	291		
6+	6+	19.96	992	27.52	1664	24.70	2656		
Total		20.22	1187	30.28	2943	27.38	4130		



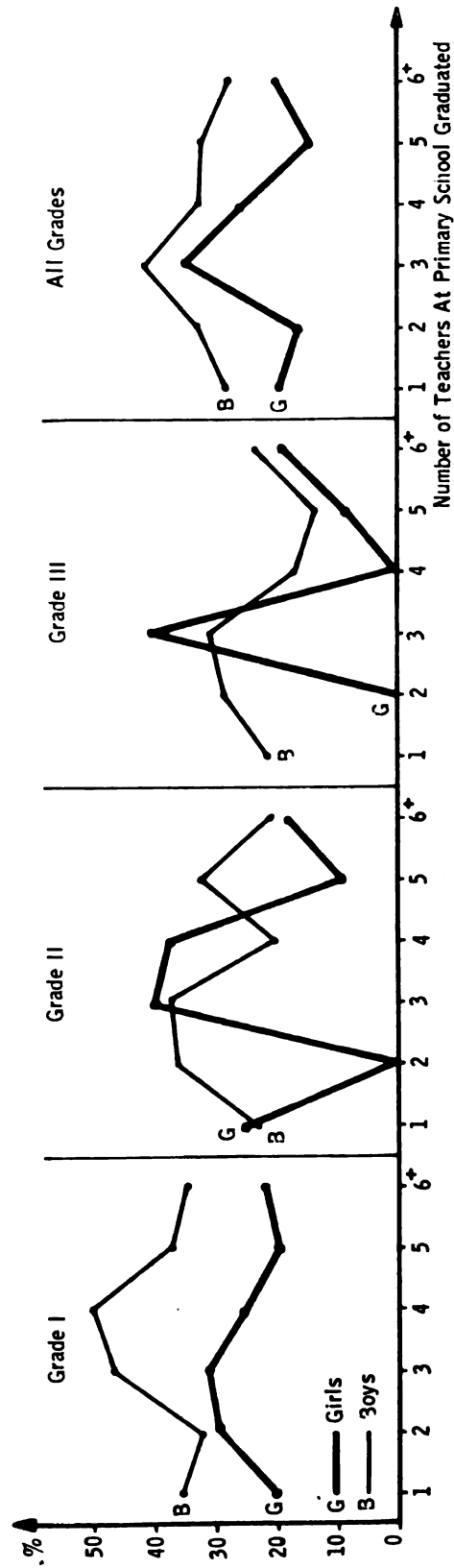
GRAPH 28A  
 Percentages of FAILED Students by Number of Teachers at Primary School Graduated, Sex, Type of Middle School and Grade Level



GRAPH 28B  
 Percentages of FAILED Students by Number of Teachers At Primary  
 School Graduated, Type of Middle School and Grade Level

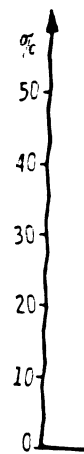


GRAPH 28C  
Percentages of Failed Students by Number of Teachers At  
Primary School Graduated, Sex and Grade Level





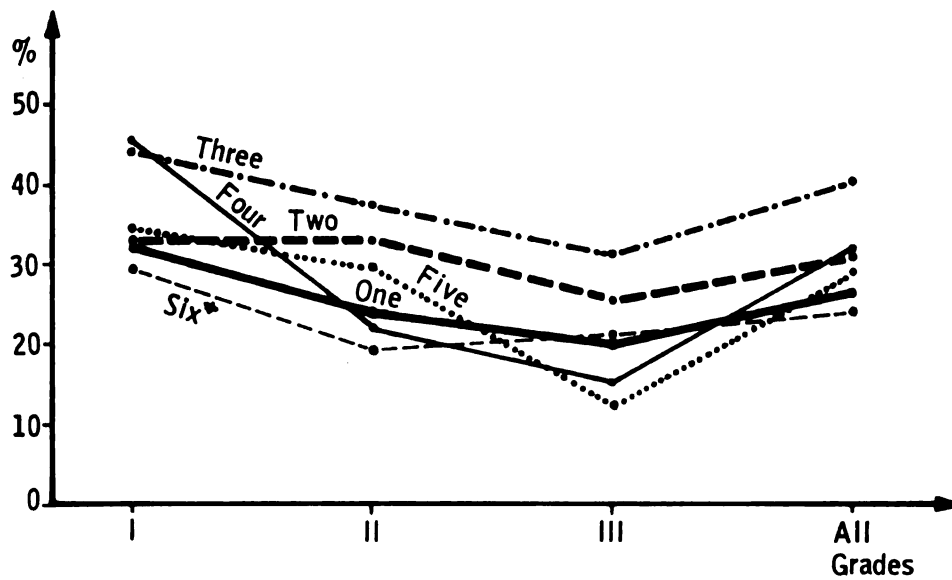
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Key:

GRAPH 28D

Percentages of FAILED Students by Number of Teachers  
At Primary School Graduated and Grade Level



Key: One = One-teacher primary school  
 Two = Two-teacher primary school  
 Three = Three-teacher primary school  
 Four = Four-teacher primary school  
 Five = Five-teacher primary school  
 Six = Six and more-teacher primary school

Table 76A.

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Grades

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I

II

III

All  
Grades

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\*P < .05,

Note: -.

Table 76A. Results of Chi-square Test of Significance Between Number of Teachers at Primary School Graduated and Success by Sex, Middle School Attending and Grade Level

Grades	Type of Middle School	Sex		Total
		Girls	Boys	
I	City	3.81	19.83*	28.23*
	Town	.-	3.96	3.71
	Total	2.16	15.08*	22.32*
II	City	.-	25.25*	31.48*
	Town	.-	5.02	3.67
	Total	.-	21.93*	25.18*
III	City	.-	4.90	7.75
	Town	.-	1.11	3.51
	Total	.-	6.04	8.22
All Grades	City	7.38	31.31*	52.03*
	Town	6.04	4.05	2.96
	Total	7.18	25.03+	42.80*

\*P < .05, d.f. = 5

Note: -.- = No test is applied due to the cell(s) with small or zero value.

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Grade	Type Mid Sch
I	Ci Ci To To
II	Ci Ci To To
All Grades	Ci Ci To To

\*Ordered fro

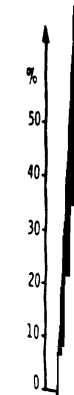
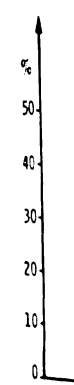
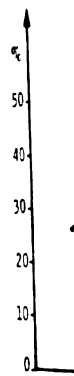
Key: 1 = O  
2 = T  
3 = T  
4 = F  
5 = F  
6+ = S

Table 76B. The Rank Order of Deviations of Failing in Middle School by Number of Teachers at Primary School from Which Graduated in Those Sub-populations for Which the Obtained Chi-square Test Value is Found to be Significant

Grade	Type of Middle School	Sex	The Rank Order of Percentages of Failing*					
			1st	2nd	3rd	4th	5th	6th
I	City	Boys	4	3	6+	2	5	1
	City	Total	4	3	2	5	6+	1
	Total	Total	4	3	5	1	6+	2
	Total	Total	4	3	5	1	2	6+
II	City	Boys	3	2	5	1	4	6+
	City	Total	3	2	5	4	1	6+
	Total	Boys	3	2	5	1	6+	4
	Total	Total	3	2	5	1	4	6+
All Grades	City	Boys	3	4	2	5	6+	1
	City	Total	3	4	2	5	1	6+
	Total	Boys	3	4	2	5	1	6+
	Total	Total	3	4	2	5	1	6+

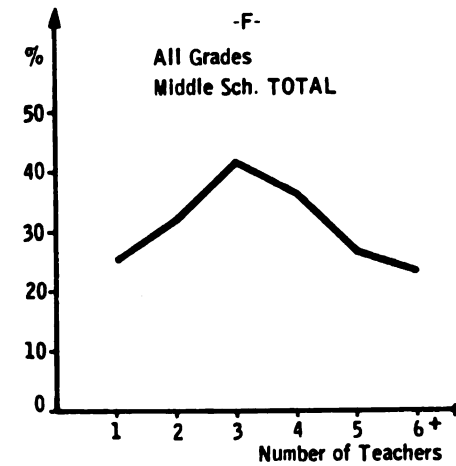
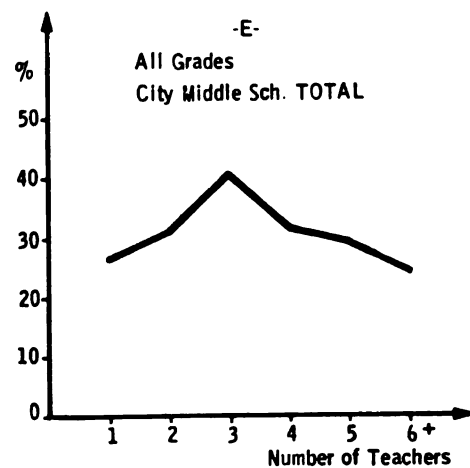
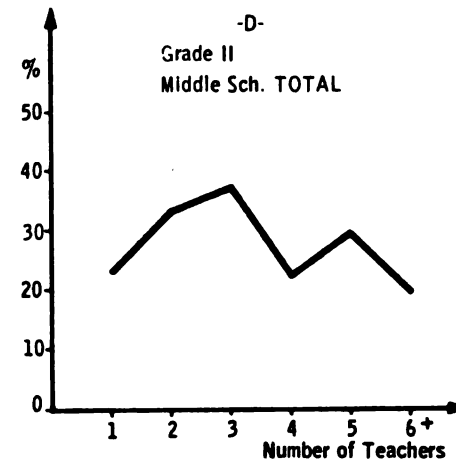
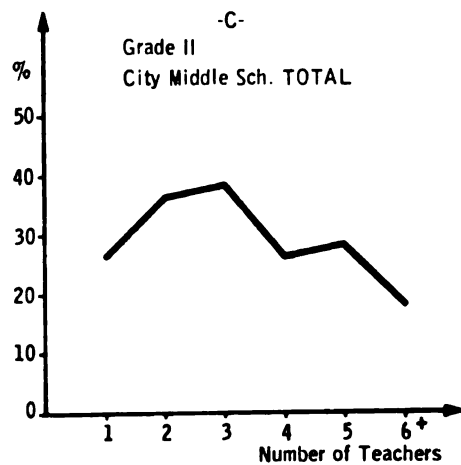
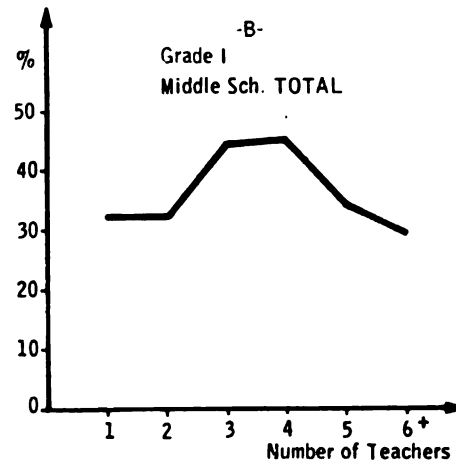
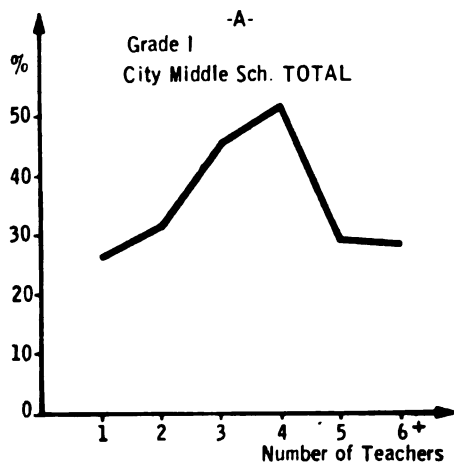
\*Ordered from 1st to 6th by decreasing percentages of failing.

Key: 1 = One-teacher school  
 2 = Two-teacher school  
 3 = Three-teacher school  
 4 = Four-teacher school  
 5 = Five-teacher school  
 6+ = Six and more-teacher school



GRAPH 29

Percentages of FAILED Student by Number of Teachers At Primary School Graduated That Are Found Significantly Related





Summary Fi

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an

### Summary Findings of Part III F

#### A. Number of Teachers at Primary School Graduated and Success

##### 1. The major finding

##### a. The null hypothesis (Hypothesis 6f)

Number of teachers at primary school from which graduated is not related to success in middle schools.

##### b. Obtained statistics and finding

$$\chi^2 (.05) \text{ d.f. } 5 = 11.07$$

$$\text{Obtained } \chi^2 = 42.80$$

Therefore, the null hypothesis is rejected.

##### c. Direction of Deviation

Related data presented in Tables 75 and Graph 29F show that as against the expectation stated in hypothesis 6f, the students who are more likely to be failing do not come from primary schools with less number of teachers. The students graduated from primary schools with 3 teachers have the highest percentage of failure. The students graduated from 4 teacher schools come after. Then 2 teacher schools, 5 teacher schools, 1 teacher school and 6 and more teacher schools follow.

##### 2. Other findings

Sub-groups for which the obtained  $\chi^2$  values (presented in Table 76A) are significant, are listed and the deviations for each sub-group (presented in Tables 72, 73 and 75) are shown in Table 76B. The students' background factor (number of teachers at primary school graduated) that are found to be significantly related to success in middle school for listed groups are marked under six column heads, order from 1st to 6th by decreasing percentages of failing.

Section G

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## Section G

### Type of Middle School Attending, Grade Level

#### Introduction

In the preceding sections the factors, type of middle school attending (city, town) and grade level (I, II, III) are kept constant as sub-populations. In this section they are used as independent variables.

The data on the factors, type of middle school attending and grade level, are presented in the following order:

1. Percentages of failed students by type of middle school attending and grade level are given in Table 77; percentages of failed students by grade level is given in Table 78. The same data are illustrated in Graph 30A-B.

2. The results of Chi-square Test of significance between type of middle school attending and success by grade level are presented in Table 79, and the result of Chi-square Test between grade level and success is given at the bottom of Table 78.

3. Lastly, the findings are summarized.

Table 77.

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 Grades
 

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I

II

III

All  
Grades

Note: The

Table 78.

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I

II

III

 $\chi^2 = 52.$ 

Note: T

Table 77. Percentages of Failed Students by Type of Middle School Attending and Grade Level

Grades	Type of Middle School	Failed %	Total N
I	City	31.25	1517
	Town	38.37	404
II	City	23.51	1004
	Town	22.95	292
III	City	22.51	733
	Town	18.89	180
All Grades	City	26.89	3254
	Town	29.22	876

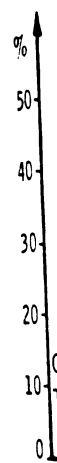
Note: The balance to 100% will be the percentage of passed students.

Table 78. Percentages of Failed Students by Grade Level

Grades	Failed %	Total N
I	32.74	1921
II	23.38	1296
III	21.80	913

$$\chi^2 = 52.53, \text{ d.f.} = 2$$

Note: The balance to 100% will be the percentage of passed students.



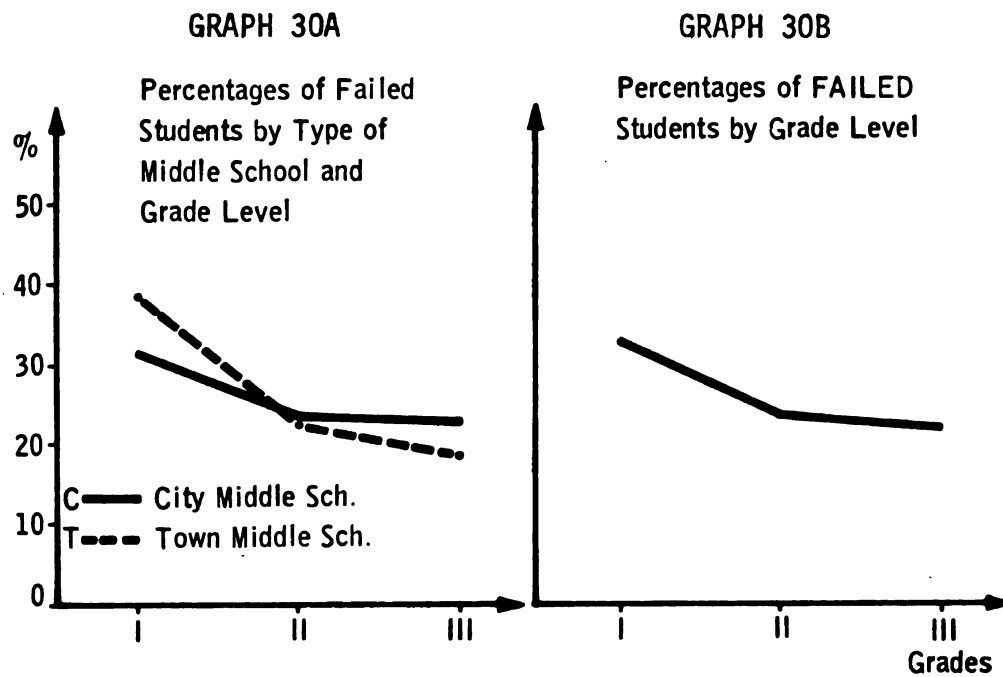


Table 79. Results of Chi-square Test of Significance Between Type of Middle School Attending and Success

GRADES			
I	II	III	Total
8.82*	.04	1.11	1.89

\*P < .05, d.f. = 1



### Summary Outcomes of Part III G

#### A. Type of Middle School and Success

##### 1. Major finding

###### a. The null hypothesis (Hypothesis No. 6g)

The type of middle school attending and success in middle school are not related.

###### b. Obtained statistics and finding

$$\chi^2 (.05) 1 \text{ d.f.} = 3.84$$

$$\text{Obtained } \chi^2 = 1.89$$

Therefore, the null hypothesis is not able to be rejected.

###### c. Direction of the deviation.

The data presented in Table 77 and Graph 30A and Table 79 show that in terms of percentages the students attending city middle schools are more likely to be failing than students attending town middle schools in grades II and III, but they are not statistically significant. In the first grade, the students attending town middle schools are more likely to be failing than the students attending city middle schools (significant at .05 level).

#### B. Grade Level and Success

##### 1. The major finding

###### a. The null hypothesis (Hypothesis No. 6h)

Grade level and success are not related in middle schools.

###### b. Obtained statistics and finding

$$\chi^2 (.05) 2 \text{ d.f.} = 5.99$$

$$\text{Obtained } \chi^2 = 52.53$$

Therefore, the null hypothesis is rejected.

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c. Direction of the deviation

The data presented in Table 78 and graph 30B show that the students are less likely to be failing as the grade level increases as expected by hypothesis 6h.

PART IV

Dropout and Dismissed Students

Introduction

Part IV has two sections. Section A presents the data on dropouts in Turkey and Usak Province sample. Section B presents the data on dismissed students in the sample.

A. Dropouts

Objective 5 (see Chapter I, page 34) is interested only in sex and grade level sub-groups of dropout students. Since the sample data has information on the other sub-groups of dropouts, these are also presented for the reader who is interested.

The data on dropouts are presented in the following order:

1. Dropouts in Turkey and Usak Province sample by sex and grade level are presented in Table 80. Chi-square Test results for Usak sample are given in Table 81.

2. Dropouts in Usak sample by level of father's education, by level of mother's education, by type of primary school graduated are presented in Tables 82-84.

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3. The findings are presented at the end based on the hypotheses in Chapter I.

#### B. Dismissed Students

As explained in Chapter I (see page 56), failed and dismissed students are both unsuccessful students at the end of the school year, and both are not allowed to register at the following higher grade. The difference is that a failed student is one who failed as a first time student at that grade and must repeat all the courses of the same grade for another school year, but a dismissed student is one who failed as a second time student at the same grade and must wait out of school during the following school year and take exams from the failed courses at the end of that school year or coming school years. The third grade students who wait out-of-school for a year or more are called "waiting" students. A waiting student is also a dismissed student, but the rules of promotion are different in the third grade. In this study, both failed and dismissed are counted in one group under failed. Here in this section the percentages of dismissed students are given in the following order.

1. The percentages of dismissed students in the total number of failed students are presented in Table 85. The same data are illustrated in Graph 31.

2. The findings are presented at the end.

Table 80. Number of Middle School Students at the Beginning of 1970-1971 School Year and Percentages of Dropouts by Sex and Grade Level in Turkey and Usak Province Sample

Table 80. Number of Middle School Students at the Beginning of 1970-1971 School Year and Percentages of Dropouts by Sex and Grade Level in Turkey and Usak Province Sample

Grades	Destinations	Turkey			Usak Province		
		Girls	Boys	Total	Girls	Boys	Total
I	Drop-out	10.70	15.42	14.18	1.77	3.12	2.73
	Total	108,324	304,487	412,811	566	1,409	1,975
II	Drop-out	11.65	16.59	15.20	1.58	1.81	1.74
	Total	76,260	194,688	270,948	380	939	1,319
III	Drop-out	18.28	12.60	14.23	.39	.30	.33
	Total	51,192	127,677	178,869	258	658	916
All Grades	Drop-out	12.65	15.21	14.51	1.41	2.10	1.90
	Total	235,776	626,852	862,628	1,204	3,006	4,210

Note: The balance to 100% will be the percentage of non-dropout students.

Table 81. Results of Chi-square Test of Significance Between Sex and Dropout by Grade Level

(USAK PROVINCE SAMPLE)			
Grades			
I	II	III	Total
2.79	.08	-.-	2.16

d.f. = 1

Table 82. Number of Dropouts During 1970-1971 School Year Until the End of Instruction and Percentages of Girls at Each Level of Father's Education by Grade Level



Table 82. Number of Dropouts During 1970-1971 School Year Until the End of Instruction and Percentages of Girls at Each Level of Father's Education by Grade Level

Level of Father's Education	(USAK PROVINCE SAMPLE DATA)							
	I		II		III		Total	
	Girls %	Total N	Girls %	Total N	Girls %	Total N	Girls %	Total N
I	0.00	9	0.00	2	-.-	-	0.00	11
II	22.22	45	25.00	20	33.33	3	23.53	68
III	-.-	-	-.-	-	-.-	-	-.-	-
IV	-.-	-	100.00	1	-.-	-	100.00	1
Total	18.52	45	26.09	23	33.33	3	21.25	80

Note: The balance to 100% will be the percentage of boys.

Table 83. Number of Dropouts During 1970-1971 School Year Until the End of Instruction and Percentages of Girls at Each Level of Mother's Education by Grade Level

Table 83. Number of Dropouts During 1970-1971 School Year Until the End of Instruction and Percentages of Girls at Each Level of Mother's Education by Grade Level

(USAK PROVINCE SAMPLE DATA)										
Level of Mother's Education	I		II		III		Total		Total	
	Girls &	Total N	Girls &	Total N	Girls &	Total N	Girls &	Total N	Girls &	Total N
I	18.92	37	21.43	14	0.00	2	18.87	53		
II	17.65	17	33.33	9	100.00	1	25.93	27		
III	-.-	-	-.-	-	-.-	-	-.-	-		
IV	-.-	-	-.-	-	-.-	-	-.-	-		
Total	18.52	54	26.09	23	33.33	3	21.25	80		

Table 84. Number of Dropouts During 1970-1971 School Year Until the End of Instruction and Percentage of Girls by Type of Primary School Graduated, Type of Middle School and Grade Level

Table 84. Number of Dropouts During 1970-1971 School Year Until the End of Instruction and Percentages of Girls by Type of Primary School Graduated, Type of Middle School and Grade Level

(USAK PROVINCE SAMPLE DATA)											
Grades	Sex	City Middle School		Town Middle School		Total		Total		Total	
		CT*	V**	CT	V	CT	V	CT	V	CT	V
I	F	23.53	10.00	16.22	25.00	22.22	23.53	24.00	13.79	18.52	
	T	17	20	37	8	9	17	25	29	54	
II	F	41.67	16.67	33.33	0.00	0.00	0.00	33.33	12.50	26.09	
	T	12	6	18	3	2	5	15	8	23	
III	F	50.00	0.00	33.33	-.-	-.-	-.-	50.00	0.00	33.33	
	T	2	1	3	-.-	-.-	-.-	2	1	3	
All Grades	F	32.26	11.11	22.41	18.18	18.18	18.18	28.57	13.16	21.75	
	T	31	27	58	11	11	22	42	38	80	

\*CT = City-Town Primary School Graduates

\*\* V = Village Primary School Graduates

Table 85. Number of Unsuccessful Students and Percentages of Dismissed Students by Type of Middle School Attending, Sex and Grade Level

Table 85. Number of Unsuccessful Students and Percentages of Dismissed Students by Type of Middle School Attending, Sex and Grade Level

(USAK PROVINCE SAMPLE)									
Grades	Destination	City Middle School			Town Middle School			Total	
		Girls	Boys	Total	Girls	Boys	Total	Girls	Boys
I	Dismissed	9.68	9.19	9.29	9.10	18.04	16.13	9.53	11.34
	Failed Total	93	381	474	33	122	155	126	503
II	Dismissed	2.04	13.37	11.01	0.00	2.18	1.50	1.42	11.16
	Failed Total	49	26	236	21	46	67	70	233
III	Dismissed	100.00	93.80	95.16	100.00	96.16	97.06	100.00	94.20
	Failed Total	36	129	165	8	26	34	44	155
All Grades	Dismissed	25.84	25.97	25.94	17.74	24.74	23.04	23.75	25.70
	Failed Total	178	697	875	62	194	256	240	891

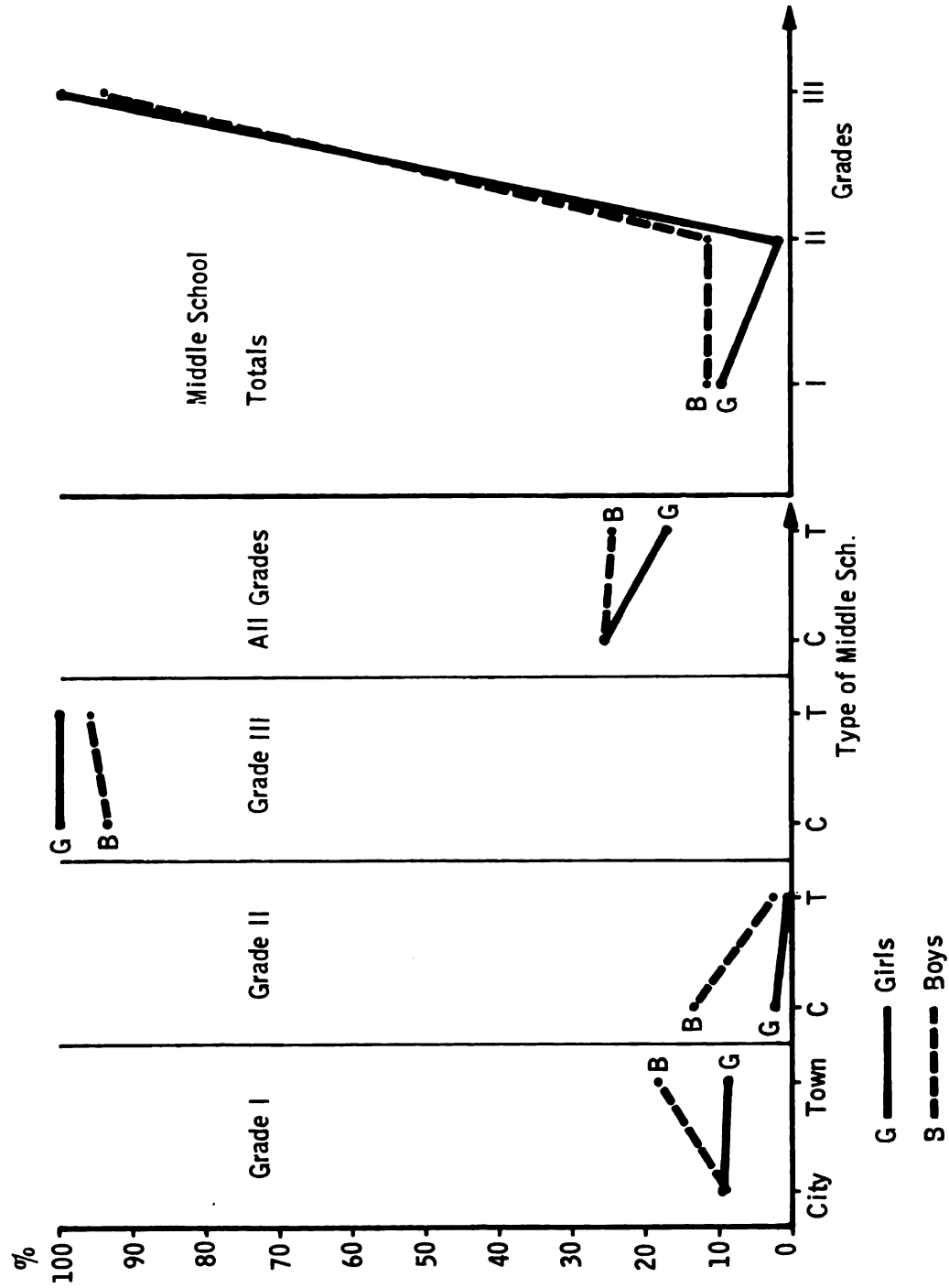
Note: The balance to 100% will be the percentage of students who failed as a first time student at that grade.





GRAPH 31

Percentages of DISMISSED Students in the Total Number of Unsuccessful Students  
by Type of Middle School Attending, Sex and Grade Level  
( USAK PROVINCE SAMPLE )



## Summary Outcomes of Part IV A

### A. Dropouts

#### 1. Dropping Out and Sex

##### a. The null hypothesis (Hypothesis No. 7a)

Dropping out of school and sex are not related.

##### b. Obtained statistics and findings

###### -Turkey's total

The data presented in Table 80 show that the percentages of dropouts for girls and boys for Turkey's total middle school population differ from each other. However, whether or not these differences are significant was not tested statistically, since the data is for the total population of Turkey's middle schools.

###### -Usak Sample

$$\chi^2 (.05) \text{ d.f. } 1 = 3.84$$

$$\text{Obtained } \chi^2 = 2.16$$

Therefore, the null hypothesis is not able to be rejected.

##### c. Direction of the deviation

As expected by hypothesis 6h, in the first and second grades more boys drop out of school than girls, but in the third grade more girls drop out of school than boys in Turkey.

Although differences do not appear to be statistically significant, we see the same pattern of deviation in the percentages of Usak sample.

#### 2. Dropping out and grade level

##### a. The null hypothesis (Hypothesis No. 7b)

Dropping out of school and grade level are not related.

## b. Findings

-Turkey's total

The percentages of dropouts do not show a constant decrease as the grade level increases. Second graders drop out of school with a higher percentage, than the third graders and first graders as against the expectation in hypothesis 7b. For girls, just the opposite of the expectation happens, more girls drop out of school as the grade level increases. The percentage of drop outs is highest for second grade boys, then first and third grade boys come next.

-Usak Sample

We did not apply  $\chi^2$  Test on the dropouts in Usak sample because of a very small number at third grade. But the observation on the percentages presented in Table 80 show that for grade totals for girls and boys, the percentages of dropouts decreases as the grade level increases.

B. Dismissed Students

Inspection of the data presented in Table 85 and Graph 31 show that:

- a. Percentages of dismissed boys are higher in first and second grade than they are for girls, but in third grade percentage of dismissed girls is higher than it is for boys as against the expectation of "no difference" stated in Hypothesis 8.
- b. Percentage of dismissed students is the highest at the third grade and the lowest at the second grade as expected by Hypothesis 8.

## CHAPTER V

### CONCLUSIONS

#### Introduction

The purpose of this chapter is to emphasize the main points that the study attempts to convey and, based on these, to present some concluding recommendations for implementation.

The chapter has four parts. In Part I, the major problem and the purpose of the study is summarized. In Part II, the related literature and research findings are summarized. In Part III, the major outcomes of the study are reviewed. And in Part IV, the concluding recommendations for implementation are presented.

#### Part I

##### The Problem and the Purpose of the Study

From the beginning of the Republic (1923), Turkey has followed the policy of modernizing her educational system and expanding the educational opportunities to all segments of the society. As a result of this commitment, the enrollment in Turkey's primary schools expressed as a percentage of 7-12 age group, reached to 87.62 percent in the 1971-1972

school year. The target is 100 percent by 1977 in the Third Five Year Development Plan (1973-1977).

The expansion of primary education and the policies followed to increase the educational level of the populace beyond primary education have resulted by a rapid increase in secondary education, especially in the first cycle which is called middle school. But still, in the 1970-1971 school year, the enrollment in middle schools, expressed as a percentage of the 13-15 age group, has reached about 38.17 percent. The actual percentage of youngsters enrolled in middle school in 13-15 age group is less than this. The targets in the Long Term Development Plan (1973-1995) are 50 percent by 1977 and 75 percent by 1995.

The data on the middle school students show that girls and village primary school graduates are underrepresented in Turkey's middle schools. On the other hand, there are disparities among the different regions in terms of the rate of middle schooling in general and the representation of girls and village primary school graduates. The conclusion is that Turkish children do not have equal opportunities to benefit from education beyond the primary level, and girls and village primary school graduates are in a more disadvantageous position than the boys and city-town primary school graduates. As pointed out by several authors, it should be remembered here that secondary level education has a very important function in the process of general mobility.

On the other hand, it is not enough for a student to enter the middle school to benefit from the education given at this level. Turkey's middle schools have a very selective system of promotion. As a result, a high percentage of students fail, are dismissed or drop-out of the school every year. The process of selection creates two basic problems: the economic problem of low productivity and the social problem of unequal educational opportunity. From the productivity point of view, it is important to know how many of the students fail, are dismissed or drop-out of the school; from the equal educational opportunity point of view, it becomes important to know those students who fail, are dismissed or drop-out of school.

It might be possible that the student transition pattern within the middle schools is related by some non-intellectual personal background characteristics of the students. This study attempts to investigate this relationship and aims to identify some of the related factors to students' success in middle school.

The overall objective of the study is stated as "the identification of non-intellectual factors derived from the measures of personal, family, community and temporary educational attributes of the students which are predictive (or related to) the middle school transitions from one status to a destination."

The study does not aim to investigate why a particular factor is or is not related to the student transition within middle school; rather it aims only to investigate if that factor seems to be related to the student transition within the middle school.

The study is carried out in the Province of Usak on a pilot basis with the thought that those factors found to be related to the student transition pattern in this study later could be included in other studies designed for the middle school populations in different regions of the country or for the entire middle school population. Finally, they could be included in the yearly middle school students statistical data collected by the Ministry of Education.

Sex, type of primary school graduated, level of father's education, level of mother's education, number of previous failures in middle school, number of teachers at the primary school graduated, type of middle school attending now, and present grade level at middle school are included in the study as background factors of the student, and their possible relationship to the transition of students within middle school is investigated.

## Part II

Related Literature and Research Findings

The aim of the presentation of the related literature and research findings in this study is to clarify certain secondary education issues in their social, economic, political context and spell out some of the implications as they are found in several countries that might be helpful for educational and socio-economic policy-making in Turkey. It is not intended to propose any certain plan or a set of plans that could be applied in Turkey.

The major points that the summary of the related literature presented in Chapter II attempts to convey could be overviewed as follows:

1. The process of flow of secondary age population into, through and out of secondary schools is very complicated. Which students will be able to enter the various levels and types of secondary schools, which students will be able to raise his/her academic status within the secondary school system and which students will fail, will be dismissed or drop out of the system is determined by this process. The factors affecting the flow of students might be demographic, economic, financial, social, psychological, educational or otherwise, together with the set of government policies.

2. "Productivity" and "equity" in education are two key concepts that have become the focus of attention in all





countries, and there have been some common trends and developments to deal with the problems and the issues related to these concepts in contemporary education. The philosophies of education, the objectives and functions assigned to education are changing; new philosophies, objectives and functions are emerging due to the changes in the value systems and the new needs of societies in regard to education.

3. "The right to education" and the concept of "equality of educational opportunity" have gained an international acceptance and affected the educational policies followed. Social demand for education has been increasing very rapidly. But increased enrollment in schools has not led to any substantial change in the relative pattern of opportunity. On the other hand, increased numbers of students in schools generate financing problems. To reduce unit costs and to increase the rate of productivity seems to be the only solution, but it does not seem possible if the present educational systems remain unchanged.

4. It is clear that a nation's educational policy must be in accordance with its stage of economic development, but it is also believed that everybody has the right to education and widespread schooling is needed for democracy and economic productivity. This thought brings some serious issues and problems into the formulation of educational policies.

5. Under the new concept of mass education and democratization of education, education is no longer reserved for the few, but an educational system which emphasizes the academic success of children, as is the case in Turkey's secondary schools, might still be serving mainly to perpetuate the present structure of the society, through admission and promotion rules, and could block the possibility for upward social mobility for some groups.

6. The present structure and organization of educational systems of many countries have some built-in barriers that prevent the optimal utilization of talent and resources.

7. The objectivity and reliability of examinations, especially their prognostic value, is by no means universally accepted. The conventional definition of "quality" (or "standard") is also questioned.

8. There is a noticeable movement and development in many countries of the world toward democratization of education through expanded pre-school training, extended general education, compensatory education at primary level, more flexible, non-selective comprehensive educational systems, introduction of observation periods, provision of guidance services, integration of educational systems, etc.

The related research findings reviewed in the last part of Chapter II indicate that:

1. Failing is a serious problem in Turkey's secondary schools;

2. The students fail in some courses more than in others in Turkey's middle schools;

3. Parallel to the increase in enrollment, the rate of failing was also increased in middle schools of Turkey between 1950-1960;

4. There are disparities between geographical areas, between sexes, between village and city-town origins, and between different occupations in terms of access to secondary schools in Turkey;

5. The imbalance of school attendance by geographical areas and locations is also found in several countries;

6. The findings of several studies indicate that there is an uneven distribution of working-class and middle-class children in secondary schools of several countries which could not be attributed solely to the intelligence of the children, but must be in large part the result of social forces;

7. Social background of the students usually plays a greater independent role in the development of all school outcomes than do the independent influences of school;

8. There is a relation between socio-economic background and school drop-out;

9. There is enough research evidence showing that educational level of the parents affect the students' achievement in school; this influence decreases as the grade level increases;

10. Findings of some studies indicate that there is a relation between the income level of the family and school success and attendance;

11. The type of community, neighborhood, educational system, school atmosphere, school norms, and peer-groups all influence the achievement of the children in schools in several ways;

12. Self-concept of ability is an important outcome of education, and it is found to be closely related to the level of achievement in school;

13. There is some research evidence supporting the mastery learning model which assumes that if each learner received optimal quality of instruction and the learning time he requires, then a majority of students could be expected to attain mastery. There would be little or no relationship between aptitude and achievement.

### Part III

#### The Major Outcomes of the Study

The following conclusions could be drawn based on the comparative data on Turkey and Usak Province totals:

1. The Province of Usak where this study was carried out is in an advanced stage of schooling in several respects with comparison to the national averages.

2. In 1972-1973 school year, the enrollments in Turkey's primary, first cycle of secondary and second cycle of

secondary schools, expressed as a percentage of 7-12, 13-15, and 16-18 age groups, were 87.62%, 38.17% and 21.98% respectively; but percentages for the same groups were 100.00%, 68.13% and 36.07% in Usak Province.

3. Although the percentage of girls in primary school was less than the percentage of boys in Usak Province in the 1970-1971 school year, the difference between the percentages of the two groups was only 6.4 percent. In general, the differences between the sexes in primary school increases to the advantage of the boys as the grade level increases.

4. In the 1970-1971 school year, transition proportions from primary into middle school were less for girls than for boys; less for village primary school graduates than city-town primary school graduates both in Turkey and Usak Province, but they were higher for girls and village primary school graduates in Usak Province than in Turkey's total.

5. Both in Turkey and Usak Province, girls and village primary school graduates are proportionately under-represented in middle schools, but the percentages of representation were higher for Usak Province's girls and village primary school graduates than Turkey's total in general.

6. Both in Turkey and Usak Province, a greater percentage of girls drop out of middle school than boys as a total, but the situation is the opposite in the third grade in Turkey and in the second grade in Usak Province. The rates

of dropouts are higher in Turkey than they are in Usak Province.

7. Both in Turkey and Usak Province, more boys fail or are dismissed than girls, but the percentage of failure and dismissal are higher in Usak Province's middle schools than Turkey's middle schools.

The findings based on the sample data suggest the following general conclusions:

1. Boys and village primary school graduates fail or are dismissed more than the girls and city-town primary school graduates respectively (both are significant at .05 level);

2. As the level of father's education increases, the percentages of failing and dismissing decrease (significant at .05 level);

3. As the level of mother's education increases, the percentages of failing and dismissing decrease (significant at .05 level);

4. As the number of previous failures in middle school increases, the percentages of failing and dismissing also increase (significant at .05 level);

5. The number of teachers at primary school from which the students graduated is related to success in middle school (significant at .05 level), but there is not a constant pattern. The data indicate that the students graduated from three- and four-teacher primary schools tend to

fail and be dismissed more than the others;

6. In the first grade of middle school, the students attending town middle schools are more likely to be failed and dismissed than the students attending city middle schools (significant at .05 level), but in the second, third grades and middle school total no significant difference is found in terms of type of middle school attending;

7. As the grade level increases, the percentages of failing and being dismissed decrease (significant at .05 level).

A comparison of the sample data with the data on Turkey's total could be concluded as follows:

1. In Turkey's middle schools, a higher percentage of second grade students drop out of school than do third and first grade students, but more girls drop out of school as the grade level increases. In Usak Province, the percentage of dropouts is much less than for Turkey as a whole. In Usak Province, the percentages of dropouts decrease for both boys and girls as the grade level increases.

2. More boys are dismissed in the first and second grades than girls, but in the third grade, more girls are dismissed than boys in the Usak Province sample.

The major outcomes of the study may be explained functionally as follows:



### 1. The Chance of Entrance Into Middle School

The outcomes of the study reveal that if you are a girl and graduated from a village primary school, your chance to enter into middle school is less than the girls when graduated from city-town primary school and less than all boys; and if you are a boy and graduated from a city-town primary school, your chance to enter into middle school is more than the boys who graduated from a village primary school and more than all girls.

### 2. The Chance of Failing and Being Dismissed in Middle School

The outcomes of the study show that if you are a boy, graduated from a village primary school, your father is an illiterate, your mother is an illiterate, the primary school from which you graduated was a three-teacher school, you are more likely to fail than others. If you are a girl, graduated from a city-town primary school, your father had some lycee education or graduated from lycee or had an equivalent education or more, your mother had some lycee education or graduated from lycee or had an equivalent education or more, the primary school from which you graduated had six or more teachers, you are least likely to fail. If you are at the first grade of middle school and have no previous failure, your chance of failing is more than the others, but if you are at the third grade of middle school and have no previous failure, your chance of failing is less than the others.

## Part IV

Recommendation for Implication

This study is a pilot study carried out in one of the small provinces of Turkey with a major aim of identifying some non-intellectual factors related to success in middle school. The study does not attempt to generalize the findings even to the Province of Usak's middle school population. The following recommendations are made based on the assumption that if this study is repeated for a representative sample of Turkey's middle school population, the same findings would be found. Therefore, they should be taken into consideration within this limit.

The major issues and problems that are identified by this study are presented in two main groups: 1. transition from primary school into middle school (or access to middle school), 2. transition within middle school (or success in middle school). In this part, the major points that come out of this study and possible recommendations are also presented in these two groups.

The issues and the problems related to both areas are not merely educational, but also economic, social and political in their nature. Therefore, economic and social requirements of Turkey as they are perceived by the authorities, and their political preferences will largely affect the decisions on the priorities and the formulation of educational policies in regard to these areas.

### 1. Transition From Primary Into Middle School

The major point that comes out of this study in terms of transfer of the students from primary into middle school is the fact that to be a girl and to be a villager are two main handicaps to enter middle school following the graduation of primary school.

The study does not attempt to investigate the factors that makes a girl or a village primary school graduate less able or just less willing to go to middle school. Some part of it is related to the non-availability of middle school in the village, for sure, but this does not explain, the lower percentage of transfer of the girls graduated from city-town primary school than boys. It also does not explain why village primary school graduated girls and boys transfer into middle school more than the Turkey's averages for village girls and boys; since only 3 villages out of 251 villages and some other neighborhoods have a middle school in Usak Province. In short, we do not know what the other factors hidden within these two factors are. What we know is that for this or other reasons, the girls and village primary school graduates are under-represented in middle school.

The Province of Usak has reached an advantageous stage in terms of schooling at each level of education (primary, first and second cycle of secondary) in comparison with Turkey's averages and with some other provinces.

As mentioned earlier, while the enrollment at the middle schools of Usak Province, expressed as the percentage of the 13-15 age group, was 68.13 percent in 1970-1971 school year; it was 38.17 percent in Turkey. The planned targets at this level are 50.00 percent by 1977, and 75.00 percent by 1995. The point that seems to be important to remember is this: suppose that some time before 1995, Turkey's average middle schooling rate will reach the stage that Usak Province has already reached. If the factors that determine the transfer of the students from primary into middle school remain unchanged, the inequalities between girls and boys and between village and city-town primary school graduates also will continue to remain as they are seen in Usak Province.

In Turkey's middle schools only general education has been given. For about ten years, most of the first cycle middle schools attached to a vocational or technical school have also used the same middle school curriculum. The "Fundamental Law of Education" which has been in effect since 1973 introduces "eight-year schools" that aim to provide non-vocational general basic education for all.

If the major objective of basic education is to furnish all children with the fundamental knowledge, attitudes, and skills that will allow them to benefit from the possibilities for further development (educational, personal, professional) that are available for them after the completion of basic education, the common minimum level of this

education will have to be achieved by every child. This is an implicit assumption in the objective stated above.

Therefore, we must study more closely the factors related to the transfer of the students from primary into middle school in order to be able to formulate efficient policies to cope with the issues and the problems we face.

A project has been developed in Turkey (coordinated by the State Planning Organization and participated in by all related ministries, including the Ministry of Education) which aims at the selection of about 800 villages, so-called "village-towns" which have an economic and social capacity to be a center for several surrounding villages, and proposes to concentrate government services and investments, including educational facilities, in them. The "village-towns" are already selected. It is anticipated that this project will be effective in providing further educational opportunities for village children. In addition to this project, or as parts of the project, the following could be recommended for experiment:

a) Similar to one-teacher and two-teacher primary schools, two-teacher, three-teacher middle schools could be experimented with using new programs and teaching methods, supported by the aid of multi-media. Even mobile workshops, libraries and laboratories could be provided for these middle schools.

b) Busing could be used where possible.

c) New type of boarding facilities supported by national, local budgets, by the parents, and by local voluntary organizations that would be established for this purpose, could be tried experimentally.

## 2. Transfer Within Middle School

The issues and the problems related to the academic success of the students in middle school could be examined in two sub-categories: 1. internal productivity, 2. selection process.

As the figures for failing in Usak Province middle schools show, the internal productivity rate in middle schools is very low (e.g., in the first grade, 35.95 percent, in the second grade, 20.86 percent, in the third grade, 19.30 percent of the students were failed or dismissed in 1970-1971). This causes an enormous economic wastage and unequal educational opportunities not only for those who fail, but for those who could be given an opportunity to enter the middle school as well, by the same resources that are used on failed students once more.

On the other hand, the findings of the study reveal that the selection process in middle school works against some groups whose characteristics are identified by some factors.

It should be again pointed out that this study does not attempt to control the other factors which are also related

to success in middle school when one factor is studied. Therefore, when it is reported, for example, that village children are more likely to be failing than city-town children, it does not mean that village primary school makes this difference. It might be possible that in the village primary school graduates' group, there are also more students with lower levels of parents education. Or some other unidentified factors also might be at work. What the findings of this study simply say, when the obtained values of Chi-square Test are significant, is that those sub-populations which are constituted by the levels of a factor are not identical.

It is obvious that more research is needed in this area.

The low internal productivity that we observed in middle schools can mostly be explained by the selective character of the system. Achievement criteria used to perform the selection function also includes an intrinsic inequality towards the different groups as far as this study is concerned.

The researcher believes that first the attentions must be concentrated on the selective character of the system rather than focusing on how the academic success of the disadvantaged groups could be increased, and the potential of the school to attain greater equality of opportunity should be redefined. This will also have implications for

the criteria used to define and measure educational achievement.

It must be stressed that the conversion of the present selective Turkish secondary educational system into a non-selective system implies a full rethinking of all aspects of the educational process: structure, curricula, methods of teaching, teaching materials, criteria and instruments of evaluation, human and capital resources and their utilization, etc. It will take careful planning.

The present Turkish middle school is a kind of junior high school, aims to prepare its students to lycee and emphasizes on mastery of concepts, learning a body of information, a subject-centered program, a textbook approach, with all students on the same page at the same time, etc. It is poor in terms of the attitudes and skills it develops in its students to apply this information and learning how to learn. Therefore, middle school curricula with a heavy "humanistic bias" also have to be revised and must be adapted to the needs of the students and the country. Shifting from abstract-verbal ability to active-applied behavior will increase the rate of productivity and the effectiveness of the system to bring about more opportunities for culturally handicapped students to join the "mainstream".

"Vertical" and "horizontal" integration has to be the basic principle of the organization of curricula. Vertically, the strict hierarchical sequences of teaching and learning



blocks that have to be completed with required mastery should be replaced by a flexible system which offers as many courses as possible. Horizontally, the students should be allowed to transfer from one program to another which is very important in regard to the equality of educational opportunity.

Besides these, educational policy making should concentrate on the environmental variables to ensure that all socio-economic groups are enjoying the benefits of education. Related to this, necessary arrangements for differentiated treatment to compensate the environmental handicaps should be developed.

All the teachers and administrators, even students themselves and their parents should be retrained or trained in the new concept of education in general and in the new functions of basic general and secondary education.

It goes without saying that all these changes should be put into effect first on an experimental basis. Based on the results, the system should be developed for full implementation.

## APPENDICES



APPENDIX 1

STUDENT QUESTIONNAIRE

Ministry of Education  
Planning Research and  
Coordination Office

Student Flow Research in Usak Province  
Middle Schools

Student Questionnaire

Information

Dear Student,

We are making a research on the school promotion results of our students in middle schools.

We have put down the things that we would like to learn from you in question form.

This is not an examination. But your answers must be correct. Please read the questions very carefully and answer them correctly. If there is anything you do not understand, ask your teacher for help without any hesitation.

Thank you.

- \_\_\_\_\_
1. Write your first and last name: \_\_\_\_\_
  2. Write the name of the middle school you attend this year, your grade, your section and your school identification number.  
  
Name of the school you attend this year \_\_\_\_\_  
  
Your school identification number \_\_\_\_\_  
  
Your grade \_\_\_\_\_ Your section \_\_\_\_\_
  3. a) Were you also a student in this middle school last year?  
  
1. (    ) Yes,      2. (    ) No.

b)

4. M

1

5. W

a

6.

7.

8

- b) If you marked question "3a" as "No", write the name of the middle school that you attended last year, your grade, your section and your school identification number.

Name of the middle school you attended last year

\_\_\_\_\_

Your school identification number \_\_\_\_\_

Your grade \_\_\_\_\_ Your section \_\_\_\_\_

4. Mark your sex.

1. (    ) Boy,      2. (    ) Girl.

5. Write the name of the primary school from which you graduated

\_\_\_\_\_

6. Write the names of the province, district or village in which the primary school you graduated from is located.

Province \_\_\_\_\_ District \_\_\_\_\_ Village \_\_\_\_\_

7. Mark whether there are any schools other than primary schools in the community where the primary school you graduated from is located.

1. (    ) There is middle school.  
 2. (    ) There is a lycee or an equivalent school.  
 3. (    ) There is not any school beyond primary school.

8. During the time that you were attending the Fifth Grade, how many teachers were there at the primary school from which you graduated? Mark the appropriate number below.

1. (    ) One teacher, 2. (    ) Two teachers,  
 3. (    ) Three teachers, 4. (    ) Four teachers,  
 5. (    ) Five teachers, 6. (    ) More than five teachers.

9. a) Did you attend the Fourth Grade at the primary school from which you graduated?

1. (    ) yes,      2. (    ) no.

- b) If you marked question "9a" as "No", write the name of the primary school at which you attended the Fourth Grade, and the name of the province, district or village where this primary school is located.

Name of the primary school \_\_\_\_\_

Province \_\_\_\_\_ District \_\_\_\_\_ Village \_\_\_\_\_

- c) If you marked question "9a" as "No", mark whether there are any schools other than primary schools in the community where the primary school at which you attended the Fourth Grade is located.
1. (    ) There is middle school.
  2. (    ) There is a lycee or an equivalent school
  3. (    ) There is not any school beyond primary school.

- d) If you marked question "9a" as "No", mark how many teachers there are at the primary school at which you attended the Fourth Grade.

1. (    ) One teacher, 2. (    ) Two teachers,
3. (    ) Three teachers, 4. (    ) Four teachers,
5. (    ) Five teachers, 6. (    ) More than five teachers.

10. How many different primary schools did you attend until you graduated from primary school?

1. (    ) I attended only one primary school.
2. (    ) I attended two different primary schools.
3. (    ) I attended three or more different primary schools.

11. Mark the item below which most appropriately represents your father's present position.

1. (    ) He has a job.
2. (    ) He is retired.
3. (    ) He does not have any job.
4. (    ) He is dead.

12. Mark the item below which most appropriately represents your mother's present position.

1. (    ) She is a housewife.
2. (    ) She has a job.
3. (    ) She is retired.
4. (    ) She is dead.

13. There are ten sentences below each of which shows a different level of education. You will choose the sentence which represents your father's present level of education most appropriately and mark it on the left side of the sentence; finally do the same thing for your mother, and place a mark on the right side of the sentence which represents your mother's present educational level most appropriately.

Educational  
Level of  
your FATHER

Educational  
Level of  
your MOTHER

- |   |        |
|---|--------|
| 1. (    ) Illiterate.   | (    ) |
| 2. (    ) Did not attend school but knows how to read and write                                 | (    ) |
| 3. (    ) Attended primary school for some time but did not graduate from primary school.       | (    ) |
| 4. (    ) Graduated from primary school   | (    ) |
| 5. (    ) Attended a middle school or an equivalent school for some time, but did not graduate. | (    ) |
| 6. (    ) Graduated from a middle school or an equivalent school                                | (    ) |
| 7. (    ) Attended a lycee or an equivalent school for some time, but did not graduate.         | (    ) |
| 8. (    ) Graduated from a lycee or an equivalent school.                                       | (    ) |



9. (    ) Attended a higher school or a university  
for some time, but did not graduate. (    )
10. (    ) Graduated from a higher school or a  
university. (    )
14. Where is your family (your mother, father or people who  
are taking care of you) living now? Mark the most  
appropriate sentence below.
1. (    ) In the same community where the middle school  
I am attending now is located.
2. (    ) In another city or town in Usak Province.
3. (    ) In a village in Usak Province.
4. (    ) In a city or town out of Usak Province.
5. (    ) In a village out of Usak Province.
15. Did your family live last year in the same place that  
you marked in question 14?
1. (    ) Yes,        2. (    ) No.
16. Where and with whom do you stay during the time that  
you attend school? Mark one of the sentences below  
that most appropriately fits your situation.
1. (    ) In the community where my present middle school  
is located, with my family.
2. (    ) In the community where my present middle school  
is located, with a relative or a friend of my  
family.
3. (    ) In the community where my present middle school  
is located, in a student dormitory.
4. (    ) In the community where my present middle school  
is located, in a hotel or a rented house.
5. (    ) In a nearby village or town with my family.
17. Mark the final results of your middle school promotion  
at the end of the school year for each grade level (you  
will not mark the grades that you have not completed,  
or have not started yet).

1. AT THE FIRST GRADE OF MIDDLE SCHOOL

1. (    ) I did not fail at all.
2. (    ) I failed only once.
3. (    ) I was dismissed.

2. AT THE SECOND GRADE OF MIDDLE SCHOOL

1. (    ) I did not fail at all.
2. (    ) I failed only once.
3. (    ) I was dismissed.

3. AT THE THIRD GRADE OF MIDDLE SCHOOL

1. (    ) I did not fail at all.
2. (    ) I failed only once.

18. Did you take any private paid lessons from someone last year during the school year or during the summer time?

1. (    ) Yes,        2. (    ) No.

19. If your answer to question 18 is "yes", mark the names of the courses you took as private courses below.

1. (    ) Turkish, 2. (    ) Mathematics,  
3. (    ) Foreign Language, 4. (    ) Social science courses,  
5. (    ) Science courses, 6. (    ) Other courses.

Thank you.

## Ministry of Education

1970-1971 School Year  
I and II Grades  
Student Flow Recording Form

Page

PAKD  
Ministry of Education

### Grade III

# Student Flow Recording Form

Page

[illegible]

\*Students who transferred into your school during 1970-1971 School Year will be shown at the end of each grade level as it is shown in the sample.

# APPENDIX 4

PAKD

## Ministry of Education

### School Identification Form

For the students who graduated from one of the middle schools of Usak Province at the end of 1970-1971 school year and registered to a second cycle secondary school at the beginning of 1971-1972

- A. Name of the school \_\_\_\_\_ Page \_\_\_\_\_  
filling out this form
- B. Students who graduated from \_\_\_\_\_ Middle School at the end of 1970-1971 School year and registered to the first grade of \_\_\_\_\_ school.

Grade, Section	Student's		Students still attend- ing this school	Students leaving school after registration	Students transferred to another school after registration	The School to which transferred	
	School No.	First and last name				Place	Name

APPENDIX 5

OFFICIAL LETTER TO THE OFFICE OF THE  
GOVERNOR OF USAK PROVINCE

Turkish Republic  
Ministry of Education  
Planning Research and Coordination Office

Ref.: 010/1450

Ankara, April 11, 1972

To the Governorship of Usak Province  
(The Directorate of Education)

Planning Research and Coordination Office of the Ministry of Education has planned a research in the middle schools of your Province on the student flow within middle schools.

There is a need for the help of all the administrators and the teachers during the administration of the student questionnaire and collection of needed data from the school filed for this important research that aims to identify the factors affecting student flow within the middle schools and to determine the type of information needed in educational planning activities.

A. Sudi Bülbül, expert in the Planning Research and Coordination Office, is assigned to collect data from schools. He will be in Usak at the beginning of the last week of April, 1972.

There is a need that the school administration should make some of the school records ready before expert A. Sudi Bülbül's coming to Usak.

Three different type of data recording forms are developed and enough copies were sent to the Directorate of Education to be distributed to the middle schools and will be filled out by the school administrations. In addition, an instruction explaining how to fill out the forms and samples of filled forms were also sent.

Among these, "1970-1971 School Year I and II Grade Students Flow Recording Form" and "1970-1971 School Year III Grade Students Flow Recording Form" will be distributed to the middle schools included in the study, and other forms will be distributed to all second cycle secondary schools in your Province.

1. Please inform all the school administrations to fill out the Student Flow Forms according to the instructions given and make them ready in time.

2. Please inform the school administrations of the middle schools included in the study also to make ready the following school record books of 1970-1971 School Year:

- a) Student Grades Recording Book.
  - b) The minutes of the class-room teachers meeting at the end of 1970-1971 school year.
  - c) New Enrolled Students Recording Book.
  - d) Student Recording Master Book.
  - e) Transferred Students Recording Book.
  - f) Dismissed Students Recording Book.
  - g) Individual Social and Health Conditions Recording Books of the Students.
3. Please give your personal help to expert A. Sudi Bülbül in his studies when it is necessary.

Nusret Karcioğlu  
Undersecretary  
Ministry of Education

The middle schools included  
in the study

- 1. Usak, Halit Ziya Middle School
- 2. Usak, Merkez Middle School
- 3. Usak, Besim Atalay Middle School
- 4. Banaz, Buyuk Oturak Middle School
- 5. Ulubey Middle School
- 6. Sivasli Middle School

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