AEPAM Research Study No. 25

A STATISTICAL STUDY

ON

TRENDS AND PATTERNS OF DROUPTS AND REPETITIONS

IN

KARACHI (WEST) DISTRICT

BY

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#### PREFACE

One of the most impressive developments in contemporary society has been the vast growth of research into all aspects of human development. Increasingly, statistical models are used as a basis for gaining insight and making decisions for the long term planning.

investment. It should therefore be planned very carefully. The best approach is to take into account the existing situation and facts and then proceed with future planning. It is now well recognised that the various kinds of educational facts are needed in time for effective administration, planning and policy making. But one of the major problems being faced by educational planners and administrators in Pakistan is the lack of adequate and reliable statistics. In addition, many of those involved in educational planning and management at the local and institutional levels lack skill in preparation of suitable statistical profiles.

The inadequacy of the statistical base on education becomes all the more evident for the data-users. It is impossible to compute exact educational indicators viz, enrolment ratios, pupils-teacher ratios, flow rates and degree of efficiency etc, in the education system except as rough approximations of varying degree of precision.

The problems of wastage is compounded by non-availability of reliable statistics as well as the lack of knowledge as how to determine indicators of educational wastage.

It is the responsibility of educational planmers, administrators and teachers to streamline the methodology and usage of statistical analysis to determine the indicators of wastage in education system, without making available to Government and decision makers accurate statistics and information and the various aspects of education, demography and resources, the magnitude of our educational wastage will continue to grow and persist.

Mr. Tauhid has prepared with devotion this document to provide simple statistical techniques and methods for the understanding and has picturised the trends and patterns of repetitions and dropouts of Karachi (West) District.

I hope that the study will be useful to all educational administrators, planners and policy-makers.

( DR. TABIR HUSAIN )

## INTRODUCTION

The importance of education in any community is undisputed.

It is the foundation of a community or even nations prosperity and

as such should get the recondition it deserves.

Education in Karachi has passed through several stages of development and the significance and importance it enjoys today have been derived from the deep concern among the people for the need of higher education to help satisfy the country's urgency in all the phases of its development as a developing nation.

In order to ensure a good and effective education in a society serious need for proper educational planning is now widely accepted, and the importance of educational statistics for successful planning and administration in education is also well recognized.

An educational institution is a system through which an internal movement of pupil take place from grade to grade until there is a hundered percent out-put or some failures or dropouts. The internal movement of pupil is influenced by promotion rates, repetition rates and dropout rates i.e. flow rates.

Wastage in any system is inevitable, and indication of this wastage are important expressions of the efficiency of the system specially when there are limited financial resources.

Generally, wastage in an educational system occurs in two forms:

- Some people leave the system at different points without completing the stage of education in which they are enrolled, and
- some repeat the same grade for one or more than one year.

In technical jargen, the former are called dropouts and the later as repeaters.

Educational wastage in the form of dropout and repetition means extra educational efforts which can be quantified in terms of extra pupil-years spent by a cohort over and above the years spent in a fully efficient system having no dropouts and repeaters.

Thus the availability of dependable data is a pre-requisite for effective educational planning. The collection, tabulation and proper analysis of data obtained provide the basic tools for the educational planners and administrators for both the macro and micro study of educational issues.

The main objectives of the study were as follows:

- To review the population characteristics at Divisional and District level(under study).
- To provide the literacy status by sex, location at Divisional and District level.
- To provide the formal Educational Attainments by level, sex and location in Karachi West District.
- To review the quantitative aspects of the school system and its expansion.
- To focus the retention of pupil by grades.
- To diagnose mout the retention of pupil by years spent in the cycle.
- To indicate the average duration of study for graduates, dropouts and cohort,
- To review the wastege in education and degree of internal efficiency.

The author has tried to make this document of great value and interest to all educational planners and administrators engaged in collecting, analysing and interpreting data in the field of education and provide useful reference material in future planning for the development of education.

Suggestions for improvement in terms of coverage, errors or omissions and get-up of this publication will thank-fully be acknowledged.

The author is highly indebted to the Director General of the Academy, Dr. Tabir Husain, for his encouragment and guidance. Thanks are also to Dr. Abdul Ghafoor, and Mr. L. Habib Kban, Directors and Dr. Sarfraz Khawaja, Senior Specialist, whose assistance made this a fruitful document. My thanks are also due to Dr. Parveen Shabid, Senior Specialist, who helped me for writing this report.

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(MIRZA TAUHIDUDDIN AHMAD)

#### SUMMARY

The following are the salient features of the study:

# POPULATION, LITERACY AND EDUCATIONAL ATTAINMENT:

- The sex ratio was observed as 117 males for avery hundred females.
- The average household size was 6 persons for family.
- The population dessity was 2160 inhabitants per Sq. K.M.
- The annual growth rate in the population was 6.3 per cent in the year 1981.
- The population of Karachi (West) District was 2156 thousands, of which 54 per cent were males and 46 per cent were females in 1981.
- The projected school-age population was observed as 395 thousands (both sexes) at primary level of education i.e. (5-9) agegroup in 1985, of which 52 per cent were males and 42 per cent were females.
- At secondary level of education i.e. (10-14) age troup, the projected population was 145 thousand (both sexes) out of which 52 per cent were males and 48 per cent were females for the same period.
- The overall literacy rate was noted as 57 per cent of which 61 per cent were males and 53 per cent were females in 1981.
- The Muslim population (10 years and above) was 1505 thousands, of which 57 per cent could read the Holy Quran (29 per cent males and 28 per cent females) in 1981.

 it is interesting to note that males and females have attained the same percentage (17%) of primary education and above in the Year 1981.

#### SCHOOL EDUCATION

- it is highlighted that the over-all participation rate was 57 per cent with a high participation of females i.e. 58 per cent at primary level of education in 1984. The participation rate at secondary level of education was 37 percent (both sexes) of which 42 per cent were males and 32 per cent were females.
- a standard pupil-teacher ratio was observed at primary level of education.
- Unlike other professions, teaching is predominently a female profession at primary and secondary levels of education.
- The enrolment in primary schools has been increased by 32 per cent (both sexes) in 1983-84 as compared to 1978-79, of which 37 and 23 per cent increase was noted in males and females respectively during the same period.
- at secondary level of education, there was an increase of 23 per cent (both sexes) out of which 24 and 11 per cent increase was noted in males and females respectively in 1983-84 as compared to 1978-79.
- the most common problem being faced by the educational institutions was "general repair of the buildings".

# STUDENT FLOW ANALYSIS AND COHORT FLOW INDICATORS

- It is remarkable to note that the flow rates indicates no significant trends and patterns which may be due to non-existence of Karachi class. However, the highest dropout rate was observed as 16.5 per cent in grade I, New Karachi.
- 92 per cent children (both sexes) retained in Grade I and II, of which 94 and 88 per cent were males and females repsectively at District level.
- It is observed that 80 per cent pupil (both sexes), of which 86 per cent males and 60 per cent females will eventually graduate from the primary cycle of education during 1989-90.
- 58 per cent pupil (both sexes) are expected to get through the primary cycle of education without any repetition in 1986-87, of which 61 and 52 per cent would be males and females respectively.
- Each graduate would take 503 years on the average to complete the primary education.
- Wastage ratio indicates that the education system is not functioning so efficiently as it could be, according to the data supplied.
- The maximum total wastage due to dropout was 74 per cent contributed by females and the total wastage contributed due to repetition was 53 per cent.

#### HISTORICAL BACKGROUND

In the 18th Century, the city was founded by a small community of fishermen and a few businessmen. It was called 'Kulachi'jo-Goth (Village of Kulachi) at that time. Then the name was changed to 'Kurrachee' in the early British days and in the course of time to its present name of KARACHI.

The Karachi Division is now comprised of three districts, namely, Karachi East, Karachi West and Karachi South. The Karachi Metropolitan falls in all the three districts.

The total area of the Division is 3527 Sq. Km. of which Karachi West is spread over an area of 998 Sq.Km. (Table I)

It is bounded by Dadu District in North-East, Thatta in South-East, Lasbela District of Baluchistan in the West and Arabian-Sea in South.

The temperature is moderate in Karachi. The relative humidity varies from 58 percent in December to 85 percent in August.

The hottest months are May and June when the mean maximum temperature generally rises to 35 C.

The average annual rainfall is approximately 256 m.m.

Karachi is primarily most industrialised and commercial area with 1713 registered industrial units in the city. It provides job opportunities to a large number of people. Against a relatively smaller operation in terms of generating income and employment. The agriculture farms are located in patches in outer areas of the division.

Health facilities are also available in the city. In all there are 107 hospitals having 7122 beds and 513 dispensaries with 227 beds. Two rural health centres having 30beds and T.B. Clinics having 40 beds are also provided.

# POPULATION - ITS SIZE, STRUCTURE AND DENSITY

The statistical study of human populations, primarily with respect to their size, structure and development over the time-these features of a population are dependent on the incidence of births, deaths and migration. Such findings are of vital importance on which educational plans are built. Nearly all the quantitative and qualitative problems which an educational plan seeks to diagnose and resolve are related to the population; its growth determines the age-composition and the size of the educational clientele; its density and distribution, etc. are important for microplanning and school-mapping.

Keeping in view the importance of population structure and its charactristics, data of Karachi Division in general and Karachi West District in particular for the census year 1981 has been analysed.

The population of Karachi Division was 5437.9 thousands, according to 1981 population census, of which 2954.7 thousands were males and 2483.3. thousands were females.

The population of Karachi West District was 2156.3 thousands out of which 1164.0 were males and 992.2 females (Table 2).

The average family size of Karachi Division was observed as 6.6 persons, whereas for Karachi West District it was 6.5 persons.

The density of population was noted as 1524 and 2161 inhabitants per Sq.Km, at Division and Karachi West District levels respectively (Table 1).

#### PROJECTION OF POPULATION

The study of population growth has one specific practical application, that is to calculate trends for the future. These calculations are termed as future population, forecasts, extrapolations, estimates or projections. These consist merely of extending some plausible pattern of growth from the past into the future.

All calculations for future population are bypothetical in nature. As actual predictions, they usually turn out rather poorly. In order to make a reliable estimate for the future various factors are to be predicted which affect all the vital processes in a population. At present this is not possible.

Projections upto 1985 of school-going age population based on 1981 census report have been made for each level of education.

The estimated population is based on the assumption that the rate of increase in population in the District under study will continue at 6.30 percent per an annum (Table 1)

From Table 3, it is revealed that the total population of children aged (5-9) years would be 395 thousands, of which 205 thousands would be males and 190 thousands females in the year 1985. This means that 395 thousands children would be available in stock to participate in the primary education in the year 1985.

Similarly, the total population of children aged 10-14 years eligible to enter the secondary level education is noted as 145 thousands, out of which 76 thousands would be males and 69 thousands females in the year 1985.

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Karachi (West) District	Karachi Division	*
E 117.3	118.9	Sex Ratio
866	3527	Area (Sq.Km)
2160.6	1541.8	density (ner sq.km)
6,5	6,6	Average Household
6.30	4.96	Annual Growth Bate in Par- centage,

Source: 1981 Census Report of Karachi Division, Pakistan Census Organisation.

TABLE 2 PERCENTAGES OF POPULATIONS BY AGE-STRUCTURE OF MARACHI DIVISION 1981.

Percen- 15.4 15.0 tage:	Female 383.2 372.3	Percen- 13.4 13.5 tage:	Male 397.7 398.5	Percen- 14.4. 14.2 tage.	Both 780.9 770.8	0-4 5-9		Karachi Division Karachi (West) Disivion.	
8.0	200 .0	7.5	222.1	7,7	422.1	10-12		Total 5437.9 2156.2	
5,4	133,3	5.0	148.1	5.1	281.4	13-14		Male Female 2954.7 2483.3 1164.0 992.2	DOPULATION (10
11.2	277.3	11.0	326.3	11.1	604.1	15-19		Total 100	1000
								34.3 53.9	PERCENTAGE
9,2	228.5	10.0	297.9	0.6	526.4	20-24		Penale 45.7 46.1	AUE
35.7	888,2	39,4	1164.1	37.7	2052.2	25 & above	In Th		
100	2483.3	100	2954.7	100	5437.9	Total	Thousand)		

AGE STRUCTURE

e de	77 6	Pe	Male	Pe	Во	Age-group
Percentage	Femsle	Percentage	Te .	Percentage	Both sexes	
13.6	154.8	13.8	160.3	14.6	315.1	9-4
15.0	149,1	13,8	160.3	14.3	309.5	5-9
8,2	81.2	7.7	89.3	7.9	170.6	10-12
5,4	54. 1ª	5.1	59.5	5.3	113.7	13-14
11.2	111.5	11.0	127.9	11.11	139.5	15-19
9.1	90.4	9.7	113,0	9,4	203.5	20-24
35,4	351.1	38.9	453.7	37.3	804.3	24 & above
100	992.2	100	1164.0	100	2156.2	Total

WEST

TABLE 3 PROJECTED SCHOOL-AGE POPULATION AT VARIOUS LEVELS OF EDUCATION
AT KARACHI (WEST) DISTRICT

(SUNYSHORT WI)

1985			1984			1983		200	1082		Year	
Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban		
395.3	386.8	371.9	8.0	363.9	349.8	7.5	342,3	329.0	7.0	322.0	Both Sexes	PRIMARY (5-9
4.3 204.7	200.4	192,6	4.1	188.5	181.1	3.0	177.3	170.4	3.6	166.8	Mala	H\$ 5/2
4.2 190.6	186.4	179.3	3.9	175,4	168,7	3,7	165.0	158.6	3,4	155.2	Female	
2.6	142,6	136,6	2.4	134.2	128.5	2,2	126.3	120,9	2.1	118.8	Both Sexes	SECONDAR (10 -
76.2	74.7	71.7	1.4	70.3	67.4	43	66.1	63,4	1.2	62.2	Male	SECONDARY SCHOOL AGE (10 - 14 YEARS)
69.0	67,9	64.9	1.0	63.9	61.1	0.9	60.2	57.5	0,9	56,6	Famele	li4

Source: 198

1981, Census Report of Karachi Division.

#### LITERACY

The literacy ratio of Karachi Division in 1981 was observed as 55 percent, of which 60 percent was for males and 49 percent for females.

The urban literacy ratio was 57 percent, out of which 62 percent was for males and 51 percent for females. The rural literacy picture was such that the overall ratio was 17 percent, of which 23 percent and 9 percent were males and females, respectively (Table 4).

In Karachi West District, the overall literacy ratio
was 57 percent. The male and female ratio was 61 and 53 percent,
respectively.

The urban literacy ratio was 58 percent for both sexes.

Amongst males and females, the ratio was noted as 62 percent and
53 percent respectively.

In rural areas, the literacy rate was observed as 32 percent for both sexes. The ratio for males and females was 37 percent and 25 percent, respectively. (Table 4).

TABLE 4
DIVISION AND KAPACHI WIST DISTRICT 1981.

District ..... Estachi Division Location Total Rural Urban Urban Rural Total Both Saxes 56,62 55.04 17.14 57.85 32.19 61.54 60,00 23.41 61,33 37,39 61.79 Female 48,84 50,47 25,42 53.02 52.53 9.13 IN PERCENT

Source: 1981, Census Report of Karachi Division, Populations Census Organizations, Islamabad.

## ABILITY TO READ THE HOLY QUEAN

The Muslim Population (10 years and above) was 3760.4 thousands in Karachi Division in 1981, out of which 55.6 percent could read the Holy Quran - 28.8 percent males and 26.7 percent females.

The percentage of those who were learning to read the Holy Quran was 22.5 percent for males and 14 percent females.

In Karachi West District, the figures reflects that out of total population (10 years & above) 56.8 percent could read the Holy Quran. The percentages of males and females were 29 and 27.7, respectively.

Amongst those who were found learning the Holy Quran, 21.7 percent were males and 13.4 percent females (Table 5).

Table 5 BY SEX AND LOCALITY ABLE TO READ THE HOLY QURAN AT DIVISIONAL AND DISTRICT LEVELS 1981

West District	Marachi Division
Urban Rural Total	Urban Rural Total
98.1	95.9 4.1
98.1 54.0 1.9 1.0 100 55.0	53.3 55.5
44.1 0.8 44.9	42.6 1.9
56.6	54.5 1.0 55.5
28.8 0.2 29.0	ABLE TO READ 28.2 0.6 28.8
27.6 0.1 27.7	26.3 0.4 26.7
8.0 8.0	7.6 0.1
4.2	UNABLE TO READ .5 M .6 4.0 .1 0.1 .7 4.1
3.7 0.1 3.7	3.6 3.6
33.7 1.4 35.1	B.S 33.8 2.8 36.6
20.9 0.8 21.7	B.S M F  33.8 21.0 12. 2.8 1.5 1. 36.6 22.5 14.
12.7 0.7	12. 7 14. 6

Source: Computed from Table 6

Table 6 MUSLIM POPULATIONS (10 YEARS & ABOVE) BY SEX AND ABILITY TO READ THE HOLY QUEAN AT DIVISIONAL AND DISTRICT LEVELS 1981.

KARACHI (WEST) DISTRICT	DIVISION
Urban Rural Total	Orban Rural Total
1476.9 27.9 1504.8	3608.5 151.9 3760.4
812.9 15.7 828.7	Total M 2005.2 85.2 2090.4
663.9 12.1 676.1	F 1603.3 66.7 1670.0
849.7 5.2 855.0	Can B.S 2050.2 38.5 2088.8
434.1	Can Read F M F 0.2 1061.7 986.5 3.5 23.2 15.3 8.8 1084.9 1003.8
415	
.6 120.5 .8 0.8	Can Not Read B.S M 287.0 152.3 6.1 3.8 293.1 156.1
64.3	Can Not Read B.S M 287.0 152.3 6.1 3.8 293.1 156.1
56.6	F 134.6 2.3 136.9
506. <b>5</b> 21.9 528.5	F B.S M F  134.6 1271.3 791.1 480.1  2.3 107.2 58.1 49.1  136.9 1378.5 849.2 529.2
	791.1 58.1 849.2
314.9 191.6 11.9 10.0 326.9 201.6	480.1 49.1 529.2

Source: 1981, Census Report of Karachi Division.

#### EDUCATIONAL ATTAINMENT

The educational attainment of a person is the highest grade or level of education completed by the person in the educational system of his own or some other State. A grade is a stage of instruction usually covered in the course of the school year.

It is evident from Table 7 that 17 percent males have completed primary education and above. Similarly, the same percentage of females has also reached this level.

In rural areas, 9 percent of males have attained primary education and above, whereas only 7 percent females have completed this level.

Table 7 EDUCATIONAL ATTAINMENTS OF THE POPULATION
BY SEX AND LOCATION 1981

				IN PERC	ENT
Below prima	ry	Both sexes	Male	Female	
	Urban	8	8	8	
	Rural	4	5	4	
	Total	R	8	8	
Primary	Urban	6	6	7	
	Rural	4	5	4	
	Total	6	6	7	
	10661				
Middle	(apple)	-		5	
	Urban	5	.5 2	1	
	Rural	2	5	5	
	Total	5	,		
Matriculat	ion.				
	Urban	3	3	3	
	Rural	1	1	1	
	Total	3	3	3	
Intermedia	te & above				
	Urban	2	3	2	
	Rural	1	1	1	
	Total	2	3	2	
Sub- Manala					
Sub- Totals					
	Urban	24	25	27	
	Rural	12	14	11	
	Total	24	25	25	
No Educati recorded o	of Population				
	Urban	76	75	73	
	Rural	88	86	89	
	Total	76	75_	75	
		100	100	100	
		management of	100000000000000000000000000000000000000		

#### SCHOOL EDUCATION

factors. Infact, it is the education system that has to feed these areas to sustain the growth of a nation. Therefore it has to be very sensitive and susceptible to changing events. The changes have been fruitful as is evident in what Karachi is today—an industrialised and developed city enjoying a high standard of living.

The Education System can not remain stagment, changes are necessary and inevitable for the growth and improvement,

Changes cannot be initiated at one level only. A change requires simultaneous adjustment at all levels i.e. from primary level to the institutions of higher education. Thought is also given recently to establish some Model Schools equipped with all basic facilities.

Over a short span of time, Karachi Division has witnessed a remarkable expension in education.

It is evident from Table 8 that in 1984 out 891 thousands primary school-age population in Karachi Division, 509 thousands children were found enrolled at that level showing thereby a participation rate of 57 percent, of which 56 percent were males and 58 percent females.

Regarding Secondary Education in Karachi Division the figures reveals that 37 percent pupils (both sexes) were participating out of which 42.0 percent were males and 32 percent females.

TABLE 8 PARTICIPATION RATES AT PRIMARY AND SECONDARY LIVELS OF EDUCATION, KARACHI DIVISION 1984.

	178 123 301	428.1 385.3 813.4	56 58 57	259 250 509	460.7 430.3 891.0	Male Female Borh sexes.
One	Enrolment (in '000)	population (in '000)	Particionations Rate (in Percent)	Enrolment (in '000)	population (in '000)	

Source:

D.E.O's Document Karachi (West) District,

#### PUPILS-TEACHER RATIOS

It is revealed from Table 9 that a standard pupil-teacher ratio has been maintained at Primary level of education both for males and females. But at Secondary stage, for every male & female teacher there were 17 and 9 children respectively.

Table 9

### PUPILS TEACHERS RATIOS AT PRIMARY AND SECONDARY LEVELS OF EDUCATION, KARACHI DIVISION 1984.

	Both Sexes	Male	Female
Primary Education.	29	40	30
Secondary Education	. 24	- 17	9

Source: Computed from table No.11.

#### TEACHING STAFF

The number of teachers in the School system in Karachi
Division has been observed as 27 thousands in 1983-84, of which 11
thousands were males (42 percent) and 16 thousands were females,
i.e. 58 percent (Table 10).

While going through the level-wise induction of teachers, it is noted that at Primary level, there was a total input of 14.6 thousand teachers, of which 44 percent were males and 56 percent were females. Similarly, the number of teachers input at the Secondary level was observed at 12.6 thousands, of which 39 percent were males and 61 percent were females. This indicates that unlike other occupations, teaching is predominantly a female profession (Table 10).

Table 10 PERCENTAGE AND TOTALS OF TEACHERS PARTICIPATING IN

Total	Secondary	Primary	Level of Education
27,236	12,585	14,651	Both Sexes
11,431	4,938	6,493	Male
11,431 15,805	7,647	8,158	Remaie
42	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	44	Nale
58	61	55	Percentage Female

Source: Computed from Table 11

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26		6,061	49	897	3,800	1.342		1,586	533	916	137		8,158	24	80	f	1,962	399	3,572	2.121		EEMIE	TEACHING STA
		10,125	120	1.769	5,990	3.146		2,460	689	1,386	385		14,651	567	80	290	3,148	8.7	4.778	5,081		TOTAL	10

#### EXPANSION IN SCHOOL EDUCATION

The data was subjected to statistical treatment, Index

Numbers were computed at Karachi district and sub-divisional levels.

This statistical tool is most frequently used to compare more readily the growth of two or more different variables over time. The idea is to take the "base-value" of the variables, i.e. their value in the base year, as equal to a hundred. Their value in any following year would then be easily computed.

It is evident from Table 13 that the enrolment in Primary schools has increased in absolute terms from 71 thousands pupils in 1978-79 to 94 thousands in 1983-84 with an increase of 32 percent. The male pupils were 48 thousands in 1978-79 and 66 thousands in 1983-84 showing thereby an increase of 37 percent. Similarly female pupils showed an increase of 23 percent in 1983-84 over 1978-79 (Table 12).

In Federal "B" Area a Sub-division the primary school going children were found enrolled with consistent increase of about 17percent for both sexes during 1983-84 as compared to 1978-79.

Again, in Nazimabad, the situation was such that there was a decrease in enrolment of both sexes by 19 percent in 1983-84 over 1978-79. Similar decreasing pattern also existed amongst males and females with almost the same rate for the same period (Table 12).

Regarding remaining Sub-Divisions of Karachi (West) District, the figures reveal that there was a consistent increase in enrolment in 1983-84 over 1978-79. But the indices of primary enrolment in Orangi, Sub-Division revealed that there was a tremendous increase in enrolment, i.e. 111 percent for both sexes. It was 124 percent for male and 82 percent for female pupils in 1983-84 as compared to 1978-79.

At Secondary level about 57.7 thousands pupils were attending the institutions in 1978-79 and 70.7 thousands in 1983-84 (Table 15) at District level. This indicates increase in enrolment of 23 percent for both sexes. Amongst males and females, the male pupils contributed an increase of 24 percent and females 11 percent during the same period (Table 14).

It is also interesting to note here that there was a slight decrease of 1 percent in male enrolment in the year 1979-80. But the indices showed a gradual increase in female enrolment till 1981-82.

	Table 12	
TO 1983-84 . (BASE YEAR 1978-79)	FUPILS ENROLLED IN PRIMARY EDUCATI	

IN PERCENT

		1978-79	1979-80	1980-91	1981-82	1982-82	1983-84
Karachi	Male	100	111	112	120	126	137
(West)	Female	100	113	117	119	124	123
DISTITUTE	Both Sexes	100	112	113	120	126	132
				ā			
	Male	100	113	119	114	116	117
Federal "B"	Female	100	111	117	114	801	116
	Both Sexes	100	113	118	114	113	117
	Male	100	100	92	90	85	80
Nazimabad	Penale	100	101	98	90	00	83
	Both Sexes	100	101	93	90	86	81
New Karachi	Male	100	119	113	811	121	121
	Female	100	120	130	125	121	118
	Both Sexes	100	119	117	119	121	120
Orangi	Male	100	111	124	157	179	224
	Yemale	100	126	127	157	189	182
	Both Sexes	100	116	125	157	182	211

Source: Computed from Table 13,

Table 13 ENROLMENT OF PUPILS AT PRIMARY LEVEL OF PRUCATION NARACHI (NEST) DISTRICT FOR 1978-84.

1978-79

1979-80

1980-81

1981-82

1982-83

1983-84

Karachi	Male	48470	53791	54241	58204	61129	66309
West	Female	22926	25993	26737	27386	28456	28160
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Both sexes	71396	97784	80978	85590	89585	94469
Fodered "R"	Male	12408	14075	14706	16193	14400	14561
1 1	Female	6896	7658	8092	7897	7452	8018
	Both sexes	19304	21733 -	22798	22090	21852	22579
	Male	11637	13645	10645	10423	3905	9353
Nazimabad.	Female	6442	6526	6329	5777	5691	5318
	Both sexes.	18079	18171	16974	16200	15597	14671
	Male	11932	14147	13462	14023	14466	14458
New Karachi	Female	4109	4914	5340	5131	4970	4829
	Both sexes.	16041	19061	18802	19154	19436	19287
	Male	12493	13924	15428	19565	22357	27936
Orangi	Female	5479	6895	6976	8581	10343	9995
		1 2022	01806	2000		200	1

Source:

Data collected from D.E.O. office, Karschi (West) District.

Table 14 OF EDUCATION IN KARACHI (WEST) DISTRICT, 1978-79 TO 1983-84

IN PERCENT

1983-84	1982-83	1981-82	1980-81	1979-80	1978-79	Year
123	110	107	104	3,26	100	Both Sexes
124	110	106	103	99	100	Male
111	110	115	111	107	100	Pemsle

Source:

Computed from table 15.

Table 15

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	Numbe	er or pupils	
Year	Both Sexes	Male	Female.
1978-79	57,672	50,330	7,342
1979-80	57,525	49,733	7,792
1980-81	59,763	51,661	8,102
1981-82	61,984	53,529	8,455
1982-83	63,373	55,331	7,992
1983-84	70,681	62,554	8,127

Source:

D.E.O. Office document Karachi West District.

## NON AVAILABILITY OF PHYSICAL FACILITIES

Based on data collected from Karachi District Education
Office on various Educational Institutions an attempt is made to
identify the problems prevailing at each level of education.

Generally a school is housed in a Government ownd building which cannot be considered attractive, since it has not been maintained in good condition. The class-rooms are either small or have dirt floors. The building's roof is makehift or leaking and completely unsafe in some institutions. Furniture in the School was either not available at all or was in bad condition. Even the Tat Fatti was not found in some schools. There were no electric lights or fans, etc. The toilet and drinking water was also generally not available.

The following were the major problems of schools as placed in order of rank:

Table 10: Problems identified and ranked in Karachi (West)
District, 1984

Rank	Nature of Problem
1.	General Repair of Building
2.	Water
3.	Furniture
4.	Tat Patt1
5.	Toilet
6.	Rooms Shortage
7.	Electricity
8.	Repair of the Furniture
9.	Dangerous Building

10.	Equipment
11.	Science Laboratory
12.	Science Teacher
13.	New Building
14.	Charts
15.	Shade.

Source:

D.E.O. Office Document Karachi (West) District.

## STUDENT FLOW ANALYSIS AND WASTAGE IN EDUCATION

Rapid educational expansion compared with growing claims on national budgets has rendered planner's preoccupation with "efficiency" today more acute than ever. High rates of repetition and dropout, observed in many places, are seen as an important manifestation of low efficiency, through certainly not as the only one.

The objective of an educational activity, i.e. the output one expects to derive from it, can obviously be assessed in different ways, depending on one's analytical perspective or ideological framework. Educators will emphasise the acquisition of relevant knowledge, attitudes and skills as the principal objective of schooling. Educational planners seem to take a similar pragmatic view; their plans consider it as the most immediate and important objective that the maximum number of those who entered an educational system or cycle complete it successfully within the prescribed period to minimize the wastage.

The issue of educational wastage is a very common problem in all the developing countries. The problem of wastage is further compounded by the lack of reliable statistics as well as lack of knowledge of how to determine or compute the indicators of educational wastage.

Admittedly, the over-all solutions for the reduction of educational wastage is a global national issue which touches on several factors such as availability of funds, staff and socio-cultural and political factors, etc. Most of these factors lie outside the control of the educational administrator or planners

But the basic problem of understanding, determination and computation of statistical analysis of the issues of educational wastege lie within the responsibility of educational planners, administrators and teachers. Without making available to Government and decision-makers accurate statistics and information, on various aspects of education, demography and resources, the magnitude of our educational wastege problems will continue to grow and to persist.

The flow rates of District and Sub-Divisional levels were computed which revealed that 7 percent children (both sexes), 5 percent males and 11 percent females were dropped out from Grade I and II. The repetition rates were noted as 8 percent for both sexes, 9 percent for males and 6 percent for females in the same grade, Table 17 (a).

The Sub-Divisional picture showed that the highest dropouts of children for both sexes was 28 percent between grades III and IV in New Karachi.

Amongst males and females, it is evident from Table 17 (b) that the highest number of male children who dropped out between grade III and IV was 31 percent in New Karachi whereas the lowest dropout of only 2 percent was from grades II and III in Federal 'B'Area.

Regarding females, 18 percent were dropped out between grades I and II from Orangi and 1.2 percent between grades II and III in Nazimabad. Similarly, the repetition rates ranges from 1.9 percent in grade IV in Orangi to 15.3 per cent in grade I for male children in New Karachi. Correspondingly, 2 percent females from grade V and 9.4 percent in grade IV were the repetition rates in Nazimabad and New Karachi, respectively, Table 17 (c).

FLOW NATES (BOTH SEXES) OF KARACHI (MEST) DISTRICT

-1317-

	Orangi			New Karachi			Nazimabad		Area.	Federal B			(West)	District		
Drepoub	Repetition	Promotion	Dropout	Repetition	Promotion	Dropout	Repetition	Propotion	Dropaut	Repetition	Promotion	Dropout	Repetition	Promotion	Flow Rates	
to to	3.0	94,8	16.5	15.7	67.8	6.8	ъ. ы	84.9	12,51	10.4	77.1	7.4	8.0	9.48	ļ⊢ı	
63	2.9	95.1	10,4	11.3	78.3	€D/	5.0	85.6	, ,	17	90.7	2.6	6.4	91.0	H	Grades
D . 23	12.7	89.1	220	10.2	61.5	, p,	7.9	82.5	1.6	8.5	89.9	5.6	6.7	87.7	III	
D. 10	10.0	91.8	23.7	10.4	65.9	8.1	4.9	87.0		හ දිර	89.6	4_7	6.0	89.3	A	
1	ro ro	1	1	10.4	1	*	2.5	ı	1	4.7	ī	E.	4.5	ı	₩	In Percent

	NAME OF STREET	2000
Ţ		- 1

IN PERCENT

100	Orangi			New Karachi			Wasimebso		Federal B Area		DOT THE PROPERTY	District		
Dropout	Repetition	Promotion	Dropout	Repetition	Promotion	Dropout	Promotion Repetition	Dropout	Repetition	Promotion	Dropout	Repetition	Promotion	Flow RAtes
11.7	10	85.8	22.1	15.3	62.6	8.9	9.5	14.4	11.1	74.5	5.6	8.7	85.7	Jы
6.9	10,10	90.9	6,2	13.0	80.8	13.7	79.4	2.0	7.2	90.8	1.4	6.6	92.0	II
16.3	ε3 .ω	81.4	30.9	10.5	58.6	8.0	83.5	ω 	9.3	86.9	4.0	7.0	89.0	III
17.2	1.9	80.9	22.0	10.7	67.3	8.3	6.0	**	8.5	83.1	N UI	6.3	91.2	V
į	(v)	1	1	10.9	1	ŧ	N 1	1	4.5	t	1	1.7	t	K

Serie as in Table 16 (a).

Sourcet

## IN PERCENT

Dropout Promotion Repetition	Dropout	Dropout	The state of the s	р	Promotion		Wazimebad Repetition			redersi B Area Repetition	Promotion	Dropout	Karachi (West) Repetition	Promotion	Flow Rates
18 1	h.0	77.9	17.4	\$2	74.47	23.22	6.0	90.8	8.7	9.1	82,2	11.4	6.4	82.2	jı-«
0.0	4-5	86.5	31.1	6.6	62.3	in Fra	3.9	94-9	7.9	0.0	83,29	i.e	νπ •	88.8	H
CD LJ	3.6	88.3	29.6	9.4	61.0	12:2	6.9	80.9	10	7.1	90.3	6.9	50	86.9	III
18.0	(1) (2)	79.8	17.				0,0			9.3		9.3		85.2	VI
t	5,8	1	9	8.9	1	- 1	2.0	1	- 1	5.0	Ü	,	4.2	1	I⊲

Source:

Same as in Table 16 (a)

## COBURT FLOW INDICATORS

The main purpose of constructing cohort flow diagrams is

that this allows to derive a number of indicators describing the flow

of a cohort of pupils through a cycle of education. They are not

related to any particular school-year but they show that what eventually

expens to the cohort when all those who repeat have finally either

been promoted or dropped out.

The following are the four groups of cohort flow indicators:

- 1. Indicators of retention (Survival) by grade
- 2. Indicators of retention by years spent in the cycle
- 3. Indicators of duration of study.
- 4. Indicators of wastage in education.

  (Further classification of each group of indicator can be seen from the diagram on page 35)

## DEDICATORS OF SETENTION BY GRADE

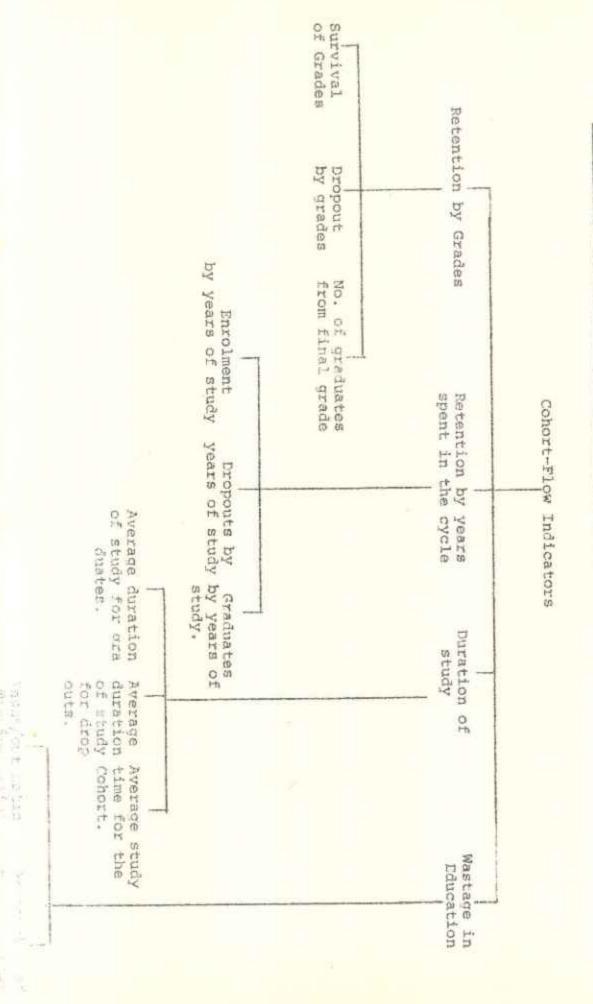
## Grade-wise Survival Ratios

The over-all picture of Karachi (West) District indicated that 52 percent of pupils (both sexes) survived in grades I and II whereas the percentages of male and female children who survived were 94 and 88 respectively in the same grades Tables 18(n), 18(b) & 18(c).

Looking into the Sub-Divisional position of retention of children in the education system it was observed that in Mazimubud out of 93 percent children (both sexes) 90 percent males and 97 percent Semaios were retained in grades I and II.

In Orangi Sub-Division, the position of retention of pupil was such that 98 percent pupil of both sexes were survived in grades 1 and II, 88 percent male children and 81 percent female children were survived in the same grades.

# COHORT-FLOW INDICATORS WITH RELATED MEASUREMENTS USED IN PUPILS FLOW ANALYSIS



Break

Again, in Federal B'Area, the survival ratios of children for both sexes was noticed as 86 percent in grades I and II whereas the percentages of male and female were 84 and 90 percent in the same grades. This indicates that female children retained more in education system than males.

Similarly, the rate of retention of children was 80 percent for both sexes, 74 percent for males and 81 percent for females, in grade I and II in New Karachi, Sub-Division.

## b) Dropout by Grade

It is evident in Karachi (West) District that the dropouts between subsequent grades were 80, 25, 53 and 43 children for both sexes, 61, 14, 40 and 24 male children and 122, 49, 62 and 75 for female. It was also noticed that the maximum dropouts were in grades I and II.

In Federal'B'Area, Sub-Division, it was observed that the dropouts between subsequent grades were 140, 14, 15 and 15 children for both sexes whereas 162, 18, 35 and 72; and 95, 78, 24 and 106 male and female children respectively were dropped out.

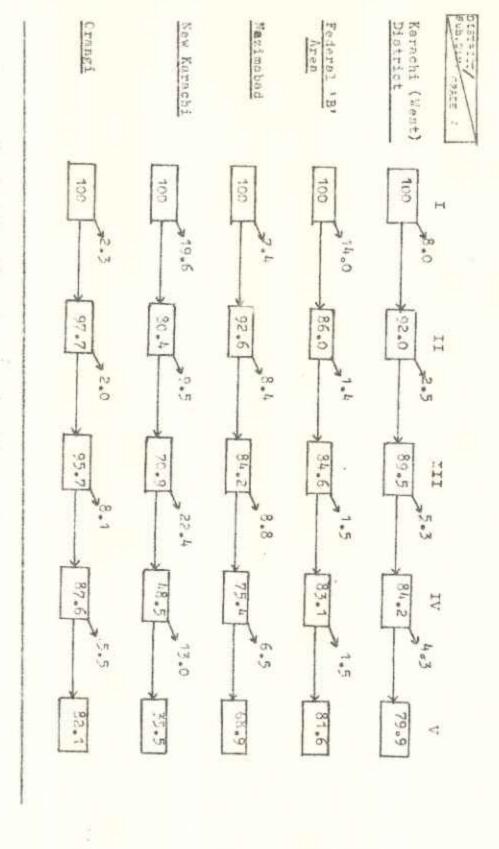
Again, Nazimabad figures indicates that dropouts between two subsequent grades were 74, 84, 88 and 65 children of both sexes. The males and females picture reveals that there were 98, 132, 68 and 63 from the system.

Similarly, it is observed that in New Karachi, Sub-Division the dropouts between grades I and II was 196, and between other subsequent grades were 95, 223, and 130 children of both sexes. The males and females children dropouts were 261, 53, 237, 111 and 188, 271, 177 and 150 respectively.

Lastly, in Orangi (Sub-Division), it is noticed that the dropouts for both sexes were 23, 20, 81 and 55 whereas the males and females were 120, 62, 137, 120; and 188, 77, 64, 124 respectively dropped out from the system.

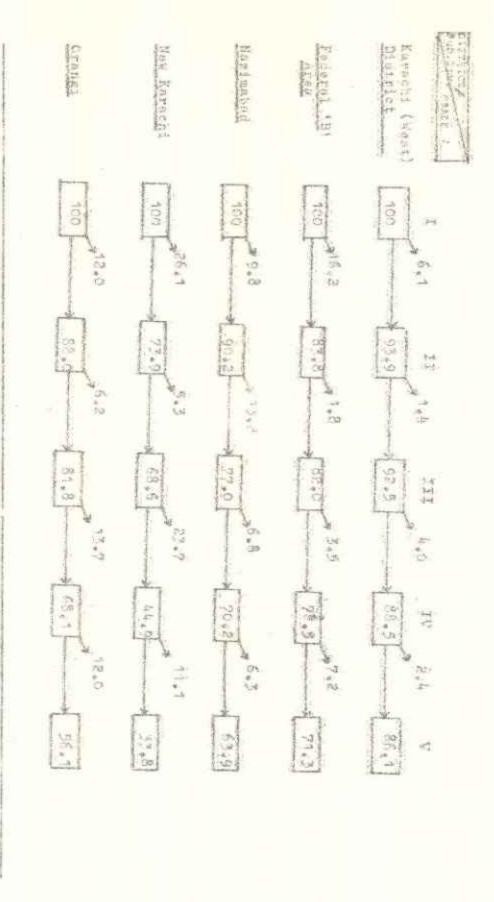
Table 18 (a) Survival and dropouts of pupils (both sexes) by grades at Primary level of Education in Karmehi (West) district and Sub-Divi Venallevels, 1982-83.

IN PERSONN



Source: Computed from Flow Diagrams, Appendixes 1-15.

N. BEHGELIE



4 T 4 L 16 20 1 T 7

Sourcet Core as in Table "7 (a).

District

Same as in Table of (a).

Source:

Orangi

67.1

54.7

21.4

hey Karachi

8

## Number of Graduates from the final Grades

From Table B it is revealed that in Karachi (West)
District, 80 percent children out of which 86 percent males and
69 percent females will eventually graduate from the cycle
during the year 1989-90.

In Federal 'B' Area, it is noticed that 82 percent children (both sexes) would eventually graduate in 1989 - 90 whereas 71 percent male, and 70 percent female will graduate during the same period.

In Nazimabad (Sub-Division), the position of children who would eventually gra duate would be 69 percent for both sexes (64 percent males and 76 percent females) in 1989-90.

Similarly, in New Karachi (Sub-Division) it is noticed that 36 percent children, 34 percent males and 21 percent females, would eventually graduate during the year 1989-90.

Orangi, Sub-Division reflects that 82 percent children
56 percent male and 55 percent female would graduate from the primary
cycle during the year 1989-90.

RUMBER OF CREDUKTER FROM THE VILLE GRADE, FRIMACY

IM PERCENT

	54.7	ř	56.1	82.1	Orenes
7 <u>-</u>	4.12	202	33.8	35.5	New Karachi
1 1	76.2	.e .e	63.9	68.7	Nezimebed
	69.7		71.3	81.6	Federal B Area
Be."	69.2		86.1	79.9	Karachi (West)
	Penale	20	Male	Both Sexes	vat .

Source:

Same as in Table 18 (a)

## INDICATORS OF RETENTION BY YEARS SPENT IN THE CYCLE

## a) Enrolment by years of study

It is emerged from the study at District level that the number of children enrolled in Primary Cycle of Education were 93 percent (94 percent males and 89 percent females) during the year 1983-84. In 1984-85, the enrolment of children at primary level was 90 percent for both sexes, (93 and 84 percent for males and females respectively). Similarly, 85 percent children (89 percent males and 78 percent female) found enrolled in the system during the year 1985-86 (Table 20).

At Sub-Divisional level, Federal B'Area figures indicate that 87 percent children (both sexes) were found enrolled in Primary Education whereas the number of females enrolled (91 percent) was more than male children (86 percent) during the period 1983-84, Similarly, in Nazimabad (Sub-Division) the same trend was observed during the same period.

Again, in New Karachi and Orangi Sub-Divisions, the enrolment of children (both sexes) were 83 percent and 98 percent respectively during the year 1983-84. Whereas 78 and 88 percent were male children enrolled in each Sub-Division.

The female enrolment indicates that 83 percent were enrolled in New Karachi and 82 percent in Orangi. It is noted that 74 percent and 96 percent children (both sexes), were enrolled in New Karachi and Orangi respectively, of which 71 percent and 82 percent were males and 58 percent and 74 percent were females during 1984-85.

(Table 20)

Similarly, it is observed that the lowest enrolment of children (both sexes) was in New Marachi (57 percent) in 1985-86 as compared to other Sub-Divisions.

Again, 88 percent children (both sexes) would be enrolled in Crangi during the year 1985-86. The percentage of the send females would be 69 and 68 for the same period (m-

## b) Dropout by Years of Study

The number of dropouts by years of study is found by adding up the dropouts from each grade for the relevant year.

The Kerschi District figures indicates that the dropouts was percent for both sexes and 3 percent for both sexes and 3 percent for Jensie year 1984-85 as compared to other academic years. But for Tensie children about 7 percent dropout by years of study is expected in the year 1985-86 (Table 21)

In Federal B'Area, the minimum dropout of children (both sexes) is expected to the part 1988-89, but it haziment and and Grangi, Sub-Divisions, there would not be any dropout during the same period. In New Karachi, Sub-Division, the maximum dropout was the and 17 percent for makes during the year 1984-85 (Table 21).

## c) Graduates by Years of Study

It is evident from Table 22 that in Karachi West District 58 percent children (both sexes) are expected to get through the Primary Cycle of Education without any repetition in the year 1986-87, of which 61 percent and 52 percent would be cales and females, respectively.

18 percent children (both sexes) would complete primary
education with one repetition, out of which 20 percent males and 15
percent females would graduate (Table 22)

The Sub-Division wise position is such that in Federal'B'

Area, 5h percent children (both sexes) are expected to complete

primary education within the specified period, of which 47 percent

and 46 per cent would be males and females respectively. Again, 22

percent children (both sexes), 19 percent males and 18 percent females

would be able to complete their primary education with one

repetition in 1987-88.

In Nazimabad, New Karachi and Orangi, those pupil (both sexes) who will qualify their primary cycle of education within the specified period without any repetition would be 51 percent, 19 percent and 72 percent, respectively Among them 45 and 61 percent would be males and females respectively in Nazimabad, 18 percent males and 14 percent females in New Karachi and 50 percent males and 46 percent females in Orangi.

Similarly, those people who complete their primary education with one repetition in Nazimabad would be 61 percent for both sexes (15 percent each for males and females). Again, in New Karachi, 11 percent children (both sexes) are expected to graduate with one repetition, of which the males and females would be 11 percent and 6 percent, respectively.

In Orangi, the position is such that 9 percent children (both sexes), 5 percent males and 8 percent females would complete primary education with one repetition (Table 22).

Table 20 EMPOINTENT BY YEARS OF STUDY IN PRIMARY EDUCATION KARACHI(WEST) DISTRICT 1982 - 1983.

Orangi	New Karachi	Nezimabad	Federal B Area	Karschi (West)	
97.8	83.5	93.2	87-5	92.6 94.4	Both sexes
88.3	77.9	14	85.6	94.4	N -84
81.9	C0 1/2 *	90	92.3	88.6	IF No.
95.8	73.6	3	85.0	89.8 92.7	No. of pupil
82,2	70.6	79.1	81,3	92.7	78-485
74.2	, T	95.5	84.0	83.5	***3
88.3	56.6	77.3	03 3.5	85,2	IN PERCENT 1985-86
88.3 69.1	53.4	72.0	63.5 79.4	89.3	1985-86
68.0	40.8	84.9	0.18	77.8	123

Source: Same as in Table 18 (a)

THEOREM MI

# Total Dropouts

		Marschi (West)	Federal B Area	Mazimabed.	Ter Karachi	Orangi
	Sexes	60	2.5	7.9	9.2	2.0
1983-84	×	j⊷i * -3	3.1	12.0	-1	6.2
	*22	5.1	7.3	1.3	24.6	
1	Both	4.6	1.5	8.0	7.3 24.6 17.3	7.7 7.5 13.2
1984-85	350	ш 2-	(w)	7.1	17.2	13.2
	শ্ব	-1 -1	3.0	10.6	17.3	6.2
	Sexes		1.	6.5	13.9	6.2 5.6 11.8 11.5
1985-86	35	(O)	.07	6.0	13.0 14.2	11.8
6	119	5.5	8.0	i.	14.2	II Cn
	Both	1.0				
986-87	×	1.0 0.6 1.5 0.2	0.4 1.9 2.6 0.1	1.5 1.7 1.3	5.3 4.9 4.2	0.6 1.6 1.6 -
	rej	in.	10	i.u	10	1.6
15	F Both Sexes	0.2	0.1	·.	F*	21
87-88	×	0,1	0.5	0	1.4	0.1
	ha	0,00	0.6 0.1	0.1 -	1.0	0.1 0.2
1	Both	i)	0.1	1	1.0 0.3	4
988-89	×	1.	0.1	0.1	0.3	t
	127	ı	0.1	(8)	0.1	1

Source: Same as in Table 18 (a).

Table 22 IN PRIMARY EDUCATION, KARACHI (WEST) DISTRICT BASED ON 1982-83.

IN PERCEIC

	Karachi (West)	Federal B Area	Razimebad	Hew Earmoni	Orangi.
Both Sexes	57.6	53.7	50.9	19.	72.1
s × × × × × × × × × × × × × × × × × × ×	60.9	16.6	15.1	17.8	50.4
F	51.7	\$6. Lo	60.9	13.7	1.64
Both	18.1	21,5	14.8	11.0	φ. ω.
oth Kertition	20.3	19.0	15.1	10.8	91. 1-
+113	14.7	18.0	13.2	5,7	7.B
Both	:S	ŭ	-1 10	3.9	0.8
Both W	#- 	F.7	3,2	3.9	0.3
the cur	N Er	4.4	1.9	P. 65	0.8
Both	0.7	1.1	0.5	1.3	ŧ.
Both M I	0.8	1.0	O Va	j1 * 5:3	
FOD	4.0	H . O	0.2	4.0	is

Source: Same as in Table 18 (a)

## INDICATORS OF DURATION OF STUDY

## a) Average Duration of Study for Graduates

The Average duration of study for graduates was computed. It is observed that in Karachi West District, each graduate of academic year 1982-83 would take 5.3 years on the average to complete the primary cycle of education.

The Sub-Division wise average duration of study, for graduates would be 5.4 years for Federal B Area, 5.3 years for Nazimabad and 5.1 years for Orangi (Table 23)

Table 23 AVERAGE DURATION OF STUDY FOR GRADUATES IN FRIMARY EDUCATION, MARACHI(WEST) DISTRICT 1982 - 1983.

	10+0+
	1700
	1,000

IN YEARS

	Both Sexes	Male	Female
District (West)	Un Lo	ů.	5.23
Federal B Area	√n E	5.4	5.4
Nazimsbad	υ ω	5.3	5.2
New Karaohi	55.66	58	5,5
Orangi	5.1	5.1	(n fo
		The second secon	The state of the s

Source: Same as in Table 17 (a).

## b) Average Duration of Study for Dropouts

It is evident that those dropping out from the education system would take 2.4 years in Karachi West District, of which 2.3 years would be taken by males and 2.4 years by females.

In Federal B Area, Sub-Division, about a year and a half would be taken by those who dropout, of which one and a quarter year by males and 2 years by females.

In other Sub-Divisions, the position is such that in each case, the average duration of study taken by the dropouts of either sex was about 2 years (Table 24)

AVERAGE DURATION OF STUDY FOR DROPOUTS IN PRIMARY EDUCATION KARACHI (WEST) DISTRICT 1982-83.

IN YEARS

	Both sexes	Male	Femsle
Karachi(West)	2,4	in the	25.4
Federal B Area	0.7	ji • €3	1.7
Nazimabad	1.6	1.5	2,4
New Karachi	1.8	, ov	1.6
Orangi	2.0	1.7	1.4

Source: Same as in Table 18(a).

## Average Study Time for the Cohort

The average duration of study for all cohort members' have been calculated.

It is observed that the average duration study of the cohort members in Karachi West District was 4.7 years, of which 4.9 years was taken by males and 4.4 years by females.

In Federal 'B" Area and Nazimabad Sub-Divisions, about 4 years each was taken by the cohort members. Whereas, in New Karachi and Orangi, the female members of the cohort took a minimum of 2.4 years on the average in New Karachi and 4.6 years was taken by the cohort members (both sexes) in Orangi (Table 25)

Table 25

AVERAGE STUDY-TIME FOR THE COHORT IN PRIMARY
EDUCATION, KARACHI (WEST) DISTRICT 1982 - 83.

IN YEARS

Orangi	New Karachi	Nazimabad	Federal B Area	Marachi (west)	
4.6	3,1	4.2	4.5	1.7	Both sexes
3.6	3.0	0.4	4 0	4.9	Male
3.4	20.1-	4.5	£.3	4.4	Fenele

Source: Same as in Table 18(a)

## INDICATORS OF WASTAGE IN EDUCATION

## a) Internal Efficiency of Education System

The extent of internal efficiency in the education system in Karachi West District was measured through an instrument, known as "Wastage-ratio".

It is emerged that the education system in Karachi West District was not functioning efficiently according to the data supplied, as it could be.

However, low wastage ratios were observed for males in Karachi West District, Federal B Area and Orangi.

Similarly, the highest wastage-ratios were observed in New Karachi which indicates the lowest efficiency in the education system (Table 26)

Table 26

DEGREE OF INTERMAL EFFICIENCY IN PHIMARY EDUCATION SYSTEM IN KARACHI (WEST) DISTRICT, 1982 - 1983

# \* WASTAGE-RATIOS

	Both sexes	Male	Penale	
Karachi (West)	1. 1.	gua e gua	i.u	
Federal B Area	1.1	j-s Cu	jul Co	
Nezimebed	دنا دنا	j-i Čai	T-2	
New Karachi	10	10	2,0	
Orangi	1,1	1.4	1.4	
	-	-		

Source: Same as in Table 18 a)

If the value of wastage ratio exceeds unity, this indicates the inefficiency in the Education System.

## Proportion of total Wastage due to Dropout and Repetition

The total wastage due to dropouts and repetition was examined. The results reveal that 74 percent of the total wastage was due to dropout of females. The total wastage contributed due to repetition was 53 percent for both sexes at district level in Earachi West (Table 27)

Again, looking into the sub-divisional position regarding each component contributing total wastage, it is noticed that 93 percent of the total wastage was due to dropout of male children in Orangi, Whereas, the lowest was observed (41 percent) for both sexes in Federal 'B'Area. Consequently, 7 percent of the total wastage was due to repetition of male children in Orangi, and 59 percent for both sexes in Federal 'B'Area (Table 27)

PROPOSITION OF TOTAL WASTAGE SPENT OF DROPOUTS AND REPETITION IN PRIMARY EDUCATION, KARACHI ( WEST )

Table 27

IN PERCENT

63.0 37.0 19.0	Marimabad.	Dropout Repetition Repetition Repetition	19	Male 48.0 52.0 73.0 27.0	
B Area Dropout 41.0 Repetition 53.0 Repetition 26.0 Repetition 37.0 Repetition 37.0 Repetition 19.0	Marachi (West)	Dropout			52.0
achi Dropout 74.0  Repetition 26.0  Cropout 63.0  Repetition 37.0  Repetition 19.0	Federal B Area	Dropout Repetition		rans =	39.0
Achi Dropout 63.0 Repetition 37.0 Dropout 81.0 Repetition 19.0	Nextmebed.	Dropout Repetition	74.0	122.7025	73.0
Dropout 81.0 Repetition 19.0	New Karachi	Dropout Repetition	63.0	45.	77.0
	Changi.	Dropout Repetition	19.0	10	97.0 7.0

Source: Same as in Table 18(a)

## CONCLUSIONS AND SUGGESTIONS

are in the early grades of school. Patterns different from this are due to exceptional circumstances. It is clear that more dropout can be prevented or eliminated from the lower grades if carefull attention to the grade I school environment, the physical setting, teachers and learning/teaching materials be considered. This underlines the need for extensive pre-school classes especially for the rural poor and the deprived and disadvantaged groups of children of all localities.

Utilising both community resources and non-formal education, consolidation of the present school system and improvement of its efficiency is possible, with consequent reduction in dropout rates. There is need for continuous investigation in this area, to explore newer pathways to solve the problem.

However, factors affecting dropout to the educational system are well known. The use of more incentives needs consideration, and continued encouragement should be given to disabled groups, from children and rural areas; involvement of community in the primary education is essential which is partially imparted.

## Keeping in view, the above facts:

- It is suggested that all incomplete schools should be provided with all classes constituting that level of education. Whereever necessary, the existing school should be upgraded.
- dropouts are usually in lower grades i.e.

  grade I and II. This is because most of the
  children comming to the primary schools are
  coming for the first time and faced with a new
  environment. They have to adjust to the new
  environment and develop a liking for the schools.

  If they are introduced to a school situation
  earlier, it will encourage them to come to and
  remain in the primary school for this purpose,
  efforts should be made to open pre-primary
  schools, particularly in rural areas, and
  support such schools which are already in
  existence.
- it is also observed that among dropouts there are majority of repeaters, which reflects the poor achievement of children particularly in earlier classes. This emphasise a review of classroom teaching in earlier classes and suitable remedial measures.
- girls contribute in a large proportion to dropouts. This is due to non-availability of separate schools for girls.

## Some factors responsible for dropout

Reasons for dropout may be classified into the following:

- Internal factors.
- External factors.

An educational system reflects in values and priorities of the society serves. It can rarely be more advanced than the general cultural matrix which supports it. Interaction between internal and external factors is continual and this interrelationship should be borne in mind.

## Internal factors affecting dropout

The primary school itself, its facilities, and pedagogical methods, all affect the child's learning experience and exert an influence upon retention or drop-out. There are not enough schools, and within existing schools there are not sufficient number of benches, desks and other facilities. In addition, a sufficient number of teachers must also be provided.

## External factors affecting dropout

The external factors are those which are within the child' socio-cultural milieu. Of these, the economic and social condition of the family is the single most crucial variable affecting drop-out. In addition, the following are the other causes of dropout mentionable here:

- the family's ethic or social status
- the child's age and sex
- the geographical location
- health and general nutrition of the child

# Measures to remove or lessen the dropout problems

## Non-pedagogical measure to prevent dropout:

Following are the prominent non-pedagogical measures taken to prevent dropouts at the primary stage:

- a) legislations for free and compulsory primary education.
- provision of school facilities within easy willing distance from the homes of children.
- creation of necessary infrastructure of facilities in schools.
- d) incentive schemes for students; and
- e) introduction of 'no detention policy' at the primary stage.

### Pedagogical measures to prevent dropouts

Generally, it is observed that one of the main causes of dropout and wastage has been the poor quality of education. Therefore, as part of the efforts to prevent dropouts and eliminate wastage, neveral measures aimed at bringing about qualitative improvement in education and overcoming the problems related to certain pedagogical aspects of the dropout problem. The following are the main measures to prevent dropouts.

- a) Improvement of curricula and learning materials.
- b) Programmes for enhancing the competence of teachers.

# a) Improvement of curricula and learning materials:

The conventional curricula, learning materials and instructional strategies have not been always relevant

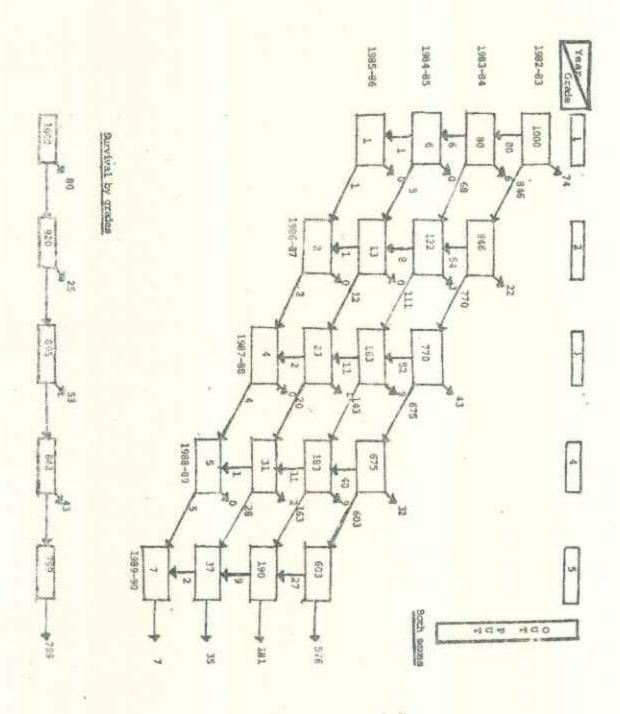
to the basic needs and life situations of the children due to the geographical, social and cultural variations. An important area of challenge, which has been engaging the attention of educational planners and workers at all levels in the country has been to evolve such a curriculum approach which provide an effective programme of education, especially at the elementary stage, through the improved use of limited resources available in the country.

b) Programmes for enhancing the competencies of teachers.

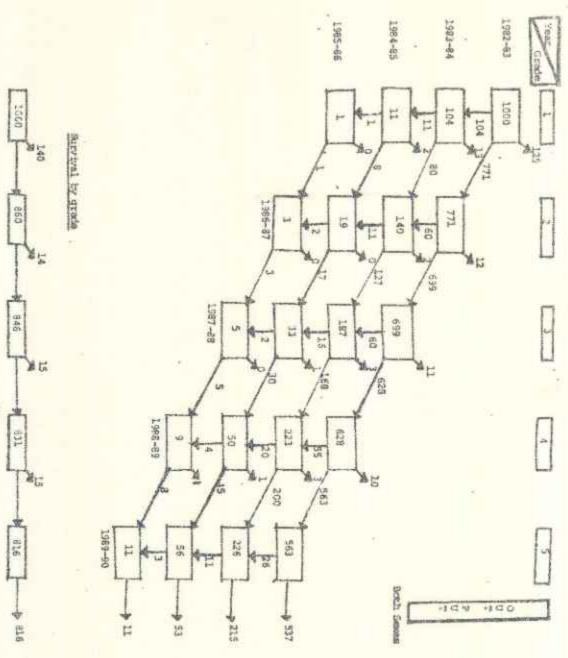
It has been recognized that one of the causes of dropouts and wastage at the elementary stage of education has been the poor quality of teaching, which has been too knowledge oriented, bookish and uninteresting. Therefore, to improve the quality of elementary education, measures be taken to enhance the competence of teachers through updating their knowledge, training and extensive use of modern educational techniques in order to achieve higher efficiency and greater effectiveness of teaching in the system.

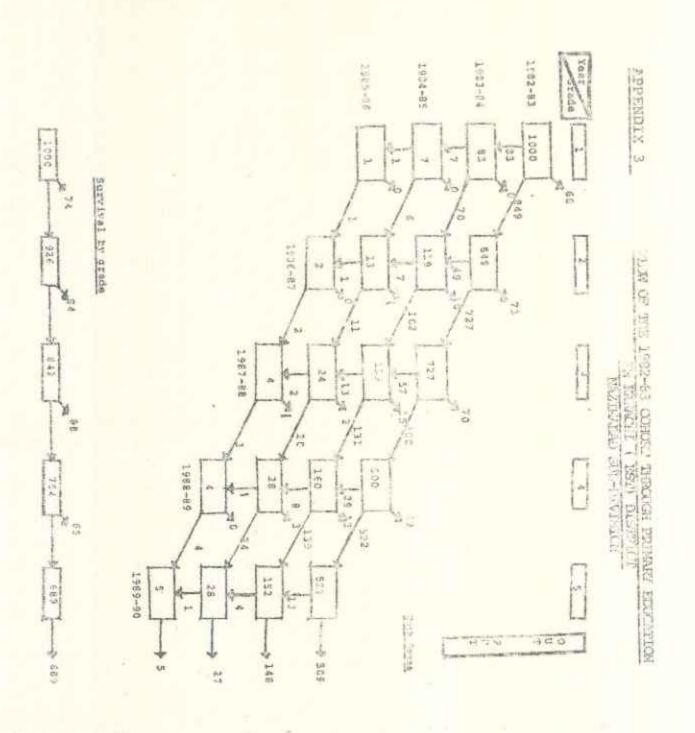
The following considerations may be kept in mind while developing the various programmes to raise the degree of efficiency in education system:

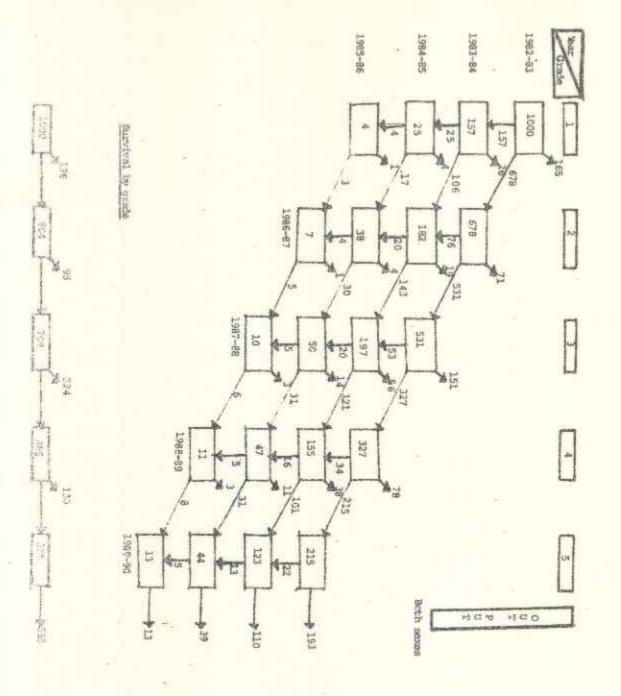
- Training of inservice teachers
- Innovatory approach to acquaint the in-service teachers with the modern teaching techniques.
- the revision of the elementary teacher education curriculum.



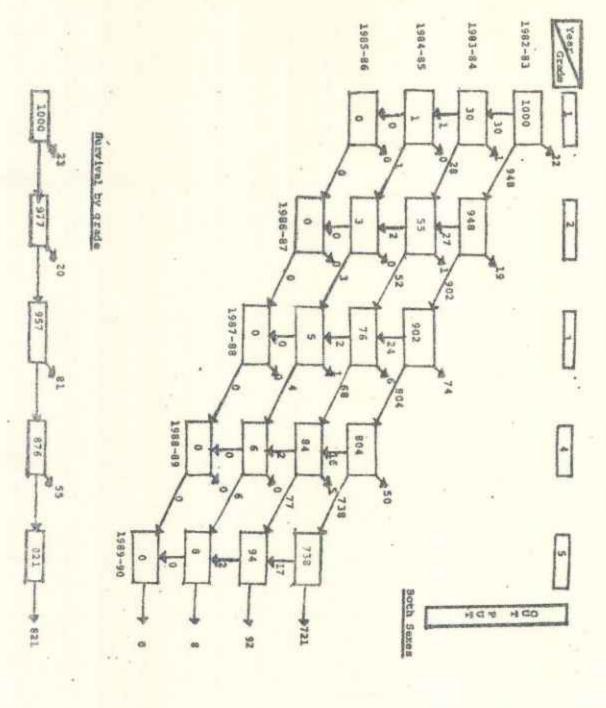
EUDERAL 'B' AREA SUB-DIVISION



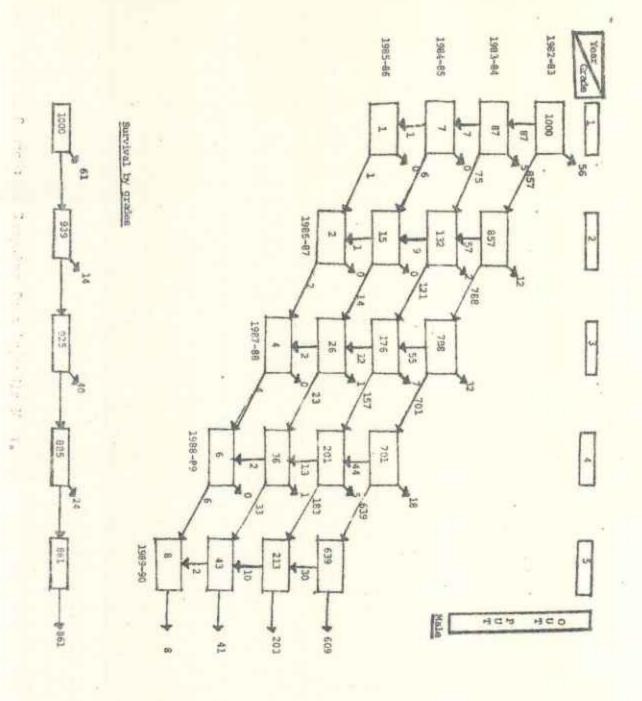




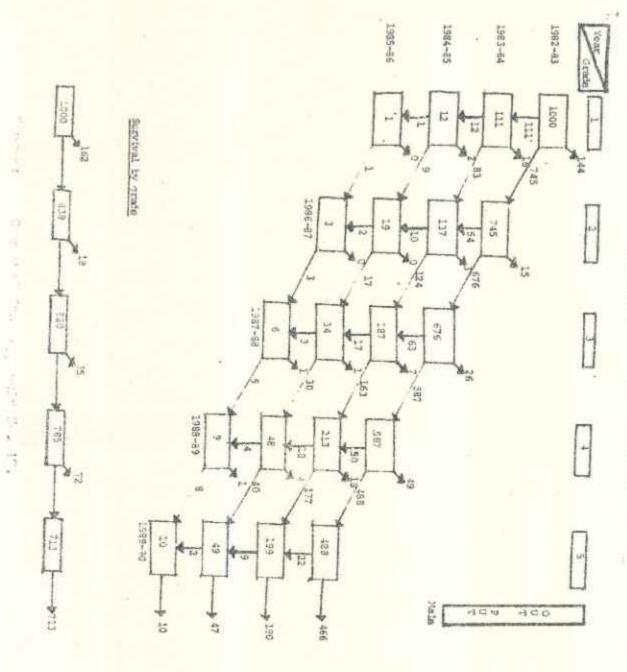
# ORANGI SUB-DIVISION



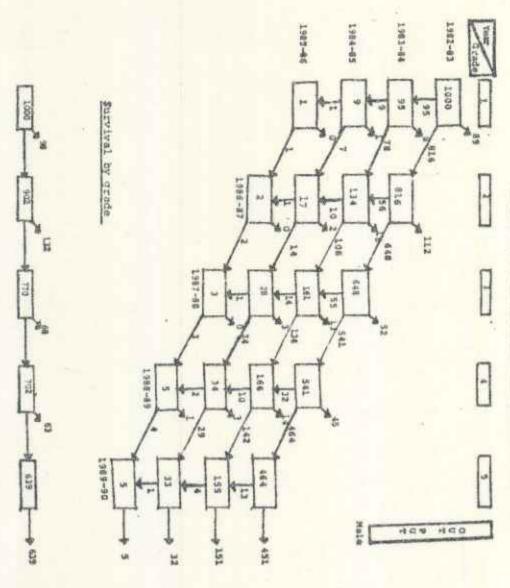
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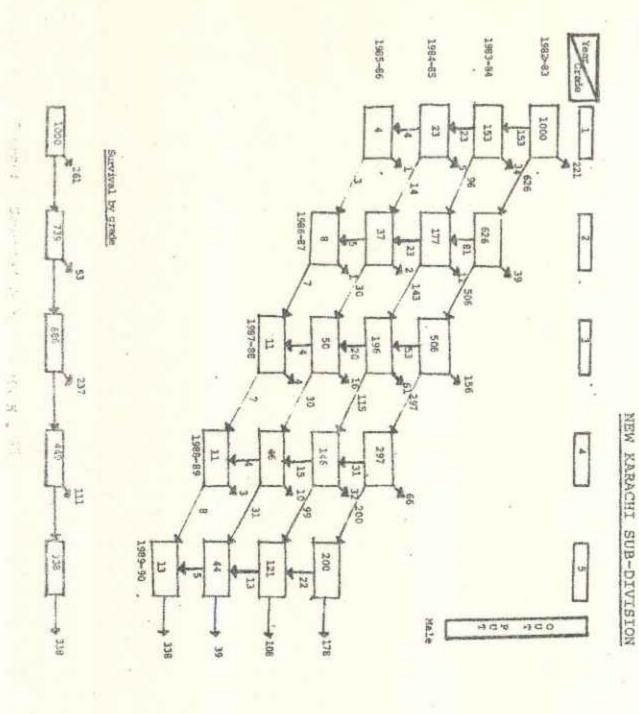
# FEDERAL 'B' AREA SUB-DIVISION

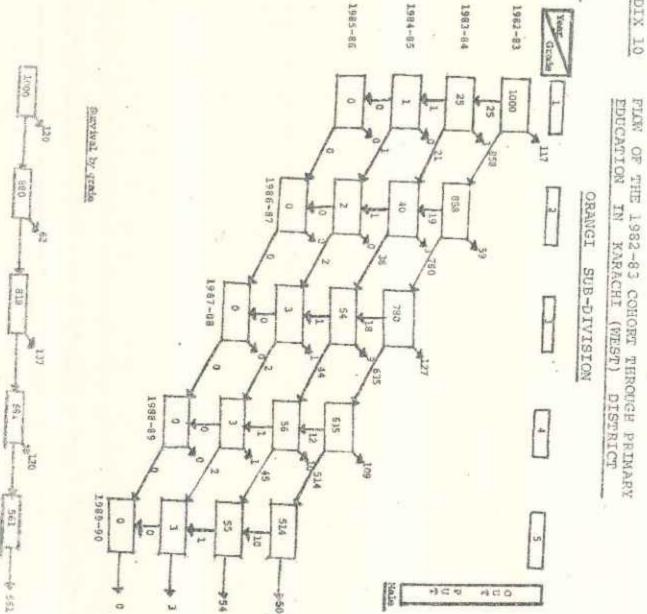


APPENDIX 8 - Flow of the 1982-83Cohort through Primary Education in Karachi (West) District, Maximaled Sub-Division

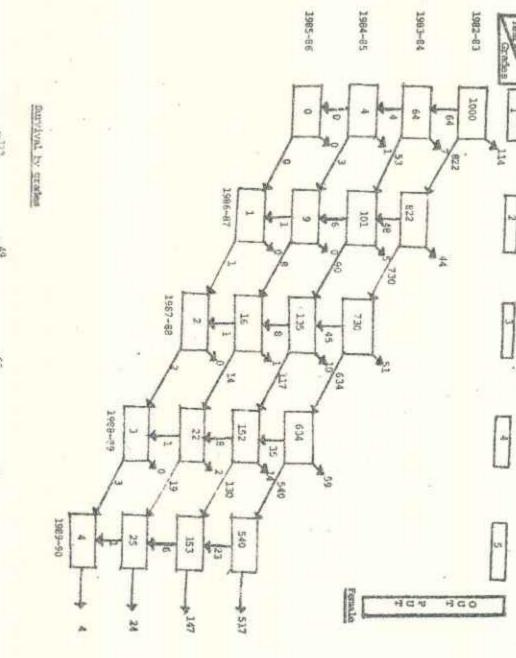


Source: Computed from Spondin No. 16.

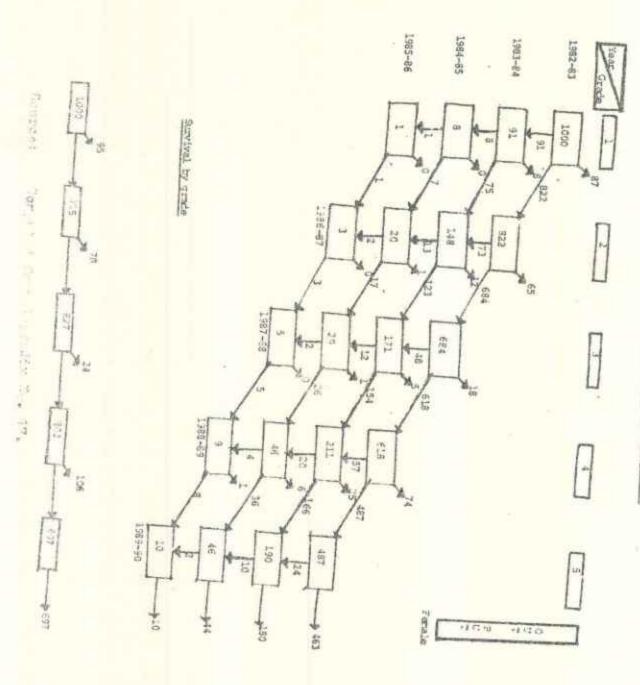




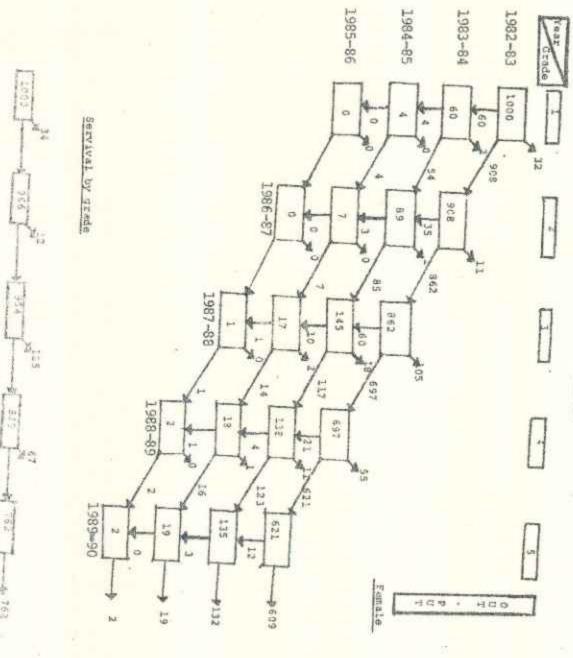
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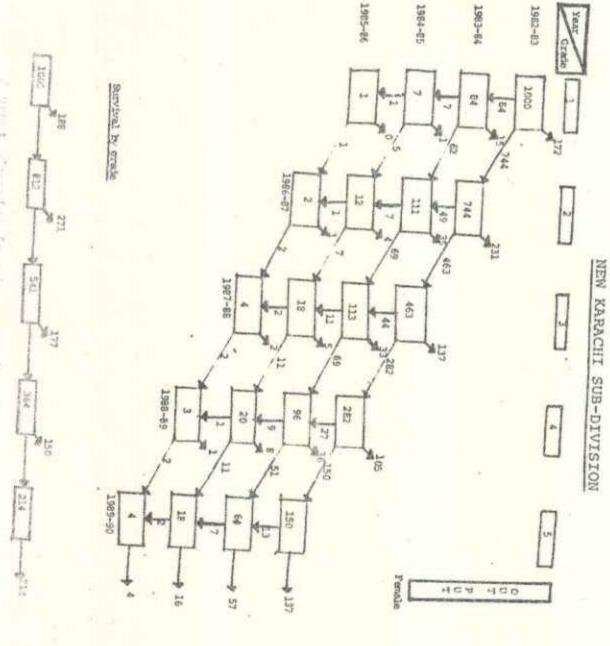
FEDERAL 'B' APEA SUB-DIVISION



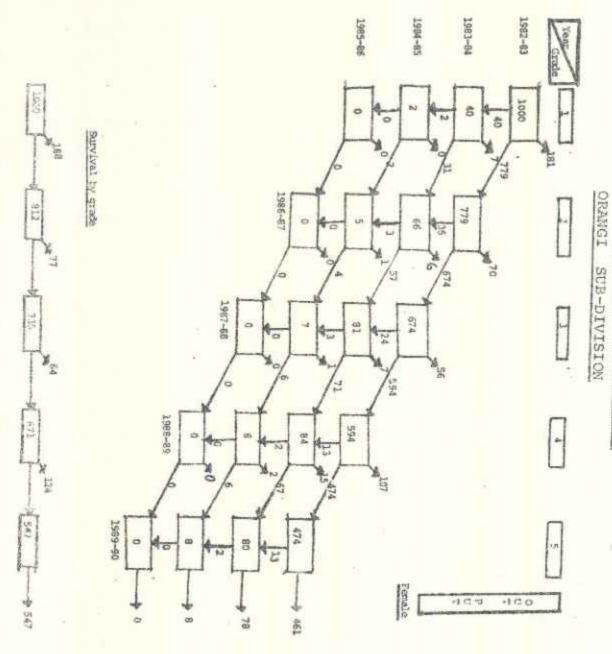
FIGW OF THE 1982-83 COHORT THROUGH PRIMARY EXCLATION IN KARACHI (MEST) DISTRICT NAZIMABAD SUB-DIVISION



おはいる 大田 水子 あいけん



KARACHI (MEST) DISTRICT



Compared free by estates for on-

Of Which Repeaters from 1982-83	1983-84 Enrolment	1982-83 Enrolment
1614	19001	Both sexes
1232	13918	oth sexes M 20467 14094
412	5083	6373
600  -1	18506	Soth sexes
33 05	12919 5587	
346	5587	GRADES M F 12686 5835
1198	18062	Hoth sexes M 17703 1188
37	12514	11881 III
364	5548	5822
1046	16588 11321 5267	Doth sexes M 17232 1073
742	11321	IV th sexes N F 17232 10739 5493
304		(Alask
727	16112	Both sexes
508	1120	V Both sexes M F 15662 10729 4933
209	4892	4933

Source: Data collected from DEO office Karachi (West).

	APPEN	APPENDIX 17	NUMBI	NUMBER OF PUPILS (SEX WISE) AND REPEATERS IN PRIMARY EDUCATION FEDERAL B AREA KARACHI 1982-83 AND 1983-84.	B (SEX V	KARACHI GRADES	1 1982- T 1982-	TERS IN	PRIMARY 963-84.	EDUCATIO	Int				
-		H		II			VI.V.	H			VI			Ψ	
	Both sexes	35	hd	Both sexes	М	*41	Both s	sexes N	72	Both sexes M	ces M	13	Both sexes M	ces M	भ्य
1982-63 Enrolment	1991	3084	1580	4182	2719	1463	1240	2754	1486	4540	4540 3037 1503	1503	4226 2806	2806	1420
1983-84 Enrolment	29.32	2680	1252	3927	2496	1431 4280	4280	2727	Ti Ci	4215	2655	1560	4267 2653		1614
OF which Repeaters from 1982-63,	489	446	145	727	196	131	363	257	106	1400	260 140	140	199	128	72
												1			

Source

Same as Appendix - 16

N.

APPENDIX 19
NUMBER OF PUFILS (SEX-WISE) AND REPEATING IN PRIMARY IDUGATION NAZIVABAD, KARACHI 1982-83 AND 1983-84.

-		н		п		GRADES	į	III		AI				∢	
	Both sexes	×	দ	Both sexes	ж	শ্ব	Both sexes	xes M	120	Both sexes	N 36	131	Both sexes	es X	
1982-83.	2983	1930	1053	3091	2014	1.077	123 123 123	1987	1237	3255	2024	1230	1230 3045 1951 1094	1951	H
s83-84	2320	1616	704	704 2715	17.	T0000	1000 2904	7777	E 33	2822	1783	1039	2910 1719	1719	OTTE
OF which depeaters from 1982-83.	248	184	<u>\$</u>	182	139	4.7 Lu	256	170	86	160	122	380	7	55	18

Source: Same as Appendix - 18.

APPENDIX 19
NUMBER OF PUPILS (SEX-WISE) AND REPEATERS IN PRIMARY EDUCATION NEW KARACHI, SUB-DIVISION, 1982-83 AND 1983-84.

Both sexes	×	*11	Both sexes	M II	THE STATE OF THE S	Both	MIII	112	Both	N IN	123		Both	
1982-83 Entrolment 4869	3672	1197	1197 4985	3001	1.081	3945	2921	1024	3510		2608	902	902 3027	902
1983-64. Involuent 4231	3215	1016	1016 3767	2692	1075 3607	3607	2735	5872	2792 1995	1	1995	1	1	1995 797 2632 2005
OF which Repenters from 1983-84 666	565	TOI	464	305	F6	406	309	97	366		281	281 85		85

Sourcer

Semie as in Appendix - 18.

Source: Same as in Appendix - 19	OF which repeaters 241 139 102 211 111 from 1982-83	1983-8h Enrolment 8518 6407 2111 8097 6016	1982-83 Enrolment 7951 5408 2543 7163 4952	Both M F Both M	ORANGI, SUB-DIVISION, 1982-83 AND 1983-84.
	100	2081 7	2211	GRADES	101
	17	7269	5294	Both	22-83 Am
	36	5281	4219	N III	D 1983-
	Ū.	1988	BOTS	****	983-84.
	120	6759	5928	Both	ATLOR
	79	45 88 88	4070 1858	N A	
	41	1871		125	
	124	6303 4771	5364	Both	
	76	1	3708	×	000
ł	ob l	1532	1656	123	