### CHAPTER VI

### THE FINAL RUN OF THE TEST

So, the final script was ready for administration. The subtests were assigned time-limits. Items of the first five tests were rearranged according to their difficulty values. Finalised instructions were got printed in the script on the first two pages. The following points were kept in mind while preparing the final script:

- (i) The final script was of 16 pages and it was possible to have central stitching. Central stitching facilitates the turning of pages to a considerable extent.
- (ii) Items were numbered on both the sides.
- (iii) The subtests were placed in such a way that when the children complete one test they cannot see the content of the next test unless they turn the page. They were not allowed to turn the page without instructions.
- (iv) Sufficient space was left after the sample

item in order to make it distinguishable. The sample items were given zero rank in the first five tests. The testees were instructed to begin with the first item of the test.

(v) Instructions for the testers were got printed very carefully. Bold letters were used for sentences to be spoken with emphasis. Some dots were kept between the two sentences whenever a pause was necessary.

The next important task was to collect the important statistics of the new Gujarat State. This was necessary for selecting the representative sample.

### The New Gujarat State

The new State of Gujarat was formed on 1st May 1960 as a result of the Bombay Reorganization Act,1960. Prior to this date, it was a part of the greater bilingual Bombay State, from which it has inherited the present administrative pattern in education. The total area of the Gujarat State, is 72,137 square miles. Administratively the State is divided into 17 districts, viz: Ahmedabad, Sabarkantha, Banaskantha, Mehsana, Kaira, Panchmahals,

Baroda, Broach, Surat, Dangs, Rajkot, Jammagar, Surendranagar, Bhavnagar, Junagadh, Amreli and Kutch. The population of the State according to 1961 census is 206.12 lacs approximately. This population lives in 249 town groups and 18,777 villages of the 17 districts of the State. The pattern of education in Gujarat does not differ much from that in other Indian States. The statistical data presented in this chapter give an overall educational situation in the State as on 31st March, 1962.

TABLE 14

Administrative Divisions of the Gujarat State

No.	Name of the division	Names of districts included in the division
1	Baroda Division	Surat, Dangs, Sabarkantha, Banas- kantha, Mehsana, Ahmedabad, Kaira, Panchmahals, Baroda, Broach.
2	Rajkot Division	Jamnagar, Rajkot, Surendranagar, Bhavnagar, Junagadh, Amreli, Kutch.
====	الله المراجع المراجع المراجع المراجع والمراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع الما المراجع ا	
		TABLE 15
	Population	and Area of Districts of the Gujarat State
No.	Districts	Population Area in square No.of miles Talukas or Mahals

2438740

71554

4,857.00

688.75

1

.2

Surat

Dangs

~	, 			
No.	Districts	Population	Area in square miles	No. of Talukas or Mahals
				~~~~~
<b>3</b> ,	Sa <b>bar</b> kantha	917809	2,844.97	10
4	Banaskantha	995980	4,039.13	11
5	Mehsana	1685430	4,324.41	11
6	Ahmedabad	2231534	3,460.93	7
7	Kaira	1973697	2,620.83	10
8	Panchmahals	1467485	3,486.08	· 11
9	Baroda	1527044	2,954.69	12
10	Broach	892241	2,986.00	11
11	Jamnagar	824725	3,942.66	10
12	Rajkot	1209004	4,587.55	13
13	Surendranagar	662308	4,230.38	9
14	Bhavnagar	1118746	4,651.66	12
15	Junagadh	1244086	3,865.66	15
16	Amreli	66738 <b>7</b>	1,543.32	10
17	Kutch	695704	17,041.53	11

# EDUCATIONAL SET UP OF THE GUJARAT STATE

## Compulsory Primary Education

Compulsory primary education was introduced by stages in the districts of old Bombay State except in

Dangs district and by the end of the year 1951-52 children in the age group 7-11 in these districts were brought
under compulsory education. The scheme, however, was not
introduced in the districts of Saurashtra and Kutch. As
a result, a scheme for introduction of compulsory primary
education in Saurashtra and Kutch for the age-group 6-11
has been included in the Third Five Year Plan. Provision
for normal expansion has also been made in the scheme.
The following table shows the standardwise enrolment in
primary schools of the State.

TABLE 16 Enrolment by Standards in Primary Schools (1961-62)

Girls         Total         Boys         Girls           7         8575         27632         1.2         1.0           9         378372         956721         30.6         42.1           2         160233         444795         17.5         17.8           9         121193         350932         14.2         13.5           8         100011         303129         12.5         11.1           3         58797         197300         8.5         6.5           7         40927         141714         6.2         4.5           3         31268         101171         9.3         3.5           8         899366         2523394         100.0         100.0	Standards		, ,	ts		988	l enrolment
tt       19057       8575       27632       1.2       1.0         577349       378372       956721       30.6       42.1         284572       160223       444795       17.5       17.8         229739       121193       350932       14.2       13.5         203118       100011       303129       12.5       11.1         100787       40927       141714       6.2       4.5         69313       31268       101171       9.3       3.5         1622438       899366       2523394       100.0       100.0       1	7 S F F F S. 0 S F F T T	Boys	Girls	Total	Boys	1 1 1	Total
577349       378372       956721       30.6       42.1         284572       160233       444795       17.5       17.8         229739       121193       350932       14.2       13.5         203118       1,00011       303129       12.5       11.1         13850.3       58797       197300       8.5       6.5         100787       40927       141714       6.2       4.5         69313       31268       101171       9.3       3.5         1622438       899366       2523394       100.0       100.0       1	Infant	19067	8575	27632	1.8	1.0	0.4
284572       160223       444795       17.5       17.8         229739       121193       350932       14.2       13.5         203118       100011       303129       12.5       11.1         138503       58797       197300       8.5       6.5         100787       40927       141714       6.2       4.5         69313       31268       101171       9.3       3.5         1622438       899366       2523394       100.0       100.0       1	Н	577349	378372	956721	30.6	42.1	39.9
229739         121193         350932         14.2         13.5           203118         10001         303129         12.5         11.1           138503         58797         197300         8.5         6.5           100787         40927         141714         6.2         4.5           69313         31268         101171         9.3         3.5           1622438         899366         2523394         100.0         100.0         100.0	H	284572	160223	444795	17.5	17.8	17.6
203118       100011       303129       12.5       11.1         138503       58797       197300       8.5       6.5         100787       40927       141714       6.2       4.5         69313       31268       101171       9.3       3.5         1622438       899366       2523394       100.0       100.0       1	III	229739	121193	350932	14.2	13.5	13.9
138503       58797       197300       8.5       6.5         100787       40927       141714       6.2       4.5         69313       31268       101171       9.3       3.5         1622438       899366       2523394       100.0       100.0       10	ΔĪ	203118	10001	303129	12.5	11.1	10.0
100787     40927     141714     6.2     4.5       69313     31268     101171     9.3     3.5       1622438     899366     2523394     100.0     100.0     10	٨	138503	58797	197300	<b>99</b>	6.5	7.6
69313 31268 101171 9.3 3.5 1622438 899366 2523394 100.0 100.0	VI	100787	40927	141714	6.2	4.5	က္
1622438 899366 2523394 100.0 100.0	VII	69313	31268	101171	e. 6	3°5	4.0
	Total	1622438	899366	2523394	100.0	100.0	100.0

It will be seen from the table that as many as 80.9 per cent of the boys in the primary schools were studying in standards below V. In case of girls this percentage was still higher. The low percentage of pupils in upper primary classes is due to several reasons as mentioned below:

- (1) A large number of the pupils who pass primary standard IV join secondary schools.
- (2) Compulsory primary education is not enforced beyond a period of 4 years at any place.
- (3) On account of financial difficulty many children leave the school before they complete the lower primary stage and engage themselves in some occupation.
- (4) Several villages have schools teaching only the first four standards.
- (5) In case of girls, social factors operate very strongly along with the factors mentioned above and girls are withdrawn prematurely from schools.

#### Basic Schools

The number of basic schools in the State was

5,114 on 31st March 1962.

TABLE 17
Craftwise Classification of Basic Schools (1961-62)

No.	Crafts used	Number of Basic Schools
1	Purely spinning	2,568
2	Spinning and Weaving	1,920
3	Kitchen, Gardening and Agriculture	494
4	Purely Card-Board Modelling	, <b>77</b>
5 ·	Card-Board Modelling & Wood Work	55
		, (MI NO NO OUT NOT AND
	Total	5,114

From the above table, it will be seen that the craft used in about 87.7 per cent of the basic schools was either spinning or weaving. Only about 9.6 per cent of the schools had kitchen, gardening and agriculture as craft. The remaining 2.6 per cent of schools had cardboard modelling and wood work as the craft.

### Pupils in Basic Schools

Basic instruction is extended in schools progressively by standards. The total number of pupils in basic schools was 10,81,179. The number of pupils actually

under basic instruction was 5,89,661. This is due to the fact that all the standards could not be brought under basic instruction at a time. The following table gives the craft-wise distribution of the pupils in basic schools of the Gujarat State.

TABLE 18
Distribution of Pupils Actually under Basic Instruction (as on 31.3.62)

No.	Craft	Number of pupils
1	Purely spinning	1,82,818
2	Spinning and Weaving	3,17,580
3	Kitchen, Gardening and Agriculture	64,575
4	Purely Card-Board Modelling	<b>7,</b> 503
<b>5</b> .	Card-Board Modelling & Wood Work	17,185
	Total	5,89,661

### Villages with and without Schools

Mere statistics of increase in the total number of primary schools does not give a correct picture of the extent of primary education unless these are compared with the total number of towns and villages in the State.

The following table shows the total number of towns and villages with and villages without schools or

schooling facilities.

TABLE 19
Villages with and without School (1961-62)

~	**************************************	
1	Total Number of Towns	249
2	Total Number of Villages	18,777
3	Number of Town places with schools	249
4	Number of Villages with schools	15,067
5	Number of Villages having no schools but having educational facilities	2,532
6	Number of Villages having no schools and no educational facilities	1,178
===	THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS O	ر پیسے جانب خاص آبادہ اللہ کسٹ طریع فائد کی کہ اس مورد کہ سے بھی بھی بارے میں اللہ اللہ صور پار مردد میں اللہ کی اللہ اللہ کا اللہ واللہ اللہ اللہ اللہ اللہ اللہ ال

## Languagewise Distribution of Primary Schools

The medium of instruction in primary schools is generally the mother-tongue of the child. There were 18,500 (97.8 per cent) schools teaching through Gujarati. The table below gives the distribution of primary schools by languages as on 31st March 1962.

TABLE 20
Languagewise Distribution of Primary Schools (1961-62)

No.	Language	No.of primary schools
1	Gujarati	18,500
2	Marathi	224
3	Urdu	70
4	Hindi	<b>34</b>
5	Sindhi	62
6	Others	12
	Total	18,902

TABLE 21
Primary Schools According to Management (1961-62)

No.	Management	No.of primary schools
1	Central Government	5
2	State Government	627
3	District School Board	16,156
4	Municipal School Board	797
5	Private aided	919
6	Private unaided	398
مورد بالدور الدور الدور الدور الدور الدور الدور مورد الدور الدور الدور الدور الدور الدور الدور الدور	Total	18,902•

## Enrolment of Scholars According to Age Groups

The following tables show the number of children in the age groups 6-11, 11-14 and 14-17 in the estimated general population for the year 1961-62.

TABLE 22
Children of School-going Age by Age Groups
(1961-62)

Age group	Estim	ated number	of children	Percentage
~~~~~~~~~	Boys	Girls	' Total	to popula-
6 - 11	13,58,000	12,79,000	26,37,000	12.80
11 - 14	7,24,000	6,81,000	14,05,000	6.82
14 - 17	6,73,000	6,33,000	13,06,000	6.34

TABLE 23
Children in the Age Group 6-11 (1961-62)

Estimated population of children in the age group of 6-11.		No.of	children enro	olled in s	chools in
		Nursery schools	Classes I-V	Classes VI-XI	Total
_	,				
Boys	13,58,000	16494	1236568	12245	1255307
Girls	12,79,000	13481	650361	<b>6671</b>	670513
Total	26,37,000	29975	1886929	18916	1925820

TABLE 24
Children in the Age Group 11-14 (1961-62)

Estimated population of children in the age group 11-14 years		No.of children enrolled in			
		below standard VI	Standards VI-VIII	Standards IX - XI	Total
Boys	7,24,000	94759	141836	8885	245480
Girls	6,81,000	42984	61727	4478	109189
Total	14,05,000	<b>137</b> 743	203563	13363	354669

TABLE 25
Children in the Age Group 14-17 (1961-62)

Estimated population of children in the age group 14-17 years		Number of children enrolled in			
		below standard IX	Standards IX - XI	Total	
Boys	6,73,000	63,945	<b>58,48</b> 8	1,22,433	
Girls	6,33,000	22,262	24,503	46,765	
Total	13,06,000	86,207	82,991	1,69,198	

### Sample Selection for the Final Testing

From the view point of what has been described above, it was decided to test about 6,000 children of the State. Below are given some important details of the sample selected for the final run.

## (1) Regions of the State

As stated in the previous pages, the sample was selected from the three important regions of the State, viz: Gujarat, Saurashtra and Kutch. School-going children from these three regions were selected as showin in the following table:

TABLE 26
Regionwise Selection of Children in the Final Testing

No.	Region	Approx.population in lacs	Children tested
1	Gujarat	142.15	5,105
2	Saurashtra	57.26	709
3	Kutch	6.95	<b>223</b>
		ر المراح الم المراح المراح	

### (2) Districts of the State

As stated earlier, there are 17 districts of the State. Out of these, the test was administered to the children of 11 districts viz: Surat, Broach, Baroda, Kaira, Panchmahals, Ahmedabad, Sabarkantha, Mehsana, Jammagar, Bhavnagar and Kutch. The table below shows the districtwise selection of the children tested.

TABLE 27
Selection of Children According to Districts

No.	Name of the District	No.of children tested
1	Surat	982
2	Broach	222
3	Baroda	825
4	Kaira	779
5	Panchmahals	758
6	Ahmedabad	323
7	Sabarkantha	689
8	Mehsana	517
9	Jamnagar	220
10	Bhavnagar	499
11	Kutch	223
	Total	6,037

On the following page is given the map of the Gujarat State indicating the districts where the final test was administered.

MAP OF THE GUJARAT STATE
INDICATING THE DISTRICTS • WHERE
THE FINAL TEST WAS ADMINISTERED.



TABLE 28
(3) Agewise Analysis of the Sample

Age	Range	Boys	Girls	Total
8	7-6 to 8-5	545	405	950
9	8-6 to 9-5	477	, <b>43</b> 8	915
10	9-6 to 10-5	461	501	962
<b>11</b>	10-6 to 11-5	412	39 <b>7</b>	809
12	11-6 to 12-5	349	369	718
13	12-6 to 13-5	472	427	899
14	13-6 to 14-5	413	371	784
	Total	3129	2908	6037

TABLE 29
(4) Gradewise Analysis of the Sample

			-
Grade	Boys	Girls	Total
III	430	401	831
IA	504	399	903
<b>V</b>	526	488	1014
IV	729	591	1320
VII	669	802	1471
	271	227	498
Total	3129	29 <b>6</b> 8	6037

TABLE 30

Analysis of the Sample Tested According to the Occupation of Fathers

	***************************************	
Grade	Occupation of fathers	Children tested
<b>A</b>	Professors, Collectors, Judges, Barristers, Engineers, Doctors, Writers, Managers of big firms, Officers of Civil and Military Departments etc.	1,290
В	Pleaders, Secondary Teachers, Share brokers, Businessmen, Contractors, Tutors, Factory owners, Landlords etc.	1,483
C	Primary Teachers, Clerks, Farmers, Typists, Insurance Agents, Compounders, Nurses, Petty Traders, Goldsmiths.	2,113
,D	Policemen, Barbers, Home servants, Motor drivers, Mill workers, Peons, Carpenters, Blacksmiths, Farmlabourers, Cooks, Sweepers.	1,151
	Total	6,037

## (6) Schools Included in the Sample

The test was given in 79 schools of Gujarat. Care was taken to include the schools of wide variety in order to make the sample as representative as possible. The principles mentioned in the previous chapter were kept in view while selecting the schools for the final run. Schools of the following variety were selected for this purpose:

- (i) Basic primary schools.
- (ii) Non-basic primary schools.
- (iii) Primary sections of high schools.
- (iv) Primary sections of multipurpose schools.
- (v) Boys', Girls' and mixed schools.
- (vi) Schools with medium of instructions other than Gujarati.

Other details with regard to the schools are given in the following table:

TABLE 31

Details of the Sample Selected for Final Testing

No.	Name of the School	Name of the District	Date of testing	Remarks about the school
H			4	
Н	Rand L Pandya High School, Dohad.	Panchmahal	27.3.63	Boys' School, Primary Section.
Ø	M.Y.High School, Dohad.	Panchmaha1	28,3,63	-00-
ო	Girls' High School, Dohad.	-00-	28,3,63	Girls' School, Primary Section.
4	Zalod Road Mishra Shala	-00-	10.4.63	Mixed, Primary School
ιΩ	Dolat Gunj Bunladi Kumarshala	-00-	29,3,63	Boys' Primary Basic School.
9	Madresa Mohamadia Girls' School	-DO-	28,3,63	Girls' Primary School
2	Madresa Mohamadia Boys' School	-DO-	28.3.63	Boys' Primary School
00	Bhatoda Kumarshala, Dohad.	-DO-	27.3.63	Boys, Primary School
თ	Padav Buniadi School.	-DO-	27.3.63	Mixed: Primary Basic School.
10	Buniadi Mishra Shala, Variav	Surat	5.4.63	-00-

	J	מי	4	•	1
	Buniadi Mishra Shala, Katargam	Surat	11.6.63	Mixed: Primary Basic School.	
123	Jeevan Bharati, Surat	Surat	11.4.63	Mixed, Basic School, Primary Section.	
13	C.N.Vidya Vihar, Ahmedabad.	Ahmedabad	12,4,63	-00-	•
4.	Mankva Kelavani Mandal Sanchalit High School, Mankva	Kaira	11.4.63	Mixed: Primary Section	
15	S.P.Madresa High School,Mota Miya Mangrol	Surat	6.4.63	-00-	L36
16	Pratap Vidyalaya, Nava Rajuwadia	Broach	10.4.63	-DQ-	•
17	University Experimental High School, Baroda.	Baroda	28,3,63	-00-	
8	New Era Boys' School, Badshah Building, Baroda.	-DO-	24.6.63	Boys: Primary Section.	,
19	Sharda Mandir, Anand	Kaira	27.4.63	Mixed: Primary Section.	
80	Shri Dwarkesh Sarvajanik High School, Bahadarpur.	Baroda	6.4.63	-00-	
21	Manjarol Mishra Shala, Manjarol	-D0-	5.4.63	Mixed: Primary School.	

н	QI	က	4	5
23	Bahadarpur Kanya	Baroda	5.4.63	Girls, Primary School
23	Bahadarpur Kumar Shala, Bahadarpura	<b>•</b> 00,	7.4.63	Boys, Primary School
24	Rustampura Primary School, Rustampura	a -DO-	15.4.63	Mixed: Primary School
25	Vasana Primary Basic Kumarshala, Vasana.	<b>-</b> DQ-	5.4.63	Boys, Primary Basic School.
98	Kosindra Primary Basic Kumarshala, Kosindra.	-DO-	8.4.63	-00-
23	Shah N.V.Sarvajanik High School, Karjan.	-00-	21.4.63	Mixed, Primary Section
88	New Era Boys' High School, Baroda	<b>-</b> DO-	25.6.63	Boys, Primary Section
20	New Era Girls' High School, Baroda	-00-	27.6.63	Girls, Primary Section
30	M.M.High School, Chikhodra	Kaira	24.6.63	Mixed, Primary Section
31	Rustompura Kumar Shaha, Baroda	Baroda	21,4,63	Boys, Primary School
SS SS	Manjarol Gujarati Kumarshala, Manjarol	<b>-</b> DO-	5.4.63	-00-
33	Shri Himmat High School, Himmat-nagar.	Sabarkantha	11.4.63	Boys, Primary Section
8	My Own High School, Himmatnagar	-00-	8.4.63	-00-

-			4	2
35	ପ୍ର	Surat	10.4.63	Mixed, Primary Basic School.
98	Local Board Gujarati Kanyashala, Rander.	-00-	3.4.63	Girls, Primary School
37	Taluka Buniadi Shala, Mota Miya Mangrol	-DO-	11.4.63	Mixed, Primary Basic School.
38	Nai Talim Shala, Velachha	-DO-	23.4.63	<b>-00-</b>
38	Nava Kumarshala, Sabarkantha	Sabarkantha	16.4.63	Mixed, Primary School.
40	Borsad Kanyashala, Borsad	Kaira	6.4.63	Girls, Primary School.
41	Prathmikshala, Ghodasar	-DO-	6.4.63	Mixed, Primary School.
24	Mishan Practising Shala, Borsad	-DO-	30.3.63	-00-
43	Sakar Baa Kanyashala, Karamsad	-DO-	13.4.63	Girls, Primary School.
44	Mukhya Kumarshala, Rander	Surat	4.4.63	Boys, Primary School.
45	Saraswati Mandir, Rajuwadia	Broach	10.4.63	Mixed, Primary School.
97	Shri Nutan Shala, Borsad	Kaira	1.4.63	Mixed, Primary Basic School
47	Shri Gujarat Vidyalaya,Gandhidham	Kutch	11.4.63	Mixed, Primary Section

	CO	n	4	
48	niadi Shala, Phu	Surat	11.4.63	Mixed, Primary Basic School.
94	Pratapnagar Buniadi Shala, Dharikheda.	Kaira	23.4.63	Mixed, Primary Basic School.
ф О	Agiol Prathmik Kumarshala, Sabarkantha.	Sabarkantha	9.4.63	Boys, Primary School
21	Jawahar Vidyamandir, Broach	Broach	11.4.63	Mixed, Primary Section
52	Gharshala, Bhavnagar	Bhavnagar	5.4.63	-00-
53	Kanyashala, Sabarkantha	Sabarkantha	11.4.63	Girls, Primary School
22	Hadiopur Prathmik Shala, Sabarkantha	-00-	11.4.63	Boys, Primary School
55	K.K.High School, Vejalpur	Panchmahal	9.4.63	Mixed, Primary Section
26	Prayogik Taluka Buniadi Shala, Alfabada.	Jamnagar	8.4.63	Mixed, Primary Basic School.
57	G.K.Shardamandir, Vidyanagar, Anand	Kaira	26.6.63	Mixed, Primary Section
<b>5</b> 8	Shri Sarvajanik Vidyalaya, Mehsana	Mehsana	18.6.63	-DO-
63	M.N.N.Sons High School,Chikhodra	Kaira	16.4.63	-DO-
09	Pratap High School, Baroda	Baroda	11.7.63	-00-
<b>T</b> 9	V.S.Patel Vidyalaya, Kosamba	Surat	8.4.63	-00-

1.	3				
82	Lok Vidyalaya, Kim	Surat	8.4.63	Mixed.	
63	M.S.Vidyalaya, Olpad	-00-	9.4.63	Mixed, Primary Section	•
49	Shri M.P.High School, M Jarod	Baroda	26.6.63	-00-	
65	Shri S.R.High School, Devghad Baria	Panchmaha1	30.3.63	-DQ-	
99	Shri Navchetan Vidyalaya,Kapadvanj	Kaira	30.3.63	Mixed, Multipurpose High School, Primary Section.	
29	Shri B.M.Commerce (Vividlaxi) High School, Bhavnagar	Bhavnagar	28,3,63	Mixed, Multipurpose High School, Primary Section. Mixed, Primary Basic School	140
89	Valcal Buniadi Shala, Surat	Surat	18,4,63	Mixed, Primary Section (Basic)	-
69	R.L.N.Nadiya School, Panchmahal	Panchmaha1	27.3.63	Mixed, Primary Basic School.	
20	Local Board Gujarati Shala, Adajan	Surat	15.4.63	Boys, Primary Section	
77	Maitr1 Mahavidyalaya,Gandhidham	Kutch	11.4.63	Mixed, Primary School	
72	Gujarati Shala, Branch 2, Borsad	Kaira	29.3.63	-00-	
73	Frdu Shala, Borsad	-DO-	28.3.63	Mixed, Primary School (Urdu School)	

·	Q	က	4	5
74	St.Xavier's	Kaira	29.3.63	Mixed, Primary School
22	Sarkari Shala, Bhuj (Adipur)	Kutch	11.4.63	Boys, Primary School
92	P.K.High School, Derol Station	Panchmahal	27.6.63	Mixed, Primary Section
22	Convent of Jesus & Mary, Baroda	Baroda	11.7.63	Mixed, Primary Section (English Medium)
28	Ramnagar Sindhi Schoolm, Rander	Surat	20.4.63	Mixed, Primary School (Singhi Medium)
9	Jayshree Model, Baroda	Baroda	11.7.63	Mixed, Primary School (Marathi Section)

### Validity of the Sample

It is very clear that the test has been designed for the children of the age-group 8 to 14 studying in grades III to VIII. The majority of the pupils, therefore, were selected from the primary schools or the primary sections of the high schools. Some pupils of std. VIII were also taken from some secondary schools. Care was taken to include almost all the types of schools so as to make the sample really representative of the population. A vast section of our society which has remained backward educationally all these years is to be helped to come up to the level of educationally advanced communities. Therefore, the portals of the schools have been thrown open to these people. To-day, our schools are having pupils of all strata of the society irrespective of caste. Primary education has been made free and compulsory and freeships are given to the economically backward pupils for the secondary and higher stages of education. Before independence education and specially the secondary education was practically the privilege of only those pupils whose parents could afford to pay the fees. The situation has changed to-day and normally we find children of all strata in a single school.

One way of ascertaining the representative

character of the sample is to see whether the I.Q.s of the pupils tested conform to the normal probability curve. Generally all test construction procedures are based on the hypothesis of a normal distribution. It is presumed that intelligence is normally distributed in an unselected population. Hence the need of testing the divergence of observed results from those expected on the hypothesis of a normal distribution. For this the Chi-square test is applied to the I.Q. distribution.

TABLE 32

Ser.	<b>.</b> ⊢	Percent area of the normal curve includ- ing ed in the range	(F)	0) E-	(fo-fe)	(fo-fe) <sup>2</sup> fe
н	bove	0.52	30	31,39	1.39	.061
<b>01</b> -	134.5 - 149.5	3,32	183	200.43	17.43	1.515
ო	119.5 - 134.5	12.03	709	726.25	17,25	.409
4	104.5 - 119.5	25.79	1602	1556.94	45.06	1.304
Ŋ	89.5 - 104.5	29.91	1798	1805.68	7.68	.032
, ,	74.5 - 89.5	19.74	1205	1191.70	13.30	1.484
2	59.5 - 74.5	7.03	415	424.40	9.40	.208
09	Below 59.5	1.66	95	100.21	5.21	.270
1	Total	100.00	6037	6037.00	116.72	5.283

P = 0.60

g = Jp

The value of P indicates that the distribution is normal, the deviation being due to chance factors only. In fine, the hypothesis of a normal distribution is accepted and it can now be safely concluded that the sample selected was unbiased, unselected and truly representative of the population for which the test was prepared.

### Programme of Testing

The testing work was started on 27.3.1963. This was the period when the schools would be busy preparing the students for examination. The principals of the schools were contacted well in advance. The active help of two persons who had a long experience of standardizing a test was taken. Most of the work of testing was done by the investigator himself. The two helpers were carefully trained in the work of testing by actual demonstration of the administration of this test. This was very necessary for uniform pattern and systematic work. It was decided not to administer the test to more than 30 children at a time. At some places, it was not possible to get benches for making a good seating arrangement. But such cases were exceptions rather than a rule. Everywhere the help of one senior teacher was taken for supervision work. Pupils were asked to use pencils in answering the tests but in some cases fountainpens were also allowed. All the information given on the left hand side of the cover

page was sought from the students. Birth dates were noted down by the tester himself. Here also, the help of a teacher of the school was taken. The birth dates given in the school records were taken to be reliable. Doubtful cases were dropped.

Thus the arduous task of administering the final test to 6037 children in 79 schools of 11 districts of the Gujarat State was completed on 11.7.1963. Answer scripts were then scored with the help of trained and experienced teachers. One mark was given for each correct response for the first five tests. The total score of the last two tests was reduced to one-fourth as decided while planning the test. No partial credit was given to a partially correct answer. The scores were entered in different mark-sheets sex-wise and month-wise.

This was more or less the task of data collection on the basis of which the test was to be standardized.

The next chapter describes at length the process of standardization of the test.

#### REFERENCES

- 1. Desai, K.G., The Construction and Standardization of a Battery of Group Tests of Intelligence in Gujarati, Bharat Prakashan, Ahmedabad, 1954.
- 2. Garett, H.E., <u>Statistics in Psychology and Education</u>, Allied Pacific Private Ltd., Bombay, 1961.
- 3. Lindquist, E.F., Educational Measurement, American Council on Education, Washington D.C., 1950.
- 4. Mukerjee, S.N., Administration of Education in India, Acharya Book Depot, Baroda, 1962.