

CHAPTER - VI : THE INVENTORY AS IT GOT FIXED

The final run of the test

The main purpose of the final administration of the test is to provide data that will help (1) to fix the norms and (2) to calculate the reliability and validity of the inventory.

As described in the previous chapter, 100 items were selected out of 145 items and retained for the final run on the basis of χ^2 values ^{and} of item analysis. These items were printed in the form of a booklet. Instructions for answering the A-type items were given on the front page. Instructions for B-type items followed the A-type items. Thus, these booklets and separate answer sheets were ready for the final administration of the inventory, (Appendix H).

Comparisons of the test scores with the norms are valid only when exactly the same procedure has been adopted in administering a standard test as was used while administering the test for fixing the norms. If the procedures in the two administrations are not identical, the results will not be valid. Utmost care should be taken in administering the

test for fixing the norms, giving attention even to minor details. All such necessary precautions were taken for this final administration of the inventory.

Selection of sample for the final testing

It was decided to test about 500 teachers, both men and women so as to fix the norms separately for the two sexes, in case any differences were observed in the scores obtained by them. To make the norms reliable, the tests should be administered to a teacher-population which may be considered to be a representative sample of the whole population. To select the representative population, the test makers follow either of the following two procedures.:

(1) Schools are selected at random from all parts of the population for which the tests are designed, so that all the samples of population may be tested.

(2) A city or an area which is representative from all points of view social, economic, cultural and educational, is selected ^{and} from the entire population, as far as possible, of the schools situated therein is tested.

The later procedure is preferable since the sample of population to be tested should include the same proportions of social, economic and cultural classes as they exist in the whole population. When the entire group of teachers working

in the different types of schools of a representative city or area is tested, the above conditions are satisfactorily fulfilled.

But it is very difficult to select such an area which harbours a representative sample of the whole teacher population. Considering the vast teacher population working in the different types of primary schools in the New Mysore State, it was decided to take a representative population of teachers, bearing in mind the following points :-

(1) Teachers working in the different types of schools were to be represented in the sample.

(2) Both men and women teachers were to be taken in the sample.

(3) Urban and rural parts of Mysore State should be proportionately represented in the sample.

(4) In choosing the places where the test was to be conducted, the economic point of view for conducting the test had also to be borne in mind, this being a private enterprise.

The statistics for the New Mysore State compiled after the integration were collected with regard to the number of teachers working in the different types of schools.

The New Mysore State

All the Kannada speaking areas with a population of nearly two crores have come under single administration after the Reorganisation of States on November 1, 1956. Under the scheme of States Reorganisation, only the number and boundaries of the districts were altered for administrative purposes. The complete synthesis of five administrative systems which have worked in isolation from each other for centuries may still take some more time. As a result of the reorganisation, new districts, namely, Coorg, Dharwar, North Kanara, South Kanara, Belgaum, Bijapur, Raichur, Gulbarga and Bidar have been intergrated into the old Mysore State consisting of ten districts, namely, Mysore, Bangalore, Kolar, Shimoga, Tumkur, Chitradurga, Hassan, Chickmagalur, Mandya and Bellary.

The basic pattern of the State's educational fabric is as follows : At the lowest level are the nursery schools. There are very few nursery schools in the state. Most of them are managed by private bodies. The number of nursery schools in the whole state as per 1951 statistics is only 95. Usually the teachers in the nursery schools are women with an SSLC pass. Very few of them are trained as there are very few training institutions to train nursery school teachers. As there are many primary or elementary schools, a large number of teachers are working in these schools.

These teachers will have either passed the SSLC or MS Examination or its equivalent examination. There are also the Middle Schools and Senior Basic Schools in which only teachers who have passed their SSLC Examination can work. These teachers take up T. C. H training or basic education training in the different training institutions of the State (Vide Chapter IV, p). Basic education is now the accepted pattern of our educational system. Hence a number of basic training institutions have been started to train teachers to work in senior and junior basic schools.

Statistical details of the New Mysore State

As the State is a very big one, it has been divided into four divisions for administrative purposes. Table 22 gives the names of the divisions and the districts included in each of the divisions. Table 23 gives the number of different types of schools in the different districts. Number of teachers working in these different types of schools is given in Table 24.

Table 22 - Administrative divisions, New Mysore State

Sl. No.	Number of division	Name of Division	Names of districts included in the division
1	I	Gulburga Dn	Bidar, Gulburga, Raichur
2	II	Belgaum Dn	Belgaum, Dharwar, Bijapur North Kanara
3	III	Bangalore Dn	Bangalore, Bellary, Chitradurga, Kolar, Tumkur
4	IV	Mysore Dn	Mysore, Mandya, Hassan, Chickmagalur, Shimoga, South Kanara, Coorg

Table 23 - Different types of schools in the New Mysore State (1951)

Name of the District	Middle School	Primary School	Junior Pri.School or Basic Middle School	Nursary Schools	New Type Middle Schools
I Bidar		567			
Gulburga	15	977	-	-	-
Raichur	12	588	-	-	-
II Belgaum					
Dharwar	38	6078	50	11	-
Bijapur					
North Canara					
III Bangalore	171	1720	89	23	151
Bellary	1	507	19	-	32
Chitaldrug	75	957	24	4	111
Kolar	69	1115	20	2	92
Tumkur	94	1386	27	5	95
IV Mysore	56	1328	26	19	63
Mandya	66	911	7	4	48
Hassan	63	986	25	6	81
Chickmagalur	58	1072	11	4	48
Shimoga	66	716	27	6	79
S.Canara	3	1153	47	2	-
Coorg	49	103	69	9	-
	808	47179	441	95	801

Table 24 - Number of teachers working in different types of schools

Name of the district	Schools			New type Middle Schools
	Middle	Primary	Basic	
1 Bidar	153	834	-	-
2 Gulbarga	284	1952	-	-
3 Raichur	184	1264	-	-
4 Belgaum	168	14132	411	-
5 Bijapur				
6 Dharwar				
7 North Canara				
8 Bangalore	1252	3610	194	1194
9 Bellary	12	1168	136	212
10 Chitradurga	430	1877	63	695
11 Kolar	453	2051	60	615
12 Tumkur	557	2608	65	623
13 Mysore	667	3382	43	403
14 Mandya	375	1587	27	287
15 Hassan	401	1767	77	500
16 Chickmagalur	313	1186	24	278
17 Shimoga	456	1904	60	420
18 South Canara	15	4452	312	-
19 Coorg	137	150	197	-
	5857	43924	1669	5227

In order to find out the proportion of teachers working in urban and rural areas of the state, the total number of teachers working in the two areas were found out. It is found that the proportion of rural teachers to urban is about 2:1. The Table 25 gives the districtwise statistics of teachers working in the primary and post-primary schools of the State and Table 26 gives the population selected for the final run.

From the statistics of men and women teachers working in the primary schools, it was found that the proportion was 5:1. But it was decided to administer the final test to only 500 teachers. In this case, then, the number of women teachers answering would be only about 100. But for statistical analysis this number would be very small. Hence, the proportion of men teachers to women teachers was decided to be 3:2 in the final sample. Table 27 gives the total number of men and women teachers working in the different types of schools in the State.

Having decided on the proportions of urban and rural teachers and men and women teachers that were to be taken in the final sample, it was next considered that the selection of schools in each district must be done bearing in mind the different types of schools that we have in the State.

Table 25 - Number of teachers working in the different schools in the State

Urban		Rural	
Name of the district	No. of teachers in schools	Name of the district	No. of teachers in schools
Bangalore	6250	Tumkur	3853
Mysore	4495	Hassan	2745
Dharwar	-	Chickmagalur	1801
Raichur	1448	Shimoga	2840
Kolar	3179	Chitradurga	3065
Mandya	2276	Bellary	1528
		Bidar	987
		Gulbarga	2236
		South Canara	4779
		Coorg	484
		Belgaum, North Canara, Bijapur Dharwar (rural)	14711
Total :	17648	Total :	39029

Urban : Rural :: 18 : 39 or 1 : 2

Table 26 - Population selected for the final run

Urban		Rural	
District	No. of teachers	District	No. of teachers
Bangalore	47	Tumkur	32
Mysore	22	Hassan	119
Dharwar	104	Chitradurga	89
		Bellary	87
Total :	173	Total :	327

So the population is : Urban : Rural as 1 : 2

Table 27 - Number of men and women teachers working in the different types of schools in the New Mysore State

Type of school	Teachers	
	Men	Women
Middle Schools	4,127	1,109
Primary Schools	33,859	6,015
Basic Schools	1,393	276
N. T. M Schools	4,390	837
Total :	43,769	8,237

Selection of schools

Table 28 gives the total number of different types of primary and post-primary schools in the State as per 1951 statistics.

Table 28 - Total number of primary and post-primary schools in the New Mysore State

	Boys	Girls	Total	Mixed
Middle Schools (ordinary)	685	123	808	28
Middle Schools (new type)	719	82	801	-
Senior Basic Schools	437	4	441	-
Primary Schools	16,071	1,108	17,179	2,985
Total :	17,912	1,317	19,229	3,013

As this inventory was to be used for those who would like to take up teaching profession after passing their SSLC it was decided to include more of teachers who have passed SSLC. Such teachers could be found mainly in Middle Schools. Hence, the proportion of teachers to be included from the middle and primary schools was decided to be 3 : 2 for the final sample.

It was also decided to include the pupil teachers from each of the following training institutions in the final sample :

- (1) Men's training college
- (2) Women's training college
- (3) Co-educational training college
- (4) Basic training institution for men
- (5) Basic training institution for women.

Other types of schools whose teachers were represented in the final sample were :

- (1) Government schools
- (2) Government aided schools
- (3) Municipal schools
- (4) Basic schools
- (5) Upgraded schools
- (6) New type middle schools
- (7) Private schools
- (8) Primary schools.

Bearing all this in mind, all the above types of schools were included in the final administration of the inventory. Table appended (vide Appendix K) gives the details regarding the selection of sample for the final run of the inventory.

The list of selected schools included schools from the newly integrated parts of the State. The tester was not familiar with these parts. Moreover, this task of testing teachers being new in this part, the heads of institutions and also the teachers were likely to have some misunderstanding

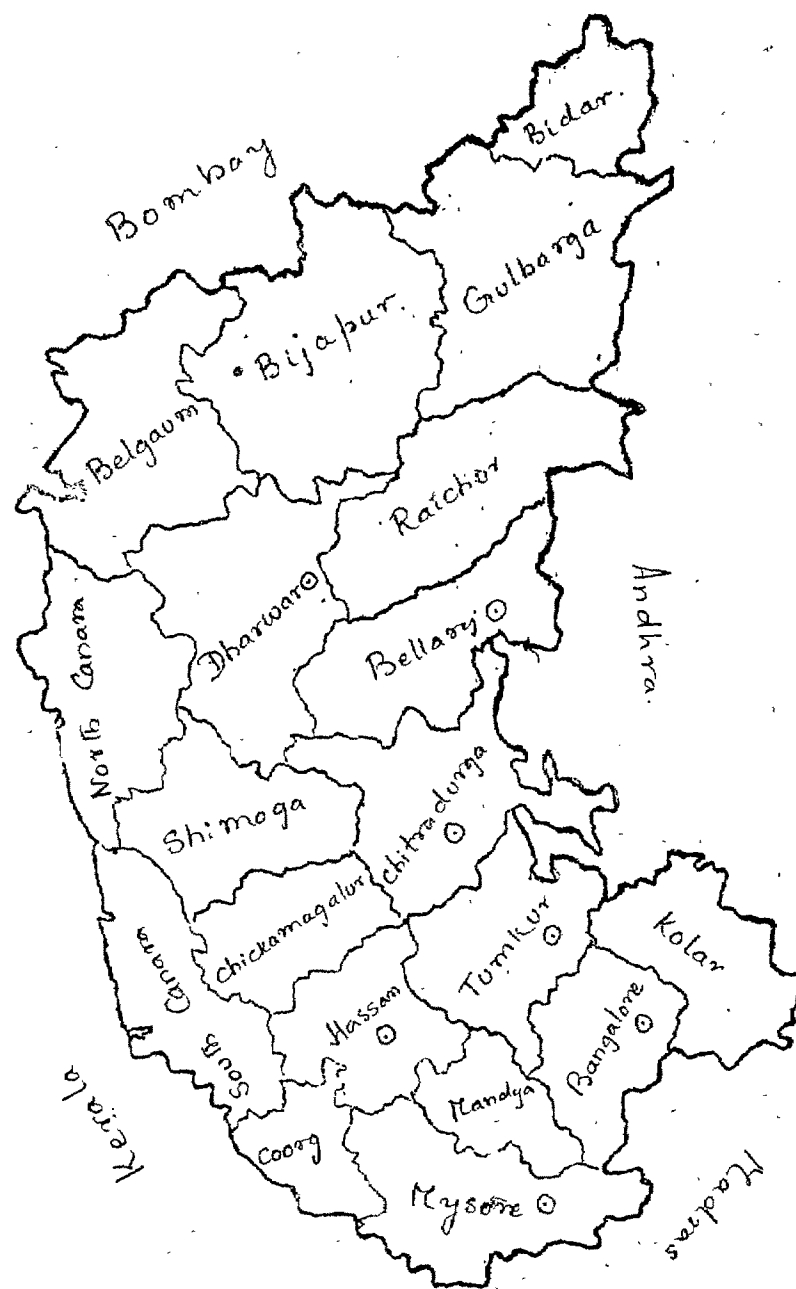
about the purpose of the testing programme. Hence, the Director of Public Instruction was requested to issue a general circular to all schools where the testing programme was scheduled to be conducted, asking the heads to extend cooperation to the tester in the testing programme. A copy of the circular issued by the Department is appended (Appendix L).

This circular was sent to all schools where the testing programme was scheduled to be conducted, well in advance. Many of the Superintendents of Training Institutions, inspectors of schools and headmasters of middle schools wrote in reply that their best cooperation would be extended for conducting the testing programme in their institutions and divisions. Some of the training institutions sent the marks of their trainees obtained in the terminal examination well in advance.

The testing programme was carried out as scheduled in the 60 institutions selected for the purpose. The places where the final testing programme was conducted is indicated in the Map of New Mysore on page 202a. During the testing programme care was taken to see that the head of the institution as well as the teachers answered the inventory willingly.

The testing programme was begun in the month of February 1959 and was complete by the month of May. As the heads of institutions were usually contacted a day earlier to fix the

MAP OF THE MEDICAL STAFF AS ON 1-11-1956
 (Districts marked with O are the places where the final
 testing programme was conducted)



time of testing in their institutions, they arranged that the teachers were ready to take the test as soon as the tester went to the school for the administration of the inventory. Also, this was possible since the departmental cooperation was extended to the tester by permitting her to administer the inventory to the teachers.

The inventory was answered by the teachers usually after the school work. In some schools the headmasters answered the inventory along with the other staff members. The size of the batch taken in each school depended upon the number of teachers in the school. It varied from three to thirty. In training institutions the batches consisted of 35 to 45 pupil-teachers.

As in the case of the pilot testing, the teachers were made to sit in an airy class-room. Booklets along with the answer-sheets were then distributed. All of them were first requested to fill in the particulars asked on the answer-sheet. After this, they were asked to go through the instructions given on the front page of the booklet. When they had completed, they were asked to start answering the inventory. Care was taken to see that they did not discuss the statements while answering the inventory. As the teachers were seated quite apart from each other, copying could be easily avoided. As far as possible, it was seen

that all the teachers answered the inventory completely.

On the answer-sheet the teachers were requested to supply the following information :

- (1) Name
- (2) Qualification
- (3) Trained or not
- (4) Years of service
- (5) Name of the institution in which he/she is working
- (6) Date of answering the inventory.

The marital status of the teachers was not collected as most of the teachers were unwilling to give the details asked for about the same. This was tried by the tester during the preliminary run of the test. As most of the teachers tested earlier had left that column blank, on the final answer-sheet it was not asked at all. Even in this final run, as the tester herself went from school to school for the administration of the inventory, cent percent returns of the answer-sheets was secured. Teachers answered the inventory quickly, since the method of marking the answers was easy. They were able to give their own responses to each of the items as there was no scope for discussion during testing.

All in all, 530 teachers of about 60 institutions answered the inventory. Out of these 530 testees, some odd

number of testees had not answered the inventory completely; since they had not followed the instructions, so they³⁰ were rejected. Only 500 answer-sheets were subjected to further statistical analysis.

Scoring of the answer-sheets

As was discussed earlier, a specific scoring system was preferred. A key was prepared with the help of the pooled opinions of 55 experts. Out of the 5 responses to each item, the response with the highest frequency was assigned 2 marks and the response with the next highest frequency was assigned one mark. Thus, keys were prepared on transparent papers (specimen appended³¹). With the help of such keys all the 500 answer-sheets were evaluated and the total score secured by each of the testees was recorded on the sheet in the space provided for the same.

The standardisation of the inventory

The full meaning of standardisation of any test or inventory is very broad and involves all steps of construction, administration and evaluation. An inventory is standardised in three respects : (1) in form and construction, (2) in the way it is administered, and (3) in the way of evaluating its results so that the performance of any examinee can be easily compared with the performance of the whole group. So far the first two aspects of standardisation of the inventory have

already been discussed in this as well as in the foregoing chapters. The third aspect will be dealt with in the next chapter.

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