

CHAPTER - IV : A GENERAL LAY-OUT OF THE INVENTORY

The problem

The main problem in the present investigation is thus the construction of an inventory for measuring teacher-efficiency of persons intending to be primary school teachers in Mysore State. As already mentioned, the selection of teachers for training in our State, has been at present mainly based on the marks obtained in the SSLC or Post-SSLC Examination that the candidate has passed. An interview is held for the candidate by the management. In the interview the candidate is asked a few theoretical and practical questions and then selected or rejected. Though this type of selection is not adequate, it is followed for the simple reason that there are no better tools which can be used to assess these prospective teachers. Hence there is a great necessity for an inventory for selecting teachers both for training institutions as well as for teaching profession in the new integrated Mysore State.

In Mysore State as in other States there are teachers working in different grades of schools, namely: nursery, primary,

secondary and college. As these teachers deal with different age groups of children at different levels, it is not possible to have a common inventory for the teachers working in all these grades. The present attempt deals with ^{the} construction of an inventory for selecting the primary school teachers of the State. It has been considered that an inventory to assess teacher-efficiency is more essential for the teachers working in primary schools for the following reasons :

(1) It is at this stage that the State recruits the maximum number of teachers every year.

(2) The primary school teachers lay the foundation for the education of each child in the State; hence proper selection must begin from the lowest level.

(3) Most of the students who do not secure a seat in any other technical school or college after the SSLC Examination just apply for the post of a teacher; not knowing what else to do, they try to secure a seat in the teachers' training institution. Hence selection must be there to eliminate at least those who are unfit for the profession.

(4) Recently, compulsory education for all has come into force and this scheme can work successfully only when proper selection of teachers is made on the basis of some standard tests. Hence it has become all the more important to construct an inventory which can help such selection.

After deciding the grade of teachers for whom the inventory has to be standardised, the next consideration was to choose the test items that would be adequate in selection of teachers of primary schools of Mysore State. There were two courses open : (1) to select a good valid test from those available in western countries and translate it into Kannada, the regional language of the Mysore State with necessary adaptations, or (2) to construct tests in Kannada language following the methods adopted by test-makers at home and abroad, so that the tests can be based on the characteristic environment of Mysore State.

There have been cases when the test-makers in India have translated many psychological tests from English into the regional languages making a few changes here and there. But a teacher's aptitude test or any test when translated cannot be valid or reliable because :

(1) The tests constructed in western countries are based on their environment which differs widely from the Indian environment. The system of education in those countries, the school management and equipment, the socio-economic status of teachers, the training that teachers get, their social customs and codes of behaviour are different from those of ours. These differences render the foreign tests totally inadequate and misleading for the people of our country.

(2) Moreover, every language has its own characteristics. The modes of expression in English are altogether different from those in Kannada. Every word has its significance in a particular language. A word in English cannot be exactly translated into Kannada with its original subtlety and significance. Some English words have no exact equivalents in Kannada and in translating them, long expressions have to be used. In such cases, the translation would often either miss some important feature or bring in unwanted points.

(3) Some tests are based on the knowledge of subjects taught to them in schools of education or training colleges. The courses of studies and duration in west are different from those in India. Hence such tests cannot be used in our country at all.

Looking to these environmental and language difficulties, many test-makers adapt the foreign tests making the necessary changes in the script of the tests. However, after making changes the whole test has to be standardised again - If this is not done in order to arrive at local norms and standards, ^{if this is not done} the test no longer remains reliable and valid. If all the steps of standardisation of a new test are also to be followed in adapting a foreign test, it is better to construct a new test altogether, doing full justice to the culture and environment of our teachers. In view of this, it was decided to

construct an original test in Kannada following good patterns of the western tests.

For this purpose, the following tests available in our country were examined :

- (1) Minnesota Teacher Attitude Inventory.
- (2) Stanford Educational Aptitude Test.

As it has already been said, much work has not been done in this field of testing teachers though many psychological tests have been constructed and standardised for study and classification of children of our country. The two tests mentioned above furnished much information regarding the procedure and contents for a teacher's test to be constructed to suit the local needs, and particularly in connection with the choice of test items in different areas, discussed in the next section.

Choice of areas for the construction of items

A number of studies on rating scales, aptitude tests, qualities essential for successful teaching etc. have been made in foreign countries especially in the United States of America. The abstracts of all such studies are found in varied issues of the journals of experimental education, teaching and research. All these abstracts have enumerated a number of qualities required by a successful teacher. Table 2 gives the qualities

chosen for study by other test-makers and the number of times they were chosen for study.

This furnished a good material to start with types of items to be included in the present test. In addition, for our purpose, experienced teachers, headmasters, inspectors of schools and district educational officers were requested to mention the qualities which they considered essential for a good teacher. Table 3 gives the qualities mentioned with their frequencies. On the basis of all this information on qualities of teachers, for the purpose of this inventory, most frequently mentioned qualities were grouped under the following areas :

(1) Professional knowledge or skill and interest (K)

This included professional knowledge or skills for professional preparation, e.g. acquaintance with the use of teaching aids, knowledge of the type of examination, evaluation, different methods of teaching, importance of curricular and co-curricular activities etc.

(2) Acquaintance with the principles of psychology (P)

This included psychology of learning and teaching, motivation, the use of punishment and reward, understanding the pupil, psychology of dealing with problem children, backward and handicapped children.

Table 2 - Essential frequencies of various factors and qualities
essential for a good teacher (as per some previous
studies)

Factors and qualities chosen for the different studies on teacher- efficiency		Frequencies
1	Knowledge of subject matter	48
2	Interest in profession	28
3	Ability to maintain discipline	27
4	Love of children	26
5	Knowledge of child psychology	22
6	Ability to teach	22
7	Thrust for knowledge	7
8	Wide experience	7
9	Good expression	12
10	Proper preparation	7
11	Patience	52
12	Kindness and sympathy	27
13	Fairness	16
14	Punctuality	13
15	Health	11
16	Tolerance	12
17	Sense of humour	8

Table 2 (contd.)

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18	Calm nature	12
19	Friendliness	7
20	Active	13
21	Resourcefulness	2
22	Contentment	4
23	Cooperation	7
24	Enthusiasm	4
25	Simplicity	6
26	Honesty and justice	6
27	Good character	30
28	Personality	4
29	Voice	2
30	Diction	3
31	Optimism	1
32	Planning ability	1
33	Good citizenship	1
34	Adaptability	2

Table 3 - Frequencies of the various factors and qualities essential for a good teacher (as per the opinion of ten experienced teachers)

Factors and qualities that are essential to be a good teacher		Frequency
1	Knowledge of subject matter	10
2	Intelligence	6
3	Professional interest	6
4	Ability to maintain discipline	7
5	Organisation and management	8
6	Knowledge of child psychology	6
7	Good expression	4
8	Proper preparation	5
9	Love of children	4
10	Ability to teach	5
11	Professional skill	8
12	Patience	4
13	Kindness and sympathy	5
14	Fairness	8
15	Punctuality	3
16	Health	6
17	Tolerance	2
18	Sense of humour	6
19	Emotional stability	10
20	Friendliness	3

Table 3 (contd.)

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21	Active	-
22	Sociability	6
23	Considerateness	2
24	Initiative	3
25	Neatness	2
26	Cooperation with authorities and colleagues	5
27	Resourcefulness	4
28	Honesty and justice	3
29	Good character	5
30	Personality	1
31	Voice	1

(3) Ability for class management, school organisation and educational administration (M)

This included discipline problems, class management, work load, school management, teachers' duties and rights, knowledge of administrative machinery, experience or knowledge of different school situations and problems etc.

(4) Relationship with others

Under this category came the attitudes towards others, relation with the authorities, colleagues, pupils and parents (R).

(5) Individual qualities (I)

Under this head ^{were} could be listed personal virtues of a teacher, e.g. patience, humour, sympathy, kindness, resourcefulness, confidence, dominance, attractiveness, personality traits, emotional maturity, idea of the teacher about justice, character, etc.

Form of test - items in the inventory

Under each of the above areas a large number of items were constructed, the responses to which, were considered to reveal whether the teacher in making is having or will develop some aspect of the ability or trait included in that area.

The following steps were adopted in the formation of the items for the inventory :

(a) A number of class-room situations wherein the personality of the teacher would be brought to the forefront were listed.

(b) Most of these situations were converted into brief and intelligible statements.

(c) Some of the above statements were converted into negative statements to make them more thought provoking.

(d) Some class-room situations were presented as such and to each situation five probable reactions of teachers were given as alternative answers.

(e) The statements were scrutinised carefully to see that they were unsuggestive.

(f) In selecting the situations for presentation care was taken to see that the situations did not pertain to teachers' private lives.

The whole inventory was framed with two types of items; The first type (A type) consisted of favourable and unfavourable statements each of which was to be opined on a five-point scale such as strongly agree, agree, uncertain, disagree and strongly disagree. A few examples of such statements (A type) on which opinion on the five-point scale was asked are given below :

(1) Gestures are useful and effective in teaching (favourable statement).

(2) Children are unable to think for themselves (unfavourable statement).

(3) A teacher who is sympathetic cannot get much work done by his pupils (unfavourable statement).

(4) Assigning additional school work is often an effective means of punishment (unfavourable statement).

The second type of items (B type items) consisted of situations common to school environment. Each situation was associated with 5 probable reactions. These reactions were selected as follows :

(1) The situations were given to five heads of institutions, ten experienced teachers and ten teachers under training.

(2) Each one of them was asked to give the most five probable reactions of a teacher to each of the situations.

(3) These reactions of the 25 persons were analysed and their frequencies were worked out. In view of the frequencies, the five probable reactions were selected for each statement. A few examples of such situations with their five probable selected reactions along with their frequencies are given below :

Situation	Reactions	Frequencies
1 A pupil comes always late to the school	I shall	
	1) Advise him not to come late	7
	2) Find out the causes for his coming late and try to remove them	9
	3) Contact his parents and request them to send him to school in time	13
	4) Report this to Head Master	6
	5) Rebuke him before his classmates.	4
2 Suppose a student shows originality or superior knowledge in answering a question asked by you	I shall	
	1) Appreciate him	8
	2) Set him the work of a higher grade	4
	3) Discourage him	2
	4) Encourage and make a special recommendation	7
	5) Ask him to help the backward children of the class.	11

It may be admitted here that the selection of the five reactions was not necessarily in order of frequencies, and it should not be; nor was it completely arbitrary; the distribution was such that probable reactions varying from the least

to the maximum frequency were selected, giving the respondent all scope as a continuum of general agreement.

Next it was thought that the final form of the inventory should contain only about 100 items because if there were too many they may not be answered properly and sincerely. In view of the time limit also, it was decided that the final form of the test was to contain about 100 items so that it should be possible for the respondent to answer the whole inventory in about one class period or at least in not more than an hour. Bearing all this in mind for the initial stage, 140 'A' type statements and 70 'B' type situations were preliminarily constructed. After an informal tryout, some of the items were revised and recast and some of them were omitted in view of the following reasons :

(1) Some of the items appeared to be ambiguous in meaning.

(2) Some of the items were thought to be duplicate in content.

(3) The form of some, needed revision for clarity.

Thus, 119 items of 'A' type and 45 items of 'B' type were retained in the first preliminary form of the inventory ready for the first systematic administration, as discussed in the following chapters.

Next, it was decided to set the whole inventory in the form of a booklet so that the same booklets could be used again and again. A separate answer-sheet was to be provided along with the booklet. The answer-sheet was to be in the form of a simple sheet accommodating five point responses. At the top of the answer-sheet, the testees were to write their names, qualifications, teaching experience, whether trained or not, school in which they were working, and date of answering the inventory. The teacher testees had just to blacken the space, in between two lines given under each response to indicate their answers to each of the statements. This answer form was used in the light of its following advantages :

- (1) It is a time-saving device.
- (2) It is easy to evaluate the answer sheets because copies of the keys made on transparent papers can be used for evaluation.
- (3) It is also convenient and easy for the respondents to mark.

The following instructions were given before the testees started responding to the items :

" You are dealing with teaching and school work. You must have your own views on problems of teaching and its related aspects. Here are given a number of items to collect

your opinions about topics like class-room teaching, teacher-pupil relationship etc. Will you please mark your own opinion in the answer sheet as described below ? There are two types of items namely 'A' type and 'B' type. Place yourself in each of the situations given and mark your own opinion in the answer-sheet. Do not hesitate to give your honest opinion. Your answers will be kept completely confidential. There is no time limit for answering this questionnaire, but work as rapidly as you can. Do not make any marks on the booklet, but only in the separately provided answer-sheet. Respond to every item".

Special instructions for answering 'A' type statements

What you have to do is this :

- 1) Read each statement
- 2) Then decide how far you agree with the opinion given in the statement

	SA	A	U	D	SD
If you strongly agree, blacken space under 'SA'	*	"	"	"	"
If you generally agree, blacken space under 'A'	"	*	"	"	"
If you are undecided or uncertain, blacken space under 'U'	"	"	*	"	"
If you generally disagree, blacken space under 'D'	"	"	"	*	"
If you strongly disagree, blacken space under 'SD'	"	"	"	"	*

The black marking is to be done in the answer-sheet against the number of that particular statement.

Special instructions for the 'B' type items

"Here are some common class-room situations. Against each

situation are given five probable reactions of a teacher. Select the most probable reaction of yours in each of such situations. These reactions are numbered as 1, 2, 3, 4, 5. After selecting your probable reaction, blacken the space in the answer-sheet under 1, 2, 3, 4, or 5 against the serial number of that situation. If you do not find your reaction among the alternatives given, you may write your own reaction on the answer-sheet against the serial number of that situation."

The inventory with 164 items was got printed in the form of a booklet after a pre-tryout. Instructions for answering the inventory were given on the front page of the booklet. 500 answer-sheets and one hundred booklets were got ready for administration of the inventory for pilot testing. The next chapter deals with the preliminary runs of the inventory.

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