CHAPTER V

TECHNIQUES OF STUDY

PART III

RATING SCALES FOR EVALUATION OF SCHOOLS

1) WHAT IS A RATING SCALE?

5.1.1. Where exact measurements are not possible a rating scale is devised for evaluation. The concept of a rating scale can be clarified by an illustration. A pupil's marks in History or Geography give an indication of his performance. They are precise numbers as 65, 62, etc. But there are other abilities which cannot be measured in precise numbers, e.g., honesty, regularity. These are the traits and we cannot give marks as 50 or 62 to evaluate these traits. Here the pupil is to be rated on each trait.

5.1.2. Rating, therefore, is a broad division continuum on which the relevant ability is placed. This ability is known as a trait. For measurements we will have to make a list of traits. Such a list in case of a pupil may include regularity,
punctuality, obedience, etc. These traits may be rated on a scale indicating whether the boy is always regular, sometimes regular or irregular. 'A' credit can be given for always regular, a lesser credit for being sometimes regular and no credit for irregularity. Assuming that these points are equidistant on the continuum always regular getting a score of 2 points, sometimes regular 1 point and irregular 0. Thus a pupil can be rated on these three traits as many as we select. His rating can be done for all the traits and the ratings can be converted into numerical points.

5.1.3. The scale as above presupposes that all the traits are of equal importance. Regularity is given the same importance and honesty and so on. But in some cases this may not be a fact; The traits may differ in their values. One may be more important than the other. As such it becomes necessary to give weights to these traits, so that they can be equalized. If it is found that honesty is twice as important as regularity (this assumption is hypothetical) then a weight of 2 will be attached to honesty, as against a weight of 1 to regularity. Thus weighting will lead further accuracy in rating scale. Therefore, generally traits
in a rating scale are weighted.

5.1.4. This can be done on the judgment of one person, but such a judgment of one person is likely to be biased. Hence the list of traits is given to different experts for rearranging them. When such a rearrangement is done importance of such traits will be known by its new position in the list. When different persons give different positions to the traits, they take into account their own views and their knowledge in the field, which helps in the long run to obtain an impartial and objective weight for each attribute.
ii) WHY A RATING SCALE IS NECESSARY?

5.2.1. Very often people try to make comparisons between different schools without any objective measure. Some say one is a good school and the other say it is a bad school. With the rapid expansion of secondary education in rural areas, schools have sprung up in rural villages and small towns. These schools are not so well equipped nor so efficiently run as city schools, probably lack of personnel, lack of equipment, etc., may be the reasons. But it would be necessary to have an objective rating scale to evaluate the schools. Such an objective instrument will help the evaluation of a school not only by the public, but also by the department. They will have a fairly reliable instrument to fall back upon and can claim a high measure of objectivity in rating. It is here that the need of a rating scale is felt.

5.2.2. This is not the only purpose. A rating scale will enable a school to rate itself and discover its shortcomings. If the instrument is made available to a school it can do self-rating and find out its score on the rating scale. The score
will reveal weaknesses of the school. Thus the school will have an instrument which will help it to plan properly to overcome its weaknesses. Self evaluation is a measure to improve the school by proper planning. Many of the rural schools and even urban ones, do not have before them a plan for improvement programmes. Unplanned work yields only a very small proportion of our out-put, compared to in-put. The objective of the rating scale is thus to provide a method for the progress of a school.
iii) THE CONSTRUCTION OF A RATING SCALE
OF RURAL SCHOOL

5.5.1. Let me take now the problem of constructing a rating scale. The first step in the problem will be fixing of the traits or attributes. The second step will be determining the weights to be given to the attributes.

5.5.2. On a survey of a number of schools experts are generally agreed on the following traits for evaluating of schools. They are:

1) Building and Play ground, (2) Staffing, (3) Laboratory, (4) Library and (5) Teaching aids. Any good school which can be rated in 'A' category should possess all these traits at the optimum level; as such I have selected these five traits. Probably I could have added to this number. But addition would not mean much improvement, and make the scale cumbersome. Hence I thought I should limit myself to these five traits.

5.5.3. A continuum for each of these traits will have to be established. It should be smooth one and easy for locating the school. Moreover, it
Should be fairly objective so that the position of the school can be on the continuum with exactness. By exactness I mean, that such location as would not with change with persons, i.e., one would not weight an item as 'A' and another as 'B', the third one as 'C'. This would mean that there is no reliability in the rating scales. I give below the points on which each item in the scale, to be rated.

5.5.4. The first point is buildings. A casual survey of some schools in rural areas will show many deficiencies in respect of buildings. A school which has its own properly ventilated and lighted building with a playground will be rated as 'A', highest in the continuum. A school which does not have its own building but meets in a rented one fairly meeting its requirements will be rated as 'B', and a school with unsatisfactory buildings meeting at different places will come in the category of 'C'. The investigator will have to first ascertain the details of the building and then decide into which category the building can be classified.

5.5.5. The second trait is staffing. A fully trained staff is the ideal to be reached for our
secondary schools. Trained graduates are very often reluctant to going to rural areas and as such the staff of secondary schools in rural areas presents a variegated picture. When the staff is fully trained the school would be at the top of scale at 'A'. When it is having 50% trained graduates, it would be at 'B' and a school which is having lower than 50% trained element would be to the category of 'C'. Information about the trained staff of any particular school will help a person to fix up the exact rating of a school on this trait.

8.8.6. The next item for rating is laboratory. With the growing importance attached to science teaching a laboratory becomes an indispensable item in schools. But, schools which are coming up in rural areas do not have adequate facilities for laboratories. The facilities would include a separate furnished building, equipments for Physics, Chemistry and Biology and a qualified laboratory assistant to help the teachers in these subjects in practical work for laboratory purposes. This would no doubt be an ideal condition. Even the annual expenditure on chemicals on the laboratory materials, gas, etc., would be an index of the efficiency of science teaching. As for this item a fully furnished adequately equipped independent laboratory
with a separate man in charge is rated as 'A'. A laboratory meeting in school building without a separate assistant is rated as 'B' and absence of laboratory is rated as 'C'.

5.3.7. The next item in the rating scale is library. The need of a good library for pupils and teachers is hardly realized in our rural schools. No doubt there are a few books for teachers and still smaller number for pupils. Hardly any arrangement exists for issue of these books to readers for fear of loss or damage. These books are safely locked in inaccessible cupboards. Knowledge development of pupils largely depend upon the pupils' quantum of general reading. But in most of our schools such reading is limited to memorization of text books. Sometimes it is also argued rather strongly that if no questions on general books are set in examinations there is no purpose in pupils' reading outside books. Some people would regard it as waste of time which would have otherwise been devoted to text books. An attitude has thus been built up in minds of pupils, that general reading is a luxury. However, for purpose of the rating an independent library with a librarian is treated as 'A' and a mere collection of books without
any facilities for issue would be rated as 'B'. And absence of a library or a too small collection of books would amount to 'C'.

5.5.8. The last and the fifth item in the list is that of teaching aids. It is not disputed that teaching aids play a vital role in teaching, meeting abstract things concrete and understandable. Maps, Globes, Diagrams, Charts, Models can have important place in adding variety and clarification to the monotonous class room teaching. But importance of such aid has hardly been realized in our rural schools, or some rural schools are poorly equipped. Very little provision is made for replacing old and damaged teaching aids and adding new ones. The use of audio-visual aids is practically a sealed book, not only to rural schools but even to many urban schools. The schools having these aids hardly use them. Hence, 'A' category would include to schools possessing a good stock of audio-visual aids, as required for all school subjects for class room teaching. A mediocre school having just a few maps and charts would come under 'B' and a school without any would come under 'C'.
5.5.9. In this way it would be possible to rate different schools on five traits. Each trait being rated as A, B or C. For facilitating conversions into numbers we may give A score of 3 points B, a score of 1 point and C a score of 0 point. When scores given to all the five traits are added they will give the numerical rating of the value of the school. Such a value would obviously be fluctuating between a school getting 'A' for all the five traits. Thus numerically the best school would have a score of $5 \times 3 = 10$ points and worst school would have 0 score. Thus the scores would fluctuate between 10 to 0. A school having 7 points may be rated 70% and 4 points at 40% and so on.
iv) WEIGHTING THE RATING

5.4.1. In the above discussion I have taken that all the ratings are equally important. Thus for instance buildings are as important as staff and teaching aids are as important as laboratory and so on. But this is not always the case. Very often a good staff can make up deficiencies in other respects and can cover up. As such some items will have to be rated according to their weights and it will be necessary to give weights to all the attributes. For this purpose a technique is devised for trying to find out the ratings for different traits.

5.4.2. All these items were sent to different persons working in the educational line. Persons who are experienced, or headmasters or professors were selected, for this purpose. The list of items was sent to 75 persons and those persons were requested to indicate against items the importance they would attach to that item. The one which is most important in their view would get 5, the next one would get 4, the next one 3, next 2 and the last item would get 1. A form in which the items
are included was sent, is given below:-

<table>
<thead>
<tr>
<th>Items</th>
<th>Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building and Play-ground</td>
<td>( )</td>
</tr>
<tr>
<td>Staffing</td>
<td>( )</td>
</tr>
<tr>
<td>Laboratory</td>
<td>( )</td>
</tr>
<tr>
<td>Library</td>
<td>( )</td>
</tr>
<tr>
<td>Teaching aids</td>
<td>( )</td>
</tr>
</tbody>
</table>

Instructions:

Please give weights to the items above according to their importance in school work. The highest weight should be given 5 points, the next one 4 points, the next 3, the next 2 and the last 1 point. The respondents were informed that the study was meant for educational purposes in research investigation and their cooperation would help the advance study of some educational problems.

5.4.3. Seventy five persons were addressed and it is appreciated that the response came from all of them. These persons are classified as under:-

1) Retired head - masters = 10
2) Working head - masters = 55
3) Professors = 12

Total = 75,
The list shows the close acquaintance of the persons with educational work, of teaching. And as such the weights given by them can reasonably be accepted as sound ones.

5.4.4. The weights given by those persons for each item were averaged, i.e., total divided by the number of respondents. The average weights for each item is shown below:

1) Building and play-ground = 2.40
2) Staffing = 4.21
3) Laboratory = 2.97
4) Library = 2.59
5) Teaching aids = 2.61

5.4.5. The averages show that a very high weight is given to staffing and the rest are almost on par, i.e., the staffing gets a weight of 4 (rounding up the decimal points) while teaching, laboratory and the library get a weight 3 (2.61, 2.97 & 2.59), while buildings get a weight 2 (2.40)

5.4.6. It is necessary to establish some form of validity for the rating scales and therefore, a few schools were rated by three independent judges. While rating a rating rated point was taken as a
product of the weights and the rating given. The judges were told, how a rating should be done on each attribute and how the total rating including weightage should be calculated. It was found that rating given by these persons, independently for 10 schools in an area agreed very closely. This is taken as an indication, as a reliability of the rating scale.
5.8.1. An example in rating will clarify how the rating scale can be used. I start with my own school for self rating. The rating scale given by me is as under:

<table>
<thead>
<tr>
<th>Weights (w)</th>
<th>Items</th>
<th>Rating</th>
<th>(R)</th>
<th>Product (w x R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max -</td>
<td>Average</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) 2.</td>
<td>1) Building &amp; Play-ground</td>
<td>v = 0</td>
<td>2 x 0 = 0</td>
<td></td>
</tr>
<tr>
<td>8) 4.</td>
<td>2) Staffing</td>
<td>v = 1</td>
<td>4 x 1 = 4</td>
<td></td>
</tr>
<tr>
<td>6) 3.</td>
<td>3) Laboratory</td>
<td>v = 1</td>
<td>3 x 1 = 3</td>
<td></td>
</tr>
<tr>
<td>5) 5.</td>
<td>4) Library</td>
<td>v = 0</td>
<td>5 x 0 = 0</td>
<td></td>
</tr>
<tr>
<td>6) 3.</td>
<td>5) Teaching aids</td>
<td>v = 0</td>
<td>3 x 0 = 0</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Total :</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

So, the total rating for the school would be seven. In this scheme the weighted rating for a school getting 'A' for all the five traits would come to 50, while one getting all '0' ratings would come to 0. Therefore, the ratings of schools would fluctuate between 30 as the highest and 0 as the lowest. The school rated above gets 7 points out of 30, which roughly means as 23%.
5.5.2. The evaluation is considerably low particularly in respect of building, teaching aids, as well as deficiency in library. This is an indication as to which aspect the school needs strengthen to reach the ideal position. This illustration, especially is given to enable schools to follow the technique of using the rating scale.

5.5.3. As discussed above a questionnaire was given to sample schools for the evaluation of these schools. The questionnaire included all the traits viz., Building and Play-ground, Staffing, Laboratory, Library and teaching aids. The questionnaire is designed in a three point scale, and adequate provision is made to indicate proper category of a school. The respondents were requested to make ticks against proper category, suggesting the position of their schools of these five traits. The significance is discussed earlier. And the form of a questionnaire is given in Appendix B.