CHAPTER III

THE REVIEW OF RELATED LITERATURE

Importance

A study of related literature involves locating, analysing and evaluating reports of research as well as reports of casual observation and opinions that are related to the planned research projects. Walter R. Borg writes:

The review of related literature is a must for scientific approach and is resorted to, by and large, by all investigators in all areas of scientific research. One can not develop an insight into the problem to be investigated into, unless and until one has learnt what others have done and what remains to be done in a particular area of his own interest. Thus the related literature forms the foundation upon which all work can be built.¹

Carter V. Good and others think that 'Survey of related literature forming one of the early chapters in research report for orienting the readers, serves in addition some other purposes such as:

1. To show whether the evidence already available solves the problem adequately without further investigation and thus to avoid the risk of duplication.

2. To provide ideas, theories and explanation or hypothesis valuable in formulating the problem.

3. To suggest methods of research appropriate to the problem.

4. To locate comparable data useful in the interpretation of results and

5. To contribute the general scholarship of the investigator. 

Stressing the importance of related research Van Dalen writes that 'An educator cannot engage in research successfully unless he becomes adept at locating thesis, dissertations, and the reports of the studies that embody the bulk of the work done in his field.'

There may be different sources of information such as journals, books, yearbooks, monographs, theses, dissertations, government and non-government publications, encyclopaedias of education, bibliographies and directories etc. Among foreign encyclopaedias of education, Walter S. Monroe's Encyclopaedia of Educational Research holds the pride of place as a comprehensive study. Henery D. Rivlin and H.Schueler's 'Encyclopaedia of Modern Education' is also a comprehensive work.


Once adequate sources of information are secured, the investigator starts collecting useful material for his purpose. Compiling a bibliography, preliminary reading, critical reading and note-taking are important steps of surveying related literature. S. P. Sukhia and others have categorically said:

Availability of adequate information about educational thought and research does not by itself result in possession of its knowledge by the researcher. The researcher must apply himself keenly to the task. On the other hand a research worker may be very keen to possess up-to-date information regarding his field and yet fail to get enough information due to non-existence of sources of such information.4

It may be concluded that every investigator must know what sources are available in his field of investigation, which of them he is likely to use and where and how to find them.

Research in Education with particular reference to Teacher Education in India and abroad

Now it has been realised by the teachers, administrators and educators of the country that the ineffectiveness of the teacher education programmes lies in the fact that an efficacious research approach to the problem of teacher education, suitable to Indian conditions was found lacking. Research is an effort to discover, develop and verify knowledge. Research has the same importance in education as in other areas of social sciences. An insight

into the surveys conducted in the field of research in education will lead to the above conclusion.

The first authoritative review of research in education has been done by a committee appointed by the University Grants Commission in 1966. The Committee members have expressed that 'Not only research in education was of a poor quality but it neglected many important areas of useful study. Social sciences in general have their own limitations which do not provide a sound basis for scientific research. Human behaviour with its components of conscious and unconscious mind and un-controllable variables defies experimentation and inquiry on the pattern of a science laboratory'.

National Council of Educational Research and Training (NCERT) published the third Indian Year Book of Education on educational research in 1968. The Indian Council of Social Science and Research (ICSSR) made a survey of researches in social sciences in the country. It has published 'A Survey of Research/Psychology' containing a number of research studies in the field of educational psychology. The latest and most authentic report entitled 'A Survey of Research in Education' has been published in 1974 by Centre of Advanced Studies in Education (CASE), Baroda under the direction of Dr. M.B. Buch.

The above mentioned survey report published by CASE covers the period from the year 1943 when the first Ph.D. thesis was approved and includes almost all the Ph.D. theses submitted to the education department of Indian Universities. It also includes research projects completed in institutions like NCERT, CASE, and SIE (State Institute of Education). In all three hundred forty two Ph.D. thesis from University department of education, one hundred eighteen Ph.D. thesis on educational problems from other disciplines and two hundred sixty nine research projects have been included in this publication. The chapter entitled 'Teacher Education' includes twenty seven doctoral theses and nineteen research projects completed so far. The field of education for the purpose of survey has been divided into the following sixteen categories:

1. Philosophy of education.
2. History of education.
4. Personality, learning and motivation.
5. Guidance and counselling.
6. Test and measurement.
7. Curriculum, methods and text-books.
9. Correlates of achievement.
10. Educational evaluation and examination.
11. Teaching and teacher behaviour.
12. Teacher education.
13. School administration.
14. Economics of education.
15. Social and adult education.

Although educational research in India started as early as 1940, its marked development is seen during the last two decades. The following table shows distribution of Ph.D. theses in education approved by Indian Universities during the period 1943 to 1972.

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Ph.Ds.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto 1947</td>
<td>4</td>
</tr>
<tr>
<td>1948-50</td>
<td>5</td>
</tr>
<tr>
<td>1951-53</td>
<td>13</td>
</tr>
<tr>
<td>1954-56</td>
<td>13</td>
</tr>
<tr>
<td>1957-59</td>
<td>22</td>
</tr>
<tr>
<td>1960-62</td>
<td>31</td>
</tr>
<tr>
<td>1963-65</td>
<td>51</td>
</tr>
<tr>
<td>1966-68</td>
<td>66</td>
</tr>
<tr>
<td>1969-71</td>
<td>89</td>
</tr>
<tr>
<td>1972</td>
<td>45</td>
</tr>
<tr>
<td>Total</td>
<td>339 + 3 (completed in 1973)</td>
</tr>
</tbody>
</table>
All research studies pertaining to teacher education have been broadly classified into the following categories:

1. Recruitment criteria, abilities and qualities of teachers.
2. Pre-service and In-service training of teachers.
4. Procedures and practices of teacher education in India and,
5. Personality variables of teachers.  

Most of these studies are general surveys, rating scales and tests etc. There is a marked tendency to make an increasing use of scientific research techniques. Prediction of teaching success is also getting attention. Various types of survey studies are in progress. However there is no study of a single aspect of teacher education covering the entire country.

S. B. Adaval pointing out the position of research in education has rightly remarked:

Research on teacher education has not received the attention it deserves from the investigators and researchers in education. Studies in this area are mainly economic, social and personal problems of teachers, their attitudes towards teaching profession, qualities required for the success, selection and evaluation of teachers and pupil teachers and interests of teachers.  

---


There are several obstacles that prevent the promotion and development of research work in teacher education institutions. To begin with, there is emphasis on quick shallow work instead of work of quality. The fact that research is a slow painstaking process is not appreciated. Another major difficulty is related to the paucity of research grants. Libraries of teacher education institutions in general are not adequate to enable teacher educators to keep abreast of the latest developments in theory and research in their field of interest. Abstracts of educational researches are also not published on a planned basis. Moreover many teacher educators do not have the competence to carry out research on their own. Such teacher educators urgently need some sort of orientation through seminars and extension lectures etc.

Research in the field of education is undergoing a radical and desirable change in India. There is improvement in research technology and efforts are being made to eliminate the errors and non-scientific nature of educational research. Use of computer in educational research has added a new chapter in the field of research technology. For a democratic country like India, a rational indigenous research base is urgently needed for maintaining and developing a suitable system of education in general and teacher education in particular.
Past Studies conducted abroad

B.O. Smith has presented a brief review of previous studies in the popular book entitled 'Research in teacher education'.3 In United States of America the study of teaching and teacher education was stimulated by the establishment of research and development centres at Stanford University and at the University of Texas. Teacher organisations were also equally active in the field of teacher education. In nineteen sixtees there were a number of publications which delineated programmes of teacher education. AACTE publication entitled 'Professional teacher education' (1968), Smith's work known as 'Teachers for the real world' (1969) and ten models on teacher education programmes can be referred in this connection.

The forth edition of Encyclopaedia of Educational Research contains articles which bear on research on Teacher Education upto the mid nineteen sixtees - Stiles and Parker (1969) in an article entitled 'Teacher Education Programmes' have reviewed previous studies in terms of general theory and rationale of programme conceptualisation, content and design of pre-service programmes, clinical experiences, evaluation of teacher education programme and promising research designs.

---


A review of trends in Teacher Education Programmes, which provides a good description of changes in emphasis in the various elements of programmes is provided by Harap.(1967) In 1968, A. Yates, editor of the issue named 'International review of education' noted certain trends in the field. Another study which reviews research on teacher education is by Blesser and Howe.(1959)

The reviews of research mentioned above indicate that there has been considerable activity in teacher education concentrating on implementing new programmes. In summarising the research on teacher education in the last decade, one may safely say that the area was quite active rather than dormant.

Survey Studies in the field of Secondary Teacher Education at post-graduate and doctoral levels in Indian Universities

Some survey type studies have been conducted in the field of secondary-teacher education by a few post-graduate students of various Indian universities. These studies are given below in a chronological order.
The above mentioned studies were conducted at M. Ed. level in Indian Universities. These surveys are based on historical records, books, journals, and data collected through questionnaires and interviews etc. However, it should not be concluded that it is a complete and comprehensive, list of M. Ed. dissertations concerned with the teacher education. Moreover it can be said very safely that these studies, by and large, are sketchy, elementary and theoretical in nature. This may be because of the fact that post-graduate students are generally not very much mature in research techniques. The time available to them is usually very short. However a trend of an increasing interest can be noticed in the field of teacher education at post-graduate level. It is not feasible to present the findings of all these studies mentioned above, however a passing reference can be made to some of these studies with a view to support the contention that these studies are sketchy and elementary in nature.

P. Parmeswarappa has studied the existing conditions and the need of teacher education in India through interviews. Suggestions have been made for agencies like area training organisations, modifications in the use of certain terms, qualifying test for admission and use of objective as well as essay type tests etc. Another study conducted by Mr. Bhatta-
charya reveals that the problems of training colleges are of different kinds. They are related to the establishment of training colleges, to staff, to the student teachers, to the mode of training and to the reconstruction of curriculum.

Now the investigator would like to turn his attention toward the studies conducted at doctoral level in the field of teacher education in Indian Universities. However in this field much has not been done, as is evident by the only authentic document entitled 'A survey of research in education'. There are twenty seven Ph. D. theses and nineteen research projects related to teacher education, which have appeared in the above mentioned survey report.

Again, it is not possible to present the findings of all these research studies, however some of the studies which are related to the problem in hand are presented below:

A study entitled 'Teacher Education for Secondary schools in Kerala' has been carried out by K. J. Joseph for Ph. D. award (Kerala University 1967). The study relates with a detailed survey of 19 training institutions in the state with a view to find out, analyse, and study the conditions prevailing in them. Information for different aspects viz. plant, facilities, working conditions were collected, followed
by visits to these institutions. The second part of the study was to collect and analyse the views of training college staff about the qualifications and experience in the training institutions. The third part of the study was related to the collection, analysis and study of views of 600 students, constituting more than 25% of the total student strength of training colleges in the state.

It was found that the number of applications for the seats in the training colleges, consistently exceeded the number of palaces available. On an average 70% applicants were women. Analysis showed that 2.1% trainees had post-graduate qualifications but over 60% of them were third class degree holders.

As far as teaching experience was concerned it was found that as the years went by, trainees with less and less experience in teaching were coming to the colleges. Out of 135 staff members 35 were women. Analysis of their qualification revealed that 24% of them had taken all their degrees in third class only. Only 28% of the staff members satisfied the minimum qualifications laid down by the university. There was no uniformity in the number of periods of practice teaching as well as in the number of subjects for practice teaching. Libraries were generally poor in their stock of books and journals and unsatisfactory in
their services. The method of teaching was mostly lecture followed by dictation of notes. Groupwork was comparatively unknown. Most training colleges were unsatisfactory from the point of view of accommodation, furniture and sanitary facilities. The tuition fee charged in government and private colleges was rupees 150/- and 240/- respectively.

The views of student teachers yielded the following findings. About 3/4 of the students favoured the pattern in which professional education succeeded general education leading to graduation. With regard to the size of the institution over 80% preferred enrolment of less than 100. Nine out of ten preferred co-education. Among the different subjects taught psychology was regarded by more than three fourths as the most useful subject. Paper of current problems was found to be least useful. There was a strong feeling that content should also be included in the training colleges.

With regard to the duration of practice teaching, the majority of staff members felt that at least, 30 days were needed while majority of students felt that 20 to 30 days were enough. In the supervision and evaluation of practice teaching the training college staff was not prepared to share much responsibility with the school staff but students had confidence in the capacity of school teachers to do this. Majority of the
training college staff called for better selection of candidates for training. On the question of relative-importance to be given to theory and practice, over 80% of the staff, favoured greater emphasis to practical aspects of the training.

Another study for D.Phil. award (Gauhati University 1971) has been conducted by S. Sakia. on teacher education entitled 'Teacher Education, A Study of the problems with special reference to Assam' (at secondary level). This study attempted at finding out causes for ineffectiveness of the teacher training programmes (at secondary level) in Assam, and to suggest some remedial measures.

Fifty trained and one hundred untrained teachers were investigated alongwith one hundred thirtyfour candidates studying in the B. T. Department of Gauhati University with regard to -

1. the participation in their training programmes.
2. the effectiveness of supervision programmes.
3. the relationship between theoretical and practical part of training to find out how teaching practices could be improved.

A study of the syllabi of the teacher training colleges in Assam was also made.
The study revealed that none of the trained teachers prepared lesson plan of their work. Although, as a group, trained teachers were found a little methodical in their teaching, yet their teaching methods differed from what was taught during training period. For qualitative improvement of training programme, the author suggested some changes such as:

1. Revision of syllabus.
2. Admission by selection.
3. Change in the method of teaching and evaluation.
4. Re-organisation of practice teaching.
5. Involvement of university departments in teacher training.
6. Introduction of regional language as the medium of instruction.
7. Creation of academic boards and staff Student Consultative Committees.

A project was undertaken by E. Marr., L. C. Singh and K. Arora. (N.C.E.R.T 1969) entitled 'An intensive study of three colleges of education in Punjab'. The purpose of study was to find the actual functioning of the programmes of these colleges and as far as possible to determine their strengths and weaknesses.
Data were collected through interviews, observations, and study of records. The population of study consisted of staff members and the students of these colleges of education. Some of the findings of the study were:

1. Both the staff and students agreed that syllabus was predominantly theoretical and pleaded for change so as to emphasise practical work and more time allocation for teaching subjects.

2. The teacher educators differed on specific skills and understandings as objectives of the programme.

3. Need was felt for more demonstration lessons by faculty members.

4. By and large, respondents expressed their concern regarding supervision of teaching practice as the supervisors could not devote adequate time to each student and partly because it was often done by supervisors who did not know the subject.

5. Evaluation of student teaching on the basis of two final lessons was considered unsound and it was advocated to assess the performance throughout the year.

6. Some expressed that examiners of practice teaching (mostly senior persons) were out of touch with new developments in teaching methodology.
7. 50% marks in each paper were allocated to internal assessment, there was, however, no attempt to coordinate internal awards.

8. Usually teacher educators followed lecture method.

9. They expressed difficulties in adopting innovations due to lack of proper educational background and study habits of students and want of time.

10. Student teachers mostly read books written mainly to meet examination requirements.

A study was made by A. S. Srivastava, (Sardar Patel University 1966) on 'Growth and organisation of in-service programme in India and its impact on Secondary Schools'. Study has shown that there is a significant improvement in attitudes with increasing number of activities attended. It has also revealed that the attitude of teachers towards the profession as well as towards extension programmes stabilises after attending four extension programmes. The following factors contribute to a great extent to the strengthening of the in-service programme:

1. Standing of the college.

2. Quality of the training college staff.

3. Quality of the extension staff.

4. Practical utility of the programmes.

5. Co-operation of the State department of education and the inspectorate staff.
Another experimental study on the quality of teachers under training has been carried out at doctoral level by S. B. Adaval (Allahabad University, 1952). This study uses certain tests and inventories in addition to questionnaires and interviews.

Dr. Adaval comes to a general conclusion that the quality of teacher is not up to the mark, at least in respect of the possession of general knowledge, intelligence and aptitude for the profession. He has emphasised the need for an objective and scientific method of selection. He has further suggested that three types of experiences - theoretical, practical application of theoretical knowledge and extracurricular activities should be integrated into one whole educational experience for future teachers. Two additional functions of training institutions have been suggested viz-organising refresher courses and guiding secondary schools in building up their libraries.

A very important study entitled 'Second National Survey of Secondary Teacher Education in India' was carried out by N.C.E.R.T. staff under the direction of B. N. Pandey and the report was published in April 1969. The data were collected from 231 institutions and the report comprised of seven chapters (Introduction; Growth of teacher education institutions;
character of student population, enrolment, output and wastage; Academic programme and evaluation; Practice of education; Building and equipment; and Academic staff).

It is a comprehensive report. The data presented in this report refer to April 1964 and April 1965 only. Moreover, this survey does not include the state of Mysore and Orissa, because a study was carried out by the Education Commission in these two states during 1965-66.

Main findings of the Second National Survey of Secondary Teacher Education in India are summarised below:

Chapter 1: As many as 273 Teacher Training institutions existed in April 1965. Uttar Pradesh has the highest number of Teacher's Colleges (56) and Orissa and Jammu Kashmir the lowest (4 each).

Chapter 2: Before 1947 there were hardly 51 training institutions in the country. Between 1943 to 1964, 222 training colleges came into being. Almost 75% are residential and the rest non-residential ones. 78% of them are co-educational. No privately managed Teacher Education Institutions exist in Orissa and Bihar. Average enrolment was 102 in 1964-65, with per capita expenditure as 568 rupees. About 257 T.E.I.s out of 273 are equipped with facilities for in-service education through their extension centres and units.
Chapter 3: A wastage of 16% was recorded during 1964-65. It was revealed that almost 88% of enrolled population of students, passed the B. Ed. examination in that year.

Chapter 4: 77% Training institutions put emphasis on practical work. On an average tutorials are arranged in 171 T.E.I.s with 19 students in each section and the maximum number of tutorials are arranged only weekly followed by twice a week. The largest number of T.E.I.s encourage ball games (156) followed by Badminton (98). The least popular are gymnastics and scouting (4).

Theory papers compulsorily prescribed for B. Ed. in different universities range from 3 to 7. There are also one to two optional papers, in addition to compulsory papers. About 130 T.E.I.s prescribe courses for specialisation either in school subjects or in other special fields. As regards the medium of instruction and examination, it is English in 99 colleges and Regional Languages in 67 colleges. Marks allotted for theory papers range between 300 to 800 and those for practice teaching between 100 to 400. The assessment is invariably both internal as well as external. Pass percentage
for theory and practice range from 30 to 40 and 25 to 50.

Chapter 5: Majority of T.E.I.s prescribe two school teaching subjects and number of lesson to be taught in each subject varies from 10 to 40. The number of practising schools ranges from 1 to 30 in the states and from 2 to 20 in respect of Union Territories.

Chapter 6: Only 51% private and 28% government institutes have their own buildings. 76% of them have college hostels while about 61% have staff common rooms.

Chapter 7: The number of teacher educators is 2543 and the teacher-pupil ratio works out at 1:10. Out of these 5.1% are Ph.Ds., 31.7% are M.A.M.Eds., and the highest percentage is of those who are M.A.B.Eds. (41.09). Teacher educators have three types of work loads viz. teaching, supervising and guidance. Teaching and supervising load is heavier in case of readers and professors. Majority of teacher educators possess teaching experience both at the college as well as school level. A lot of variation exists in the pay scales of different categories of teacher educators, in different states and under different managements.
From the above lines, it is clear that very little work in the field of secondary teacher education in the state of Orissa has been done so far. The research studies done at doctoral level in Indian universities (mentioned earlier) have not covered comprehensively many areas of teacher education, which seem quite important to the investigator such as:

1. Details of pattern of courses, medium of instruction, Evaluation and Pass-percentage etc.
2. Admission procedure, output and wastage.
3. Staff-student ratio, opportunities for professional growth, work load, and facilities extended to faculty members.
4. In-service education and other facilities at Teacher Education Institutions.
5. New trends - such as institutional planning work experience, integrated courses, comprehensive colleges etc.

The present study, related to secondary teacher education programme in Orissa has included all these areas. Thus the problem proposed to be undertaken by the investigator, differs considerably from the above mentioned studies. Basically it is a survey meant for straight forward factual inquiries
related to secondary teacher education programme in Orissa. The Second National Survey of Secondary Teacher Education conducted by NCERT has collected data upto 1964-65 and it is obvious that in education many changes must have taken place since then. Moreover the state of Orissa was excluded from this survey report. Therefore, it seemed quite interesting and urgent to the investigator to inquire into the secondary teacher education programme in Orissa, hence this study.