

## **CHAPTER - II**

### **REVIEW OF RELATED LITERATURE**

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#### **2.0 Introduction**

This chapter attempts to review the related literature. The studies reviewed are categorized as follows:

- 2.1. Studies on Teacher Education Programme
  - 2.1.1. Studies on Teacher Education Programme in India
  - 2.1.2. Studies on Teacher Education programme Abroad
- 2.2. Studies on Teacher Education Curriculum
- 2.3. Studies on Specific Skills and Methods in Teacher Education
- 2.4. Studies related to Innovative Proneness of Teachers
- 2.5. Studies on Innovative Practices in Teacher Education Programme

#### **2.1. Studies on Teacher Education Programme**

##### **2.1.1. Studies on Teacher Education Programme in India**

**Sharma (1982)** studied progress and problems of Teacher Education in India. The aims of the study were 1) To examine the growth pattern of Teacher Education in India, and 2) To identify the problems of Teacher Education in the country. The progress and development of Teacher Education was examined on the basis of data collected from reports and journals on Teacher Education. The information was collected in the light of the modern concept of Teacher Education, the qualities of a teacher, the teacher's role in modern society and pre-service and in-service Teacher Education Programmes. Progress and programmes of Teacher Education during the five year plans in India were also examined. The main findings of the study were 1. Even after a lapse of sixteen years, from the publication of Education Commission Report (1966); Teacher Education Programme had not undergone any marked improvement. 2. Method of teaching and evaluation being used in training Institutions were traditional. 3. There were evidences to show that there was lack of research data in the field of Teacher Education. 4. There was dire need of organizing refresher courses, short term intensive courses in special subjects, practical training, workshops and professional conferences at both the levels (Primary and Secondary) of Teacher Education Programmes. 5. If evaluation was to meet the demands of our time and of

coming decades, the organization, content and methods of Teacher Education must be constantly improved. 6. Search for new education strategies and concepts should be undertaken, taking account of the special social and cultural conditions under which the school and the teacher must perform their basic functions 7. Since it was not possible to equip the student-teacher with knowledge and skills which would be sufficient for his whole professional life, the initial preparation for the profession in the form of pre-service education and training should be considered only as the first fundamental stage in the process of continuous education of teachers.

**Sinha (1982)** conducted An Evaluative study of Teacher Education in Bihar. The main objectives of the study were; 1) to evaluate various Innovative programmes in the field of Teacher Education in Bihar and 2) to examine the impact of these programmes on the quality of output. The study was based on randomly selected sample of forty-four primary Teacher Education Colleges out of a total of eighty-four Colleges and all ten Secondary Teacher Education Colleges in Bihar. A questionnaire, consisting of forty items seeking personal data, Institutional data, information about teachers, students, syllabus and evaluation process was prepared for the study and was sent to the Principals and the Teacher Educators of the Colleges of selected in the sample. The investigator personally visited the Colleges and collected data. The Principals and the senior Teacher Educators were also the interviewed to verify the entries in the questionnaire and missing items of information were thus supplemented. The major findings of the study were 1. At the primary level about 60 percent of the Teacher Educators were trained graduates and their performance was not satisfactory. 2. Over 77 percent Colleges had no building of their own while 65 percent Colleges had their own buildings in poor condition. 3. A majority of the Colleges had inadequate staff, library, equipments and laboratory. 4. Recent innovations in Teacher Education had not been incorporated into the system. 5. In-service programmes were not carried on effectively and there was little attention paid to follow up programmes. 6. The evaluation process had remained traditional. 7. Practice Teaching in Colleges of Education was being neglected by the method masters.

**Hemabujam (1983)** conducted a critical study of Teacher Education at Secondary level in Tamil Nadu. The objectives of the study were: 1) To conduct a survey of Teacher Education at Secondary level to make a critical appraisal of the B. Ed. program in Tamil Nadu, at its operational set-up, 2) To report briefly on the historical background, 3) To report a comparative study of the contemporary Teacher Education

program at Secondary level in advanced countries abroad, with reference to that in India and in Tamil Nadu, 4) To locate the differences in the system here, if any and suggest remedies. The data was collected from all the Colleges of Education in Tamil Nadu through a comprehensive questionnaire, which collected data regarding the functional aspects of Teacher Education. The opinions of Teacher Educators on various aspects and their suggestion for improvement and remedies for the defects or shortcomings in the program were collected. An interview schedule was also used for collecting data. The Findings of the study were: 1. The State government controlled the recruitment of all Teacher-Educators. Selection was done on the reservation basis. 2. The service of Teacher Educators was secure and their salaries were paid. 3. The comprehensive B.Ed. curriculum was not effectively implemented due to time shortage, semester internal assessment etc. 4. The revised B.Ed. syllabus in force in Tamil Nadu was appropriate and fulfilled the requirements on the professional side, but lacked in the content knowledge of the academic subjects.

**Deo (1985)** studied the practical programme other than Practice Teaching in Teacher Education Institutions. The objectives of the inquiry were 1) To study the role of practical work (besides practice teaching) in a Secondary Teacher Education Programme. 2) To survey the nature and type of practical work other than practice teaching, that was being given to student-teachers in Secondary Teacher Education Institutions in Delhi. 3) To study how these programmes of practical work were actually implemented. 4) To survey the perception of student-teachers about the objectives of such practical work. 5) To find out how these objectives were achieved and the reasons for non-fulfillment to the desirable extent, and 6) To suggest an effective scheme of practical work. The sample of the study consisted of 350 student-teachers and 55 Educators selected randomly from three Teacher Education Institutions of Delhi. The sample subjects responded on a locally prepared questionnaire having questions about different type of practical work, their objectives and working in the College system, etc. The major findings of the study were: 1. Most of the student-teachers felt that 'lack of time' was a major factor in not being able to achieve the objectives of the practical programme. 2. The Teacher Educators opined that lack of sufficient opportunities and lack of time were the causes for non-fulfillment of objectives of practical programme. 3. The student-teachers felt that there could be a large number of practical programmes in the Colleges of Education, but due to lack of time, lack of proper guidance, lack of sufficient opportunities and

lack of feedback from the teachers they were not able to achieve the objectives. 4. For work experience and socially useful productive work, sufficient time and guidance were not provided to students by in time-table. 5. The student-teachers were not provided facilities for training in preparation of some visual and audio aids. 6. Physical education and participation in games and sports were taken casually by the student-teachers. 7. Excursions for student-teachers were not arranged by Institutions. 8. Social work had not been an integral part of the Teacher Education Programme. 9. Co-curricular activities were not organized according to the interest and needs of the students. 10. Opportunities for talented students were not provided in the areas of art, library, dramatic and other cultural areas. 11. There was no provision for psychology practical's which would give student-teachers opportunities for application of theories of learning.

**Bhatnagar (1988)** conducted a study of the development of tools for supervision and evaluation of student-teaching and practical work in Colleges of Education. The objectives of the study were: 1) To identify activities under student-teaching and other practical work which might be common in the B.Ed. curriculum in the case of most universities in the country. 2) To develop tools for the assessment of all these activities under student-teaching and other practical work prescribed in the B.Ed. courses being run at that time by various universities and 3) To try out these scales in actual training situation through feedback from Colleges of Education. The study had two phases. The first phase concentrated on the review of studies and literature on student-teaching along with the analysis of the B.Ed. syllabi followed by various universities; the second phase was concerned with the development of tools for supervision and evaluation of student-teaching and other practical work of the B.Ed. programme. The sample comprised Teacher Educators and Principals of Colleges of Education in Andhra Pradesh and Karnataka, who attended the three workshops held at Hyderabad and Bangalore where the tools were finalized on the basis of their judgement. Rating scales were used as the tools for the study and feedback on these was received from the Teacher-Educators and Principals. The findings stressed on 1. The need of developing common tools for assessment of activities under student-teaching and other practical work for all Universities in the Country. 2. Common areas in which the tools were required to be developed were lesson planning, supervision/evaluation of actual teaching by Student-Teachers, Co-Curricular

Activities, SUPW, and community work arising out of theory papers, including assignments.

**Das (1991)** made an attempt to compare the Evaluative Procedures of Secondary Teacher - Training Institutions in Gujarat State. The objectives of the study were: 1) To find out the differences in the evaluative procedures among the Secondary Teachers' Training Institutions in Gujarat State and 2) To study the opinions of the Principals/ heads of the Institutions regarding the evaluative procedures which they are adopting. The findings of study were: 1. Diversity exists in the evaluation process in Teacher-Training Colleges, 2. The majority of the Institutions followed a mixture of internal and external evaluation procedures, 3. An external cum-internal marking system with continuous evaluation, and the semester system should be adopted in all Teacher Training Colleges.

**Nagpure (1991)** conducted a critical study of the system of Teacher Education at the Secondary level in Maharashtra. The objectives were: 1) To study the present situation of the system of Teacher Education at Secondary level in Maharashtra with reference to physical facilities, academic work, staff extension work, Innovative program, finance, administration, examination (evaluation) and development activities, 2) To analyze the professional requirement of Secondary Teachers in the State (pre-service & in-service) with reference to the quality of Teacher Education as envisaged in National Policy on Education (1986). Tools used were questionnaire and interview schedule. The major findings of the study were: 1. Innovative methods like team teaching and models of teaching were rarely tried out in the Colleges of Education and 2. About 30% Colleges of Education had opted population education, continuing education and distance education.

**Sohoni et al. (1992)** studied to develop a training programme for the student-teachers to develop their problem-solving skills so as to facilitate their transferring these skills to their students. The objectives of the study were: 1) To develop a training programme for the development of problem solving skills. 2) To implement the training programme. 3) To study the effect of the training programme on the development of problem- solving skills in the Student-Teachers. 4) To study the effect of the training programme on the development of creativity in the Student-Teachers. 5) To study the effect of graduation in different faculties on the development of problem-solving skills and 6) To study the effect of teaching experience of the Student-Teachers on the development of problem-solving skills. The findings of study

were: 1. The mean scores of the experimental group on the problem-solving skills were highly significant as compared to those of the control group. 2. The gain of the mean scores of the experimental group on the creativity test was highly significant as compared to the mean scores of the control group. 3. The mean scores of the experienced and inexperienced student-teachers did not differ significantly. 4. The mean scores of the student-teachers belonging to different faculties of graduation, such as arts, commerce and science, did not differ significantly and 5. The student-teachers appreciated the various aspects of the training programme and they were highly motivated to implement these in the schools.

**Walia (1992)** evaluated Secondary Teacher Education Programmes in northern India. It sought to discover the weaknesses and disfunctionality of the curriculum and practices at this level of Teacher Education. The objectives of the study were: 1) To study the curriculum of Teacher Education at the Secondary level. 2) To discover the weaknesses and disfunctionality of the curriculum and practices at this level of Teacher Education and 3) To work out a functionally useful Teacher Education Programme for the country. The major findings of study were: 1. The curriculum of Secondary Teacher Education lacked uniformity and clear-cut definition, 2. The majority of Teacher Education Institutions had late defective admission criteria and late admissions, 3. Provision for the optional/specialization paper ranged from 4 to 39 papers in different universities, out of which only one paper was to be selected, 4. Four-year Teacher Education Programme was preferred to the existing one year B.Ed. programme.

**Srivastava et al. (1999)** studied on existing pattern and restructuring of secondary Teacher Training. The objectives of study were: 1) To study the existing pattern of Secondary pre-service Teacher Training in the country. 2) To analyze various components of the training. 3) to develop an improved model of Teacher Training and 4) To prepare guidelines to restructure the internship programme. Major Findings were: 1. Micro - Teaching, Herbartian pedagogy, simulated teaching, lesson planning, and teaching with aids constituted the existing pattern of teaching in RIEs. 2. Lesson planning constitutes the prominent pattern of practice teaching in Institutes of Advanced Studies in Education (IASE) and other training Institutions. In University Departments of Education in addition to lesson planning, ET constitutes existing pattern internship. 3. More RIEs emphasize on questioning, explaining, stimulus variation, and reinforcement than other training skills provided. 4. More number of

IASEs focuses on introduction of the lesson as an important training skill whereas questioning was emphasized more by other training Institutions. 5. University Departments of Education emphasize more on introduction of the lesson, writing of instructional objectives, questioning, and explaining as training skills to be provided in practice teaching. 6. In majority of the RIEs demonstration lessons were conducted by Teacher Educators and in each teaching subject, 7. In most of the IASEs demonstration lessons were conducted in real- classroom situations. 8. Demonstration lessons were conducted by teacher-educator in majority of the university departments of education and other Teacher Training Institutions, 9. Majority of the RIEs gave preparation of achievement tests and teaching materials as assignments, 10. In other training Institutions mainly preparation of teaching materials were given as assignments, 11. In case of IASEs preparation of achievement tests constitute majority of assignments whereas in case of university departments of education, textbook analysis, study of science laboratory and preparation of teaching material constitute majority of assignments given, and 12. In IASEs, university departments of education and other training Institutions lesson plan was discussed by the teacher

**NCTE (2001)** examined the Teacher Education in Assam. The major objectives of the present study were: To study the growth and development of Teacher Education in the State of Assam along with its present status and to study the management system, infrastructural facilities, admission criterion, courses offered and their mode of transaction and other allied matters related to the quality of Teacher Education in Teacher Education Institutions of Assam. Major findings of study were: 1. Teacher Education Institutions were lacking the minimum basic facilities like classrooms, furniture, equipment etc. Besides, required number of qualified staff was also not available in most of the Institutions. 2. To improve the quality of teachers, it was desirable to improve the quality of Teacher Educators and Teacher Education Institutions. 3. It is also urgently necessary to introduce compulsory pre-service and regular in- service training of teachers at all the levels of school education.

**NCTE (2001)** studied the Teacher Education in Andhra Pradesh. Being a State level study, it covered all Teacher Education Institutions in the State at Primary and Secondary levels. It highlighted the present status, its historical growth, the organizational set up, roles and functions of these Institutions. It also studied the strength and weaknesses, problems and issues pertaining to academic, financial and professional aspects. It provided databases to the survey conducted in Andhra

Pradesh. The major findings of the study were: 1. In Colleges of Education, there was a dearth of lecturers in subject like philosophical foundations and psychological foundations. 2. The situation in DIETs, CTEs and IASEs in the State appeared to be unsatisfactory according to NCTE norms. Hence there was an urgent need to recruit the staff members to satisfy the requirement of manpower planning as also to have an effective and efficient Teacher Education system in the State.

**Yadav (2011)** studied a Comparative Study of Pre-Service Teacher Education Programme at Secondary Stage in Bangladesh, India, Pakistan and Sri Lanka. The major objectives of the study were as follows: 1) To identify different issues of pre-service Teacher Education Programme at the Secondary level in Bangladesh, India, Pakistan and Sri Lanka. 2) To compare different components of pre-service Teacher Education Programme in Bangladesh, India, Pakistan and Sri Lanka. 3) To derive implications for overall improvement of pre-service Teacher Education Programme in India. The sample of the study consisted of 24 Principals (6 males and 18 females), 88 (46 males and 42 females) Teacher Educators and 157 Student-Teachers (53 males and 104 females) from all the four countries. The following three questionnaires were developed to seek the information about the various components of the B.Ed. programme from Bangladesh, India, Pakistan and Sri Lanka. 1. The first questionnaire related to Principals of the B.Ed. Institutions seeks to ascertain perception of Principals about various aspects of B.Ed. programme. It consisted of 36 items related to general information of the Institutions, faculty profile, admission procedure, curriculum development, curriculum transaction and its evaluation. 2. The second questionnaire was meant to ascertain the perceptions of Teacher Educators on the strengths and weaknesses of the B.Ed. programme and its various components. It consists of 32 items, related to structure, duration, components of curriculum, transaction of curriculum, course evaluation, Teacher Educator professional development, etc. 3. The third questionnaire was related to student-teachers. This questionnaire seeks to obtain the perception of student-teachers/ Teacher Trainees of pre-service Teacher Education Programme (B.Ed.) at the Secondary stage. It consisted of 30 items related to the curriculum, methodology for curriculum transaction, use of Information and Communication Technology (ICT) and other facilities available in the institute, organization of co-curricular activities and evaluation system. All the three questionnaires were tried out and finalized on the basis of experts opinions. The data were collected by mailing all the three



questionnaires to the B.Ed. Institutions in Bangladesh, India, Pakistan and Sri Lanka. The efforts were made to get the filled-in questionnaires from all the four countries. However, less number of questionnaires were received and analyzed from Bangladesh, Pakistan and Sri Lanka from Principals (7), Teacher Educators (9) and student-teachers (19). Besides these, data from Secondary sources were also used for completing the study. The data were scrutinized, classified, compiled and analyzed. The descriptive analysis of data was carried out. The syllabus and curriculum of the B.Ed. programme from all the four countries were analyzed to validate the information provided by the respondents. The following findings and implications have been derived on the basis of the perceptions of the Principals, Teacher Educators and student-teachers on different aspects of B.Ed. Institutions from India, Sri Lanka, Bangladesh and Pakistan. Major findings of the study were as follows.

1. Duration
  - i) The duration of the B.Ed. programme was one year in India, Bangladesh and Pakistan. However, the duration of the B.Ed. programme in Sri Lanka was three years.
  - ii) Most of the Teacher Educators from India, Bangladesh and Pakistan were not satisfied with the one year duration of the B.Ed. programme. The student-teachers were found weak in content knowledge in all the four countries in general and particularly in India.
2. Admission
  - i) Graduation degree was the minimum qualification for seeking admission in the B.Ed. programme, the admissions in the B.Ed. programme were made on the merit basis. The entrance test was also conducted in some universities in India and Bangladesh. But the teaching aptitude was not considered as criteria for admission in the entrance examination.
3. Curriculum Development
  - i) The B.Ed. curriculum was revised during 1998, 2002, 2005 and 2009 in India, Sri Lanka, Pakistan and Bangladesh respectively. In all the countries, no definite role was specified for the involvement of the faculty in formulation and revision of B.Ed. curriculum and syllabus.
4. Theory Papers
  - i) The compulsory theory papers prescribed in the B.Ed. programme were almost common in all the four countries.
  - ii) The teaching of different subjects in the B.Ed. programme laid more emphasis on the theory courses than practical work. Besides this, there is no link between the curriculum of the B.Ed. course and the school curriculum. Moreover, the curriculum is lengthy and content in many subjects are not required.
5. Practical Work
  - i) It was found that the practical activities were very useful for making an effective teacher. It developed confidence among them. The necessary knowledge and skills related to subject matter were inculcated by these activities.
  - ii) The student-teachers

of India expressed that performing and visual arts increased their confidence, brought hidden talent outside and made them tension free. It also helped in developing their personalities. Performing and visual arts made teaching learning interesting.

6. Computer and ICT i) The computer labs were established in the Institutions. The computer literacy varied between 40 to 75 per cent in all the four countries.

7. Practice Teaching i) In India, practice teaching was organized in all types of schools including government, private, aided and own demonstration schools during first and second half of the year. In all the four countries, student-teachers were prepared for practice teaching before sending them to actual classroom situation. For preparing student-teachers, demonstration lessons by faculty members or outside experts were arranged. Simulated and Micro-Teaching lessons were organized. About twenty schools were selected by all the four countries for practice teaching. ii) The student-teachers expressed that two subjects were undertaken for the practice teaching. In India, twenty-four lessons from two subjects were delivered during forty-five days by student-teachers while, forty-five lessons were delivered during ninety days in Bangladesh. In Pakistan, eleven lessons were delivered during thirty days duration. iii) The minimum duration of school experience programme was 35-60 days in India, Sri Lanka and Bangladesh, whereas maximum was 90 days in Pakistan. In Sri Lanka, minimum 5-6 lessons were required to be delivered during practice teaching, iv) There were many weaknesses in the system of practice teaching. Teacher Educators from India, Bangladesh and Pakistan revealed that the duration of the practice teaching was less. It was not supervised properly. The school authorities also did not cooperate fully in organizing the teaching practices in their schools. It was difficult to observe the natural behaviours of student-teachers during this programme.

8. Co-curricular Activities i) Lecture method was frequently used by the Teacher Educators in all the four countries for curriculum transaction in the B.Ed. programme. Demonstration methods and group discussions were held on some occasions. Discovery and problem solving methods were used rarely. ii) ICT is not used for curriculum transaction.

9. Professional Development i) There was no policy for the professional development of the Teacher Educators. They were only deputed in orientation and refresher courses organized by national Institutions like UGC and NCERT in ad-hoc manner.

10 Research and Innovation i) many research projects in the area of school and Teacher Education were completed during 2004-07 in India and Pakistan. In India, innovations on practice teaching, educational technology, and

instructional strategies were carried out, whereas innovations on ICT and staff development were undertaken by Pakistan. No innovations were reported by Sri Lanka and Bangladesh countries. 11. Weaknesses and suggestions i) Many weaknesses were reported in the B.Ed. programme from all the four countries. It was reported that more emphasis was given on the teaching of theory courses. Infrastructure facilities were not adequate. Student-teachers were not attending the classes on regular basis. New and Innovative methodologies were not used for transacting the curriculum.

### **2.1.2. Studies on Teacher Education programme Abroad**

**Somneuk (1989)** studied Teacher Education Programme for Rural Development in Thailand. This study was designed to evaluate the project Teacher Education Programme for Rural Development' launched by the Ministry of Education, Thailand, under its Five Year National Development Plans. The objectives of the study were: To study the Teacher Education Programme for Rural Development (TERD) project in terms of (a) its historical evolution, (b) its course content, planning, organization and implementation, and (c) its impact and limitations through the perception of functionaries and beneficiaries. The major findings of study were: 1. The majority (61.5%) of the respondents found the content-matter of TERD quite relevant; various personnel possessed the required educational qualifications, but lacked orientation, experience and skill in carrying out the activities; lack of physical facilities also hindered implementation. 2. The TERD project was instrumental in bringing about rural development as the concerned schools became known as community centres. 3. Villagers gained confidence, social awareness and a desire for change and 4. The Teacher Trainees gained the required knowledge and skills not only in teaching but also in social service.

**Atisabda (2001)** studied pre-service Teacher Education in the information society: from the perspective of implementation of technology innovations. This qualitative case study was to investigate and implementation process of technology integration in the pre-service Teacher Education Programme at the University of Missouri - Columbia. Qualitative data were collected through interview, participant observation and artifact collection. Research participants included administrators, technology innovators, faculty members and students. The major processes of technology implementation included the restructure of Teacher Education curriculum, the internal

reorganization, the budget reallocation, the design of technology implementation model and faculty development and the cultivation of organizational climate & culture to foster change. Guidelines for technology integration in the Teacher Education program were recommended.

**Fraser (2001)** of Union Institute and University, studied on the heart of the classroom: Affective development in Teacher Education. This study examined the role of the affective domain in teacher development, both in undergraduate and graduate degree programs, focusing on the nature of young teachers' perceptions of such training and development in their formal studies. The inquiry also studied teachers' reflections on the origins of affective competence in their development of teaching skills. Using multiple case study methodology with elements of phenomenology and content analysis, this Project Demonstrating Excellence (PDE) explored the academic backgrounds and perceptions of five teachers selected for their demonstrated commitments to professional development. The project specifically examined the relationship between the teacher and the student and the development of Teacher Education practices that could positively affect that relationship. By the end of the case studies observation period, three of the five teachers in the case study had left public school teaching. The remaining two transferred away from their original teaching assignments in search of more supportive situations. The major findings of the study were: 1. Bright, young teachers were leaving the field of education, motivated largely by feelings of disillusionment and lack of support. 2. The findings lead to the conclusion that teacher development courses in affective development, expanded internships, and affective mentoring might be key contributions toward keeping these intelligent and caring young minds in the profession. The PDE makes recommendations for curriculum improvements in Teacher Education leading to more deliberative development of affective skills in teachers.

**Finely (2003)** of The George Washington University conducted a descriptive study of utilization of technology from a prospective of full-time faculty in Virginia's Higher Education Teacher-Preparation Programs. This study investigated to what extent computer technology was available and utilized by Colleges of Education faculty who prepared pre service teachers in the Commonwealth of Virginia teacher-preparation programs. The study intended to: 1) Describe to what extent technology equipment is currently available for use by Virginia's Colleges of Education faculty for the delivery of instruction; 2) Describe to what extent technology equipment is currently being

utilized by Virginia's Colleges of Education faculty for the delivery of instruction; 3) Describe to what extent computer applications software are currently available for use by Virginia's Colleges of Education faculty for the delivery of instructions and 4) Describe to what extent computer applications software is being utilized for the delivery of instruction by Virginia's Colleges of Education faculty. A survey instrument was mailed to faculty of all 37 Colleges of Education, who prepare teachers for licensure, in the Commonwealth of Virginia. The principle purpose of the study was to assess whether Colleges of Education faculty who prepared pre-service teachers had computer technology equipment and applications available for use in the classroom. The second part of the study was to determine to what extent technology equipment and applications are utilized for instruction in the classroom by faculty who prepare pre-service teacher for licensure. Descriptive statistical methods were used to analyze the data. The data analysis included frequency counts and percentages. The major findings of the study were: 1. Technology equipment and applications were available in all Colleges of Education that responded to the survey; however the utilization of technology equipment and applications varied. 2. Older and familiar technology equipment such as the overhead projector, WIN/DOS computers and Video cassette records were utilized more than the upcoming technology equipment such as the Video Laser, Disc Player and Digital Camera. The same held true for the technology applications.

**Bovver (2003)** of University of Toronto (Canada) studied on Preparing for the first Ontario teacher Qualifying Test Experiences of Teacher candidates and Teacher Educators at the Ontario Institute for Studies in Education of the University of Toronto. This study examined how six Teacher candidates and three Teacher-Educators at the Ontario Institute for Studies in Education of the University of Toronto prepared for the first teacher licensure test in Canada in recent times, the Ontario Teacher Qualifying Test. A case study approach was used to document participants' experiences, with subsequent cross-case analyses revealing twelve key themes. The major findings of the study were: 1. with previous experiences and personal beliefs about high-stakes testing, as well as self-knowledge, influenced how individuals approached test preparation. Additionally, lack of clarity regarding; (a) the content and format of the test itself; (b) the purpose of the test, and; (c) the way in which it was to be administered, affected participants' experiences in the Teacher Education Programme. Nevertheless, most teacher candidates reported being adequately

prepared for the test. The study's findings include suggestions for ways to improve future teacher licensure test preparation.

**Gabbard (2003)** studied the Teacher Education programs engaged in professional schools: A study of organizational change. As unique forms of school-College partnerships, Professional Development Schools (PDS) facilitated shared responsibility between Teacher Education programs and school for: The clinical preparation of new teacher, Professional developments of school-and university-based faculty, The support of children's learning and Inquiry aimed at simultaneously improving teaching and learning in both school and College environments. Few studies explored the changes within Colleges and universities that contribute to the Institutionalization of such partnerships. It aimed at understanding how change occurs within higher education, this study examined the organizational culture, curriculum, and patterns of inquiry of three different Teacher Education sites in Professional Development Schools relationship. Institutionalized change was studied using Goodman and Dean's (1984) five facets of Institutionalization: knowledge of behavior, performance of behavior, preferences for the behavior, normative consensus, and values. Qualitative in nature, the study triangulated in-depth interviews and a cross - section of individuals from three established PDS sites and with an examination of related explanatory documents. The extant literature available on each of the sites was analyzed. Using a comparative case study approach, the study identified unique Institutional elements as well as mutual themes across the three sites, revealing the complexities of PDS engagement for Teacher Education and implications for change in higher education as a whole. The major findings of the study were: 1. Significant alteration in the organizational culture, curriculum and patterns of inquiry contribute to the development and Institutionalization of PDSs. 2. Change in Colleges with established PDSs is reciprocal, complementary, predictive, and visionary. Concluding that sustained transformational change may extend to the large Institutions, five key factors contribute to such Institutionalization: (a) Institutional profile (history of Innovative Practice, size, clarity of mission, and alignment of Institutional mission with PDS goals, values, and strategies, (b) Diffused models for shared leadership and authority for the change process, (c) Creative resources identification and allocation, (d) Explicit efforts at facilitating normative consents and democratic participation is process and structure of change efforts and

(e) Significant alteration of roles and rewards which support boundary-spanning efforts in ongoing partnerships.

**Goyle and Sue (2001)** conducted a study on online video case studies and Teacher Education (A New Tool for Pre-service Education). Investigators concluded that ease methodology has emerged as a powerful tool for creating a bridge between theory and practice in Teacher Education. Video case studies delivered on the internet offer tremendous potential for enhancing the sense of context and realism for Pre-Service Teachers to demonstrate best practices in integrating technology within and across the curriculum. This area was so new that there was a great deal of discussion about the best ways to take advantage of the internet in using both case studies & video. This article reported the recommendation of a community of experts and practitioners in case studies and video that shared their knowledge to build greater understanding with others who were considering the use of on line video case studies in their Teacher Education Programmes.

**Hoffer (2003)** from University of Virginia conducted a study on, ISTE educational technology standards: Implementation in award-winning Teacher Education programs. In 1997, the National Association of Teacher Education (NATE) adopted the International Society for Technology in Education (ISTE) National Educational Technology Standards (NETS) for preparing Pre service teachers to use technology. Because the ISTE standards are guidelines and not prescriptions for practice, Teacher Education programs must develop their own approach to address them. Five years after the incorporation of the standards into the NATE accreditation process, it would be helpful to determine exactly how these standards were being addressed. This study examined how award-winning programs have implemented the standards. Specifically, the purpose was to determine in which courses the standards were addressed, how technology skills and concepts are taught and assessed, how much emphasis is placed on foundational technology skills versus pedagogical concepts related to integrating technology into teaching, and what barriers, incentives, and systemic support influence the implementation process. The sample for the study consisted of the seven Teacher Education programs, which had received the ISTE and NETS Distinguished Achievement Award for exemplary implementation of the standards. A multi-method approach to a data collection was used, including an analysis of documentation that the programs submitted for consideration for the ISTE and NETS Distinguished Achievement Award, related course syllabi, and instructor

questionnaires and interviews. An implementation framework was developed, which outlined how each standard was addressed in each of the programs studied. Although it would be unrealistic to offer a blueprint of how to best implement the ISTE standards in teacher preparation, through the data analysis, three common issues emerged. 1. The programs studied used a variety of courses in the teacher preparation sequence to integrate the standards, including educational technology courses, teaching methods courses, foundational and other education courses, and field experiences. 2. The educational technology course does not necessarily focus on technical skills. Rather it can help complement and support other course in the program. 3. Institutional support plays a key role in if and how these standards will be implemented.

**King (2003)** from Widener University conducted a study on Characteristics of undergraduate elementary reading Teacher Education Programs in Pennsylvania's State system of higher education. It is essential that Teacher Education programs prepare students to be competent teachers in the field of reading and language arts. Currently there was a great deal of national, State, and local interest in teacher preparation programs, and some people believe that the preparation of elementary reading teacher is inadequate. This study investigated the undergraduate elementary education reading programs course requirements and course content at the 14 universities that comprise Pennsylvania's State System of Higher Education.

Data was obtained from a review of the required reading and language arts courses at each university and an examination of course syllabi. Additional information was obtained from questionnaires completed by instructors of the reading and language arts courses. Frequently distribution tables summarize the questionnaire responses and course syllabi information. The study included a description of the reading and language arts course requirements in the undergraduate elementary Teacher Education programs and course content as it relates to the five essential elements of reading instruction identified by the report of the National Reading Panel. The major findings of the study were: 1. Teacher Education programs at the State universities include more required reading and language arts course than at any time in the past. 2. The undergraduate elementary education reading courses were based on current textbooks and the personal knowledge and experience of the instructors. 3. Reading Teacher Educators, at the State universities were experienced and highly qualified. 4. Reading Teacher Educators were strongly influenced by the philosophical and political



orientations of the International Reading Associations and 5. Although reading Educators disregard the report of the National Reading Panel, they include the five essential elements of reading instruction as integral components of undergraduate elementary reading methods course content; the findings of this study indicated that course requirements and course content were the critical elements of effective Teacher Preparation Programs.

**Ralston (2003)** of Pepperdine University conducted a study on online video cases: Encouraging reflective thinking in Teacher Education students. This study examined using online video cases to encourage reflective thinking (RT) among student-teachers in a university Teacher Education program. The typical participants were female, between the ages of 18 and 22, in their junior year of studying elementary education. However, some were older students and 19 of the participants had degrees in other disciplines. Participants completed questionnaires and posted reflections online. Some participants also completed journal forms, were interviewed, and allowed the researcher to examine class assignments. Three instructors using different presentation in discussion methods showed the video case. Two sets of quantitative data were gathered. The first utilized the Reflective Thinking Questionnaire (Kember et al., 2000), included in the questionnaires completed by the participants. The second set compared counts of RT instances in discussion board postings made before and after class discussion. The counts were made using the categories of the Reflective Thinking model by Kember et al. (1999). Qualitative data from journals and assignments was analyzed using the reflective practice clue structure (MacKinnon et al., 1999). The results of this study indicated that RT increased with the use of the video case. However, it showed that RT was most influenced by the method of discussion used by the instructor. Students of the instructor who used the Case NEX method showed the greatest increase in RT at the highest level. Data from the journal forms and assignments also showed an increased level of RT as the term progressed. Older student-teachers demonstrated a tendency toward higher levels of RT. Since few participants used the accompanying website outside of class, further research needs to be pursued to see if using the website and materials would increase RT. It was suggested that more research on how the unique features of online video cases could be utilized as opposed to other video formats.

**Deobbs (2006)** studied the inclination of Secondary Teachers to implement Innovations learned through professional development. This study was conducted in a

large north Texas school district to examine the inclination of Secondary Teachers to implement and educational technology innovation learned during professional development. An online survey was conducted during the spring of 2004. Approximately 250 Teachers responded. 196 were selected for the sample for those who receive their training during 2003-04 school years. A correlation coefficient the innovation and the age of the teacher, ethnicity of teacher, gender of the teacher and certification attainment method of the teacher. Findings indicated a significant relationship between gender and the inclination to implement the innovation in the classroom.

**Papier (2010)** analysed recent national policy on Further Education and Training (FET) College lecturer development in South Africa in the light of more established curricula and practice for the training of vocational teachers internationally. The policy published by the National Department of Education suggests standards for College teaching which encompass academic competence, work experience and pedagogic competence. However, qualifications were yet to be designed, developed and offered by universities and other providers that hold responsibility for Teacher Education. The article explored local and global Vocational Teacher Education (VTE) policies and curricula in an attempt to highlight the agreed-upon elements of curricula that could pave the way for South African policy on vocational lecturer development to be implemented.

## **2.2. Studies on Teacher Education Curriculum**

**Kakkad (1983)** studied the Secondary Teacher Education Curriculum as An Analytical Study and Developing Teacher Education Program. The objectives of the study were: 1) to analyze existing B. Ed. curriculum of various representative universities of four different regions of the nation. 2) To study the common and uncommon aspects of Secondary Teacher Education program analytically. 3) To know the changes that were expected in STEP and 4) To develop a Secondary Teacher Education Program (STEP). The tools used were an interview schedule and a comprehensive questionnaire prepared by the researcher. The major findings were: The duration of the STEP should be two academic sessions. The aspects of STEP should be Educational Theory, Practice Teaching, Community Work, Work Experience, Sessional Work and Co-curricular Activities. There should be two subjects for methodology of teaching and number of lessons should be 15 in each

subject. Internship in teaching should be introduced for a period of three months. There should be a provision for urban and rural STEP. There should be examination in theory and practical. Separate results in theory and practical should be declared. Assessment for theory papers should be in marks. Evaluation of practical, sessional work and other aspects may be in grades.

**Bhatia (1987)** evaluated new B.Ed. Curriculum in the Colleges of Education affiliated to the University of Bombay. The main objectives were: 1) To study the relevance of the topics in the revised B.Ed. curriculum. 2) To study the relevance of practice teaching program. 3) To study the effectiveness of the evaluation scheme in the new B. Ed. Curriculum and 4) To suggest improvements. The study employed the normative and descriptive survey method. The main conclusions of the study were: There were some important changes in the new B. Ed. syllabus on one hand; while on the other hand; quite a few topics were repeated. Implementations of new curriculum were found to be difficult. Teacher - Educators unanimously agreed that the area of practice teaching was the most important part of B. Ed. program. Practical work was a useful part of the curriculum and should be organized more seriously. A large majority of the Teacher Educators found the B.Ed. curriculum mechanical and book-oriented. The study indicated that the theory load should be brought down and the ratio of the theory and practice should be fifty: fifty.

**Bhosale (1992)** made a critical study of the new curriculum of Teacher Education developed by all the universities in the State of Maharashtra. This study addressed itself to the comparison of different curricula of education developed by all the universities in the State of Maharashtra and focused on problems faced by Principals, Teacher-Educators and student- teachers. The objectives of the study were: 1) To study the recommendations made by the Kothari Commission with reference to Teacher Education. 2) To study the recommendations made by the State Government of Maharashtra with reference to Teacher Education in a white paper based on recommendations made by the Kothari Commission. 3) To study critically and in depth the curricula of Teacher Education prepared by all the universities of the State of Maharashtra. 4) To identify the difficulties faced by the Principals in implementing new curriculum of Teacher Education and 5) To study the opinions of Principals, faculty members and Student-Teachers with respect to new curriculum of Teacher Education. The findings of the study were: 1. The majority of the topics were common to the Teacher Education curriculum of all the universities in the State of

Maharashtra. There was a variation in topics with respect to some of the papers. 2. The number of lessons to be taught by the student-teachers was not the same in all the universities. 3. Some of the optional papers and the nature of practical work were also different with respect to the curricula, according to student-teachers, and Teacher Educators. 4. All the optional papers taught were quite essential to the teaching profession. 5. The majority of Principals, Teacher Educators, student-teachers and teachers were of the opinion that the new curriculum was suitable for developing teaching competence among the Student-Teachers.

**Behari (1998)** conducted a study on Analysis of Teacher Education Curriculum in the context of requisite abilities for effective teaching. The study analyzed the Teacher Education curriculum in relation to develop requisite abilities for effective teaching. The sample consisted of 187 Student-Teachers enrolled at Central Institute of Education (CIE), University of Delhi (in one session). Student-teachers' ability schedule consisted of a list of abilities categorized into two major areas. Personality characteristics and skills of teaching, covering 40 components were employed for data collection. Major findings of study were: 1. the methodology of teaching paper was more helpful than foundation papers taken together in developing abilities, especially skills, but practice teaching or practical skills in teaching were found to be more helpful than the rest of the Teacher Education Programme in developing abilities especially skills. Dramatics as the activity and discussions as a mode of transaction of programme were found to be more helpful. 2. It was observed that a theory practice link was missing in Teacher Education Programme and therefore the student-teachers were not able to link what they had learnt.

### **2.3. Studies on Specific Skills & Methods in Teacher Education**

**Singh (1981)** studied a comparative study of different strategies of integration of teaching skills. The major aims of the study were: 1) To compare the effects of integration training through summative pattern with those of the traditional practice teaching programme on three criterion variables viz., attitude towards teaching, integration of teaching skills and general teaching competence and 2) To find out whether different sources of feedback produced varied effects on the above variables. The sample consisted of forty eight B.Ed. trainees chosen out of a total of 200 and divided into four groups of twelve trainees each - the control group, the auto feedback group, the peer - feedback group and the supervisory - feedback group. Data were

collected with the help of the Passi and Lalitha, the teaching Assessment Scale of Passi et.al. and Ahluwalia's Teacher Attitude Inventory. The study followed the four parallel-group design providing all the groups with similar training in teaching skills in simulated Micro-Teaching situation and measuring the difference attributed to integration of teaching skills. The t-test was applied to test the significance of difference between the means of pre-test and post-test scores of the four groups. The technique of analysis of covariance was resorted to for comparing the significance of variance among the four groups. The findings of the study were: 1. There was significant positive impact of integration training through summative model of general teaching competence. (Implying that integration training was helpful to Student-Teachers in achieving better teaching competence and better teaching effectiveness) 2. There was positive influence on the teacher's performance of immediate feedback (from peers or supervisors or through reply of the tape) given more objectively and definitely in terms of the components of integrated skills. 3. The Micro-Teaching technique in the controlled laboratory environment as well as the reality of bonafide teaching was quite effective.

**Gupta (1982)** carried out a study on evaluation of Innovative Practices of teaching in the Colleges of Education. The main objective of the study was to evaluate the effectiveness of the Innovative method in the direction of better learning higher achievement in the Colleges of Education. The methods of lecture-cum-discussion, discussion, symposium, seminar, workshop, assignment and supervised study were experimented upon the College of Education at Ajmer, Bikaner, Gulabpura, Jaipur, Jodhpur and Dabok. Control and experiment groups of fifty students each were formed in each of the seven colleges. The groups were equated on age, sex, intelligence, pre-achievement level, and educational qualifications. Each method was experimented upon in one of the seven colleges. Education and social change, the meaning of education, philosophy and its relationship with education, educational sociology, infectious diseases and their treatment, the laws and theories of learning and the teaching methods of Hindi prose were the seven topics from the syllabus selected for teaching by the Innovative methods in serial order at the seven colleges selected. Unit tests were prepared in each of the selected topics and these were administered to both the control and experimental groups after the teaching was over. The control group was taught by the routine lecture method and the experimental group by the Innovative method. Each of the groups of fifty students was divided into

three sub groups according to their IQ - higher, average and lower. The scores obtained by each group were compared by computing means, standard deviations and t-values. The result showed that the method of discussion, symposium and supervised study were more effective than the lecture method at both 0.01 and 0.05 level of significance. The discussion method proved to be very helpful to the lower intelligence group. The symposium method also gave better results and proved to be definitely more useful to the average group. The workshop method proved to be definitely superior in the case of the general groups as well as the higher intelligence group. Nothing could be categorically said about the assignment method. The supervised study method gave better result at both the places - by and large, it was inferred that all the Innovative methods, except the lecture-cum-discussion method, had established their comparative merits against the lecture method.

**Dogra (1986)** studied Effect of training in concept development strategies upon classroom communication behaviour patterns. The objectives of study were 1) to determine if teachers could be trained in Content Analysis System (CAS) 2) To explore the cognitive style of students and teachers. 3) To study the discriminatory power of CAS to identify content development sequence. 4) To determine the effect of training of teachers in the use of element through classroom communication behaviour and changes in the communication behaviour through content development. 5) To describe some of the relationships of content development characteristics. The method of enquiry adopted in the study was a non-equivalent control group quasi-experimental design, where classroom behaviour of sample subjects was observed and coded through the content-analysis system six times. The first observation of experimental and control group was recorded without training, the next five observations were recorded following training in Control Analysis System (CAS) to the experimental group and traditional training to the control group. The sample consisted of 24 women student-teachers of a College of education of Ambala city of Haryana State. The sample was divided into two groups, the experimental group having 16 subjects and the control having eight subjects. Both the groups taught Science to the 9<sup>th</sup> and 10<sup>th</sup> classes. Analysis of classroom communication behaviour was undertaken in terms of elements and relationship among elements. The elements were limited to 12 categories of communication which were identified and defined by the Content Analysis System. (Hill, 1969). The 12 categories of CAS were background, naming, defining, general example, personal example, amplification,

digression, vivid and miscellaneous. The analysis was done through five sets of gain scores obtained by subtracting present measures from post-test measures for six different observations. The major findings were: 1. The student-teachers trained in the use of the Content Analysis System showed a significant increase in defining, concrete examples, negative examples, amplification and vivid categories. Simultaneously, they showed a decrease in the use of background, naming, general examples, abstract examples, personal examples, digression and miscellaneous categories. 2. The student-teachers trained in CAS presented the content by using different types of examples, by enlarging the focus of attention, by relating of contrasting two of ore things. 3. The experimental group used relationships involving the amplification element at a faster rate than the control group. 4. As a result of training in CAS, student-teachers showed an increase in the use of most of the relationships, which were more emphasized during training. They showed a decrease in the use of those relationship which were expected to show a decrease in their use. 5. CAS had discriminatory power to identify content development. 6. Matrix displays of category data were quite useful as a means of providing feedback to a teacher concerning his strategies for the organization of content. 7. Teachers trained in the analysis of content communication could better engage themselves in self-evaluation.

**Ekbote (1987)** studied Development of a strategy for integration of Skills in Teacher Training. The objectives were 1) To develop a strategy for integrating the teaching skills acquired through Micro-Teaching practice. 2) To determine the validity of the integration strategy in terms of content validity, student-teachers' performance in classroom teaching and their reaction to the strategy, and 3) To study the effectiveness of the integration strategy in relation to the following variables pertaining to the student-teachers: a. qualification b. teaching experience c. academic achievement d. skill comprehension e. availability of study time f. attitude towards teaching and g. attitude towards Micro-Teaching.

The study was conducted with a purposive sample of 13 student-teachers of a regular B.Ed. programme having science as one of their special methods and English as the medium of instruction chosen for practice teaching. The study involved a single group pre-test post-test design. Before the pre-test, there was a general treatment comprising simulation practice teaching through the Indian standard Model of Micro-Teaching for seven skills. The experimental treatment in included integration practice using instructional material, instructional techniques like discussion, lecture, simulated

practice, classroom practice and field work as its components. The content units of strategy were use of questioning and explaining, use of blackboard, use of visual media, reinforcement personalization, inquiry approach, variables influencing classroom teaching, diagnostics and remedial practices and organization of curricular activities. The pre-test and post-test were conducted by observing two lessons of each Student-Teacher in a real classroom using the following instruments: i) Baroda General Teaching Competence Scale developed by Passi, et al. ii) teaching effectiveness comprehensive scale developed by the investigator. iii) Skill Interaction Analysis Category System developed by investigator (Inter-observer reliability 0.81). The other tools used were the skill comprehension Paper-Pencil Test developed by the investigator, Ahluwalia's Teaching Attitude Inventory and the attitude towards Micro-Teaching programme- a Rating Scale developed by Passi, et.al. The analytical technique used was mainly analysis of covariance. The major findings of the study were 1. The integration strategy was found effective in terms of the improvement it made in the student-teachers performance in classroom teaching. 2. All the seven variables pertaining to the student-teachers, viz., qualification, teaching experience, availability of study time, academic achievement, skill comprehension, attitude towards teaching and attitude towards micro-teaching influenced the improvement in classroom teaching performance through the strategy.

**Sultana (1988)** attempted to study the effect of Micro-Teaching approach on the behavior modification of Student-Teachers of Gorakhpur University. The objectives of the study were: 1) To assess the modification of behaviour of Student-Teachers of science through the Micro-Teaching approach, and 2) To study the attitude of Student-Teachers towards the micro- teaching approach. Major findings were: 1. The skills of introducing a lesson and questioning, probing-questions and experimentation, each skill having 10 student-teachers, were significant, which meant that after getting feedback these teachers changed their behaviours towards teaching during micro-teaching. 2. The skill of reinforcement and increasing pupils' participation, however, was not significant at any level. 3. There was a remarkable change in the behaviour of student-teachers of science on the skill of experimentation. 4. Only 41 out of 60 teachers significantly changed their behaviour during the Micro-Teaching approach. 5. A significant change in behaviour occurred for the female rather than the male Student-Teachers of science and 6. Modification of behaviour occurred for all Student-Teachers of Physics, Chemistry, Biology and Mathematics.



**Chaudhary (2002)** studied s Comparative Study of Formal and Non-Formal Methods of Teacher Education for Teaching English. The objectives were 1) To identify reasons behind poor performance of students in English. 2) To find whether training of teachers in teaching of English affects and develops competence of students in English. 3) To identify merits and demerits of formal and non-formal system of Teacher Training agencies. 4) To suggest key areas and methods of training teachers for better teaching of English Language. 12 under training English teachers of senior Secondary schools, 12 trained English teachers of senior Secondary schools, and 180 students were randomly selected as sample. Tools and techniques used: Questionnaire for teachers to analyze the teacher's classroom teaching and teaching methods of teachers, Questionnaire to evaluate the performance analysis of students in English Language, Observation schedule to analyze the Personnel, Pedagogical and Social aspects of teachers and students. The data were analyzed through frequencies and percentage responses. The major findings were 1. The students were learning English language not because of their love for this language but due to the personal and professional importance. They were not found to have favourable attitude towards English language. 2. English was taught as a second language in schools. So, the duration of exposure was hardly adequate. The students usually were hesitated to speak English and switch over to their own mother tongue. 3. The students pedagogically were not competent to use all the English language skills. Some could fluently write but were hesitant to speak, whereas, others could fluently speak but could not properly write. 4. The under training teachers were more interested in using Innovative methods, whereas, the trained teachers were not motivated to use Innovative methods.

**Jadhav (2008)** carried out a study on effect of Advance Organizer Model on student-teachers' teaching and its Influence on the School Pupil's Performance in Science. The objectives were 1) To develop self- instructional material on theory, planning and evaluation of AOM suitable for Indian conditions. 2) To analyze the Science Syllabus of STD. IX to identify the units which can be taught using AOM. 3) To determine the student-teachers' teaching performance using AOM. 4) To determine the student-teachers' performance in terms of achievement of pupils in paper-pencil tests based on different sub units in Science. The study has appropriately employed Experimental Research Method. The post-test only control group design has been employed for the study. The independent variables used in the present study were Self Learning

Material of Science Structure (S.A. Group), Self Learning Material of Inquiry Method (Inquiry Group), Self Learning Material of Inquiry Method and Science Structure (Inquiry + S.A. Group), Self Learning Material of Conventional Method (C Group). The dependent variables were student-teachers teaching performance in simulated conditions and student-teachers Teaching Performance in terms of Pupils' achievement. Adequate measures, namely, significance of the difference amongst the four Means, and SD on achievement and IQ scores to establish the parallel amongst the four groups were taken. The major findings were 1. The final draft of the self-instructional material was found comprehensive, self explanatory and instructive for planning and practice teaching. 2. Out of the syllabus prescribed for Std. IX, 75 sub-units were found suitable to the Advance Organizer Model (AOM). 3. In the first two lessons the teaching performance of the conventional group was found comparatively effective in simulated situation, whereas, in the last three lessons the teaching performance of AOM and conventional groups was found equally effective in simulated conditions. 4. The AOM group of student-teachers was found more effective than conventional method group in real classroom situations.

**Nagar (2010)** carried out a study on Evolving Strategies for Enhancing Cooperative Learning in Teacher Education. The Objectives were 1) To prepare and implement Cooperative Learning Lessons based on different Cooperative Learning Strategies. 2) To find out the effectiveness of Cooperative Learning Strategies in reference to academic achievement, self esteem, interpersonal relations, individual and group cooperative work, trust behaviour, collaborative skills and classroom environment and 3) To enhance cooperative learning in Teacher Trainees. The sample of 48 Teacher Trainees was drawn. The tools used for the study were, namely, Student Profile Form, Classroom Environment Checklist, Rosenberg's Self Esteem Scale, Interpersonal Relations Assessment Technique, Examination of Trust Behaviour, Individual and Group Cooperative Learning Worksheet, Social Skill Observation Form, Group Processing Form, Achievement Test for Strategy-1 (Ironing Out a Problem), Achievement Test for Strategy-2 (Picture Perfect), Achievement Test for Strategy-3 (Cooperative Micro-Teaching) and Feedback Form. Data were analyzed through compatible statistical techniques, namely, ANOVA, ANCOVA and Percentage. The major Findings were 1. The achievement level of the Teacher Trainees was found to be remarkably high when they were tested after Strategy-1, Strategy-2 and Strategy-3. 2. The retention rate of Teacher Trainees was found to be improved when they were

re-tested for their performance. 3. The individual and group cooperative work of the Teacher Trainees showed remarkable improvement. 4. It was observed that oral communication skill of the Teacher Trainees showed impressive improvement. 5. Teacher Trainees exhibited more responsibility for learning. 6. The Teacher Trainees improved gradually on the usage of collaborative skills. 7. No difference was found in the opinion of Teacher Trainees regarding the choice of sitting adjacent to classmates. 8. No difference was found in the intention of the Teacher Trainees for lending stationary to their classmates. 9. Remarkable improvement was found in the interpersonal relationship between Teacher Trainees as the number of classmates in the friends list increased rapidly, they including more and more number of classmates on their invitation list and expressed desire to tell and share their secrets with more number of classmates. 10. The student-teacher interaction and familiarity increased. 11. The involvement in class of the Teacher Trainees showed much improvement. 12. The cohesiveness between the Teacher Trainees increased after the implementation of the intervention programme. 13. The feeling of cooperation and equality amongst Teacher Trainees was enhanced to a great strength. 14. The competition between the Teacher Trainees decreased rapidly when cooperative learning strategies were implemented. 15. A positive inclination of Teacher Trainees towards the subject matter was experienced. In other words, Teacher Trainees showed positive attitude towards the subject matter. Overall an atmosphere of cooperation and helping was established. 16. The Teacher Trainees exhibited more trusting and trustworthy behaviour. In other words, openness and sharing of Teacher Trainees along with their acceptance and support improved drastically. 17. The self esteem of the Teacher Trainees was enhanced after the implementation of the intervention programme. 18. The cooperative learning strategy-2 showed remarkable positive effect on the self esteem of Teacher Trainees, whereas, the cooperative learning strategy-1 and cooperative learning strategy-3 did not have any effect on the self esteem of the Teacher Trainees. 19. The self esteem of the Teacher Trainees was remarkably increased after the implementation of the cooperative learning strategy-2 and 3 combined, whereas, the cooperative learning strategy-1 and 2 combined did not have any effect on self esteem of Teacher Trainees. 20. It was observed that anxiety of students in class and towards test got significantly reduced. 21. A recognizable improvement in the self confidence of Teacher Trainees was observed.

## **2.4. Studies related to Innovative Proneness of Teachers**

**Panchal (1977)** carried out a study on Innovative proneness of Teacher Educators of Secondary Teacher Training Colleges of Gujarat State. Objectives of the study were: 1) To construct and standardize an Innovative proneness scale Teacher Educators of Secondary Teacher Training Colleges with respect to age, experience, sex, professional satisfaction, mobility, participation in service education, habit of reading professional literature training and academic qualifications. 2) To study the Innovative proneness scale through factor analysis and 3) To find out inter correlations among the components of the scale. The sample of the study included Teacher Educators (N-200) from the entire Secondary Teachers' training Colleges of Gujarat State. The Innovative proneness scale was developed and used to collect data from the Teacher Educators. Percentile ranks, t-test and factor analysis was used to analysis the data. The major findings of the study were: 1. Individualization of teaching-learning process, inter school organization and staff development had the highest percentile score (25.0) and school community relationship had the lowest percentile score (9.0) 2. Staff norms had the highest percentile score (58.0) and system norms had the lowest percentile score (8.0). 3. Traditionalism, progressivism and change proneness had the highest percentile score (50.0) and conservatism had the lowest percentile score (15.0). Teacher Educators above thirty five years were more change prone than those below thirty five. 4. There was no significant difference in the attitude of Teacher Educators towards innovation. 5. Academic qualification of Teacher Educators bore no significant relationship with attitudes to innovation, on the whole. But Teacher Educators showed significantly higher change proneness. 6. Professional qualifications did not have significant relationship with Teacher Educator's attitude to innovation, but M.Ed. degree showed significant concern for teaching-learning process. 7. Mobile Teacher Educators were more venturesome and more prone to change. 8. In-service education of Teacher Educators tended to be significantly related to attitudes to innovation, concern with teaching-learning process, teaching resources and school-community relationship. 9. Reading habits of Teacher Educators did not make significant difference in the context of attitudes to innovations. 10. Professional job satisfaction was not significantly related to attributes to innovations situational and Innovative characteristics and to any of their components, but was significantly highly related to traditionalism.

**Patel (1979)** conducted a study of Innovative proneness of Secondary and higher Secondary school teachers. The objectives were: 1) To design and validate an Innovative-proneness scale for teachers. 2) To study the Innovative-proneness of secondary and higher secondary school teachers. 3) To find out certain other characteristics of teachers which were related to their Innovative-proneness scale developed by the investigator and 4) To find out the in the interrelationship among the components of the scale. A sample of 100 Secondary and higher Secondary schools was drawn from Gujarat. In all, 100 teachers from the selected schools responded to the Innovative proneness scale. Data were collected with the help of the Innovative-proneness scale developed by the investigator. The investigator administered the tool personally under natural conditions and got reliable data. The data were analyzed by employing the statistical techniques of mean, standard deviation, t-test, percentile ranks, correlation and factor analysis. The major findings of the investigation were: 1. There were twenty-one components of Innovative-proneness which could be identified. These components were divided into three sections in the scale. 2. The phi-values of 200 items in the scale ranged from 0.16 to 0.82 3. The reliability of sections I was 0.84 by the test-retest method and 0.91 by the split-half method. 4. The reliability for section II was 0.77 by the test-retest method and 0.90 by the split-half method. 5. The reliability for section III was 0.86 by the test-retest method and 0.67 by the split-half method. 6. As a whole, reliability was 0.86 by the test-retest method and 0.79 by the split-half method. 7. The factors extracted through the Principal component method were: teaching resources, system and staff norms, dogmatism-conservatism, riskiness and curriculum organization. 8. Regarding Innovative – proneness, the mean score was the highest in Banaskantha District and the lowest in Dangs. 9. Academic qualification, stability in the schools, training and professional reading habit influenced the Innovative-proneness of teachers, positively. 10. Age and sex also were significantly correlated with the different components of Innovative-Proneness. 11. Professional satisfaction and experience of teachers also were significantly correlated with Innovative-proneness. 12. Different components of Innovative-proneness were also highly correlated with one another. 13. These components were: individualization, curriculum organization, teaching resources, internal school organization, staff development, school community relationship, administrative support, staff norms, progressiveness and venture sameness, teaching-

learning process, attitudes of innovations and change proneness. These components were also related with Innovative-proneness as a whole.

**Valand (1983)** carried out a study of Innovative Proneness of teachers of primary Teacher Training Colleges in the State of Gujarat. The objectives of the study were 1) To develop an instrument seeking identify and quality for aspect of Innovative proneness of Teacher Educators, via Teacher Educators expressed attitude towards specific innovations, Teacher Educators' general attitudes to change or their changed related values, Teacher Educators preferred behaviors in relation to their perception of the seeking or circumstances in which innovations were introduced. 2) To design and validate Innovative proneness scale. 3) To study Innovative proneness of Teacher Educators of primary teachers' training Colleges of Gujarat with respect to age, teaching experience, mobility, participation in service education, habit of reading professional literature, professional training and academic qualifications, and 4) To find out the inter-correlations among the components of the Innovative proneness scale. An Innovative proneness scale constructed and standardized and was used for studying Innovative proneness of primary Teacher Educators of Gujarat State. There were three sections - attitudes of innovation scale, situational and innovation characteristic scale and changed related values questionnaire. The study was based on a sample of 200 Teacher Educators selected from 64 primary training Colleges of Gujarat State. Percentile norms were established, for comparing the Innovative proneness of teachers of different age-groups, sex, experience, qualifications etc. The t-test was used to test the significance of difference between the means of any two groups. The major findings were: 1. The mean Innovative proneness score of the teachers above 35 years of age was greater than those of teachers under that age. 2. The mean score of the female teachers was higher than that of the male teachers. 3. The mean score of the teachers having more than 5 years of teaching experience was greater than that of teachers having less than 5 years of teaching experience. 4. Teachers possessing master degree gave the highest mean score on Innovative proneness, while teachers having a B.Sc. degree gave the lowest mean score. 5. The mean score of the teachers who had not changed Institutions was higher than the teachers who had changed Institutions.

6. The mean score of the teachers who attended the in-service programme was higher than the mean score of the teachers who had not attended any in-service programme.
7. The mean scores of the teachers having a habit of reading professional literature

and having no-professional satisfaction. 8. Components of the Innovative proneness scale significantly correlated with teachers' personal variables such as age, sex, experience, academic qualifications, professional qualifications, mobility, in-service education, reading habits and professional satisfaction.

**Shukla (1984)** did a comparative study of personality characteristics of Innovative and non-Innovative teachers and their pupils' creativity. The objectives of the study:

- 1) To identify Innovative and non-Innovative teachers from selected primary schools.
- 2) To assess the personality characteristics of Innovative and non-Innovative teachers.
- 3) To find out one differences and similarities in personality make-up between Innovative and non-Innovative teachers (male/female).
- 4) To find out the differences in Innovativeness due to age, remuneration, experiences and rural-urban belongingness.
- 5) To find out the difference in creativity in pupils taught by Innovative teacher and of pupils taught by non-Innovative teacher. The sample consisted of 650 primary school teachers (326 males and 324 females). The primary schools were of all kinds. Another sample of 600 pupils taught by these teachers was also taken. The socio-metric Questionnaire, Principals rating scale and self - Rating scale were used for data collection. The test-retest and split half reliability coefficients for the self-Rating Scale were 0.78 respectively. The 16 PF Questionnaire and Non-verbal Test of creative Thinking by Baqer Mehdi were also used. The critical ratios were calculated. The major findings were: 1. Urban teachers were more Innovative than rural teachers. Male urban teachers were more Innovative than male rural teachers. Similarly, female urban teachers were more Innovative than female rural teachers. 2. Sex differences were not observed to be significant causative factors as regards Innovativeness of teachers. 3. Teachers having less teaching experiences were found to more Innovative. 4. Only a partial relationship was discerned between age of the teacher and his Innovativeness. 5. A not very clear relation was observed in different salary groups of teachers and their Innovativeness. 6. Non-Innovative teachers were found to be reserved, detached, critical, cool, less intelligent, dull, tending towards trauma and tension, frustrated, excitable and restless. 7. Innovative teacher were found to be emotionally stable, calm, mature, assertive independent, self-assured, happy-go-lucky, impulsive, lively, gay, enthusiastic, socially bold, trusting, free-thinking, imaginative, shrewd, calculating, placid, experimenting, analytical, free-thinking, inclined towards relaxation and composure. 8. The pupils of

Innovative teachers were found to be higher on creative thinking score than the pupils of non-Innovative teachers.

## **2.5. Studies on Innovative Practices in Teacher Education Programme**

**Joshi (1972)** carried out a study of innovations and changes in Teachers' Colleges. The major purposes of the study were as follow: 1) To make a comparative study of Innovative Practices of teachers' Colleges in India and abroad with references to the objectives of Teacher Education, curriculum, method of teaching, in-service education and research. 2) To identify factors responsible for resistance to adoption or successful implementation of innovation in Teacher Education. 3) To suggest remedial measures to overcome the resisting factors. The descriptive method was employed to find out the Innovative Practices and their adoption in the Colleges of Education. A preliminary survey of the Colleges of Education was made and, for intensive study of innovations, a sample survey was conducted in India and U.S.A. Questionnaires, interviews and observation schedules were employed to collect data from U.S.A. and India. The study of other countries was based on relevant literature. The major findings were: 1. In connection with the Innovative Practices of Colleges of Education, it had been noted that there was a trend to increase the duration of B.Ed. courses. Indian and South East Asian Countries have included courses which have a rural bias, while in U.S.A. new courses were emerging for special needs of the schools and children. Increasing inter disciplinary and inter departmental approaches would lead to upgrading of syllabi in the method of teaching showed great variety and divergence in the Colleges of Education in different countries, with the recent development and advances of technology in the field of education and its impact of teaching techniques. In-service education was comparatively new in Teacher Education Programmes in India and South East Asian Countries. The concept of Open University has been tried out in U.K. 2. In connection with acceptance of and resistance to innovations, it has been noted that there is no category of acceptors as opposed to the category of rejecters. Acceptance of or resistance to an innovation depends on various factors, such as situation, facilities leadership, personal qualities and the atmosphere etc. 3. The investigator has suggested innovations for the Teacher Education Programme in India and has developed a conceptual curriculum development model.



**Joshi (1974)** carried out a study of innovations in Teacher Training Institution. The objectives of the study were to find: 1) Innovations in Teacher Education Programme pertaining to curriculum, method of teaching and in-service education. 2) The types of courses followed in different States. 3) The resisting factors of innovations. The method followed was the descriptive survey method. A preliminary survey of fifty Teacher Training Institutions was made and eleven Institutions were selected by stratified random sample basis for intensive study. Questionnaires were mailed and a sample of Principals & teachers was also interviewed. The major findings of the investigation were: 1. In the area of method of teaching, popularly used methods were question-answer and objectives based teaching. 2. The use of Micro-Teaching, programmed learning, interaction analysis and self learning, projects were negligible. 3. Nearly eighty one percent of the instructors frequently used lecture method in their theory classes. 4. There were not many Institutions nor were the instructors involved in the in-service programme of elementary teachers. 5. In Rajasthan some innovations were reported. As for example, there were three Institutions provided training on ungraded unit and a new experiment on first introduction to teaching was undertaken. 6. In Gujarat and Jamia Milia Islamia, block teaching was one of the components of the Teacher Education Programmes. 7. In Gujarat and Rajasthan separate Institutions for linguistics minorities were existing. 8. The most significant factors of resistance to innovations as reported were: lack of facilities, lack of funds, lack of time to pursue the new ideas, lack of professional guidance, lack of supports from education department.

**Bhagia (1975)** has studied on innovations and change and the extent of their utilization in the schools and teachers' training Institution of Haryana. The purpose of the study was to assess the nature of innovations made in schools and training Colleges. Besides, an attempt was also made to find out whether the problem of diffusion and implementations was associated with the Institutional variables. The independent variables studied were grouped in to four categories, viz., i) Activities and efforts. ii) Motivation factors. iii) Capabilities and clarity about the innovations and iv) Facilities as well as problems. The effect of these variables on the diffusion and the implementation of the innovations were studied. For the purpose of collecting data, two tools were used: 1) for heads of the Institutions, 2) for teachers of the selected 92 schools. The findings showed that the teachers did not have a clear picture of their role performance and the objectives of the various innovations. Teachers

needed help from different persons in acquiring the techniques and behavioral skills required to conform to their specifications.

**Buch (1975)** made case studies of innovations in three Teacher Education Institutions. The study on the programmes of the department of education of the M. S. University of Baroda, pointed out that innovations were undertaken in 1. Micro - Teaching. 2. Evaluation - transfer of power from external to internal and making whole evaluation process a continuous one. The study on the programmes of Gandhi Shikshan Bhavan, Bombay reported innovations such as i) Development of self-study and group study methods. ii) Activity centered learning iii) Helping schools in solving their problems and iv) Development of a curriculum for lifelong education. Such innovations led to development of more favourable attitude at least among 20 percent Student-Teachers of 1970-74 periods. The study on the programmes of linking Teacher Education to the needs of the community at the M. B. Patel College of education, S. P. University, V. V. Nagar reported innovations such as visit to rural sites, arrangement of extra moral lectures in rural areas and symposia and discussions on rural society.

**Buch (1976)** reported the innovations in Teacher Education at the M. S. University of Baroda, which were i) Semester system, ii) Micro-Teaching, iii) Interaction analysis, iv) Preparation of instructional and lesson plans, v) Observation of classroom teaching, vi) Preparation of indigenous teaching aids, vii) Evaluating a lesson, viii) Preparation of socio-grams' and their interpretation, ix) Performing classroom experiments in role playing goal setting behaviour, in game situation, x) preparation of case study of a child showing problem behaviour, xi) Practical work involving administering and scoring of different types of psychological and educational tests, xii) Preparing a profile of a student for guidance purposes, xiii) Practical work leading to the preparation of pupils' progress card and cumulative record card, xiv) Practical work in writing instructional objectives in behavioural terms, xv) Preparing objective based items, xvi) Preparing unit tests, xvii) Preparing model question papers, xviii) Practical work in organizing P. T. A. meeting, health exhibitions etc. xix) Practical work to develop skills in preparing a class time table, home-work time table etc., xx) Preparing outlines of educational projects and xxi) Preparing different types of assignments.

**Buch, Yadav, Joshi and Mukhopadhyay (1976)** reported on innovations in Teacher Education for relating education of life in an urban setting and rural uplift. The Gandhi Shikshan Bhavan, Bombay had adopted innovations such as 1) Self study

method to develop self-reliance, confidence, concentration, comprehension, curiosity, proper method of taking down points, method of answering orally in a precise way and habit of correcting others without hurting them through techniques such as oral questions and answers, reading of materials, essay type tests, uses of library, atlas, laboratory apparatus etc. 2) Group study methods to develop team spirit, co-operation, leadership, confidence, self-reliance, respect for other's views, concise method of presentation, proper method of discussion and habit of drawing up one's own notes and points through techniques such as group activity with each group having a leader, working on a different theme, submitting report, reading and discussing them. 3) Activity lesson to find use for waste, to be economical in money, time and space, to develop aesthetic sense, to learn to be neat and tidy, to develop necessary skills and to learn to be proud of them through techniques such as preparation of models, charts, folders, albums, herbariums, dresses in certain periods of history, *safai-work*, measurement of actual distance, self performed experiments, map drawing in class, planning, division of work, collection of materials and tools, working together in class and completing the work in time. 4) Dramatization to develop comprehension, writing skill, proper audience reaction, understanding life through characters, time and place, appreciation of abilities and feelings of others and self criticism through techniques such as complete study of the subjects, rewriting in the form of a play, selection of actors, a little practice, stitching of the dresses, setting, staging-acting and criticism by actors, audience, director and judges. 5) Organization of programmes for development of emotional integration, national and intellectual brotherhood, organizational ability, team spirit, enthusiasm for democratic living, qualities of leadership and frugal habits, collection and saving of money through techniques such as observation of festivals national days, birth days of great men, talks by actual men from actual fields-freedom fighters, writers, poets, scientists, foreigners, parents, picnics, visits, bhajan, cleanliness campaigns, exhibitions, bulletin board maintenance, organization of matches, sports, etc. 6) Social services consisting of activities such as literacy programmes, community health services, moral science and recreational activities. The innovations at M. B. Patel College of Education, Vallabh Vidhyanagar included. 1. orientation on problems of rural areas-through visits to rural places, extra mural lectures, symposia and discussions on rural sociology and economics led by experts in those fields, 2. Community programme-in summer for students of rural communities, 3. School College co-operation through 10 outpost centers, one such centre covering

20 to 25 schools and 4. School adoption, wherein 10 to 12 schools were adopted each year and these schools were supplied with teaching aids.

**Buch and Sansanwal (1977)** reported innovations in teacher preparation programme at Vidya Bhuvan G.S. Teachers College, Udaipur, which were 1. Open air session, wherein the whole Institutions moved to one of the rural areas for a period of several days to inculcate self reliance in student-teachers and to acquaint them with the way of life of the rural people 2. During this period besides participation in community living activities, the student-teachers surveyed localities, organized functions and exhibitions. There was block teaching practice in schools situated within a radius of 100 miles, wherein 20 student-teachers were attached to one staff member for a fortnight and the practice teaching activities included items such as classroom teaching, maintenance of school records, participation in running the school, study of home environment of school children, development of skills in teaching in a rural environment, devising educational activities, preparing teaching aids, studying relation of community with the school etc.

**Buch (1977b)** reported development of skills of instruction through Micro-Teaching and simulation at the Centre of Advanced Study in Education, M.S. University of Baroda. In this programme, a trainee used to give at least 3 cycles of micro lessons with a group of 6 to 7 peers as students. The skills covered were stimulus variation, skill of probing, skill of questioning, skill of reinforcement, skill of illustrating with examples and skill of explanation.

**Buch and Mukhopadhyay (1977)** reported the programme of Training Teachers for their roles as rural reconstruction workers at Gandhi Vidyapeeth, Vedchhi, Gujarat. The trainees undertook activities such as agricultural and spinning work besides getting practice in other teaching and non-teaching activities of a teacher. During practice teaching period, they participated in daily assemblies, sports, sanitation, craft work, school community kitchen activities. They also took classes for one week project on a subsidiary craft such as preparing candles, hair oils, chalk sticks, dusters or herbal medicines. Non-classroom teaching activities were done at three places:-

- i. Activities at schools consisted of gardening, wall newspaper, exhibitions, children, journals, assignments, question boxes, self-service, co-operative shop, Parent Teacher Association, sports, music, dance, drama, cultural activities, teachers discussions, flag hoisting ceremony, national songs and case studies of children

- ii. Activities at home included decorating the houses for scientific ways of living, discussion with parents, help in farm work, first aid, and barefoot doctor's work, sanitary work constructing simple but better latrines, bathrooms, disposal of waste, hygienic ways of living, compost pits, manual or gas plants, preparing spinning wheels, and servicing
- iii. Activities in society included organizing community meetings, village sanitation, prayer meetings, youth clubs, social education, child education, play centres, work camps (*Shramadan Sibirs*), surveying (*Santisena Training*). Crash programme on agriculture was another important activity. Lessons were distributed among primary, primary-basic, Secondary and post-basic schools.

**Buch and Roy (1977)** reported innovation at Gujarat Vidyapeeth, Ahmedabad. The innovation was the programme of linking teachers' education with rural reconstruction. It consisted of observation of 60 lessons, delivery of 10 lessons in attached experimental basic school, delivery of remaining 20 lessons in other schools, mostly rural schools, during internship programme and training in crafts, community living in hostel and off campus programmes in rural areas. Off campus programmes were organized in six rural service extension centres or in any post basic school in the rural areas. The student-teachers participated in different types of social works.

**Buch and Sharma (1977)** reported innovation at Mouni Vidyapeeth, Gargoti. It was on Teacher Education in rural setting. The programme had an intimate school college co-ordination. Vidyapeeth's teachers visited the schools periodically and organized demonstration teaching in them. The teachers of schools also were invited to the Vidyapeeth for getting training on audio-visual education. The studies on innovation are a few in numbers. In Indian situation, innovation was highlighted by NCERT through its computations of Innovative Practices in Teacher Training Institutions. Latest of them was compiled by Khosla (1973) and the finding of the said study does not give a very bright picture. A year later, Joshi made study on innovations in Teacher Training Institutions and this study also gave similar picture. Two years later a study taken up by Damodar did not find any innovation. However, UNESCO (1979) brought out a directory of various Innovative Institutions engaged in preparing educational personnel. Out of 306 Institutions engaged for preparation of Secondary school teachers, there were 19 in India was much low figure in comparison to 68 in U.S.A. However, the innovations in certain Institutions of India could get highlighted through case studies prepared by Buch and others and published in various documents

of the UNESCO Regional Office for Education in Asia and Oceania. This had given some inspirations for other Institutions.

**Singh (1977)** conducted a study on adoption and discontinuation of innovations in the preparation of Secondary schools teachers in India. The study had the following objectives. 1) To find out to what extent innovations recommended by different commissions and committees have been adopted by the Secondary school Teachers Training Institutions in India. 2) To find out how far these adopted innovations have been maintained or discontinued by these Institutions. 3) To find out whether Institutions under three different types of control, viz. private management, and universities differ with respect to the adoption and maintenance of innovations. 4) To study how decisions for the adoption of innovations are made in these training Institutions and 5) To suggest measures how training Institutions may be more prone to the adoption of innovations. The present study employed descriptive survey method of research. All the Secondary level Teacher Training Institutions in India were approached for the data through the Questionnaire for studying innovations adopted and discontinued by them. Out of them only 209 Institutions were responded. For studying decision making process for the adoption of innovations, 200 Teacher Educators from forty training Institutions (ten percent training Institutions from each of the four educational regions) were interviewed. A sample of 200 student-teachers' selected from the forty Institutions were used for the fulfillment of objectives one and four. The syllabi prescribed for the Bachelor of Education and bachelor of Teaching Courses of fifty Universities were analyzed. A Questionnaire developed for the purpose and interview were used as tool for the collection of data. The major findings were 1. Only a limited percentage of Secondary Teacher Training Institutions (from 6.6 percent to 11.4 percent) had adopted objective criteria and standardized procedures for admission. 2. Above 85.6 percent of Secondary Teacher Training Institutions prescribed flexible methods of teaching for student-teachers. 3. About 56.9 percent to 82.2 percent of the Institutions had adopted activity and group discussion methods of teaching. 4. About 85.1 percent of the Institutions gave weightage to internal assessment. 5. Institutions which had adopted innovations had been able to maintain them. 6. Frequently discontinued innovations were those that involved heavy expenditure for which training Institutions had to depend on other financing agencies. 7. The adoption of innovations related to admission, foundation course, and experiences at laboratory phase, practice teaching and method of teaching

were not related to the nature of Institutions. 8. The adoption of innovations related to the areas of non-instructional activities, evaluation, Teacher Educators in-service education, and organization and administration showed mixed results. 9. Institutions which had Teacher Educators exposed to foreign influences through visits, literature and other means of communications had been able to adopt a large number of innovations. 10. Decisions regarding the adoption of a large number of innovations had been made by external agencies without involving the actual practitioners. 11. Teacher Training Institutions in India had not developed experiential attitude towards new ideas, methods and Innovative Practices. 12. A number of inhibiting forces existed in the training Institutions for the adaption of innovations related to administrative and financial matters.

**UNESCO (1979)** mentioned various Innovative Practices used in preparation of educational personnel. This information was compiled from the questionnaires returned by 426 Institutions located in 194 countries. Out of these Institutions, there were 19 Institutions of India, and they were involved in preparation of Secondary School Teachers. Various Innovative Practices in vogue in these Institutions were – Micro-Teaching 5 Institutions, Block Teaching Practice - 2 Institutions, and Internship - 3 Institutions. There was only one Institution for remaining Innovative Practices. Various innovative practices were - Unit plan, Use of audio-visual materials, Searching interviews, Model writing practices, Model reading practices, Preparation of improvised aids, Games and sports, Drama, Music and Cultural Functions, Seminar, Debates and symposia, Adoption of village for development, Survey, Manual work for rural development, Functional literacy, Remedial Teaching, Programmed Learning, Micro-Teaching, Maintenance of Dairy, Morning condition classes and training in nature cure, Weekly lectures on saints and sages of eminence, Making Filmstrips, Improvisation of chemistry kit for rural high schools, Community work, Programme for low achieving Student-teachers, Use of 10 point criteria for evaluation, Physical Science Clubs, Seminar, History room, Health project, School adoption, Mid-Term demonstration lesson, Pre-Teaching Demonstration Lesson, Discussion in Student Teaching, Adoption of Village, Tutorials, Subject associations, Assessment of total personality.

**Srivastava, Kanti Mohan (1982)** studied effectiveness of the Teacher Education Programme. The investigation was an attempt to find out the effectiveness of the Teacher Education Programme of Avadh University. The objectives of the study were

1) To study the actual position of resources, existing conditions and working of the Teacher Education Programme. 2) To study the quantitative and qualitative characteristics of the programme's end-project. 3) To study the effect of the programme on teaching aptitude of Student-Teachers. 4) To study opinions regarding quality and sufficiency of existing conditions and working of the programme from the point of view of organization of professional education of Secondary Teachers. 5) To study opinions regarding utility of the programme from the point of view of teacher's job and 6) To ascertain the most desirable changes needed for making the programme effective. The study was a normative survey. All the Teacher Education departments of the ten affiliated Colleges of Avadh University situated in five Districts of Faizabad Division - Faizabad, Gonda, Bahraich, Siltanpur and Pratapgarh - were included in the study. The sample consisted of ten Colleges Principals, 76 Teacher Educators, 929 student-teachers, 175 Secondary Teachers who had been trained by these Departments, 38 Secondary School Principals, and 8 Educational Administrators. The School data were collected with the help of two questionnaires, two Interview Schedules, four Rating Scales (all prepared by the investigator), one Test of teaching Aptitude prepared by Dr. Jai Prakash and Dr. R. P. Srivastava, Observation of Institutions, and content analysis of the university, College and government records. The major findings were: 1. The Teacher Educator, student-teacher ratio was 1:14, which was higher than prescribed by the government. 2. Sixty percent of the departments did not have Educators in all school subjects on their staff. 3. All the Teacher Educators belonged to UP were upper-caste Hindus and married. Not all of them had double post graduate degree; less than ten percent of them had a doctorate degree. Most of them were committed to the profession but were unable to take part in extra professional activities due to various College and personal engagements. The Educators were not very clear about the objectives of the programme. 4. Facilities for non-teaching staff were inadequate. 6. Coordination between the department and Secondary Schools, other training schools and departments, and the community was lacking. 8. Admission rules, as prescribed by the State government were followed, which had many drawbacks. 7. The whole programme comprised theory teaching, practice teaching and sessional work. Average working days were only 118. There was little uniformity in organizing practice teaching and sessional work in the various departments. 8. Separate divisions were given for theory and practical (Practice Teaching and sessional work) examinations.



9. The output of the programme was not at par with the capacity of production. Wastage of more than nine percent was observed. 10. Immediately desired changes in the programme were in its curriculum, organization of practice teaching, admission and evaluation procedures, establishment of independent Colleges of Education, Teacher Educators, orientation and research facilities.

**Mohanty (1984)** carried out a study of student teaching programmes in Colleges of Educational with special reference to innovation. The objectives of the study were 1) To study the provisions of student teaching programmes in Colleges of Education in respect of objectives, pre-practice of teacher preparation, practice teaching, supervision, evaluation, School/College cooperation, resources and innovation, and 2) To make case studies of innovations in student teaching programmes. The study was conducted on the population of all the 19 Teacher-Training Colleges of Orissa State. All the Principals (100%) and 118 (75%) of the lecturers of these Teacher Training College were the respondents of the study. The researcher prepared two questionnaires, one for Principals and the other for Lecturers, and one observation schedule, one interview schedule and one Proforma. The data were collected by mail as well as through personal visit to the Teacher Training Institutions. The responses to the questionnaires were analyzed through percentages and the data collected through other tools were analyzed quantitatively. The major findings were: 1. The manner in which criticism lessons were held was not proper. 2. Various methods of teaching were not used in teaching lessons. 3. The practice teaching programme stressed delivery of lessons and not other activities expected from a student-teachers. 4. Supervisors did not observe lesson completely. They rarely discussed their observations in lesson plan journals with the trainees. 5. The evaluation was of doubtful validity as no evaluation criteria were explicitly stated. 6. School- College co-operation was found poor in almost all Institutions under study. 7. The Colleges lacked qualified method of masters. 8. The lecture method of teaching was in vogue. Micro-Teaching and team supervision of criticism lesson were the only two innovations practiced in three Colleges. 9. In all respects, the functioning of government Institutions was better than that of private Institutions. 10. Training in techniques of observation maintenance of classroom discipline and organization of functions and festivals were found in all Colleges.

**Mani (1987)** studied educational innovations in the affiliated Colleges of India. The study emphasis how the innovations were accepted implemented and Institutionalized

in Colleges. The objectives of the study were 1) To examine the conceptual basis and objectives of selected innovations in Colleges. 2) To find out by whom and how they were developed and defused innovations. 3) To find out how they were adopted and implemented innovations. 4) To identify the factors that facilitated or trained them, and 5) To study the aspects such as the valuation, personnel, cost, consequences, change agents and dissemination of innovations. The sample consisted of 205 Colleges, with the common ideas and objectives, a similar managerial pattern and a shared historical background, by Purposive Sampling Technique. The tools used to collect data included Institutional data sheet, checklist of collegiate innovations, interview schedule and questionnaires. The data were analyzed through qualitative techniques which were supported by calculation of percentages, rank and rating of choices made by respondents. The major findings were: 1. The success of the innovations was affected by the change oriented skills, knowledge, values and attitudes of the personal involved in the change efforts. 2. Effective human relations and personnel management also were found to be enhancing the productivity of innovations. 3. The study had identified 41 factors such as clarity and relevance of Institutional goals, staff motivation, human and material resources etc. that facilitated innovations. 4. Similarly, 21 factors such as lack of freedom for Colleges to experiment, financial shortages, heavy work load of the staff etc. that were found to inhibit such programme.

**Patted (1992)** studied whether the selection procedure, the changed syllabi, the innovations, and the evaluation procedure have any impact on the qualitative improvement of the Secondary Teacher Education Programme in Karnataka. The objectives of the study were: 1) To study the selection procedure, curriculum and methods of teaching of pre-student teaching, procedure of evaluation and existing conditions of resources in the Colleges on education in the universities of Karnataka State, 2) To study the teaching and other school- related behaviour of teachers with varying experience and are trained with different B.Ed. syllabi, and 3) To analyze the B.Ed. syllabi in the universities of Karnataka State from 1968- 88. The major findings of the study were: 1. The eligibility for admission to the B.Ed. course which was 35% from 1968-81 had been raised to 45% in 1982 in all the universities. 2. Lecture, assignment, discussion and seminar methods were used, while case study and project methods were used as Innovative methods, 3. Most of the Colleges had their own buildings, classrooms, psychology-lab, audio-visual room, ladies' lounge, books and

journals, and SUPW facilities, 4. A majority of the Colleges were run by the students' fees, donations and management funds, except the Colleges run by the State government or the university, 5. A majority of the teaching staff had B.A./B.Sc., M.A./M.Sc. and M.Ed. degrees in the second class; a few had Ph.D. degrees. 6. A few universities had framed the objectives after 1982 and framed regulations for admission to the B.Ed. course, 7. The enhancement of minimum percentage at the Bachelor's degree to 50% and a minimum of two school subjects to be studied at this level and an entrance test were quite essential for qualitative improvement of the Secondary Teacher Education course, 8. For assessment of annual lessons, the mean of the two examiners was taken into consideration.

## **2.6. Summary of the Reviewed Literature**

The studies reviewed revealed a variety of patterns. The studies have pointed out variations in resources. The programmes utilizing better resources were expected to be better ones, but, those also needed effective organization. Various organizational patterns of student teaching have emerged. Talented personnel use various innovative practices but, studies on such innovations present a gloomy picture. Case studies focussed on certain aspects of these practices and highlight the nature of working of the Institutions. These case studies also become source of inspiration for others. In such a situation, study of Student Teaching Programmes and innovations therein may be beneficial for improvement of the quality of Teacher preparation.

There are studies on relative effectiveness teaching through of traditional method and Innovative method. Most of the studies used Survey method and tools like, Questionnaire, Observation Schedule, Interview Schedule, Rating Scale, Attitude Scale, Check List, Portfolio and Techniques like Interview and Participant Observation. Out of these, 2 studies by Gupta (1982) and Jadhav (2008) were found experimental in nature. The outcome of the study Gupta (1982) was a fully tried-out and validated strategy for integration of teaching skills with instructional material and other software. This study provides a workable model for skill integration which can be incorporated in the practice teaching programme of any Indian Teacher Training Institutions. Whereas Jadhav (2008) reported that the performance of AOM group of student-teachers was found superior in terms of pupils' achievement than that of the conventional group.

Singh (1977) and Mohanty (1984) studied the innovative communication patterns adopted by the Colleges of Education. The studies of Mohanty (1984) and Bhagia (1975) revealed that the structure of Teacher Education Programme continues unchanged while the nature of Schools, teachers and teaching have changed with Civilization, Culture and Technological Changes in the Society.

Sharma (1982) reported that Teacher Education Programme in India have not undergone any marked improvement. There is a dire need of organizing refresher courses, short term intensive courses in special subjects, practical training, workshops and professional conferences at both the levels (Primary and Secondary) of Teacher Education Programmes. Sinha (1982) reported that recent innovations in Teacher Education of Bihar State have not been incorporated into the system & Practice teaching in Colleges of Education is being neglected by the Method Masters. Hemabujan (1983) found that the comprehensive B.Ed. curriculum was not effectively implemented due to time shortage and semester internal assessment. The revised B.Ed. syllabus in force in Tamilnadu was found to be appropriate and fulfilled the requirement, but, lacked in the content knowledge of the academic subjects. Deo (1985) reported that most of the Student-Teachers felt that 'lack of time' was a major factor in not being able to achieve the objectives of the practical programme. Bhatnagar (1988) found that tools were required to be developed for lesson planning, supervision/evaluation of actual teaching by Student-Teachers, Co-Curricular Activities, SUPW, and community work arising out of theory papers, including assignments. Das (1991) found that diversity exists in the evaluation process in Teacher-Training Colleges. The majority of the Institutions follow a mixture of internal and external evaluation procedures, an external cum-internal marking system with continuous evaluation, and the semester system should be adopted in all Teacher Training Colleges in the Gujarat State. Nagpure (1991) reported that Innovative methods, like, team teaching and models of teaching were rarely tried out in the Colleges of Education of Maharashtra State. Walia (1992) reported that the Curriculum of Secondary Teacher Education lacked uniformity and clear cut definition & four-year Teacher Education Programme was preferred to the existing one year B.Ed. programme in Northern India.

A total of 13 studies were reviewed on Teacher Education Programme as a whole. Out of 13 studies 1 study by Sinha (1982) was conducted in Bihar State, 1 study by Hemabujam (1983) was conducted in Tamilnadu State, 1 study by Deo (1985) was

conducted in Delhi, 1 study by Das (1991) was conducted in Gujarat State, 1 study by Nagpure (1991) was conducted in Maharashtra State, 1 study by Sahoni et.al. (1992) was conducted in Northern part of India, 1 study by Srivastava et.al. (1999) was conducted in RIEs of India, 1 study NCTE (2001) was conducted in Assam State, 1 study by NCTE (2001) was conducted in Andhra Pradesh and 1 study by Yadav (2011) was conducted in Bangladesh, India, Pakistan and Sri Lanka. He reported that many research projects in the area of school and Teacher Education were completed during 2004-07 in India and Pakistan. In India, innovations on practice teaching, educational technology, and instructional strategies were carried out, whereas innovations on ICT and staff development were undertaken by Pakistan. No innovations were reported by Sri Lanka and Bangladesh countries.

The review of related literature on Teacher Education Programme revealed that most of the studies concentrated on the factors affecting the innovations, ICT integration, duration of the course, finance and resource availability, guidance, attitude and proneness of Teacher Educators, types of governing body, i.e., Government & Self-financed, Role of Headship, Curriculum, Method of Teaching, Practice Teaching, Micro-Teaching, Team Supervision, Criticism of Lesson and Climate of the Organization.

Somneuk (1989) studied Teacher Education Programme for Rural Development in Thailand. This study was designed to evaluate the project Teacher Education Programme for Rural Development launched by the Ministry of Education, Thailand, under its Five-Year National Development Plans. It was found that the majority (61.5%) of the respondents found the content-matter of TERD quite relevant; various personnel possessed the required educational qualifications, but lacked orientation, experience and skill in carrying out the activities; lack of physical facilities also hindered implementation. Atisabda (2001) studied Pre-Service Teacher Education in the information society: from the perspective of implementation of technology innovations. It was found that the major processes of technology implementation included the restructuring of Teacher Education Curriculum, the internal reorganization, the budget reallocation, the design of technology implementation model, faculty development and the cultivation of organizational climate & culture to foster change. Deobbs (2006) studied the inclination of Secondary Teachers to implement innovations learned through professional development. Findings indicated a significant relationship between gender and the inclination to implement the

innovation in the classroom. Papier (2010) analysed recent national policy on Further Education and Training (FET) for College lecturer development in South Africa in the light of more established curricula and practice for the training of vocational teachers internationally. The article explored local and global Vocational Teacher Education (VTE) policies and curricula in an attempt to highlight the agreed-upon elements of curricula that could pave the way for South African Policy on Vocational Lecturer Development to be implemented.

However, research on private higher education has been also conducted in some Universities abroad. These cover the issues like role of affective domain in teacher development preparing for the first Ontario teacher qualifying test by Bovver (2003), educational technology in award-winning Teacher Education programs by Hoffer (2003), encouraging reflective thinking in Teacher Education students by Raltson (2003).

A total 12 studies were reviewed on Teacher Education Programme in different Countries of the World i.e. Thailand, Columbia, Canada, South Africa.

Review of related studies on Teacher Education Curriculum shows that the present Teacher Education Curriculum is too much theoretical. In fact, it is this large component of theory papers that has hampered the growth of practical and pedagogical aspects of the programme. This has in turn impeded the growth of Teacher Education.

A few studies examined various aspects of Curriculum transaction, as well as, related aspects in various Teacher Education Institutions of India. Bhosale (1992) made a critical study of the new curriculum of Teacher Education developed by all the Universities in the State of Maharashtra. A majority of Principals, Teacher Educators and Student-Teachers were of the opinion that the new curriculum was suitable for developing teaching competence among the Student-Teachers, whereas, Behari (1998) reported that the methodology of teaching paper was more helpful than foundation papers taken together in developing abilities, especially skills, but practice teaching or practical skills in teaching were found to be more helpful than the rest of the Teacher Education Programme in developing abilities especially skills. Dramatics as the activity and discussion as a mode of transaction of programme were found to be more helpful. It was observed that a theory practice link was missing in Teacher Education Programme and therefore the student-teachers were not able to link what they had learnt.

Works of Bhatia (1987) revealed that the new B.Ed. Curriculum in Bombay University is mechanical, bookish and doubtful in producing quality teachers. Practical work was a useful part of the curriculum and should be organized more seriously. The study indicated that the theory load should be brought down and the ratio of the theory and practice should be fifty: fifty. Hence, the research findings are yet to support the existing B.Ed. curriculum, whereas Kakkad (1983) reported that Internship in teaching should be introduced for a period of three months.

A total of 4 studies were reviewed in this category. Out of the 4 studies 3 studies i.e. Kakkad (1983), Bhatia (1987) and Bhosale (1992) were conducted in Maharashtra State and 1 study by Behari (1998) was conducted in Delhi.

Most of the studies pointed out the drawbacks of the existing Curriculum of the Teacher Education Programme. It is encouraging to note that steps were taken by NCTE to rectify the defects and make the curriculum up to date to meet the requirements of the age.

Singh (1981) found that the Micro-Teaching Technique in the controlled laboratory environment, as well as, the reality of bonafide teaching was quite effective. Gupta (1982) reported that all the Innovative Methods, except the Lecture-Cum-Discussion Method, had established their comparative merits against the lecture method.

Ekbote (1987) developed strategy for integration of Skills in Teacher Training. The study provides a workable model for skill integration which can be incorporated in the practice teaching programme of any Indian Teacher Training Institutions. Sultana (1988) found that there was a remarkable change in the behaviour of Student-Teachers of Science on the Skill of Experimentation. There was significant change in the behaviour of 41 out of 60 teachers during the Micro-Teaching approach. Nagar (2010) found that the competition between the Teacher Trainees decreased rapidly when cooperative learning strategies were implemented & the cohesiveness between the Teacher Trainees increased after the implementation of the intervention programme.

A total 8 studies were reviewed on Specific Skills and Methods in Teacher Education which mainly focused on Micro-Teaching technique in the controlled laboratory environment, skill integration in practice teaching and strategies implemented for the integration of skills & cooperative learning.

Panchal (1977) & Valand (1983) have studied Innovative Proneness of Teachers through Innovative Proneness Scale and found positive correlation between proneness

to Innovation and Work Experience, Educational Qualification, Place of Habitation and Professional Satisfaction. Patel (1979) reported that academic qualification, stability in the schools, training and professional reading habit influenced the Innovative-proneness of teachers, positively, found that different components of Innovative-proneness were also highly correlated with one another. These components were: individualization, curriculum organization, teaching resources, internal school organization, staff development, school community relationship, administrative support, staff norms, progressiveness and venture sameness, teaching-learning process, attitude towards innovations and change proneness. These components were also related with Innovative-proneness as a whole. Shukla (1984) reported that non-Innovative teachers were found to be reserved, detached, critical, cool, less intelligent, dull, tending towards trauma and tension, frustrated, excitable and restless, whereas, Innovative Teacher were found to be emotionally stable, calm, mature, assertive independent, self-assured, happy-go-lucky, impulsive, lively, enthusiastic, socially bold, trusting, free-thinking, imaginative, shrewd, calculating, placid, experimenting, analytical, free-thinking, inclined towards relaxation and composure. He concluded that the pupils of Innovative Teachers were found to be higher on creative thinking than the pupils of Non-Innovative Teachers.

The investigators (Patted 1992; Bhosale, 1992; Behari, 1998) studied the quantitative and qualitative aspects of various Teacher Education Institutions in various States of India. They found that the majority of the Colleges were run by the students' fees, donations and management funds, except the Colleges run by the State Government or the University.

The studies on innovations done by Joshi (1972) on acceptance of and resistance to innovations, found that there is no category of acceptors as opposed to the category of rejecters. Acceptance of or resistance to an innovation depends on various factors, such as situation, facilities, leadership, personal qualities and the atmosphere. Joshi (1974) reported that the most significant factors of resistance to innovations were: lack of facilities, lack of funds, lack of time to pursue the new ideas, lack of professional guidance and lack of support from Education Department. Bhagia (1975) found that the teachers did not have a clear picture of their role performance and the objectives of the various innovations. Teachers needed help from different persons in acquiring the techniques and behavioural skills required. Buch (1975) reported innovations in S. P. University, V. V. Nagar, such as, visit to rural sites, arrangement



of extra mural lectures in rural areas and symposia and discussions on rural society. Buch (1977a), Buch and Sansanwal (1977) reported innovations in teacher preparation programme at Vidya Bhuvan G.S. Teachers College, Udaipur, which were Open air session, participation in community living activities, the Student-teacher's surveyed localities, organized functions and exhibitions. Buch (1977b) reported development of skills of instruction through Micro-Teaching and simulation at the Centre of Advanced Study in Education, The M.S. University of Baroda. In this programme, a trainee used to give at least 3 cycles of micro lessons with a group of 6 to 7 peers as students. The skills covered were stimulus variation, skill of probing, skill of questioning, skill of reinforcement, skill of illustrating with examples and skill of explanation.

Mani (1987) identified 41 factors, such as, clarity and relevance of Institutional goals, staff motivation, human and material resources that facilitated innovations. Singh (1997) found that Institutions which adopted innovations were able to maintain them and frequently discontinued innovations were those that involved heavy expenditure for which training Institutions had to depend on other financing agencies. Patted (1992) concluded that lecture, assignment, discussion and seminar methods were used while case study and project methods were used as Innovative methods. Nagpure (1991) showed that Innovative methods like team teaching and models of teaching were rarely tried out in the Colleges of Education and about 30% Colleges of Education were found to opt for Population Education, Continuing Education and Distance Education.

A total 17 studies were reviewed on Innovative Practices in Teacher Education Programme. Out of 17 studies in India 8 studies by Joshi (1972), Buch (1975), Buch (1976), Buch (1977b), Buch and Mukhopadhyay (1977a & b), Buch and Roy (1977), Mani (1987) & Singh (1977) were conducted in Gujarat State, 1 study by Bhagia (1975) was conducted in Haryana State. 1 study by Buch, Yadav, Joshi and Mukhopadhyay (1976) was conducted in Maharashtra State. 1 study by Buch (1977a) and Buch and Sansanwal (1977) was conducted in Rajasthan State, 1 study by Srivastava and Kanti Mohan (1982) was conducted in Uttar Pradesh, 1 study by Mohanty (1984) was conducted in Orissa State, 1 study by Patted (1992) was conducted in Karnataka State.

The reviewed studies on Innovative Practices in Teacher Education Programme revealed that the pre-practice teaching preparation is the base on which the structure

of student teaching is laid. In certain States of India, the programme has not been found to be effective. It may be worthwhile to study various types of programmes being carried out for such a preparation, as well as, practice teaching programmes. Not only the practice teaching provisions are to be made, but, for its effective utilization adequate supervision, guidance and feedback are necessary for its effective utilization.

There was a need to find out the existing provisions for Teacher Education and what ought to be. It might be worthwhile to study the extent to which such provisions exist and suggest measures for their improvement.

It is evident from the review that all the 17 Studies in concerned sections were during 1972 to 1992. No recent study could be spotted on Innovative Practices in the Teacher Education Institutions of Gujarat State.

## **2.7. Implications of the Reviewed Literature for the Present Study**

Total 58 studies were reviewed in 5 different categories, namely, Studies on Teacher Education Programme, Studies on Teacher Education Curriculum, Studies on Specific Skills and Methods in Teacher Education, Studies related to Innovative Proneness of Teachers and Studies on Innovative Practices in Teacher Education Programme.

There were studies on relative effectiveness of teaching through Traditional Method and Innovative Method. Most of the studies used Survey method and tools, such as, Questionnaire, Observation Schedule, Interview Schedule, Rating Scale, Attitude Scale, Check List, Portfolio and Techniques, like, Interview and Participant Observation.

The studies reviewed on “Teacher Education Programme” revealed that the pre-practice teaching preparation is the base on which the structure of student teaching is laid. In certain States of India, the programme has not been found to be effective. It may be worthwhile to study various types of programmes being carried out for such a preparation, as well as, practice teaching programmes. Not only the practice teaching provisions are to be made, but, adequate supervision, guidance and feedback are necessary for its effective utilization.

The review of related literature revealed that most of the studies concentrated on the factors affecting the innovations, ICT integration, duration of the course, finance and resource availability, guidance, attitude and proneness of Teacher Educators, types of governing body, i.e., Government & Self-financed, Role of Headship, Curriculum,

Method of Teaching, Practice Teaching, Micro-Teaching, Team Supervision, Criticism of Lesson and Climate of the Organization.

The Studies reviewed on “Teacher Education Curriculum” revealed that the present Teacher Education Curriculum is too much theoretical. In fact, it is this large component of theory papers that has hampered the growth of practical and pedagogical aspects of the programme. This has in turn impeded the growth of Teacher Education. Most of the studies pointed out the drawbacks of the existing Curriculum of the Teacher Education Programme. It is encouraging to note that steps were taken by NCTE to rectify the defects and make the curriculum up to date to meet the requirements.

A total of 8 studies were reviewed on “Innovative Skills and Methods in Teacher Education” which mainly focused on Micro-Teaching technique in the controlled laboratory environment, skill integration in practice teaching and strategies implemented for the integration of skills & cooperative learning.

The studies reviewed on “Innovative Practices in Teacher Education Programme” revealed that the pre-practice teaching preparation is the base on which the structure of student teaching is laid. In certain States of India, the programme has not been found to be effective. It may be worthwhile to study various types of programmes being carried out for such a preparation, as well as, practice teaching programmes.

The literature suggested that the Teacher Education Institutions were lacking various things required to enhance its quality. In the last 2 decades a large number of such colleges have been opened in each State of India. With the quantitative increase the quality has reduced.

The reviews revealed that most of the studies employed survey and comparative methods to study the Innovative Practices. Keeping in mind the recent Innovations in Technology and Global Teacher Education, our Teacher Education needs to be enhanced in terms of, use of technology, Methodology for Curriculum Transaction and Practice Teaching. It is evident that there is a scarcity of research on Innovative Practices in Teacher Education. More researches are needed for implementing innovative practices in Teacher Education across the country. Hence, the present study has attempted to explore the Innovative Practices in Teacher Education.