CHAPTER III

REVIEW OF THE RELATED LITERATURE AND STUDIES

3.1 INTRODUCTION

The review of related literature is an essential part of a research project. Survey of related literature and studies implies locating, reading and evaluating reports of research as well as reports of casual observation and opinion that are related to the individuals planned research project.

Several studies have been made on the in-service education of teachers: in India and abroad. Very limited number of studies, however, could be found, attempting to find out comprehensively the effectiveness of the in-service teacher training programmes in the country.

In the present study, the selected literature and studies are presented in two heads- Related Literature and Supporting Studies. They are further divided into three levels-International, National and Kerala. Limited number of literature was found available from Kerala. The studies available from abroad were also limited.

3.2 RELATED LITERATURE

3.2.1 International Level

Nelson (1952) edited a yearbook of the National Society for the study of Education in 1957. According to him in-service

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education includes all activities engaged in by the professional personnel during their service and designed to contribute to improvement on the job. The professional growth may also be the result of activities or experiences initiated by the supervisory staff, by the public, by any combination, or by miscellaneous groups in the community. The major reason for in-service education is to promote the continuous improvement of the total professional staff of the school system. All teachers, administrators and supervisors must constantly study in order to cope up with advances in subjects matter and in the theory and practice of teaching. According to Nelson the need for in-service education are follows:

1. The continuous cultural and social changes which create need for curriculum change.

2. Pre-service education cannot adequately prepare members of the public school professional staff for their responsibilities.

3. The present and continuous increase of the number of teachers. the quality should be reduced.

4. Improved knowledge of teaching method

5. Improved attitude and skills involved in co-operative action research

6. General skills in utilizing community resources and in working with adults.
7. The development and retirement of common value and goals.

Eraut (1977) has referred to a British Government Committee, which suggested that the aims of in-service teacher education are to enable teachers:

(a) To develop their professional competence, confidence, and relevant knowledge:

(b) To evaluate their own work and attitudes to conjunction with their professional colleagues in other parts of the education service:

(d) To develop criteria which would help them to assess their own teaching roles in relation to a changing society for which schools must equip their pupils: and

(d) To advance their careers.

Singh (1985) investigated into the programmes and perspective of in-service Teacher Education. He concluded that many areas where the course was weak like lack of follow-up studies and evaluation of courses. The new dimensions included Mastery Learning Approach, Development of values working the community, Self-study skills etc. Training strategies need to be based on the variety of training situations including face to face interaction and distance learning to exploratory problem solving experiences arising out the role performance.
On the basis of the various reports on in-service teacher education submitted in various international conferences and workshops organised by 'Commonwealth Secretariat. UNESCO and its Asian Programme for Educational Innovation and Development' (APEID, 1986). Six objectives of in-service teacher education in developing countries of Asia including India have been developed.

1. Providing professional training and qualifications to untrained working teachers. Although majority of our teachers are inducted after obtaining a specified initial teacher training still there are some teachers in certain states who were appointed without any prior training for teaching. For them there is a legitimate need for providing a first level in-service teacher education programme.

2. Upgrading the qualifications of serving teachers whose original qualification may have been rendered out of date by educational changes and by reforms in the teacher education process. No country in the world can afford to ignore this purpose of in-service teacher education. The process of improvement and change in teacher preparation programmes is continuous and, therefore, it demands that in-service teacher education activities should always continue to pay attention on this objective.
3. Arranging refresher courses particularly to familiarise teachers with modern practices being encouraged in the schools. Every school seeks to improve the competence of teachers in their teaching subject and in practical teaching skills. The need to update teachers in production of teaching materials, use of audio-visual aid and application of evaluation techniques is widely felt across the country.

4. Disseminating specific educational innovations such as curriculum change, introduction of socially useful productive activity and work in schools, population education and teacher participation in non-formal education of children in deprived sections of society etc.

5. Amelioration of quality of educational management and administrations at all levels is an important goal of in-service teacher education. This may involve retraining of teachers to enable them to take up new responsibilities outside the classrooms for which their earlier training and experience may not have prepared them.

6. Improving the quality of teacher education. There is growing emphasis on the needs for continuing training of the teacher educators themselves.
Kiwia (1994) describes and discusses in-service training course conducted in Tanzania 1984, with the objectives—

(i) To keep abreast with the developments in the teaching profession
(ii) To cope with knowledge explosion in the teachers respective subject areas.
(iii) To fill in the knowledge explosion in the teachers professional teaching.
(iv) To refresh teachers in their areas of specialization and indeed to relate their experiences, encounters, discoveries and any other interesting development in the course of their individual and group careers.
(v) To advance the horizons and competence level of those practising teachers of the sake of not only better performance in the field but also for higher academic awards.

Myers and Simpson (1997) discussed about Revising Teaching and Professional growth. According to them teaching as professional practice and teachers as professional practitioners. According to him, school as the centre for teacher learning and teaching as investigative problem identification, problem solving, and a culture of inquiry.
Teacher as scholar practitioner

In his view, professional knowledge included-(1) Subject matter content knowledge (2) Pedagogical content knowledge (3) Curricular knowledge (4) Technical knowledge (5) Practical knowledge (6) Tacit knowledge

Professional knowledge constructed from practice and in the context of use.

According to him teacher education needs to be re-conceptualised. Instead of being the delivery of ideas, competencies and values to teachers, it needs to be thought of as the helping of to educate they are pledged to serve. To the extend that teaching is professional practice. Investigative problem identification and problem solving teacher educators need to be co-problem solvers and co-investigators. To the extent that professional learning is a matter of intellectual construction, to educators need to be constructors and co-learners. To the extent that schools are learning communities, teacher educators need to be professional participants - committed fully to serving the schools 'mission'.

Saeed (2000) discussed the various aspects of initial and in-service training of school teachers in Federal Republic of Germany, France and United Kingdom. According to him in-service Training helps teachers to meet efficiently the contemporary demand on their
knowledge of subject matter, teaching skills and to ensure that schools can fulfil their mandate to educate children. In United Kingdom the aims of in-service training as laid down in the legislation are: (a) to enable teachers to reflect and develop their teaching practice throughout their professional life: (b) to support teachers in the preparation and implementation of their individual school development plan. (c) to support teachers in the implementation of curricular and other reforms in the education service: and (d) to prepare teachers to assume additional responsibilities associated with specific posts for which they may wish to apply.

In England and Wales teachers take part in-service training at any time in their career. The statutory conditions of service provide for all full-time in their career. The statutory conditions of service provide for all full-time teachers to have at least five working days a year when they are not required to teach pupils.

The major areas of in-service training courses of Federal Republic of Germany were (a) a subject area (b) a type of school (c) particular functions (d) particular individuals

Some topics of special emphasis include: nature conservancy and environmental protection, intercultural learning, health education, new technologies and career counselling. Schools
sometimes assess in-school in-service training programmes on the basis of questionnaires completed by participants.

In France in-service training programmes are assessed in a variety of ways depending on their content. They affect the careers of the participants in different ways. The participants have to appear in an examination after each in-service training which entitle them to a qualification.

Joint Innovative Project on In-service Training of Primary Teachers undertaken by the UNESCO Regional Office for Education in Asia and the Pacific (ROEAP). Bangkok under the APEID during 1980-81 analysed differences in the objectives of in-service education and grouped them in the following categories:

1. Improvement of personal skills. It covered communication skills, content of learning areas, attitude and values toward teaching and the teaching process: commitment and performance standards, knowledge of current issues and broad knowledge of one's mission in life as a citizen and as a professional:

2. Upgrading of professional competence. Those related to the teaching/learning process, research orientation, problem solving, curriculum, curriculum development, planning and development of educational programmes, evaluation and others:
3. Knowledge and teaching of learning areas. Ethics education, social studies, agriculture, values education and others:

4. Curricular modifications. Changes due to rising demand brought about by social and technological change:

5. Problem solving. Areas such as drop-outs, low achievement, repetition rates:

6. Developing familiarity with innovative projects:

7. Operation of management and in-service education programmes:

and

8. Advancement of individual teacher's experience as a professional.

3.2.2 National Level

Hightower (1956) lays down some principles which should form a part of the fundamental philosophy of teachers and the in-service education programmes should endeavour to promote them among teachers.

These principles are:

1. Teachers must grow continuously in their own persons to expect their pupils to grow.

2. A teacher must believe that every child in her room can learn.

3. Teachers should recognise that their pupils differ in ability and achievement level.
4. Teachers must be able to adopt themselves to the changing conditions and the resulting changes in the needs of young people.

5. Teachers must know as much as possible about how a child learns, grows and develops.

6. Teachers should know that growth and welfare of the community is a part of the total school programme.

7. If teachers are to contribute to the welfare of the democratic way of life, they must administer their classes democratically.

Buch (1968) suggests that if schools are to improve the only programme that can steer such an improvement programme is a well planned programme of in-service education through competent teacher educators on the one hand, and enlightened administration on the other. According to him, the teacher training institutions should accept their responsibilities for assisting the in-service stage of teacher training.

According to Buch the following are some major assumptions on which in-service education is based.

1. It is impossible to conceive of pupil growth without teacher growth. The teaching profession cannot became or remain vital dynamic, adjusting entity without the pupil involved continuing expanding both their understanding and their effectiveness.
2. The maximum pupil growth is co-related with effective teacher growth.

3. All attempts to improve education through the provision of better facilities, better programmes and better teaching aids can prove effective only if the teacher is kept professionally alert and academically sound.

4. Pre-service programme does not and can fully prepare a person to function adequacy as a teacher.

5. It is always possible for practising teacher to become a better teacher.

Jangira and Mukhopadhyay (1987) pointed out that Educational Administrators and Heads of Institutions should be given an orientation of three days. The programme should include special needs concepts as an integral component of teaching all children in the classrooms, planning and management facilities to meet special needs, organisational support to facilitate these programmes, organisation of staff development activities and co-ordination support from other relevant departments and agencies.

Aggarwal (1988) has given the following aims of in-service teacher education.

1. To maintain the knowledge and skills of teachers
2. To give teachers the opportunity to enlarge and improve their knowledge and educational capacities in all fields so their work.

3. To make teachers ready and able to understand and face in time the situations coming up in society and to prepare their students for the new economic, social or cultural challenges.

4. To enable teachers to gain additional qualifications and to develop their special talents and dispositions.

5. To raise the cultural and professional standard of the teaching force as a whole and strengthen its innovative vigour and creativity.

Shukla (1988) opined that in-service teachers training has promising significance and through it

(a) the teachers whose initial training offered through pre-service teachers training courses has failed to provide with the confidence that they require, can be benefited by increasing their confidence level.

(b) the older teachers who have reached the stage at which they feel that their earlier training has become out of date and ill-adapted to present, changed conditions and who need to refresh their knowledge and to refurnish their skills, can be profited to achieve their objective.
the weaker teachers seeking help for coping with their assigned responsibilities can improve themselves: and

d) the teachers who are looking for avenues to promotion, become successful and confident.

Neshla (1988) pointed out the following suggestion, will go a long way in chalking out a plan of action for getting the derived results of in-service training.

1. There must be a systematic, continuing and objective assessment of the need and demand.
2. There must be effective consultation with teachers in every type of school and college
3. The existing training structure for teacher education must be reformed drastically it not replaced by a completely new one.
4. In-service education must be voluntary so that interested candidates can be brought to the field who, after going back from the centre, may be able to work according to the newly designed plan.
5. Proper incentives should be given to the teachers.
6. Educational research and development must be totally integrated with in-service education.
7. These programmes should have advanced courses and should not be more repetitive. There should be challenging in nature and
content and incorporate latest information concepts, process and methods, modes and procedures.

8. These programmes should be organised at strategically located centres in a region so that all could take advantage of them.

9. There should be a proper co-ordination among the various agencies providing in-service education.

10. Enough financial aid should be provided by the State Government to run in-service programme effectively and efficiently.


The main objectives of the report were: (i) to study the programme inputs (key persons, resource persons, physical facilities of training camps, curriculum transaction, use of media and quality of guest lecturers) (ii) to study the effectiveness of learning packages including awareness of NPE components, learner-centred approach, use of media and continuous comprehensive evaluation (iii) to study the various innovative practices followed by the resource faculty and participating teachers (iv) the study the follow-up study of the teachers oriented and opinion survey of Principals with regard to the performance of teachers oriented (v) to study implications of the
evaluation study with a view to re-designing and restructuring the in-service training in the subsequent years.

The main findings of the study were: 1. The younger participants were found to be more active, resourceful and participating in the programme. 2. The physical facilities like toilet, water, light, seating arrangements were satisfactory only at some of the centres. 3. All the modules were not self-explanatory. They were unable to generated motivation and develop competencies and skills in the teachers. The resource persons did not discharge their duties and responsibilities with the needed sense of commitment, devotion and involvement. (4) 'Lecture' and 'Discussion' methods were largely followed. (5) Telecasts from Delhi Doordarshan were not used profitably by the teachers. (6) Selection of guest lectures and deliberations was found to be ineffective. (7) Accommodation facilities for the teachers in the hostels were inadequate. (8) There was a significant change in the perception of teachers in respect to general awareness topics (9) There was a considerable increase in the awareness with respect to salient features of NPE-1986 and modalities of curriculum transaction etc. (10) In the area of competency and skill development in curriculum transaction modalities, there was no significant increase in outside classroom activities. (11) There was
increase in the activities and functions of the oriented teachers in the school.

Jangira and Ahuja (1990) studied the effectiveness of cooperative learning based training in an in-service training programme for teachers. They concluded that the ultimate effectiveness of the training would be determined by the change in perception of children about teacher and teaching and improvement in their attainments.

DIET (Namakkal, Salem District, Tamil Nadu). (1992) conducted a Research Project on Developing a Plan for In-service Education of Elementary Teachers at District Level. (This research project was submitted in part-fulfilment of the requirements for the diploma in Educational Planning and Administration of the NIEPA).

The main objectives of the study were: 1. To identify the expectation of a DIET at grass root for in-service education of teachers. 2. To review the present status of in-service education in the selected DIET since its establishment. 3. To identify the gaps between the planned targeted and the actual situation. 4. To study the possible reasons for the lapses. 5. To develop a plan for in-service education of teachers with the existing frame-work.

The major findings of the study were: 1. Most of the teachers desired to have continuing education/ refresher course in school. 2. Little importance was attached to national goals like UEE and
MLLs. 3. No effort was made to involve teachers in the planning, evaluation and follow-up of in-service programmes. 4. Educational administrators were not convinced by the quality improvement in teachers after in-service programmes. 5. There is no difference in teachers' attitude towards teaching profession after training as per administrators' opinion. 6. DIET, too cannot meet the demand for in-service education at district level. 7. Funds provided were inadequate for DIET. 8. There are no attempts so far at the state level in training all the teachers at elementary schools within five years. 9. So far no attempt was made to identify the teacher's need at district level.

National Advisory Committee headed by Yashpal (1993) enlisted about pre-service and in-service teacher education. In the context of constructing a new self-image of the teacher pre-service training is a key but elusive area of reform. Past attempts to improve teacher training programmes and institutions have met with rather limited success. By and large, teacher training continues to be isolated from mainstream academic areas related to education. In-service training too in most of the place, has assumed the character a ritual devoid of academic substance or the capacity to stimulate. The current efforts to provide statutory status of the NCTE may perhaps make some impact on the weak training that is generally available in the country to people, who want to work with children, especially young children.
According to Kishore (1994) the main purpose of in-service education is to help the teacher to acquire the knowledge, competencies and skills required performing his changed role effectively and it must upgrade the teachers' subject matter competencies as well as improve his teaching method.

Jangira et al. (1995) conducted a study on Teacher policy.

Training needs and perceived status of Teachers.

The specific objectives of the study were

- Document and analyse state policy on teacher training, their recruitment procedure, transfer policy, demand and supply, initial and in-service training etc.
- Document and analyse infrastructure facilities available at the district level for initial and in-service training.
- Study perception of teachers about their social economic and professional status.
- Identifying training needs of teachers.

Survey was the methods of the study.

The following facts were developed for collecting data

1. State policy on Teacher Training Guidelines
2. Schedule of SCERT Faculty
3. Schedule of District/Block Education Officer
4. Training Institute information schedule
5. Teacher Schedule

The important findings of the study were the following:

Teacher’s perceptions about their initial training programmes were ascertained. About 30 percent teachers in Haryana and 40 percentage in Kerala expressed that the initial training which they received was not satisfactory. In most of the districts less than 50 percent teachers could get an opportunity to undergo in-service education once during the last five years. The low coverage of in-service training programmes in the districts is due to funds and the absence of a conscious policy.

The following areas were mentioned by the teachers for in-service training. (a) content of school subjects(b)method of teaching (c) multi-grade teaching (d) play way techniques for teaching (d)preparation and use of improvised teaching aids

Most of the head teachers expressed that they need training in the following areas: (a) General administration (b) Providing instructional support to teachers (c) Team building (d) Seeking community support

Anjaneya (1996) attempted a study on ‘An investigation into the impact of Training on teachers in the implementation of six learning principles of APPEP’. The objective of the study was to find out the changes in APPEP schools after training and the difference
between children is learning in APPEP and non-APPEP schools. The sample consisted of 10 teachers and 100 children from same APPEP schools for experimental group and same number of teachers and children from non-APPEP schools for controlled group. The study showed a lot of difference in the activities of teachers and children's learning in experimental and control groups. That difference in experimental schools was due to the impact of training.

Govinda (1996) described the importance of teacher education and professional development. According to him teacher educators should help teachers to develop their insights into the practical theories which structure their practices. Professionalism could only be developed on an ongoing basis through experiences and experimentation. Training only help one to feel more confident as a teacher. Teachers professional development, within and outside classroom is a product of their reflective ness and participation in educational opportunities, that will enhance and extent their growth and development. In addition, professionalism among teachers is built through a support system from colleagues.

Arora et al. (1997) has conducted a study about E.K.Lavya's Content Specific Activity Based Training of Primary Teachers. E.K.Lavya, a non-governmental organization started training of primary teachers from 1986. The main objectives of training were to:
fine-tune the skills of learning by doing approach
- enrich teachers knowledge in different subjects
- develop teacher’s capability in undertaking action research

Salient features of the training methodology are mentioned below:

- The training of primary teachers is through 3 tier cascade model. Training is first imparted to key persons who in turn provide training to resource persons. These persons provide training to primary teachers.

- The training of key persons and the Resource Persons is as rigorous as of primary teachers. The duration of training of key persons and resource persons is of 10 days and that of primary teachers is 15 days.

- In order to minimise the transmission loss, the gap between training of key resource persons and that of resource persons and between the training of resource persons and that of primary teachers is almost zero.

- The training is activity based. This is achieved by
  - use of waste materials, local resources
  - asking teachers to read aloud the training materials one by one and also encouraging them to explore activities which they can perform in the classroom.
  - providing training in simulated conditions
encouraging individuals for effective thinking.

Gupta (1997) described the role of NPE in In-service Education.

In-service education has also been envisaged in NPE (1986) as a requirement of all teachers to undergo a course in every five years to keep them in touch with the changes in education.

The orientation course for in-service programme may include UEE, Curriculum Planning, Curriculum transaction, evaluation, action research, use of media, NPE and adult education, programme, evaluation. This is a suggestive design but there can be other areas such as education for slow learners etc. In-service programmes will be run by different levels of the structural in teacher education (SCERT, IASE, DIET and S.T Schools) for different levels of beneficiaries and/or using school based in-service education programme for teachers.

For systematic in-service training and orientation of teachers frequent interaction among teachers within a school complex on problems relating to teaching and learning: newsletters, magazines for use of teachers containing innovative ideas and school related issues: organisation of summer school: orientation programmes: exposure to resource centres: availability of distant learning and supportive system in terms of leave and fellowships will have to be undertaken to bring quality improvement in teacher education.
Panda (1997) described the importance of DIETs in Teacher Education.

The DIET which occupies a corner stone in the hierarchical structure of Teacher Education is located one for each District and are staffed with deviations from the norm recommended by the MHRD. In most cases round pegs are fitted in square holes. Thus in spite of the best efforts and constraints they are able to organise pre-service Teacher Training Programme for elementary school teachers (50 in a batch) and are organising a couple of in-service teacher training programmes. The expertise and infrastructure facilities being limited, the quality of output is obviously questionable. The DIET which occupies a pivotal place in the scheme of Teacher Education needs to be strengthened by competent personnel fairly of longer tenure and after being exposed to the roles and functions of the DIETs.

NCTE (1998) found out the objectives of competency based in-service Teaching Education.

An in-service competency based teacher education course will enable the teacher to (a) understand the cultural and socio-economic background of elementary school pupils (b) develop an insight into the problems of elementary education and acquire competence to solve them (c) comprehend the importance and concept of Minimum Levels of Learning for improving quality in school education (d) understand the
concepts of cognitive and subject structure and their relationship with children's learning.

(e) compare the ways and means of promoting learning under traditional and competency based teaching and make changes wherever necessary

(f) evaluate planning and implementation of co-curricular and other educational activities and modify the same

(g) develop understanding about the ways of procuring and using teaching learning materials to encourage guided/independent self-learning among pupils.

(h) use evaluation for continuous feedback of pupils with a view to assisting them in achieving expected level of mastery:

(i) understand principles and practices in getting others cooperation inside and outside the school

(j) develop partnership with parents in facilitating development of pupils

(k) seek co-operation from the community and various other developmental agencies to make school a centre of development of the locality.

(l) strive to attain professional excellence and follow basic values

(m) make sincere efforts to practise a value based approach

Dhar (1999) described and discusses about the various aspects of in-service training programmes. The content of in-service education has been determined by the perceptions of educational policy makers and administrators most of whom have no professional competence to conceptually visualize what in-service education should aim at. These 'orientation' lead to hardly any tangible benefits whether
orientation of teachers aims at policy awareness of alternative modalities of such orientation programmes, such as print and non-print materials, is never debated.

NCTE (2000) in its report pointed out the issues and weakness of DIETs in Kerala. All DIETs possess qualified principals, senior lecturers and lecturers with M.A. M.Ed. having minimum of three years teaching experience. They are good at organising camps, processions and other similar programmes. But their professional capacity as teacher educators needs to be improved in respect to teaching ability and doing research. Competencies expected of a teacher educator need to be improved in certain cases as many of them have acquired their professional degrees (B.Ed./M.Ed.) through correspondence courses. Teachers are recruited on the basis of merit and interview by a special board constituted by the Government. All DIETs are run by the Government of Kerala. Most of the staff in the DIETs are deputed for seminars, workshops, conferences and also orientation programmes organised by NIEPA, NCERT, SCERT etc. A few teachers participate in the development of instructional materials and teaching aids. The DIETs organise various programmes of the Department of Education and District Primary Education. They have provision to orient teachers in Operation Black Board, Minimum Levels of Learning and establishing a relationship with community. The staff
are entitled to join schemes such as provident fund, insurance, etc. and have the benefits of availing. House building advance, vehicle advance, and medical assistance. Five DIETs have quarters for Principals, teachers and administrative staff. The overall percentage of such facilities varies between 40-60.

Inculcating professionalism among the staff, training DIET staff in the use of hardware and software of educational technology for in-service and pre-service teacher education are some of the main issues. The weaknesses of DIETs include lack of books for libraries, computer operators, statistician etc. So far, they are not in a position to ensure co-operation of the community in all their activities.

Intensive training in teacher education curriculum construction and transaction is very essential. Certain teachers in DIETs, among the vast majority, feel that they are capable of doing everything, even the preparation of curriculum without an understanding of the principles of curriculum development through tasks like text book preparation is of serious nature.

At present, there are no programmes for institutional development. But some programmes such as financial autonomy for DIETs, provision of infrastructure facilities, co-ordination with local bodies, making staff more resourceful to meet the challenges of primary education have been suggested.
3.3 SUPPORTING STUDIES

3.3.1 International Level

Rellin (1949) in his study found out the following five as most important objectives of the in-service teacher education programmes:
(a) To promote professional growth for efficient teaching
(b) To familiarise teachers with subject matter and sources
(c) To stimulate self improvement among teachers
(d) To equip teachers for leadership in the community
(e) To orient new teachers to be effective on their jobs.

Pires (1962) conducted a study of the In-service Training of Primary School Teachers in Asia. He found out that following objectives are in view one or the other country, while organising in-service education programmes:
1. Upgrading the professional knowledge and competence of teachers
2. Extending the general education of teachers
3. Enhancing the qualification of teachers in-service
4. Providing opportunities for teachers to obtain increments in salary
5. Raising the morale of teachers
6. Improving public relations
7. Providing training in community living.

Pradhan (1966) found the following aims and objectives of the in-service education programme in the Philippines:
1. To upgrade the quality of education
2. To demonstrated instructional, administrative and supervisory techniques and practices which are found effective.
To offer opportunities to teachers for professional growth 4. To help new teachers to get acquainted with new rules and regulations pertaining to their vocation. 5. To develop evaluation criteria for assessing the outcomes of in-service education. 6. To stimulate teachers to conduct action research 7. To develop leadership 8. To demonstrate new practices on methods of teaching.

Chilana (1971) conducted a study on the Practices and Trends relating to in-service Education of teachers in Asia.

The objectives of the study were to examine the various Programmes related to the in-service course and to find out the problems of untrained teachers.

The findings were that the Programmes of in-service education of teachers in Indonesia have so far been granted to solve the problem of untrained teachers. There was a need to organise courses for all types of teachers in future. The existing teacher training institutions should discharge their functions in the form of extension service to nearby schools.

3.3.2 National Level

Layug (1961) revealed in his normative study of the five-year in-service education programme of public elementary school, that administration and supervision, teacher-pupil relationship and public
relations were among the most important subjects treated in the in-service education programmes. Among the different techniques used were teacher’s meetings, inter-school visitations, informal discussions, demonstration classes, seminars and open forums etc.

In his study on Growth and Organisation of In-service Programmes in India and its Impact on Secondary Schools (1966) Srivastava tried to focus on the history of in-service teacher education in India from its inception till date and gathering its material from scattered sources. It had revealed that the attitude of the teachers towards the profession as well as towards the extension programmes stabilised after attending four extension programmes. The improvement was rapid.

Shankar (1969). Conducted a study on the impact of extension services department on school improvement in Haryana Department of Education. The study revealed that (i) 70% of headmasters and teachers thought that the extension services proved useful in making the knowledge up to date and increasing the efficiency of teachers and in changing their attitudes and outlook towards teaching. (ii) The extension Services work enabled the teachers to start experimental projects and also to coordinate the work of different schools. (iii) A fair majority felt that the various activities undertaken were organised by keeping the needs of schools in view and thereby
helping heads and teachers in making classroom teaching effective. (iv) As a result of extension programmes, heads and teachers started taking more interest in school work by organising subject clubs, projects and the like. (v) Teachers generally did not use teaching aids available in the extension department. (vi) Teachers read publications of the extension department with interest and found them useful. (vii) Teachers were not interested in seminars. (viii) The extension department failed in 'follow up' work as they were unable to chalk out any concrete programme to assess their activities. (ix) Heads, teachers and coordinators felt that the expenditure of the extension service work did yield sufficient return in terms of improvement in schools. (x) With regard to making the department more useful and effective many felt that heads and teachers should be made aware of the facilities available and programmes drawn keeping in view the needs of local schools which could be known from heads and teachers. (xi) There was a greater need for more follow up programmes to assess the implementation of new ideas, methods and techniques.

State Institute of Education (Maharashtra) conducted a study of the in-service training needs of Headmasters of rural primary schools in Poona, District Poona (1971).

The main objectives of the study were to find out the in-service training needs of headmasters in their academic and
administrative work and to collect data for preparing a programme of in-service education and training for Headmasters.

The importance of the study was that more than 50% of the Headmasters needed practical knowledge in general science. One third of them desired to have knowledge in mother tongue, grammar and Mathematics. The percentage of teachers desiring to get knowledge of special methods in Hindi was higher than that of other subjects. The Headmasters were asked to denote the areas in which they needed sufficient knowledge so as to guide their assistants. The four areas were given in the order of preference. (a) Improvement of present examination system (b) Problems of schools discipline (c) Methods of teaching different subjects and (d) Presentation of teaching aids. The Headmasters thought that the knowledge regarding the maintenance of the five records were essential. (a) General (b) Examination results (c) School repair records (d) Log book (e) Annual report. The Headmasters felt that these subjects should be included in the in-service teacher education programme. (a) HMs powers and duties (b) Relation between the Headmaster and his assistants (c) School inspection and its methods (d) Relation between school community and workers in educational field (e) School organisation. To an open ended question regarding their difficulties more than 10% Headmasters reported the difficulties such as (a) Inadequate school equipment (b) Inadequate building (c) Non-
cooperation of parents (d) Inadequate staff (e) Non-cooperation of local leaders (f) Non-cooperation of assistants and (g) Non-availability of subject teachers.

Devaraj and PavanaSam (1972) conducted a study on the In-service educational needs of secondary school teachers.

The objectives of the study were: (1) To find various In-service educational activities in which the teachers participated (2) To find the reactions of the teachers to the various programmes. (3) To get the suggestions they have to offer with regard to the conduct of such programmes.

The findings were that majority of the teachers preferred seminars as the means of In-service training Programmes for teachers. Other Programmes receive only secondary rank. Only four Programmes - seminars, courses, workshops. Audio-visual services were popular among the teachers.

Summer holidays seem to be the best period for In-service education. Teachers prefer short terminal vacation period and week ends also for this work. Headmasters should supervise the follow up work undertaken by teachers who had undergone training. Some preferred changing the methods according to the classroom situation and facilities available in the school. According to the views expressed
In-service education in the teaching of language should get highest priority. Next in rank came elective subjects and science.

Gupta (1979) has conducted a study of the in-service Training needs of the Secondary Teacher Education.

The objectives of the investigation were: (i) to study the relationship between the qualification and the in-service education proneness of secondary teacher-educators. (ii) to study the relationship between the professional experience and the in-service education proneness of secondary teacher educators. (iii) to identify the type of in-service education courses preferred by secondary teacher-educators in view of the emerging curriculum changes at the school level and the corresponding changes in the teacher-education curriculum. and (iv) to identify the specific units under each of the curricular areas identified at (iii) above. and (v) to study the congruence between the qualifications and the instructional allocation.

The findings of the investigation were: (i) There was some measure of association, though not very strong, between the qualifications of secondary teacher-educators and their in-service education proneness (ii) There was a small measure of association between the teaching experience and the in-service education proneness of teacher-educators. (iii) In view of the emerging curricular changes at the school level and subsequently at the teacher-education level, the
in-service education courses required by secondary teacher-educators were identified: (a) socially useful productive work. (b) vocationalization. (c) working with the community. (d) non-formal education and (e) pedagogical and methodological subjects. (iv) By and large, there was congruence between the qualifications and the instructional allocation, except in the case of those secondary teacher-educators who were involved in the teaching of Methodology of Teaching Geography, as they did not have any degree in geography.

Mama (1980) conducted a study of the impact of In-service Education on Teachers in the State of Maharashtra.

The main objectives of the study were: (a) to examine the concept of in-service education. (b) to find out the academic and recreational reading habits of teachers. (c) to find out the opinion of teachers on in-service programmes. (d) to examine the facilities offered to teachers to attend in-service education programmes. The survey method was used for the study. The tools used for data collection were questionnaires prepared for the principals of Colleges of Education and the principals and teachers of secondary schools and an interview schedule for experts in education and principal and teachers of secondary schools. The final sample included fifty principals of colleges of education, with 5 percent of the principals in secondary schools and 50 percent of the teachers in each of the selected schools.
The main findings of the study were: (i) Of the fifty-one teacher education colleges in the State, twenty-six ran extension centres. (ii) Little importance was attached to in-service education. (iii) The colleges of education conducted a variety of programmes, most of which dealt with subject matter, planning of tests, evaluation and audio-visual aids. (iv) No effort was made to involve teachers in the planning, evaluation and follow-up of in-service programmes. (v) The school teachers had no access to the college libraries except while participating in in-service programmes. (vi) In-service programmes were run as weekend courses. (vii) Adequate communication did not exist between the colleges of education and the secondary schools. (viii) Control of in-service programmes was in the hands of the school principals. (ix) The teachers were sometimes prevented from attending in-service programmes by the principals. (x) The concept of in-service education was not clear to the teachers.

SCERT (1980). (Andhra Pradesh). conducted a study on Evaluation of In-service Training of Secondary School Teachers in Science Teaching Centres attached to the Colleges of Education in Content and Methodology. The study was done to evaluate the in-service training programme run by the science teaching centres with respect to academic and administrative aspects. The training programme of one month duration. The findings of the study were: 1.
The proportion of participants who understood the concept, principles and facts was 50 percent in physics, 64 percent in chemistry and 45 percent in biology teaching. 2. Participants indicated that many of the concepts were dealt with in an impressive manner in physics and biology. 3. The demonstrations were conducted in different units satisfactorily. 4. The explanatory aids were not used satisfactorily in the classroom in biology teaching. 5. Many of the participants felt that the laboratory techniques employed during the training programme were useful to improve professional competence. 6. The course was useful in teaching in the classroom and many simple techniques were given to make improved apparatus for teaching science. 7. The duration of the course was quite short. 8. According to participants, time devoted to practicals was not satisfactory. 9. Though the course had high academic value, the syllabus prescribed for teaching in the schools was very heavy. Some of the topics prescribed in the syllabus in biology were not relevant to the age group of the students. 10. Several activities and projects undertaken during the training programme made many participants enthusiastic to undertake such projects in their schools also.

Singh (1980) conducted a critical study about the programme of the pre-service and In-service Education of Teachers of Higher Education in India.
The objectives of the investigation were: (i) to study the needs of pre-service and in-service education programmes as felt by the university teachers. (ii) to study the objectives of the pre-service and in-service education programmes as they were being conducted by various institutions. (iii) to study the pre-service and in-service programmes in terms of their types, duration, syllabi and methods of teaching. (iv) to seek the opinions of the participants regarding the evaluation of their performance in the programmes and the usefulness of the programmes. and (v) to develop a syllabus for training teachers of higher education.

The sample consisted of 512 university teachers, including pre-service, in-service and untrained teachers, from different universities. Sixty-five experts, who were concerned with these programmes or those who taught at M.Ed. level, were requested to give their opinion about the syllabus for training programmes. The deans, heads, conveners and the directors of the institutes were interviewed. Data were collected with the help of two questionnaires prepared by the investigator and a semi-structured interview schedule also prepared by the investigator.

The major findings of the investigation were: (i) The programme was helpful for the pre-service, in-service and untrained teachers. (ii) The main aspects helpful to them in their situations. (ii)
Students desired more autonomy for decision-making and interpersonal cooperation or support for effective group action in the teaching-learning situations. (iii) Three basic elements which emerged into a characteristic pattern of tenth grade actual classroom could be described as (a) the individually interpersonal meaningful quest for personal cognitive outcomes rather than emphasising on group achievement in the imposed formal group structure. (b) the teacher defined learning directions for group actions. and (c) the apathetic attitude towards the reality orientation of social ideological awareness which was not conducive to striking a balance between theory and practice during the teaching-learning process. (iv) The classrooms of mathematics were generally characterized as co-operative supportive milieu interpersonally: The classrooms were oriented to the desired accomplishment of group tasks and the clarification of personal experience. (v) The authenticity aspect of tenth grade actual classrooms was significantly related to autocratic-democratic, harsh-kindly evading responsible, etc., characteristics of the teachers' classroom behaviour. (vi) An attempt was made to study the relationship between the A. L and P ethos in general and the fourteen dimensions of the teacher's morale in general. Out of the 42 relationships tested only one between 'productivity' and 'material and equipment' dimension of the teacher's moral was significant.
Raina (1981) has conducted a study on "A Factorial study of the personality, Attitudes to teaching and creativity of in-service and student teachers belonging to three subject areas". The pre-service science, arts and commerce teachers differed significantly in their attitude to teaching. The in-service teachers were highest on the factors of intellectuality, self-strength, environmental sensitivity, individuality, initiative and artistry as measured by the test of creative potential. The pre-service teachers were highest on intellectuality, self-strength, environmental sensitivity, individuality, initiative and artistry.


The project was undertaken with the objectives of (i) examining the plan of the training programme, (ii) ascertaining the existence of coordination among the organizations involved in the training programme, (iii) diagnosing the bottle-necks in the process of training particularly with reference to the administration of the programme, (iv) identifying the trend of the programme in terms of its utilization by teachers in different subjects, (v) getting feedback from the trained teacher/teachers undergoing training regarding different aspects of the programme and on the needs, problems and perception, (vi) ascertaining the relative use of different components of the training, (vii) evaluating the contribution of radio and correspondence
part of the training on the performance of teachers, and (viii) evaluating the entire programme in the light of the findings, and to suggest improvement.

The findings reported under specific aspects included: I. Planning: (i) There was need for in-service training programmes in Kerala. (ii) The majority of the trained teachers were not satisfied with the training they received. (iii) The training course in Malayalam was fast deteriorating. (iv) There was no comprehensive planning and implementation of the programme. (v) There was no scope for using the feedback from trained teachers to improve the programme from year to year. II. Organisation: (i) The coordination among the State Institute of Education (SIE) and the All India Radio (AIR) for science and mathematics and the SIE, the AIR and the Central Institute of Indian languages (CIIL), Mysore, for Malayalam courses was deteriorating. (ii) The organization of contact courses also suffered from lack of planning. (iii) The duration of the contact programme was inadequate. (iv) There was considerable delay in the supply of learning packets to the trainees, and there was no monitoring effect on the training programme. (v) The trainees were left to themselves for clearing their doubts. III. Learning Materials: (i) Learning packets, especially in science, were the most useful part of the programme, but they needed a lot of improvement. (ii) Though radio lessons were interesting and useful, all the trainees did
not listen to all the programmes. and the participants felt that the learning experiences in the contact programmes were inadequate. IV. Evaluation: (i) There was no effort to evaluate the project periodically. (ii) The grades awarded to the trainees were independent of the radio lessons. resulting in the redundancy of radio components. The majority of the trainees felt that there should be a proper examination at the end of the course. V. Responses of the Trainees: (i) A majority of them to learn the topics which they had not studied earlier. (ii) They felt that it improved the academic achievement of their students. (iii) They wanted that the learning packets should contain diagrams, figures, charts, illustrations, examples, and more units of learning. (iv) They felt that the duration was too short. though the programmes were interesting and useful. (v) They wanted that arrangements should be made to clear the doubts. and the contact programmes should be increased and should be interspersed during the training period rather than at the end of the programme.


The objectives of the enquiry were (i) to study the relevance of course content of the in-service training programme. (ii) to
study the relevance of activities of the in-service training programme to
the objectives of the training programme. (iii) to study the relevance of
improvisation techniques being taught in the in-service training
programme. and (iv) to study the attitude of in-service teachers towards
improvisation of science equipments for science teaching in secondary
schools.

The findings of the study were: 1. More than 60 per cent of
the participants felt that the course was good and acquainted the
teachers with new developments in science. 2. Most of the participants
felt that there adequate staff and individual attention were not given
during the course. 3. The participants felt that they could not attend the
course properly because of too much interference from the education
officers and other supervisors. 4. The participants felt that the course
was theoretically relevant but practically many of the problems of
science teaching in the classroom were not taken into account. 5. The
participants felt that the teacher-educators did not consider them as
equals but treated them as students. 6. The participants had a feeling
that even the teacher-educators were not fully acquainted with modern
concepts and development in science. 7. Most of the teaching activities
being practised by the participants in one way or another. 9.
Improvisation of the science apparatus was a good activity but it was
not fully relevant to the environmental set-up of the schools in which they worked.

Syag (1984) conducted a study on "Teaching competence of pre-service and in-service Teachers trained through different treatments of Microteaching".

The main objectives of the study were: (i) to find out the relative effectiveness of three different training approaches: peer feed back in the Standard Microteaching Group (SMT), peer-cum-audiotape feed back in the Modified Microteaching Group (MMT) and college supervisor feed back in the Traditional Student Teaching Group (TSP) upon General Teaching Competence (GTC) of teachers measured at different occasions during their pre-service and in-service stages.

The samples of the student-teachers was drawn from secondary school trainees studying in B.Ed.

The major findings were 1. Peer feed back in the SMT group, and peer-cum-audiotape feed back in the MMT group produced equal effect, but superior to that of TST group, on the development of general teaching competence and competencies in specified skills.

Purkar (1986) attempted a study on "The Effect of Microteaching on the training competence of In-service teachers and its Impact on pupils' attainment and pupils' liking".

The study was designed with the following objectives
(1) to study the effect of microteaching (MT) training on the development of selected skills. viz. Probing Questions (PQ). Reinforcement (RE). Explaining with Examples (EX) and Stimulus Variation (SV) among in-service teachers.

(2) to study the effect of MT training on the development general teaching competency (GTC) of in-service teachers.

(3) to study the effect of MT treatment of pupils' liking for their teachers.

The sample included 36 teachers and their 729 pupils from 17 schools. The pre test, post-test control experimental group design was employed in this study.

The findings were:

1. Microteaching treatment had a positive significant effect on the development of skills. viz. PQ. RE. EX and SV.

2. M.T. treatment had a positive significant effect on the development of GTC.

3. M.T. treatment had a positive significant impact on pupils attainment.

4. M.T. treatment had positive significant impact on pupils liking for their teachers.
The implications are I.M.T. should find a place in in-service teachers education programme. The procedure of M.T. training should consist of general orientation of M.T. technique.

Butala (1987) conducted a Critical Inquiry into In-service Educational Programmes conducted by Secondary Teachers Training Colleges of Gujarat State.

The objectives of the study were: (i) to study the existing position of in-service educational programmes in secondary teachers training college classified by types, organization, and factors affecting planning, (ii) to study the usefulness of in-service educational programmes for teachers, and (iii) to study in-service educational programmes according to the assessments of the participants, resource personnel and coordinators.

Some of the major findings were: 1. On an average, a college conducted about 33 programmes. The maximum number of programmes were conducted in 1982-83 and the minimum in 1984-85. 2. A majority of the teachers were not covered under any in-service programme. 3. Secondary teachers from Bharuch, Banaskantha, Amreli, Bhavnagar, Surendranagar and Kachchha districts were not covered by in-service programmes in a systematic way. 4. In one year, the average time spent by the secondary teachers training colleges for in-service education programmes was 231.4 hours. Programme-wise, the time
allotted was 6.9 hour per programme. 5. The main modes employed in the programme were lecturers, seminars and workshops. No audio-visual aids were employed. 6. The in-service educational programmes concentrated mainly on school curriculum. Very few training colleges focused on areas like educational technology, administration, management and modern trends in education. 7. The programmes of in-service education were planned by the advisory committee of the centre. 8. The teachers were in favour of in-service training programmes being organized on working days only. The second preference was summer vacations. Working on weekends was their last preference. 9. The training colleges did not have adequate facilities for conducting the programmes. 10. Teacher-participants considered an attendance certificate to be a proper incentive for participating in in-service programmes. They, however, desired that such attendance should be considered a necessary qualification for the purpose of promotion. 11. Most of the resource persons felt that a monetary allowance was the best incentive.

Sharma (1992) has developed "An appraisal of Accountability of Teacher Educators in DIETs in Haryana."

The study was undertaken with the following objectives:

- To identify the area of accountability of the teacher educators in DIETs in Haryana.
To study the difference between the perception about accountability and their actual performance.

To establish the teacher - educators attribution for the performance

It had been hypothesised that teacher - educator working in these pace setting 'teachers' training institution have been performing their job as per required and there is incompatibility between the perception about accountability of their actual performance. As per the finding of the present study only three branches of two DIETs are in operation PSTE, IFIC and W.E.

Aiholli and Sahoo (1995) studied 'Nature and forms of In-service Education for Secondary Teachers in the Karnataka State by 2005 A.D.'

The objectives of the study were

1. To forecast the types and forms of in-service education towards 2005.
2. To study inter-relationship among different training technology for in-service education towards 2005.
3. To study the in-service training for teachers to change their personality and behaviour in positive ways.

DELPHI is used in this study. It is treated as a popular method of conducting studies on nature and forms of in-service education. This is a method, through which the experts and experienced
teachers educators opinion are sought on different aspects of events of in-service programme through different rounds of survey. One questionnaire was prepared focussing on the objectives of the study. The population of the study consisted of the expert of DSERT and Teacher educators in the Karnataka. The final sample consisted of 40 experts and teacher educators.

It is revealed from the present study that in majority of the items the subjects have rated more to desirability than probability occurrence.

Major findings were: 1. The respondents expect the change in method of in-service education. The methods were focussed on 'Brain Storming' with 70.5 percent probabilities. where as to use the desirable methods with high probabilities read as workshop, project, symposium, self-study instructional materials. 2. With respect to acquaintance with new educational technology of in-service education 59.3 probabilities such as computer programming.

Ajit Sing and Anil Kumar (1996) studied about the training needs for primary teachers.

The objectives of the study were: 1. To analyse state policy on teachers - their training. transfer policy. service conditions, incentives for effective performance etc. 2. To assess adequacy of facilities for in-service education of teachers. 3. To determine training needs of
teachers. 4. To study perceptions of teachers with regards to their promotional prospects.

Survey method was adopted for this study. The main tool of this study was an interview schedule. The major findings of the study are given below:

1) In the most of the states, the minimum academic qualification for the post of primary school teacher is 12 years schooling. As such 59% matriculate teachers are under qualified. 2) The transfer policy of a State has a significant influence on the level of teachers' motivation. 3) Only 12% of teachers have attended short-term in-service training programme. 4) Teachers were asked to mention the areas in which they need training. Teachers reported that they need training in the content of school subjects, method of teaching and multi-grade teaching play way techniques for teaching.

The following were the important implications, which emerged from the study.

1) The DIET need to be urged to conduct studies to asses in service training needs of teachers working in area. 2) Further, the organisers of in-service training should consider the conditions of work place of teachers while designing in service programmes.
3) Studies need to be undertaken to determine the impact of in-service education on teachers' classroom practices and pupils learning achievements. (4) The state should formulate in-service education policy.

Ranganathan (1996) has developed "Research project on developing a plan for In-service education of Elementary Teachers at District Level".

The main objectives of the study were: (1) To identify the expectation of a DIET at grass-root level for in-service education of teachers. (2) to review the present status of in-service education in the selected DIET since its establishment. (3) to identify the gaps between the planned target and the actual situation. (4) To study the possible reasons for the lapses. (5) to develop a plan for in-service education of teachers with the existing framework work.

Methodology of this project was case-study.

Samples were 300 teachers and 100 participants in the comprehensive in-service course. The important findings were:

1) Most of the teachers desired to have continuing education/refresher courses in schools.

2) No effort was made to involve teachers in the planning, evaluation and follow up of in-service programmes.
3) Educational administrators were not convinced by the quality improvement in teacher after in-service programmes.

Sarada (1996) conducted a study on 'Effectiveness of Strategies Used in Developing Information Processing Skill Involving Thinking In Teaching of History'. The following conclusion may be drawn on the basis of findings. The strategies used in developing information processing skill involving are more effective than using traditional approach in teaching History. These strategies deepen the imagination and understanding of the students. These strategies also help the students in processing and organising information in meaningful compact structures which are in easily readable form.

Elahi (1996) conducted a study on 'A Critical study on in-service training of State Council of Educational Research and Training. This study related to evaluate of different aspects of in-service teacher education programmes of various educational functionaries organised by State Council of Educational Research and Training, Delhi.

Objectives of the study were: (i) to trace the factors which led to the establishment of SCERTs. (ii) to study the effectiveness of in-service education programmes undertaken by the SCERT, Delhi and (iii) to suggest measures for improving the working of SCERT, Delhi.

The sample comprised of 350 educational functionaries like principals, vice-principals, PGTs and TGTs who were selected by
random method of sampling from the five districts of Directorate of Education, NCT of Delhi. The tools used to collect data were questionnaires and information blank proforma. The collected data were treated with percentages and frequencies.

Major findings of the study were: (1) It was found that 44 per cent each PGTs and TGTs. 40 per cent Principals and 72 per cent Vice Principals were not satisfied with the weightage given to the general awareness aspects. (2) 41.33 per cent PGTs and 37.33 per cent TGTs considered that the pedagogical aspects was one of the weaker areas in the programmes. (3) 74 per cent PGTs and 62.67 per cent TGTs observed that the resource persons were dominating the proceedings. 72.67 per cent PGTs. 64.67 per cent TGTs. 72 per cent Principals and 60 per cent Vice-principals opined that they were satisfied to some extent with the approaches adopted by the resource persons. (5) 59.33 per cent PGTs and 33.33 per cent TGTs. considered that the material distributed was irrelevant and 64 per cent principals and 72 per cent vice principals observed that some of the material distributed were useful (6) 42% PGTs and 46.67 per cent TGTs. 52 per cent principals and 64 per cent vice principals considered the duration of the programme was too short. (7) 76.67 per cent PGTs. 70 per cent TGTs. 52 per cent principals and 72 per cent vice principals were happy with four sessions held in a day. (8) Regarding the duration of lecture. 81.33
per cent PGTs. 78 per cent TGTs. 60 per cent principals and 52 per cent vice principals considered one hour and twenty minutes time as appropriate. (9) 83.33 per cent PGTs. 95.33 per cent TGTs. 88 per cent principals and 52 per cent vice principals suggested that emphasis should be laid on group discussion and panel discussion respectively. (10) Regarding overall rating of the programmes 34.67 per cent PGTs. 52 per cent principals and 60 per cent vice principals opined average quality while 43.33 per cent TGTs observed good quality. (11) With regard to follow up of in-service education programme. 92 per cent PGTs. 96 per cent TGTs. 52 per cent principals and 64 per cent vice principals realised that they would be using new ideas/techniques learnt in the programmes.

Verma. Pushpa and Chabra (1996) conducted a study on 'Application of pedagogical knowledge and skills acquired in teacher training to school teaching by primary school teachers of Mathematics'. The study attempts to assess teachers' perceptions on the need to reform existing classroom instructional practices in small size primary schools. problems faced in doing so and way to resolve them.

Objectives of the study were: (i) to find out the extent of familiarity with the skills, strategies and devices during the pre-service teacher training and the extent to which teachers are able to employ the training competencies in their classroom practices. and (iii) to enquire
them into the difficulties and limitations of teachers in using their pedagogical skills and competencies in actual teaching of mathematics.

The sample of the study comprised 100 primary school teachers teaching mathematics. Schools were selected on the basis of the representative sampling keeping in view both rural and urban zones. Questionnaire and interview were used for the collection of data. The collected data were treated qualitatively.

Major findings of the study were: (1) Teachers had sufficient knowledge of subject matter and they did make an initial preparation for the course in advance. (2) Teachers tended to use predominantly one or two teaching techniques namely, illustrations and problem skills. (3) Most of homework given by the teachers originated from the assigned textbook and was checked by teachers. (4) Majority of the teachers were found having high professional qualifications than required, which led to the difficulties of handling all subjects by a single teacher.

Agarwal and Kamlesrao (1997) conducted a study on 'The quality of in-service teacher training programmes for primary school teachers-An appraisal study'. It attempts to study the quality of in-service training programme in relation to coverage of content and transactional studies and ascertain the extent of transmission loss in teacher training programmes.
Objectives of the study were: (i) To study the quality of in-service teacher training programmes in relation to coverage of content and transactional strategies and (ii) to ascertain the extent of transmission loss in teacher programmes.

Two groups of resource persons training and four groups of teachers of teachers trained under Special Orientation Programme for Primary Teachers (SOPT) and District Primary Education Programme (DPEP) projects in the State of U.P. and Haryana were randomly selected. Coverage of content and the mode of transactional strategies were observed using observation schedules.

Major outcomes of the study were: (1) Considerable amount of content was not transacted in the training programmes for resource persons under DPEP and SOPT programmes. (2) Further loss was observed at teachers' level as more content were left out. (3) Emphasis was on transmission of information and knowledge rather than on instructional strategies and activities. (4) Transactions during training were mainly through lectures and discussions. Groups work activities were too less. (5) The loss of information was more in SPOT than in DPEP training programme. (6) DPEP training programme, compared to the SOPT programme provided better quality of training in terms of more coverage, adoption of child centred activities and less loss of information.
Bhattacharjee (1997) conducted a study on conceptual model of teachers’ empowerment at primary level: Contextual issues, emerging paradigms and parameters. The focus of this study is on teacher empowerment issues at primary level. It attempts to highlight the emerging paradigms of primary education and identify an agenda for tomorrow’s child.

Objectives of the study were: (i) to identify the teacher empowerment issues at primary level. (ii) to highlight the emerging paradigms of primary education and implications for teacher empowerment. (iii) to identify agenda for tomorrow’s child. (iv) to highlight teacher empowerment strategies derived from empirical research findings on teachers’ empowerment issues at primary level. and (v) to develop a conceptual model of teacher empowerment highlighting its parameters.

The teacher empowerment issues and empowerment strategies at primary level have been derived from Baseline Assessment Studies in various districts of Assam, Madhya Pradesh, Maharashtra and Orissa and findings of empirical studies on training needs of teachers, teacher quality, teacher education curriculum, teacher’s role, teacher effectiveness and teacher’s motivation at primary stage.

Major outcomes of the study were that the conceptual model of teacher empowerment at primary level will help build
capacities in DIETs/ CTE/BRCs/CRCs to empower the teacher with modalities/tools/techniques/designs/guidelines to operationalize the multiple strategies to finally empower the learner. The teaching-learning process, the parents, the learning conditions, the community and to enlarge the canvas of institutional capabilities.

Khader (1997) conducted a study on 'A model for strategic planning of in-service training inputs for teachers. Objective of the study was to outline a model for using strategic planning approach in choosing training inputs in the in-service training programmes for teachers.

The model is formulated based on the evidence emerging from the analyses of field reality and available research studies. By critically examining the field reality in terms of the prevailing patterns of training, entry level qualification, duration size of teachers, pupil teacher ratio, multigrade and non-multigrade system of schools. The paper points out the need for adopting planning approach in designing training inputs.

Major findings of the study were: (i) There are evidences to the effect that systematic planning of training inputs-pedagogy and management strategies- facilitates teachers to perform their professional roles effectively. It means planning of training inputs did make a difference. (2) Indicators provided the framework for planning training
inputs by facilitating the selection of training inputs, developing materials, executing training and verifying whether they make any difference. Obviously, indicators provided a framework for formulating a data-based model in training by integrating development, training and research.

Kulkarni (1997) conducted a study on 'An investigation into the classroom management behaviours of teachers and its implications for the teacher training'. Objectives of the study were: (i) to identify factor structure of teaching behaviour in special context of classroom management, (ii) to study the classroom behaviour of teachers having effective and ineffective classroom management, (iii) to identify factors facilitating and hindering classroom management behaviours of teachers, and (iv) to enlist components of classroom management skill and draw implications of the same for teacher training.

The sample of the study comprised 840 students and 168 teachers of the higher secondary stage from Kolhapur city. The students were selected randomly. The tools used to collect data were Classroom Teaching and Managerial Behavioural Analysis battery (CTMBAB) by the researcher in Marathi, Teacher Behaviour Marathi, Teacher Behaviour Scale, Students Overt Behaviour Scale, and Student
Covert Behaviour Scale. The collected data were treated using factor analysis.

Major findings of the study were: (i) It was found that the various factors served purely instructional function were (a) General Lecturing Competency (GLC) covering questioning for feedback, closure, blackboard work, reacting, teacher's interacting personality, mastery over plan and content, (b) teacher's solicitation and reacting, (c) the linguistic competency deficiency, (d) the strict content building tendency, (e) teacher's mastery over plan and content and (d) modulating gestures and speech. (2) It was found that the various factors served purely managerial functions were: (a) general classroom management competency (b) instructive momentum, (c) controlled smoothness and (d) teacher's status maintenance. (3) It was found that the various factors served both managerial and instructional were: (a) GLC covering, set, induction, explaining and stimulus variation, (b) B.B. work for originated pacing, (c) socio-emotional permissiveness, (d) timely use of non-verbal media, (e) teacher's purposive physical movement and (d) teaching flow management deficiency.

Lakshmi Narayana (1997) conducted a study on 'Impact of in-service training on teacher empowerment with special reference to professional skills of primary teachers'.
Objectives of the study were: (i) to identify essential professional skills for teacher empowerment. (ii) to develop professional skill scale (PSS) and observation checklist for measuring professional skills of primary teachers. (iii) to identify professional skills of resource persons and teachers. (iv) to find out the discrepancy of professional skills between resource persons and teachers. and (v) to find out the differences of professional skills between APPEP (Andhra Pradesh Primary Education Project) trained and untrained teachers.

The sample of the study consisted of 200 teachers drawn randomly from five coastal districts of Andhra Pradesh. Forty-six resource persons, 115 APPEP trained teachers and 30 teachers not trained under APPEP were also included in the sample. Tools used to collect the data included Professional Skills Scale and Observation Check-list. The collected data were treated with ‘t’ value.

Major findings of the study were: (i) It was found that resource persons and trained teachers did not differ in the professional skills such as questioning, story telling, using different cards, investigating and experimentation using real objects, working with different cards, making models, recording individual work, group work, whole class work, identifying student potential, assigning tasks based on student potential, involving all students in teaching-learning activity, formation of heterogeneous groups, using local environment
and display of teaching-learning materials. (2) It was found that there was a significant difference between resource persons and trained teachers in respect of skill of comparison, observing and generating ideas through questioning. (3) Classroom observation results showed that there was significant difference between trained and untrained teachers in the skills such as questioning, story telling, using different cards, investigating and experimentation, using real objects, working with different cards, making models, recording, individual work, group work, whole class work, identifying student potential, assigning tasks based on student potential, involving all students in teaching-learning activity, formation of heterogeneous groups, using local environment and display of teaching-learning material. (4) It was found that trained and untrained teachers did not differ in the skills of comparison, observing and generating ideas through questioning. Trained teachers, due to lack of proper inputs during in-service training did not differ in these skills from their counterparts without training. (5) It was revealed that in-service teacher training helped many teachers in acquiring seventeen professional skills out of twenty skills. But in-service training did not empower primary teachers in these professional skills, viz., comparison, observing and generating ideas through questioning.

Mishra and Kishore (1997) conducted a study on 'Teacher empowerment issues related to development of local specific
competencies based curriculum at Primary level. It attempts to study the effect of module to empower the primary school teacher in developing local specific competencies based curriculum.

Objectives of the study were: (i) to assess the training need of primary school teachers in Environmental Science I. (ii) to know the impact of training module in Environmental Studies-1 based on local specific MLL based curriculum development. (iii) to judge the competencies of teachers in the application of MLL based curriculum after the administration of the module. and (iv) to know the school effectiveness through learning achievements after the application of MLL based strategies.

Fifty two primary school teachers from three Blocks and one Municipality under Jeypore Education District constituted the sample of the study. Tools used included a module, worksheet and an observation schedule. The collected data were treated with percentages.

Major findings of the study were: (i) Prior to the implementation of MLL based curriculum it was highly essential to orient the primary school teachers to know how to develop local specific competencies based different activities. (2) There was a positive impact of module to empower primary school teachers in developing competency based local specific curriculum. (3) There was
appreciable empowerment of primary school teachers to enhance the achievement level of students in EVS I after the orientation.

Paranjpe and Sandhya (1997) conducted a study on 'Developing partnership for teacher empowerment: A focus on INSET'. Objectives of the study were: (i) to examine the present status and use of partnerships in INSET programmes. (ii) to assess teachers' perception on the need for partnership development in INSET, and (iii) to identify partnership pattern for improving INSET and its application in primary schools.

The study was conducted in four randomly selected rural blocks from four educationally backward districts of Maharashtra. Within each of the blocks a list of primary schools was drawn up. From each of the four lists 20 schools were randomly selected. The total sample comprised 80 schools and 200 teachers. Interview was the major tool. The collected data were analysed qualitatively.

Major findings of the study were: (1) Most of the INSET programmes did not use partnerships as a strategy for promoting education and training of primary school teachers, either as a part of the overall training strategy or specific INSET programmes. (2) Teachers strongly expressed the need to establish and promote different kinds of partnerships particularly tripartite between the community (Panchayat.
VECs) parents, business/factory owners, and other organisations at different levels in the district. For the realisation of INSET inputs a support system of teacher peer groups along with an expert facilitation/guide, was categorically emphasised as necessary basic prerequisites, both crucial mechanisms for achieving continuity and applicability of new INSET practices. INSET needed to be viewed as a continuous ongoing activity and not a one time input.

Venkataiah (1997) conducted a study on ‘Impact of inputs provided in District Institutes of Education and Training (DIETs) on teaching competency. Objective of the study was to study the impact of inputs such as adequacy of staff, student personal services, academic and auxiliary facilities, co-curricular activities and practice teaching provided in DIETs on teaching competency of student-teachers. A sample of 600 student-teachers from six DIETs in A.P. was drawn following multistage stratified random sampling. The data gathering tools were Teaching Competency Scale and a questionnaire. The collected data were treated with mean, SD, ‘t’ test and ANOVA. Major findings of the study were: (1) Student teachers belonging to DIETs with partially adequate staff were superior in their teaching competency compared to their counterparts in DIETs with inadequate staff. (2) Individual guidance in subject knowledge improvement and tutorial
system had significantly influenced the teaching competency of student-teachers. (3) More the academic facilities provided in DIETs, the higher was the teaching competency of student-teachers.

Pushpanadhan (1997) conducted a study on 'Discovering teacher potential through the capacity building programme: An experiment in primary education. The objectives of the study were: (i) to identify teachers' potential in organising the educational activities in primary schools. (ii) to foster teacher potential. skills through teacher initiated programmed (iii) to find out the difficulties faced by the primary school teachers in teaching different school subjects (iv) to study the effectiveness of the programmes and (v) to train the teachers on pedagogic skills through the teacher initiated programme.

Major findings were: (i) It was found that the primary school teachers having various skills and talents which were useful for educational activities made learning more joyful. The specific talents of the primary school teachers were story telling, singing, preparing low cost and creative teaching aids, writing humorous poems, basic content mastering in primary school subjects and public speaking/communication (2) Sensitising teachers in social issues was found to be effective to boost teachers' professional commitments (3) Teachers' participation in the capacity building programme was
maximum. Teacher initiated programmes were found interesting and appropriate in-service training programme for primary school teachers. (4) Teachers showed interest in participatory programme. (5) Teachers found difficulty in teaching mathematics and science (6) recognition and appreciation were found to be most effective motivational factors for the teachers. (7) Teachers opined that the teacher initiated in-service programmes were interesting and useful to the teachers as they were need-based.

3.3.3 Studies in Kerala

Lakshmikutty Amma (1978) has attempted a study on 'The Role expectations of teachers'.

The major roles expected from the teachers are:

1. try to eliminate illiteracy. 2. be thorough in the subject matter he teaches. 3. never lead the pupil to violence. 4. co-operative with the Headmaster and other staff in maintaining discipline. 5. correct home work. written exercises and arrange special classes whenever necessary. 6. treat the pupil kindly. 7. develop the dignity of labour among the pupils by setting himself an example. 8. not be a political worker. 9. try to inculcate the feeling of patriotism. 10. be a social agent. 11. need not provide guidance to trade unions. 12. develop the sense of national integration among the pupils. 13. develop the habit of reading in pupils. 14. mould the character of the pupils. 15. be a member of
local bodies like panchayats, municipalities etc. 16. give training in health living, sanitation hygiene and co-operation. 17. not be a promoter of family planning programme. 18. visit the families of problem children, understand and guide them. 19. work for communal harmony. 20. teach only subject matter. 21. give the students guidance to solve their problems. 22. conduct examinations and test papers. 23. not resort to bad habits. 24. not direct the pupils in students union activities. 25. keep close contact with parents

Pillai (1992) conducted a study on "Role of DIETs in promoting in-service programmes for Elementary Teachers".

The study was designed with the following objectives.

1. To identify the role played by DIET in imparting in-service education and training to elementary teachers. 2. To study the organisation and conduct of the programme. 3. To find out the infrastructural facilities provided for the organisation of the programme. 4. To ascertain the effectiveness of the training organised. 5. To study the problems faced in the implementation of the programme. 6. To suggest measures for the improvement of the existing situations.

The investigator has used a questionnaire for collecting the data.

Following roles were identified. (1) Provision of in-service training both in the awareness level and skill level. (2) Identification
of innovative teachers who keep on trying new ideas in the classroom.


Mohana Chandran (1993) has conducted a study on the priority of training needs in management development for Heads of Primary Schools in Kerala.

Objectives of this study were follows:

1. to identify areas in which the heads of primary schools
2. to assess the perceived gap in the competencies on various aspects of planning and management
3. to determine the training priorities on the basis of the felt need in actual work situation.

According to him training programmes are arranged without paying much attention to find out what a group of learners needs to learn. Actually this leads to wastage of resources and the trainees do not get any desired benefit. Some trainers give major
emphasis to conduct the training program than its preparation. The design of attaining programme is the preliminary blue print which becomes basis for its actual conduct.

The process of designing a training programme follows a series of steps.


Menon (1993) has conducted a study about selected DIETs in Kerala.

The specific objectives of the study were:

1) To study the overall scenario of implementation of the scheme of DIET in Kerala. 2) To identify areas of educational intervention selected by the DIET in the socio-economic and educational context of the district. 3) To survey the activities undertaken by the DIET since its inception through training research and resource support. 4) To study the administrative financial and academic support received by DIET from other agencies. 5) To formulate recommendations for making DIETs more effective.

Methodology of this appraisal was survey. The tool employed for this study was an information schedule. She visited DIETs of Kasaragod, Wayanad, Trissur and Ernakulam for this study.
The following major recommendations were suggested for improving the situation of teacher education in Kerala.

1. Government of India assistance to DIETs should go directly to autonomous institutions. Funding also should be given directly to the concerned agencies. 2. Constitution and activation of state level and district level steering committee for teacher education projects. 3. Creation of a cell in the SCERT and designation of a Nodal Officer in the State Secretariat to look after teacher education.

Chacko (2000) has conducted a study on "Availability and Utilisation of Educational Media during in-service training imparted by educational technology (ET) faculty of DIETs in Kerala.

The objectives of the study were: (1) to investigate the existing staff strength in ET faculty of DIETs. (2) to investigate the training acquired by imprese in ET faculty of DIETs. (3) to investigate the availability of physical facility in ET faculty of DIETs. (4) to investigate the availability of technological equipments in ET faculty of DIETs. (5) to investigate the extend of training imparted in operating during in-service training of DIETs. (6) to investigate the extend of training imparted in the preparation of software during in-service. (7) to investigate the extend of utilisation of the educational media (Graphic media. display media. 3-D media. project media. Audio media. Audio-
visual media, activity media, print media) during in-service training. (8) to identify the problems faced by E.T faculty of DIETs.

The findings of the study were: (1) The existing strength in ET faculty of DIETs is not satisfactory. (2) The members of ET faculty are not trained in the main areas of ET. (3) Physical facilities are not adequate as the DIET guideline. (4) DIETs are not equipped with Hardware and Software. (5) Training provided to teachers in operating technological equipment during in-service training in ET faculty was far below the expected level. (6) Technological training imparted by E.T faculty preparing software was not satisfactory. (7) Utilisation of Graphic media was satisfactory. (8) Blackboard, Bulletin board, Flannel board etc. are used in all E.T. faculty and (9) Activity media and print media are utilised in in-service training.

CONCLUSION

The investigator has reviewed nearly five hundred books and three hundred research papers in connection with the study. They were mainly related to teacher education, in-service training, in-service teacher training, learning techniques and DIET functions. Majority of the studies reviewed, focused on the quality of training programmes. Research journals on education were referred to collect information regarding new trends in the field of in-service teacher education. The
reviews helped the investigator to develop an insight in planning the modus operandi of the present study.

The review of studies and literature has enriched the investigator in (a) design of the present study (b) methodology and (c) analysis. This also helped the investigator for the avoidance of duplication, wastage of time and money.
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CHAPTER IV
METHODOLOGY

- DESIGN OF THE STUDY
- POPULATION
- SAMPLE
- TOOLS USED FOR THIS STUDY
- PROCEDURE OF DATA COLLECTION
- TREATMENT OF DATA