1.1 INTRODUCTION

Virtually all nations today, rich and poor alike, find themselves in the clutches of deepening crises. It is in essence a crisis of maladjustment of disparities, taking many forms, between educational systems and their environment. The world has lately been changing with unprecedented speed under the impetus of a series of interacting revolutions in science and technology, in political, economic and social affairs and, as a consequence of these, a revolution in human expectations. These great revolutionary forces have generated explosive increases in educational demands and aspirations. The International Commission on the Development of Education, set up by UNESCO in 1971, in its report under the title "Learning To Be" has considered succinctly the threat posed to mankind by multiple dangers. To quote the report: "Irreversible ruptures are threatening mankind. The job of confronting these multiple dangers falls largely on education. Work to remedy the situation involves an all-out attempt to prevent such division to forestall and counteract the dangers deriving from the technological civilization. Stimulating awareness of such dangers is a demanding new task for education."
education in this context, has to prepare for changes, show people how to accept them, create a dynamic, non-conformist, non-conservative frame of mind. Concurrently, it has to play the part of an antidote to the many distortions within man and society. For democracy, education must be able to provide a remedy to frustration, to the depersonalization and anonymity in the modern world and, through life long education, reduce insecurity and enhance professional mobility.

The main response of educational systems to these challenging new demands and circumstances has been to follow a policy of linear expansion aimed at enrolling large numbers at each educational level. The third world countries are seriously engaged in planning for a large scale of quantitative growth in their educational systems. India is one such country which is trying to educate its population since 1950. A look at the statistics in our country in the field of education would help us to understand the magnitude of efforts.

During the last three and half decades the number of primary schools in India has increased from 2,99,671 to 4,85,538, middle schools from
13.4 thousands to 123.3 thousands, higher secondary schools from 7,300 to 52,279. As far as the number of pupils is concerned, an all round increase in enrolment is from 2.8 crores to 11.4 crores. During 1950-63, the total number of teachers increased from 7.5 lac to more than 32 lac. Educational expenditure of all types and at all levels has been growing along with the expansion of the system. In 1950-51, the amount of expenditure was Rs. 114.3 crores, while the budgeted expenditure for 1982-83 was Rs. 5185.9 crores (Change of Education, a Policy perspective, 1985).

As indicated above there has been an unprecedented expansion in the field of education since independence. The enrolment in our institutions has touched new heights. The number of schools, colleges and Universities has proportionately increased. In similar fashion educational expenditure has mounted rapidly. All this indicates that there has been a very serious effort to bring about expansion in education. But unfortunately the qualitative aspect of education did not get the required attention. " Linear expansion strategies can no longer be justified, either from the point of view of results
obtained or their methodology. When an educational system has to absorb a huge number of children, strategies must be modified, must move from the quantitative aspect to the qualitative aspect, from imitation and reproduction to a search for innovations, from a uniform procedure to diverse alternatives.

( Learning To Be. 173-174). This is the considered opinion of all commissions and committees constituted to suggest improvement in the field of education. The various commissions have stressed that the expanding educational system suffers not merely from a shortage of teachers but also from a shortage of well qualified and trained teachers. Poor teacher education has been pointed out as the major obstacle in the way of quantitative improvement of education.

It is evident that the time has really come for our country to undertake a reappraisal of education in general and teacher education in particular. We should visualise the challenges that teacher education must face today and tomorrow. It is admitted that teacher education activities should be conceived in a less pedestrian but more realistic and innovative
way. If it is accepted that the teacher is a factor that promotes quality in education, then the education of teacher has to be viewed from a new angle. We have to educate the teacher in such a manner that he becomes dynamic, innovative and a life-long learner. According to M.Ebert "we must realise teachers are one of the elites of the world, blessed with both means and the motivation to improve ourselves and our society. This status is certainly not conferred by birth, but rather obtained through effective educational training. To bestow quality, one must have quality. To inspire, one must be worthy of emulation. To teach one must know and one must be".

Teaching is no more a single-track process in which teachers teach and students learn. It has become a very complex process wherein the major role of a teacher is that of an initiator of learning and motivator of the students. The complexity of the teaching process has made the job of the teacher more technical. He is no more a retailer of information but is expected to interact with his students. One of the essential tasks for educators at present is to change the mentalities and qualifications inherent
in all professions; thus they should be the first to be ready to rethink and change the criteria and basic situation of the teaching profession, in which the job of educating and stimulating students is steadily superseding that of simply giving instructions.

This makes the point that we must promote the high standard of teacher education as one of the essential forms of insurance for the future. We need teacher education programmes that may help teachers to meet the challenges of the complex teaching process. The complexity of the teaching process demands that a teacher is to work at the highest level of efficiency and that he should be acquainted with those feedback techniques which may enable him to monitor his own performance. If a teacher is made conscious of his performance through variety of feedback techniques it is likely that we may continue to improve the standards of his teaching.

Unfortunately the professional education of teachers has been comparatively neglected in the post-independence period. Looking into the reports of the University Education Commission 1947, the Secondary Education Commission, 1953, International
Team on Teachers and Curricula in Secondary Schools

1954, National Council of Teacher Education 1975, UNESCO publications entitled 'Alternative Structures and Methods in Teacher Education' (1975) and 'Exploring New directions in Teacher Education' (1976), it is clearly evident that the programme of teacher education requires closer scrutiny and improvement. There is at present no policy for the education of teachers in India. In a manner that is typical of the Indian tradition in social and educational affairs, the present arrangement for the education of teachers represents the product of piecemeal reforms and of ad hoc decisions made in response to inadequately foreseen events.

There are very few educationists who have a clearly developed idea of the way in which the structure and contents of teacher education should develop during the next twenty years. Even if such a vision existed, it will be difficult to convince experts in education of its merits and feasibility.

It has been observed that although nomenclature has changed, such as 'Education' instead of 'Training', the system in practice has by an large remained unchanged. The existing system seems to be too static to cope with new goals. It provides student teachers very little
awareness of the role education can play in transforming
the present society into a truly democratic, socialist
and secular society that we wish to build up.

The teacher education is not planned and organised
to develop the spirit of enquiry, initiative, scientific
temper, manual dexterity, conceptual clarity and linguistic
skills for effective speaking and writing which teachers
are expected to impart to their students. Adequate attention
is also not given to develop communication skills which are
crucial to the function of teachers. The training programme
also does not provide for developing receptivity to
induction of modern educational aids nor does it impart
skills to operate even audio-visual equipment. While it is
increasingly emphasised that education should become an
instrument of national integration, cultural cohesion and
development of humanitarian values, the trainees in the
colleges of education are not exposed to these ideas.
No wonder, then, that they should fail to discharge this
function. Teacher education lacks a consistent theory
as well as frame of reference fit for Indian conditions.

Since it is a question of educating the millions
particularly those growing in the socially and economically
deprived communities, a drastic change in the entire system of
teacher education is overdue. Teacher education has not kept pace with the changing times and has lost practical utility of any kind. The products of the colleges of education have brought no significant change in school practices which remain almost obsolete and outmoded even today. Conditions in which teachers are trained should be profoundly changed so that, essentially, they become educators rather than specialists in transmitting pre-established curricula; the principle of a first, accelerated training followed by inservice training cycles should be adopted.

1.2 QUALITY VS. QUANTITY

New educational policy has stated that it is difficult to define quality, particularly with reference to educational processes. However, it could be stated that a quality conscious system would produce people who have the attributes of functional and social relevance, mental agility and physical dexterity, efficacy and reliability and, above all, the confidence and the capability to communicate effectively and exercise initiative, be innovative and experiment with new situations. A review of the history of education in general and teacher education in particular since independence would reveal that we have been pursuing the policy of expansion in terms of more colleges, more buildings, etc. Somebody has rightly pointed out that if a prize is to be awarded for expansion
it would certainly go to the colleges of education. In one way this was desirable. Our country has perhaps a large number of illiterate people, we know the success of democracy depends upon a learning society and therefore the need for more schools was inevitable. Moreover it was a political, economic and social necessity to educate the masses. The constitutional commitment of providing free and compulsory education upto age of 14 is a pointer in this direction. It goes to the credit of the government that it made ceaseless efforts to bring more and more children into schools. But there is another aspect of the problem. Today we have more illiterate people in our country than in 1952. Similarly more than seventy five percent children drop out without completing eight years of school. It seems that so far as the qualitative aspect of expansion of education is concerned our achievements are rather disappointing. The major criticism against our education system is that it has poor holding power. In other words, it means that we have not been able to provide quality education to our students.

The number of children desirous of entering schools is increasing rapidly. As a consequence, the need for more schools is felt. The pressure of enrollment on schools has been tremendous. It has reached a breaking point as
far as facilities are concerned. Again, to meet the
pressure of enrolment, not merely more schools but more
teachers are also needed. These teachers have to be
quite efficient in the discharge of their professional
functions. They have to be well equipped with professional
skills. The need for more teachers has resulted into opening
of more colleges of education. But quantity and quality
do not easily go together. Planners have been trying to
reconcile the quantitative and qualitative aspects of
teacher education—the first is based on the necessity
of supplying large number of teachers to cope with growing
school population and second is rested in maintaining
quality of training.

The Indian Education Commission 1964–66 also
voiced its concern about the quality of teacher education
when it stated, "The quality of the existing programmes
of teacher education should be improved. In the absence
of quality, teacher education becomes not only a financial
waste but a source of overall deterioration in educational
standards."

American educationists also expressed the
same feelings on teacher education in these words: The
quality of citizens depends, not exclusively, but in
critical measure upon the quality of their education.
The quality of their education depends, more than upon any other factor, upon the quality of their teachers. The quality of the teachers depends largely upon the quality of their own education both that portion which precedes and that which comes after their entrance into the profession. It follows that the purpose and effectiveness of teacher education must be matters of profound social concern.

Producing quality teachers is an intrinsic interest and obligation of teacher education. If quality teachers can be provided to the educational system, the likelihood of attaining desirable educational outcomes is substantial; on the other hand, although schools may have excellent inputs in the form of equipment, buildings and textbooks and although curricula may be appropriately adapted to community requirements, if the teachers are misfits or are indifferent to their responsibilities, the whole programme is likely to be ineffective and largely wasted. So the first concern of any future planning of teacher education in India should be to reconcile the apparently competing claims of quality and quantity. Realising the need to improve the quality of colleges of teacher education a number of efforts have been made. Beginning from the mid-fifties teacher training
institutions are trying to innovate different dimensions of teacher education. The efforts of NCERT and the Centre of Advanced Study in Education, M.G. University, Baroda are well known. The different programmes like team teaching, simulated teaching, programmed learning, classroom interaction analysis, etc. have been introduced into the programmes of teacher education from time to time. The efforts for introducing these programmes have not yielded adequate returns. It is necessary to have a close look at these programmes and the way they were introduced.

1.3 **NEEDED FOR A CLOSE SCRUTINY OF THE EFFORTS MADE FOR THE IMPROVEMENT OF COLLEGES OF EDUCATION.**

In the previous section an effort has been made to present a picture of the efforts made for making teacher education more effective. But it seems that we are caught in a vicious circle. If we study any report on teacher education we would find the same criticism of the programme of teacher education which any report written thirty years back would indicate. This is a paradoxical situation. On the one hand we observe that quite a few innovations have been introduced to improve the quality of teacher education programmes.
on the other hand teacher education programmes meet the same criticism of being out of date, mediocre, irrelevant, ignoring the needs of the consumers, etc. The innovations which were introduced from time to time were well tested and were already tried and researches had shown their positive effect on the quality of teacher education. But when efforts were made to introduce the same innovations in our country hardly any improvement could be witnessed. The fault lay somewhere else and not in the innovation which appeared logically sound though it could not work effectively. The main reason was an erroneous assumption on which all efforts at introducing successful innovations from developed countries were based. The teacher educators assumed that innovations could be transferred wholesale from one culture to a different culture. It was lost sight of that researchers had undertaken sustained research in western countries before the innovative practice took shape. It was forgotten that the set of conditions under which the institutions in western countries operated were radically different from those obtaining in India. The Indian teacher educators realised the need of research efforts to precede and follow the shaping
and introduction of an innovation. They realised the need to understand the nature of an innovation and the set of conditions in which it has to operate. Innovation had to be seen not in isolation but in the context of the environmental conditions. There is a need to understand an innovation, its rational, its nature and operating conditions, its linkage also has to be kept in mind.

1.4 INNOVATION

The word innovation, according to the Oxford dictionary, meant the introducing of novelties, the alteration of what is established, a novel practice and a change in established methods. Generally, in the field of education an innovation is to create something new which markedly deviates from traditional practices which have been followed since a long time to impart education at different levels. Innovations in education are adopted to bring qualitative improvement. The basis for educational change is the innovation or creative idea of an individual or of a system as a whole. Innovations may be regarded as a species of the genus change. In a system they affect either one or more parts of the system and may get rejected, modified, accepted or maintained by the system. Despite of their utility and fruitfulness they are not easily
accepted. It has been found that some innovations get
diffused immediately while some others take sometimes
fifteen years to get diffused.

While observing in everyday practice, even casually,
there is always a chance of noticing something that will
raise a doubt about the effectiveness of the existing
practice. The doubt will sometimes be followed by an idea
about ways in which the practice might be improved.
Whatever the sources of the idea the next stage will be
ordinarily to find out if it works. This is innovation.

Barnett (1953) has defined innovation as ....
any thought, behaviour or thing that is new, because it
is qualitatively different from existing forms.

Rogers (1962) defines innovation as ...
an idea perceived as new by the individual. He is
of the view that it is the novelty of the idea to the
individual that determines his reaction to it. It
does not matter much whether or not an idea is
objectively new as measured by the amount of time
between adoption and its first use or discovery.
Miles (1964) defines innovation as ..... a deliberate,
novel, specific change, which is thought to be more
Adiseshiah (1977) used the term innovation in the sense, as used in the engineering sciences, as referring to bringing into use a new product or a new process—the process by which an invention or an idea is translated into a programme. According to him the term innovation is used to refer to a situation where some result of a piece of educational research is turned into an educational practice. Innovation would then be turning the idea into an educational process design, bringing together the material and nonmaterial factors to effectuate the process, preparing, training, and orienting the persons who are to be involved in the process, and operating the process and evaluating the resulting system. From various studies it is found that there are certain characteristics which help an innovation in its rate of adoption and diffusion.

There are some needs which impel us to introduce changes and innovation in our teacher education system. The first which necessitates introduction of change and innovation is the continuous scientific study of behaviour of learners. Recent researches in the field of Psycho-socio-anthropology have thrown new light on the psychology of learning which has great impact on methodology at different levels.
incorporate new findings in teacher education system it is necessary to make certain changes and evolve certain innovations, which may incorporate the research findings.

The second need of introducing innovative ideas is the application of research findings in the area of teaching methodology in classroom settings.

The third need is that educationists and psychologists all over the world are busy in creating materials for instruction that are original and superior to existing material. Due to the stress on individualization of classroom instruction, number of teaching learning strategies have been evolved in recent years.

Explosion of knowledge, explosion of numbers, explosion of human aspirations and expectations in the fast developing society compel us to introduce drastic changes in the existing methods of classroom teaching learning. The seriousness of the need for an innovation is bound to affect its adoption.
Research helps a lot in providing new ideas and hence plays an important role in the process of change. It can provide a basis for change and aims at the advancement of knowledge. The researcher should be free to pursue his ideas. All incoming changes are on the basis of research only.

1.5 RATIONALE FOR INNOVATION

We are living in the age of change. The political, social, economic, scientific and technological changes are taking place so fast that it is difficult to keep pace with them. As is well-known, educational institutions are a sub-system of the larger social system. Naturally education cannot remain static. It must change so as to fulfil the needs and aspirations of the society.

We are witnessing an explosion of knowledge; there is no branch of knowledge which is not trying to update itself. The social and behavioural sciences have brought into focus new areas of human behaviour.

It is now accepted that education is an instrument of national development and international cooperation. This is the reason why people all over the world are demanding more and more education and also nations are trying to spare more and more funds for the spread of
education because it has been realised that a country cannot achieve its desired goals if its population does not receive education up to a particular level.

It is but natural that education should become the first priority of every society. A review of the educational statistics all over the world indicates that every nation, poor and rich, big or small, has increased its expenditure on education manifold. But so far the stress has been on quantity not on quality. The time has come when educational institutions should try to emphasise the qualitative aspect of education. The availability of sophisticated instruments due to advancement in science and technology has become a big challenge and also helps in the process of change. Education if it really has to become an instrument of change should come out of the age of chalk and talk. It must apply new technologies to improve the quality of education. Change in education is a natural corollary of changes in society. This provides a rationale for continuing, reviewing and rethinking of the total system of education from time to time.

It is a well-known fact that any change in education has the potential danger of being nullified if the teacher is not convinced of its desirability.
All our new educational programmes and innovations depend on the capacity of the teacher to assimilate them. It, therefore, requires teachers who are agents of change. This in turn brings in focus the role of colleges of education. These institutions, as noted by Indian education commission are expected to be pace setters.

If the colleges of education are to fulfil this role, they must welcome change. As mentioned above, due to researches in social and behavioural sciences and technological advancements, new knowledge about the nature of human behaviour is available. Colleges of education should integrate the new knowledge into their programmes and equip the teachers for the different roles and functions imposed upon them by new technologies.

1.6 **INDUCING CHANGE INTO THE SYSTEM OF TEACHER EDUCATION.**

In the previous section all effort has been made to build a rationale for a continuous change in the system of teacher education. There are no two opinions that any qualitative improvement in teacher education largely depends on human resources. Teachers who are
to induce change should be equipped and prepared for change. From this point of view colleges of education have a responsibility for preparing teachers who are always ready for bringing about qualitative improvement in their teaching strategies.

Change cannot be introduced abruptly. It requires a well thought out procedure. Educational technology is not just apparatus to be clamped on to a conventional system, adding to or multiplying traditional procedures. It can only be of value if it is really integrated into the entire system and if it leads to rethinking and renovation. Widespread and efficient use of new technologies in education is only possible if sufficient change takes place within the system itself. It is not enough to adapt educational structures for the introduction of new technologies. Teachers must be prepared and adequate resources must be available. The history of innovation stands witness to the fact that whenever...
a change or an innovation has been forced on the system it has failed, rather the system has reached negatively.

Whenever there is dissatisfaction with a particular aspect or with the total system a need is felt for change. The dissatisfaction provides incentive to search for alternatives for improving the system. Research workers and planners look to the research material for finding out if any strategy is available which helps them to overcome the dissatisfaction. For this purpose the available resources like visits to other countries, articles, research studies, magazines, discussions, conferences, are made use of. Sometimes in the mind of an individual or an institution, on the basis of collective thinking, new idea or a strategy starts germinating. So at the initial stage an innovation or strategy takes a concrete shape in the minds of those who feel dissatisfied with the existing arrangement. At the same time thinking starts about the process which may facilitate the planning, implementation and dissemination of the change in the system.
This may be termed as the planning stage. During this planning stage a thoughtful consideration is given to the concept of the innovation. Its different dimensions are considered and the long and short term effects of the innovation are viewed. A blue print is prepared about the introduction of the innovation into the system. All these exercises are done by those who are responsible for introducing innovations into the system. Now the exercise of planning the introduction of an innovation may be done at any level—national, institutional or even individual. An innovation passes through different stages. They are:

1. **Sources of innovation.**
2. **Planning of the innovation.**
3. **Implementation/Adoption of innovation.**
4. **Dissemination/Diffusion of the innovation.**

Any study of an innovation will encompass these four stages/aspects. The source of the innovation may be research laboratory or think tank. A detailed planning is undertaken after studying the system in which innovation
is to work and the characteristics of innovation and its implementers. Once the implementation is there and that too a successful implementation, the innovation slowly diffuses or is disseminated in a planned way. Thus planning, implementation and dissemination are the three major aspects of an innovation which are to be studied. In the context of teacher education and innovation that promises success is microteaching.

1.7 Microteaching

Microteaching derives its name from the fact that it is an approach of training teachers in which normal teaching is scaled down. The term 'Micro' connotes a reduction in the length of time for a lesson, the amount of subject matter covered and the size of the class. It is a laboratory technique to analyze the recorded behaviour of a microteacher objectively. The microlesson is called single concept lesson which lasts for three to seven minutes.

To be more precise it would be useful to peek into some of the definitions of microteaching. In one of the earliest descriptions from Stanford, microteaching is described as a scaled-down teaching encounter in class size and class time." (Allen, 1966). Microteaching may also be viewed as "a teacher education technique which allows
teachers to apply clearly defined teaching skills and carefully prepared lessons on a planned series of five to ten minute encounters with a small group of real students, often with an opportunity to observe the results on videotape (Bush, 1968).

McLaene and Urwin (1970) suggest that the term microteaching is "most often applied to the use of closed circuit television to give immediate feedback to a trained teacher, performing in a simplified environment." However, Indian researchers have developed a microteaching technique without electronic hardware. This by itself is an innovative modification of the western-based innovation of microteaching.

In their book on microteaching, Allen and Ryan (1969) suggest that the basis of microteaching is to be found in five essential propositions. The first is that microteaching is real teaching. Secondly, the complexities of normal classroom teaching are lessened. Thirdly, there is a focus on training for the accomplishment of specific tasks. Fourthly, allowance is made for the increased control of practice, and lastly, the normal knowledge of results or feedback dimension is greatly expanded.

Clift and others have defined microteaching
as a teacher training procedure which reduces the teaching
to a simpler and more controlled encounter
achieved by limiting the practice of teaching to a
specific skill and reducing teaching time and class
size. Microteaching procedure involves three phases
as shown in the following figure:

<table>
<thead>
<tr>
<th>KNOWLEDGE ACQUISITION PHASE</th>
<th>SKILL ACQUISITION PHASE</th>
<th>TRANSFER PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observe and discuss demon-</td>
<td>Prepare micro-lesson.</td>
<td>Evaluate perfor-</td>
</tr>
<tr>
<td>stration skill.</td>
<td></td>
<td>mance of skill</td>
</tr>
<tr>
<td></td>
<td></td>
<td>to actual</td>
</tr>
<tr>
<td></td>
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<td>teaching</td>
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<td></td>
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<td>situation.</td>
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</table>

Reteach

In view of all these definitions Griffiths
(1973) remarked that not only there is no widely accepted
single definition of microteaching but also that it may
be wise to avoid restrictive and specific definition
of such a flexible and adaptable procedure. Moreover
microteaching is a concept which is in the process of
development, so there is no agreement on any single
definition of microteaching.

In general terms we may say microteaching
is a system of controlled practice that makes it possible
to concentrate on specific teaching behaviour and to practise
teaching under controlled conditions. The student teacher
teaches a class of 5-10 pupils for 5-10 minutes. It is also scaled down with respect to the teaching complexities. Teaching is considered to be an interplay of a number of teaching skills and each teaching skill is a set of related teaching behaviour which tends to facilitate pupils' learning. Such skills can be defined, practised, controlled, observed and evaluated. The student teacher (micro-teacher) gives a short lesson based on a single teaching skill (Microlesson). In terms of the given skill, this lesson is recorded or observed or followed by immediate feedback by the observers. This completes one microteaching cycle. It can be represented as: plan-teach-feedback-replan-reteach and refeedback. There can be many variations within this broad outline; the size of the class may vary from 3 to 10 pupils, time may vary from 3 to 20 minutes, the pupils may be either real children or peers acting as pupils; the source of feedback may vary from one to many sources like self, pupils, peers acting as supervisors, teacher educators, audio tape recording, video tape recording and the like. The feedback can be immediate or delayed, prescriptive or descriptive, qualitative or quantitative. There may be variations in length of time devoted to any phase of the microteaching cycle. According to these variations, microteaching can be defined and described in many ways.
In the absence of one definition it would be better to know the standard use of the term microteaching involved in the programme of training teachers.

<table>
<thead>
<tr>
<th>STEPS</th>
<th>SMT</th>
<th>PNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEORETICAL ORIENTATION OF THE SKILL</td>
<td>Each teaching skill is defined to student teachers in terms of rationale, components and teaching behaviours and the objectives which such behaviours are aimed at achieving.</td>
<td>Same procedure was followed.</td>
</tr>
<tr>
<td>DEMONSTRATION OF SKILLS</td>
<td>Students are oriented to the skill through films, videotape or written material (model lesson).</td>
<td>Model lesson by the supervisor.</td>
</tr>
<tr>
<td>PLANNING</td>
<td>After theoretical and practical orientation the student teacher plans a short lesson in which he can use the skills.</td>
<td>Student teacher planned a lesson of six minutes to use that particular skill.</td>
</tr>
<tr>
<td>TEACH SESSION</td>
<td>The student teacher teaches the lesson to a small group of pupils which can be video-taped or audiotaped or observed by supervisor and/or peer(s).</td>
<td>The student teachers taught the lesson to a group of eight peer students which was observed by peer supervisor/peer on the observation schedule meant for a particular skill.</td>
</tr>
<tr>
<td>STEPS</td>
<td>SMT</td>
<td>MNT</td>
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<td>-----------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
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<tr>
<td>FEEDBACK</td>
<td>Feedback is provided to the student teacher by videotape or audio</td>
<td>Same as SMT technique with a difference that here the feedback was</td>
</tr>
<tr>
<td></td>
<td>tape recorder, who observes and analysis his lesson with the help</td>
<td>provided by supervisor peer supervisor on the basis of observation</td>
</tr>
<tr>
<td></td>
<td>of supervisor. The supervisor comments about instances where skill</td>
<td>schedule developed under Indian conditions.</td>
</tr>
<tr>
<td></td>
<td>was used effectively and where skill could have been used.</td>
<td></td>
</tr>
<tr>
<td>REPLAN</td>
<td>In the light of feedback and supervisor’s comments the subject</td>
<td>Same as SMT procedure.</td>
</tr>
<tr>
<td></td>
<td>student teacher replans the lesson in order to use the skill more</td>
<td></td>
</tr>
<tr>
<td></td>
<td>effectively.</td>
<td></td>
</tr>
<tr>
<td>RETEACH</td>
<td>The revised lesson is retaught to different but comparable group of</td>
<td>The revised lesson was retaught to the same group</td>
</tr>
<tr>
<td></td>
<td>pupils.</td>
<td></td>
</tr>
<tr>
<td>RE FEED</td>
<td>Feedback is again provided on the reteach lesson which is analysed</td>
<td>Same as SMT procedure.</td>
</tr>
<tr>
<td>BACK</td>
<td>with the help of the supervisor</td>
<td></td>
</tr>
</tbody>
</table>

Borg et. al. (1969) developed a mini course.

A minicourse model provides a) self instructional package, b) feedback through self evaluation and/or peer interaction and c) the reteach session not immediate but delayed by 24 hours. The sequence of the steps in a minicourse could be
described as:

View Instructional Film - Read Handbook - View
Practice Instructional and Model Film - Plan
Practice Lesson - Teach Practice Lesson - View
for Self Feedback - Plan - Teach - Feedback -
Replan - Reteach - Feedback.

Such self instructional material was also
developed at the University of Lancaster by Perrott and
her associates (Perrott et al., 1974). She referred to
five steps in a self instructional microteaching course:
Study Skill - Observe Skill - Practice Skill - Evaluate
Skill - Refine Skill.

Another extension of the microteaching
format is 'Miniteaching' (Hargie et al., 1978). Hargie
Views Stanford model as too narrow and restricted wherein
skill is presumed to be completely a discrete unit which
An reality is not so. In miniteaching, skills are therefore
practised and simultaneously integrated together.

Indian modification of microteaching, better
known as Baroda modification, consists of training
packages on different instructional skills, observation
proforma which are used for feedback by peer, supervisor,
etc., evaluation sheets to know the level of performance by microteachers. This modification is cost effective— a condition very much in need in a developing country with constraints on resources. The present study is concerned with the process of planning, implementing and dissemination of the above mentioned Baroda version of microteaching.

1.8 SIGNIFICANCE OF THE STUDY

The acceleration of technological change for exceeding the speed of changes in other social institutions proclaims increasing recognition and growing concern about institutional lag. The institutional lag in education is not due to the dearth of innovations, instead they are constantly rocking the educational institutions. In post independence era, development of education in India has been very rapid and nowadays technology knocks at the door of education. But the output is not commensurate with the knowledge input in the education process. This seems to be a common problem with all the countries (Watson 1975). But this is of paramount importance for developing countries like India. Had all the innovations been accepted Indian education would have been different. The innovations that were floated have been implemented by a few, some innovations got diluted and distorted and some did not
reach even the institutions. How do these innovations get distorted or diluted? Why do these innovations fail to reach educational institutions? Are there resistances in the change process? Indian researches have been characterised by the absence of studies on change process. The studies on change process would have thrown light on institutional lag in our teacher education institutions. A few studies have been concentrated on factors facilitating change but they fail to explain the problem of implementation, dissemination, distortion or rejection of innovations.

There is no denying the fact that there are lots of researches regarding innovations and lots of innovations are at our disposal to be implemented and disseminated but the sad aspect is this that very little effort has been made for follow up purposes to see whether a particular innovation is implemented or disseminated in practical terms and this is the rationale of the present study.

1.9 STATEMENT OF THE PROBLEM

The problem taken up for the study is "THE PROCESS OF PLANNING, IMPLEMENTATION AND DISSEMINATION OF MICROTEACHING AS AN INNOVATION IN COLLEGES OF EDUCATION IN SELECTED REGIONS OF INDIA".
1.10 AIM AND OBJECTIVES

The purpose of the present investigation is to do an inquiry into the process of planning, implementation and dissemination of microteaching as an innovation in colleges of education in selected regions of India. In order to accomplish this major purpose the following subsidiary objectives are framed.

(1) To study the origin of the idea of microteaching in India.

(2) To study the process of planning and implementation of microteaching as an innovation started in colleges of education.

(3) To study the process of dissemination of microteaching as an innovation.

(4) To evaluate the existing status of microteaching as an innovation in institutions of teacher education.

(5) To study the perceptions of teacher educators, student teachers as far as utility of microteaching in student teaching is concerned.

1.11 CONCLUSION

The theory of a research presents the basis of research, clarifies, explains and elaborates many ideas
behind that research work which are life and blood of the research work. So in the present chapter an attempt has been made to present a theoretical framework of the problem with regard to the planning, implementation and dissemination of 'Microteaching Approach' as an innovation. An attempt has been made to provide a theoretical background to the problem which will derive further sustenance from the next chapter which would present a review of the related research on the theme.