CHAPTER I

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***** SIGNIFICANCE OF THE STUDY

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SIGNIFICANCE OF THE STUDY

1.1 Introduction

With the attainment of the status of an independent state in 1947, India faced a stupendous task of changing from a traditional agrarian pattern to a modern industrial society. Democracy gave new rights and demanded new responsibilities. People utilize the right of Franchise to secure the right of life i.e. the social rights in the form of employment, economic security, education etc. The right of education becomes a fundamental right in a democracy. Education is necessary to enable the citizens to exercise their right of franchise in a way laid down by norms of democracy, to prepare for securing better means of livelihood and to participate intelligently in the social processes. Education is the chief agency to maintain efficiency in developing human resources and to foster the desired values of democracy.

The greatness of a nation depends upon the greatness of individual citizens who constitute the living substance of the nation. In order to move towards the set goals of the nation, a dynamic society is needed which, in an era of explosion of knowledge, can perform such tasks as are needed to keep the society smoothly functioning and continuously changing in character. Demand for highly trained personnels becomes a necessity for a dynamic society. Thus, India today needs administrators, business

executives, teachers, doctors, engineers, economists, scientists, pharmacists, salesmen and sales representatives. The list is always incomplete as new occupations crop up every day.

In the fast-changing society, a man with expertise knowledge to-day may become a common-man to-morrow with limited information. Individuals narrowly trained have to be at the mercy of circumstances. The new era demands that the individuals should be trained in such a way that they themselves find a way to use their potentials in any sort of circumstances and can act as experts in any spontaneously aroused situation. Thus, the country has become conscious of the strategic importance of education in the present society and has realised the need for investment in education. Emphasizing education, Dr.D.S.Kothari (1964) gives his opinion as under :

> 'It is important to recognize that we do not have
> more time than a generation to bring about this change
> in our country .... and the task of reconstruction
> would become far more difficult than what it is to-day.
> The key to bring about this change is education.'

1.2 Teacher Education

In order to pave a way for modern India, with ever widening horizons of education and with the new oncoming challenges that educationists have to face today, teacher training has acquired a new importance. Effectiveness of any programme of teacher education depends upon many factors. Buildings, equipments, curriculum, books etc. are important ; but, apart from the children, no other element in any education system is so vitally significant as the teacher. The quality of teacher must be a matter of deepest concern.

There has been an explosion of knowledge during recent years. Traditionally, the main aim of education was the preservation of the quantum of knowledge; but in the modern society, the rate of growth of knowledge is so much quicker that the main task of education becomes keeping pace with the advances in knowledge. This necessitates a revolution in education which would require a new approach to the objectives and methods of education and also changes in the training of teachers. Unless teachers are trained in new ways of teaching and learning, the students in schools will not be able to receive the type of education needed for the new society. The profound changes in the recent years, especially in the post-independance period, has far reaching effects on the very structure of the social, political and economic life of the people. The constitution embodies fundamental rights and interpretation and translation of these rights mean not merely a revision of old life but a radical change in the society. Teacher education programme will have to play an important and significant role in bringing about these changes.

In the light of post-independence developments and the changes that have occured, and are still occurring, teacher-preparation has to be reshaped; and, when one considers the new requirements of education, the following principles of teacher preparation emerge.

(1) Teachers must have a sound philosophy of education which is capable of incorporating changes with changing trends, which is conscious of major life forces in the society whose thoughts and actions it seeks to guide.

(2) Teachers must have an adequate functioning psychology. When India is emerging into a new and dynamic life, teacher education programme must equip the teacher to unravel motivations to direct the emergies of children for building up and reinforcing the new life.

(3) Teachers must have a dynamic sociology that can play a vital role in clarifying and interpreting the complexities of social life and functions in order to understand and to meet intelligently the needs of the society which it seeks to serve.

(4) Teachers must be helped in keeping abreast of new developments. No formal training can fully prepare a teacher for his profession. The maximum that a teacher education programme can do is to keep the teacher abreast of existing knowledge and skills and instil in him an attitude for seeking new knowledge as he progresses in his profession.

(5) Teachers must be prepared for their role as potential contributors towards better international understanding. This is today one of the main aims of education wherein children and youngsters should be prepared to be intelligent members of one-world society which, though varied in nature and traditions, strives for world peace and a fuller life for every human being.

(6) Last but not the least, a sound programme of teacher-education must provide for and encourage the achievement of various job-skills, viz. mastery over methods of teaching, habit of scientific inquiry, understanding the ethics of the teaching

profession, skills in the practice of democratic ways, sound mental hygiene, moral and spiritual maturity, devotion to the task of education, etc.

Thus, for a sound teacher education programme, three aspects need consideration : (1) philosophy of teacher education, (2) know-how for teachers and (3) job-skills of teachers. Philosophy of teacher education would include purposes and functions of education in India and purposes and functions of teacher-education in India. Know-how for teachers would include basic knowledge essential for teachers in content area and special training for competence as teachers. Job-skills of teachers would include three categories of skills, viz. (1) conceptual skills like understanding educational problems, action research, interdisciplinary approach etc.; (2) personal and social skills like mental health, speech, communication techniques, human relations etc. and (3) professional skills like teaching methodology, school administration, guidance, measurement and evaluation techniques etc. Figure 1 gives a schematic diagram of the concept.

It can be seen from the figure that, though philosophy of education forms the base of teacher education programme, know-how and job-skills are the aspects without which the programme remains incomplete. Putting in a strictly narrow sense, in words quite familiar with teacher training institutions, content and method
                                                    are
form two facets of teacher training that recognised as immediately

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Job-skills

Conceptual skills
Personal and social skills
Professional skills

Know-how

·Basic knowledge
Special training

Philosophy of
Teacher Education

·Purposes and functions of Education
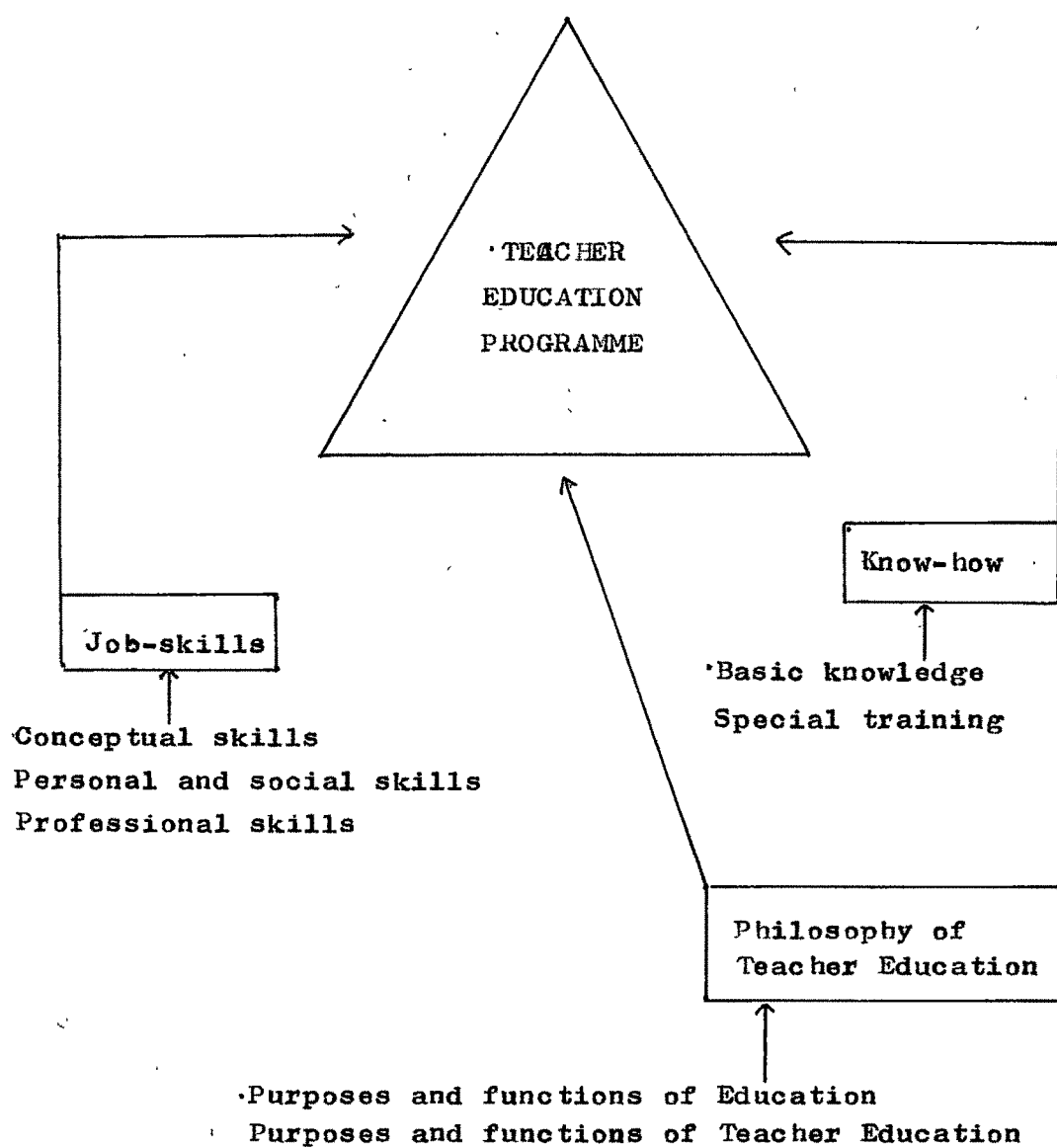 Purposes and functions of Teacher Education

Fig. 1   Teacher Education Programme

practical aspects by the administrators and principals of schools who are the first customers of teacher training colleges.

Report of the Education Commission (1964-66) opens with the words, 'The destiny of India is now being shaped in her classrooms.' As a teacher, one may be tempted to ask, 'Do I possess necessary skills and tools for shaping the destiny ?' A sculptor is a person who chisels out from rough stone an exquisite piece of art; and, if teachers are the sculptors of the destiny of India, it becomes imperative that they possess most modern tools and necessary skills. For such an immense job of shaping the destiny of a country. Is our present teacher education programme in a position to provide for such a training ? This leads the researcher to consider the shortcomings of the programme.

1.3 Shortcomings of Teacher Education Programme

When a qualitative improvement of education becomes a basic necessity for the country, a sound programme of teacher education becomes vitally essential. The Education Commission (1964-66) has stressed : Investment in teacher education can yield very rich dividends because the financial resources required are small when measured against the resulting improvement in the education of millions... First rate teacher education institutions can thus play a critical role in the development of education.

Unfortunately, teacher education programme remains a comparatively neglected during the post-independence period.

Various Education Commissions in this period have clearly
stressed that the programme of teacher education requires closer
scrutiny and improvement. University Education Commission (1949),
the Secondary Education Commission (1953) and the International
Team on Teachers and Curricula in Secondary Schools (1954)
stressed the significance of improvement in teacher education
programmes.

In the present pattern, the teacher education programme in
India consists of two parts, viz. theory courses and practical
training. Theory papers mainly include principles of pedagogy,
educational psychology, philosophy and sociology of education,
school administration, some special fields of education and
teaching methods in two or three school subjects. Practical
training consists of a traditional mode of practice-teaching
wherein a student-teacher is required to give a specified number
of lessons in school subjects of his choice. Pandey (1969)
reports a wide variation in the number of theory papers prescribed
for B.Ed. courses all over the country. His study also reveals
a wide variation in the number of practice teaching lessons to
be given as well as the mode of supervision of the lessons.
Trivedi (1969) criticizes the situation prevailing in theory
courses as a situation attempting to discuss all possible vague
slogan-like generalizations punctured at times by phrases like
'sociological and psychological foundations' where many a times
the bases of foundations are absent.

In one study by Jackson (1968), experienced teachers were
interviewed after training. Some of the teachers were of the

opinion that perhaps the more sophisticated knowledge is not taught in a meaningful context. The teachers fail to make use of sophisticated concepts and principles of pedagogical studies because whatever is taught in theory classes is in the form of abstractions and they find it difficult to simplify these abstractions into concrete situations. Smith (1969) reports that pre-service teachers have found educational psychology, educational sociology, educational philosophy and other theory courses that they are required to do as student-teachers, unrelated to the classroom work. Education Commission (1964-66) observes:the quality of training institutions remain, with a few exceptions, either mediocre or poor, competent staff are not attracted, vitality and realism are lacking in the curriculum and programme of work which continue to be largely traditional; and set patterns and rigid techniques are followed in practice teaching, with disregard for present-day needs and objectives.

Lulla (1969) lists the following drawbacks in the present teacher education programme :

1. Teacher education programme extends to a very short duration

2. It overemphasises methods of teaching and ignores knowledge of the subject-matter.

3. It is not integrated in terms of theory and practice.

4. It is not Indian in character and composition.

5. It is out-dated in courses and superficial in methods of training.

6. It is not flexible and is not based on current educational research.

7. It is not related to the actual needs of schools and society.

8. Its practical aspect is inadequate and perfunctory.

9. The staff of the most teachers' colleges is not very competent.

The essence of the programme of teacher education is quality. In absence of quality, the programme becomes a financial waste and a source of over-all deterioration in educational standards. The Education Commission (1964-66) has given several measures to improve the quality of teacher education. They are :

1. Well planned subject orientation in content area should be organized in collaboration with university departments. This will give insight ⅄ into the basic concepts to be taught. (4. 14-17).

2. Integrated courses of general and professional education should be introduced in universities. (4. 18-20).

3. Professional studies should be vitalized through development of educational research. They should be based on Indian conditions. (4. 21 - 22).

4. Improved methods of teaching with greater scope for self-study and discussion should be used. Improved methods of evaluation including continuous internal assessment should be used for practical work, sessional work and practice teaching. (4 . 23 - 24).

5. Practice teaching should be improved and made a comprehensive programme of internship. (4. 25)

6. Special courses and programmes should be developed (4. 26)

7. In the light of the fundamental objectives of preparing
   teachers for their varied responsibilities in an ∞
   evolving system of education, curricula and programmes
   of all levels of teacher education should be revised.
   (4. 27-32).

To sum up, the inadequacy of the current teacher education
procedure is apparent at three levels :

1. At conceptual level, there is a general lack of clarity
   about the overall objectives of teacher education programme
   and the sort of learning which particular parts of this
   programme are intended to promote.

2. At empirical level there is little evidence to show the
   effectiveness of teacher education programme but a great
   deal of evidence to suggest inadequacies of many kinds.

3. At level of professional consensus and co-operation there
                    distrust
   is considerable and wide-spread failure of communication
   between different groups ; especially, teacher educators
   and school teachers.

To conclude, the present conditions of teacher training
institutions in India has rightly been described by Buch and
Yadav (1974). They have pointed out that 'much dissatisfaction
has been shown about the training provided to the teachers ;
the trainees are not satisfied, the consumers are not satisfied;
and, more than this, even the trainers are not satisfied with
the training programme'.

1.4 Drawbacks of Practice Teaching

Practice teaching has been considered as a backbone of teacher education programme because this aspect of the programme is directly connected with the skills that a student-teacher will develop for his future work. It is during practice teaching training that a trainee develops the concept of good teaching and tries to get mastery over basic teaching skills.

The teacher's task is to create or influence desired behavioural changes in the pupils. The goal of teaching is to bring about desired learning in the pupils and the valid criterion of success in teaching is the degree to which a teacher becomes able to achieve these desired changes. Thus, a teacher must know what learning is desirable and how to bring about this learning. The task of practice teaching is to develop in student-teachers skills whereby they gain competence in the methods of bringing about the desired changes in the pupils. Methods of teaching thus concerns the way in which a teacher organizes and uses techniques of teaching, subject matter, teaching tools and teaching materials.

Preparation of competent and skillful classroom teachers is the basic objective of a teacher training programme and it is this objective which is most valued and emphasized by school managements. It is the task of practice teaching programme to provide for adequate and effective experiences for student-teachers through vigilant and stimulating supervision, and help them acquire skills and competence for meeting various teaching-learning situations. Desai (1971)

suggests that the following objectives of practice teaching need careful consideration :

1. To help the student-teachers to grasp the principles and techniques of organizing subject-matter and map out his approach to teaching.

2. To diagnose his teaching as fully as possible, not bluntly but sympathetically, and consider the emotionality and capacity of the person to take in the diagnosed facts.

3. To help the student-teacher develop his own style of teaching.

4. To help him to establish a rapport with students through his teaching and make learning interesting and an active affair for them.

5. To recognise individual differences in capacity, background and temperament of student-teachers and help and motivate them efficiently to the best of their capacity.

6. To evaluate continuously the lesson planning and methods of teaching and provide a feed-back in improving his method of teaching.

Keeping in view the above objectives, when one judges the effectiveness of practice teaching programme, one comes across many flaws in the programme. Organisation of the content with the approach to teaching is not proper and in most cases the practice teaching tends to be a mechanical way of following the prelaid steps of planning and rigidly adhearing to it. Background of student-teachers as well as other influencing factors like personality, socio-economic level, intelligence, achievement motive etc. are mostly overlooked in chalking out a stereotyped

programme of practice teaching lessons. In actual teaching practice, continuous evaluation of planning and teaching is hardly achieved and observation remarks of the guiding teachers are in most cases vague and lacking in providing specific feedback. The programme is confined to specific number of lessons and the number is fixed arbitrarily. Student-teachers develop unfavourable attitude towards the type of routine that they have to pass through and this leads to widening the gap between the training institutions and the schools so far as method of classroom teaching is concerned. Palsane and Ghanchi (1967) surveyed sixtytwo teachers' training colleges and they have observed that (i) number of lessons given by a trainee was arbitrarily fixed and it was not based on the needs and abilities of the trainees, (ii) orientation programme before initiating trainees to practice teaching was too inadequate, (iii) the units chosen by the trainees were not continuous and there was little scope for developing initiative, dynamism and resourcefulness as teachers, (iv) there was no continuous and integrated assessment of the trainees, and (v) the programmes for the trainees were not planned in joint co-operation of schools and teacher training institutions.

A number of studies have been undertaken in India in the area of practice teaching and they have brought to light the following defects.

1. During classroom teaching, there is more emphasis on telling rather than on doing and discussing.(Palsane and Ghanchi, 1967; Marr, et al., 1969).

2. Supervision of practice teaching is not adequately
   arranged and is indiscriminating. (Upasani, 1966; Palsane
   and Ghanchi, 1967, Joseph, 1967 ; Marr et. al., 1969 ;
   Srivastava, 1970, Saikia, 1971, Mehrotra, 1974 and Singh,
   1976).

3. Feedback provided by guiding teachers or supervisors
   is in most cases vague and in terms of global remarks.
   It is not in terms of specific behavioural skills.
   (Passi, 1976).

4. Number of lessons to be given during the practice teaching
   programme is fixed arbitarily and there is no uniformity.
   (Sharma, 1966, Upasani, 1966; Palsane and Ghanchi, 1967;
   Mallaya, 1968; Pandey, 1969 ; Srivastava, 1970 and Singh,
   1975).

5. Student teaching is perfunctory, fulfills only the official
   requirement and does nothing towards the development of
   teaching skills. (NCERT, 1969).

6. Student-teachers themselves are not satisfied and have not
   a favourable attitude towards the practice teaching
   programme. (Verma, 1968, Srivastava, 1970, Saikia, 1971,
   Mehta, 1971 and Kaul, 1972).

7. There is need to try new innovations in the programme of
   practice teaching. (University Education Commission,1949;
   Secondary Education Commission, 1953 ; International Team
   on Teachers and Curricula in Secondary Schools, 1954;
   Education Commission, 1964-66; Banerjee, 1967; Mallaya,
   1968; Marr, et al., 1969; Buch, 1970; Patel, 1971; Saikia,
   1971 and Joshi, 1972).

In order to improve the student teaching programme, there is
a need to bridge the chasm between theory and practice by
introducing new courses that have a direct application in student
teaching (Lulla and Singh, 1974). As Passi and Shah (1974) have

suggested, there is a great need to make student teaching
programme more effective as it is the pivot of teacher
education programme. Present day student teaching programme
falls short of the expectations from it and a need has arisen
to frame student teaching programme on sound empirical basis
and to find out alternatives for the traditional programme.
Clear-cut definitions of teaching and teachef education have
not been evolved and training in teaching skills is mostly
left to the effects of past experiences. It is the experience
of the researcher that many experienced teachers show little
mastery over some basic important teaching skills like
listening to pupils, asking thought-provoking questions,
reinforcing the responses of the pupils, etc. It is said
that 'teaching is an art'. What is needed today is an analysis
of this art to put it on a scientific basis and to convert
the saying into a one like 'teaching is a science'. Analysis of
the overall effectiveness of the teachers would lead into many
varied facets of their role as classroom teachers and if
student practice teaching is to be made more effective, such
an analysis and innovations based on it become a bare necessity.

1.5   Analytical Approach to practice teaching - Microteaching

Teaching is a complex process and the findings of the
studies in the area of teaching and teacher behaviour are not
significant enough and are also inconsistent. The programme of
training the student-teachers through practice teaching hinges
on two aspects viz. classroom teaching by the student teachers
and the observation of their performance by the supervisors

and the feedback that they can provide. If an analytic approach
is to be tried in practice teaching, the approach would
naturally depend upon the analysis of the process of teaching
into various component skills, specifically defining these
skills to provide for an effective feedback and the procedure
in which the practice of the skill and feedback are laid.

An analysis of the process of teaching leads to various
constituent activities that are designed and performed to
produce required behavioural changes in the pupils. Komisar
(1966) has pointed out that various specific activities
included in teaching are introducing, demonstrating, citing,
hypothesing, reporting, conjecturing, confirming, constrasting,
explaining, questioning, elaborating etc. In other words,
teaching constitutes a number of verbal as well as non-verbal
teaching acts like questioning, accepting pupils' responses,
rewarding, smiling, noding to pupil's responses, movements,
gestures etc. These acts, in various combinations, facilitate
the achievement of objectives in terms of behavioural changes.
The teaching skills can be looked upon as a set of related
verbal or non-verbal acts or behaviours performed with an
intention to facilitate pupils' learning.

Brown (1975) explains the complexity of learning how to
teach by giving analogies of learning to fly a jumbo jet or to
transplant a heart. Both the acts require a large number of
skills and no flying school or medical faculty expects its

trainees to perform the ultimate task of flying a jet or
transplanting a heart unless basic skills are mastered. In the
same way, teaching also has its repertoire of skills and the
complex task of teaching is analysed into limited but well
defined components called teaching skills or technical skills
that can be taught, practised, evaluated, predicted, controlled
and understood. Many findings in the area of teaching and
teacher behaviour have given inconsistent results and the
reason behind this, as Gage (1963) puts it, is that these
studies considered the criterion of over-all teacher effectiveness.
He suggests micro-criterion approach to teacher effectiveness
to reduce the complexity of the problem. According to him, training
in classroom teaching can have better success with criterion of
effectiveness in small specifically defined aspects of teacher
role instead of seeking criterion of effectiveness of teachers in
many varied facets of their role.

Thus, the analytic approach to teaching and the effectiveness
of training in practice teaching lead to various components of
teaching called teaching skills or technical skills. Gage (1968)
has defined technical skills as specific instructional techniques
and procedures that a teacher may use in the classroom. They
represent an analysis of the teaching process into relatively
discrete components that can be used in different combinations in
the continuous flow af the teacher's performance. The Asian
Institute for Teacher Educators (1972) has defined technical skills
of teaching as specifically those activities of teaching that are

especially effective in bringing about desired changes in
pupils. They are related to each other i.e. the attainment of
a particular objective is unlikely to depend upon teacher's
display of any single category of behaviour. Pointing out the
importance of this approach to the training of teachers, Allen
(1966) has pointed out that the identification of representative
skills and the devotion of substantial time in teacher education
to these relatively narrow skills will help teachers, not only
to become adapt in the skills themselves, but also to improve
their general competence as well.

Teaching skills can be identified through various approaches.
Firstly, it can be done by observing a number of teachers in a
variety of classroom situations. Secondly, it can be done by
analysing the teaching task through interviews and discussion with
teachers. Thirdly, it can be done by analysing the curriculum
and objectives and thinking out what teaching acts would help in
achieving them. Fourthly, it can be done through conceptualizing
a model of good teaching based on opinions of teachers, pupils,
headmasters, etc. The first approach, viz. observing teachers
in variety of classroom situations has been a more rewarding one
and Baral et al. (1968), through this approach, have evolved a
taxonomy of teaching behaviours at Stanford Centre for Research
and Development in Teaching. The idea of viewing teaching as a
group of skills was first taken up in teacher training programme
at the Stanford University and Allen and Ryan (1969) lists the
following fourteen teaching skills :

1. Stimulus variation
2. Set induction
3. Closure
4. Silence and nonverbal cues
5. Reinforcement of student participation
6. Fluency in asking questions.
7. Probing questions
8. Higher order questions
9. Divergent questions
10. Recognizing attending behaviour
11. Illustration and use of examples.
12. Lecturing
13. Planned repetition
14. Complateness of communication

Training the student-teachers in the analysed teaching skills require altogether a new approach. In the traditional procedure of teacher training, a novice teacher faces an extremely demanding and almost overwhelming task of mastering complex teaching skills all at a time and a supervisor sitting at the back of the class evaluates his performance in a vague subjective criterion. Skills which are useful for effective teaching are more likely to be acquired if student-teachers can begin to practise them one at a time in a relatively secure environment, with time to reflect on the objectives towards which they are directed and on the perceived effect of different patterns of behaviour.

Various methods of training teachers in particular skills have been demonstrated to be successful but the most generally applicable and the most intensively investigated approach to

skills training is microteaching. Microteaching is one of the most important developments in the field of practice teaching. The practice originated at Stanford University in 1963 when workers at the Centre for Research and Development in Teaching evolved an approach to practical teacher training, which owed something to already existing techniques such as group practice but which transcended them by introducing higher control, more analytical methods and a completely new approach to providing feedback. Since then, there has been an explosion in the use of these techniques and the new methods go under the generic title of microteaching and these methods hold very great promise in the area of teaching practice and teacher preparation.

Basically microteaching is a scaled down teaching encounter in which the teacher teaches a group of about five pupils for a period from five to twenty minutes. The term has been applied to a wide variety of uses of this basic situation but the standard use of microteaching developed at Stanford University involves a programme of the following type.

1. A particular skill is defined to student-teachers in terms of a pattern of teaching behaviour and the objectives which such behaviour is aimed at achieving. Attempt is made to justify the value of the objectives and the suggested efficacy of the skill.

2. Videotapes or films are shown of teachers using the skill, in microteaching or in normal classroom teaching. A commentary drawing attention to specific instances of the teacher's use of the skill is given.

3. The student-teacher plans a short lesson in which he can use the skill. He teaches it to one group of pupils.

4. A videotape of the lesson is replayed to the student. He observes and analyses it with the help of the supervisor. The supervisor attempts to make reinforcing comments about instances of effective use of the skill and also draws the student's attention to other situations where the skill could have been exercised.

5. In the light of the videotape feedback and the comments of of the supervisor, the student-teacher replans the lesson in order to use the skill more effectively.

6. The revised lesson is retaught to a different but comparable group of pupils.

7. A videotape of the 'reteach' lesson is viewed and analysed with the help of the supervisor.

8. The 'teach-reteach' cycle may be repeated.

Advantages claimed for microteaching as a training technique are that, while it involves real teaching, it is teaching in a relatively simple and non-threatening context; that the trainee can focus his attention on clearly specified aspects of his behaviour; and that provision is made for much fuller and more objective feedback to the trainee.

Microteaching is thus an innovative technique of teacher training. It is a new departure in teacher education and it is based on the principles of behaviour modification. Microteaching works, like programmed learning, on the paradigm of operant conditioning. Student teacher is made to learn certain behaviours or set of behaviours called skills of teaching, under controlled

conditions. The component skills of teaching are developed one by one under paradigm of microteaching in simulation or real condition.

1.6 Microteaching and Teacher Training

Microteaching is an innovative approach to teacher training and it provides a useful tool to help teacher-trainees in developing teaching skills under laboratory conditions. It aims at developing teaching ability in a student-teacher through five r's viz. recording, reviewing, responding, refining and reduing. It helps student-teachers in acquiring behaviours that are necessary for increasing the effectiveness of teaching-learning process. Teaching has been considered an art but microteaching aims at developing a science of teaching wherein teaching is looked upon as a set of behaviours and is analysed into various component skills. Mastering these skills one at a time under laboratory conditions makes learning of the complex process of teaching far more easier for the would-be teachers.

The importance of microteaching approach can best be understood by the five essential propositions given by Allen and Ryan (1969). They are :

1. Microteaching is real teaching. Although the teaching situation is a constructed one in the sense that teacher and students work together in a practice situation, nevertheless, bonafide teaching does take place.

2. Microteaching lessens the complexities of normal classroom teaching. Class size, scope of content and time are all reduced.

3. Microteaching focuses on training for the accomplishment of specific tasks. These tasks may be the practice of instructional skills, the practice of techniques of teaching, the mastery of certain curricular materials, or the demonstration of teaching methods.

4. Microteaching allows for the increased control of practice. In the practice setting of microteaching, the ritual of time, students, methods of feedback and supervision, and many other factors can be manipulated. As a result, a high degree of control can be built into the training programme.

5. Microteaching greatly expands the normal knowledge of results or feedback dimension in teaching. Immediately after teaching a brief micro-lesson, the trainee engages into a critique of his performance. To give him a maximum insight into his performance, several sources of feedback are at his disposal. When the supervisor has a videotape available, he can use videotape playbacks to help show the trainee how he performs and how he can improve. All this feedback can immediately be translated into practice when the trainee reteaches shortly after the critique, stage.

Initial training of teachers, i.e. pre-service training is a highly complex task and once a certain level of professional skill is acquired, it is equally important to maintain and to rise that level of professional skills through a life-time of service. Microteaching provides an answer by making the training process scientific and it takes up a key position amidst an array of training resources. According to Allen and Ryan, micro-teaching can be a very effective tool for teacher training at various levels and they discuss the following areas of importance

of microteaching in teacher training.

1. Practice is a prerequisite for many learning activities
   and practice in a normal classroom for a novice teacher
   may prove a hazardous job . Other professions have
   their built-in training programmes and provide opportunities
   for safe practice. Microteaching provides the teachers
   with a safe setting in which they can practice for the
   acquisition of various skills of teaching.

2. Teaching is a complex task and microteaching provides a
   focused instrument which helps the teachers to have more
   precise means of describing their activity of teaching. A
   teacher, wishing to improve his performance can identify
   specific teaching activity and by means of microteaching
   can practise them.

3. This is an era of change and teachers must be able to
   adjust to these changes and also to deal with them in
   educationally sound ways. After a few years in classroom,
   teachers tend to settle down with their own patterns of
   teaching and to reach a professional plateau where their
   development level off. One of the reasons for this
   plateau is that teachers have few vehicles for continued
   growth. Microteaching represents a solution to this
   problem by providing a vehicle for continuous growth.

4. Microteaching provides for modelling the instructional
   skills. Outstanding teachers can demonstrate their skills
   and be recorded on videotape. Teaching skills can be
   isolated and their performance highlighted so that the
   trainee can more easily identify the behaviours that
   make up the specific skills. Well-executed models of
   instructional skills can be used as a major tool in micro-
   teaching.

5. Traditional supervision of teaching tends to be generalised
   in approach and vague and frequently negative in tone. Micro-

teaching provides a new approach to supervision. It gives a good setting for supervision and a positive approach to it. The stress is on instructional help to the trainee. Also microteaching focuses on a particular skill and both, the trainee as well as the supervisor, are clear about it ahead of time. This makes supervision clearer, pin-pointed and highly specific.

6. Through microteaching approach the classroom complexities can be lessened, specific skills can be analysed, great control over teaching practice can be obtained and variables such as time, content, students, teaching technique, feedback etc. can be easily manipulated. Thus, microteaching provides a research tool for research in classroom teaching and teaching technique.

The foregone discussion shows what microteaching is and what it can do. It can prepare teacher trainees for their initial teaching experience and can bridge the gap between their formal study of classroom teaching and actual classroom teaching practice. Introducing microteaching in colleges of education can help the training process and its administration in the following ways :

1. It can initiate the teacher trainee to analyse and develop teacher behaviour under laboratory conditions.

2. It can land novice teachers gradually in the real classroom after gaining enough confidence.

3. It can impart intensive training in the component skills of teaching to teacher trainees.

4. It can help to involve the academic potential of the trainees for providing feedback to their peers.

5. It can help lessen the workload of teacher educators
with the involvement of peer supervisors.

6. It can lessen the burden upon practising schools by
having practice of teaching skills under simulated
conditions in college.

7. It can help explore the human resources to the maximum
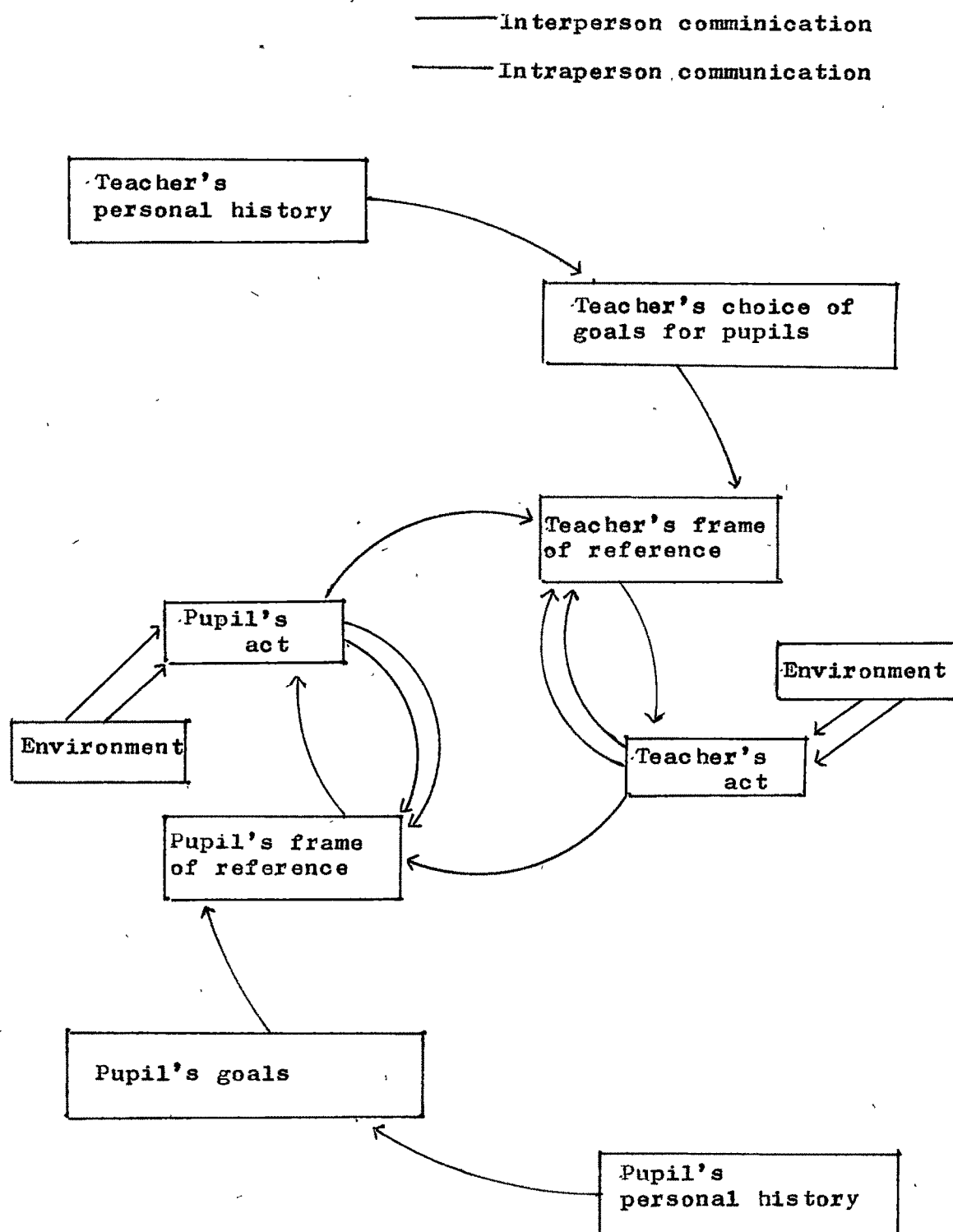and can help economise time, money and materials.

1.7 Teaching and Demographic Variables

Microteaching aims at developing teaching competence
through the development of various component skills wherein the
trainee passes through the process of practising and achieving
mastery over one skill at a time. Travers (1975) however
criticizes this competency based on teacher education programme
and has remarked that a complex behaviour of teaching cannot be
a chain of component skills. Teaching is not a mere sum-total
of various component skills, but it involves something more and
that is other personal variables of the teacher, viz. educational
background, social background, personality, his perception of
teachers and teaching, etc. Research on teaching has not gone
deep into this fascinating diversity of demographic variables
which have a direct bearing on the success and resourcefulness
of a teacher in classroom teaching. Classroom teaching is a
process of interaction between the teacher and the pupils and
the teacher's personal variables affect the matters like person
perception, information feedback, stereotyping, sensitivity to
pupil needs, social skills in specific context and his expectations
of pupils. Variables like teacher's opinion, values, attitudes,

personality characteristics are factors that contribute largely
to making of a good classroom teacher, for example, many a time
it is not wrongly assumed that a particular trait like child-
centred or authoritarian teaching is characteristic of a good
or bad teacher.

Study of teacher-pupil interaction highlights the effect of
such demographic variables and Runkal (1959), concerned specifically
with the teacher and pupil in the classroom, has suggested a
simple model consisting of two identical components, one for the
teacher and one for the pupil. (Figure 2). The teacher has
personal needs and goals that are represented in the figure by
personal history. This influences his choice of goals concerning
the pupil. His frame of references represent his standards derived
from his personal factors like upbringing, relevant demographic
variables, professional experience, etc. against which he makes
assessment of his acts and acts of pupils; and, during this
process, environment also plays its role. These assessments in
turn lead to the choice of further acts. The feedback of information
is an essential feature of the model where there is self-
assessment of behaviour within the teacher component and between
the teacher and the pupil when the teacher receives information
feedback on the pupil's acts.

Researches have focussed upon the importance of personal
characteristics of the teachers at pre-service as well as in-service
level. Generally it is observed that student-teachers do not differ

———— Interperson comminication

———— Intraperson communication

Teacher's
personal history

Teacher's choice of
goals for pupils

Teacher's frame
of reference

Pupil's
act

Environment

Environment

Teacher's
act

Pupil's frame
of reference

Pupil's goals

Pupil's
personal history

Fig. 2   A model for pupil-teacher interaction

from other students in their interest and past time preferences,
but Cohen (1969) has found that university students who intended
to be teachers were more persistance than others in the importance
they attached to conversation with lecturers, intellectual
discussion with friends and participation in cultural activities.
He has suggested that these students were identifying themselves
with an image of graduate teachers as a cultured and intellectual
person. One particularly interesting result has been with one of
the scales of Minnesota Multiphasic Personality Inventory, known
as K scale , which assesses the general tendency of a respondent
to assent to statements in the inventory. Teachers have been
found to score highly on this scale. Gowan (1955), reviewing
results of the K scale has suggested that it indicates some
degree of social anxiety overlaid with reaction formation in which
emphasis is directed towards control of self and adaptation to
the needs and demands of others. Thus, teachers in general may be
                                    in
more inclined than most to behave conformity with social pressures
                                  ᴧ
which they experience.

Probably the most comprehensive study of the prediction of
student success in training is that of Werburton et al. (1963).
Students in the University Department of Education were assessed
at the start of their one-year course on eightythree variables
including interests, attitudes, values, personality traits, academic
achievements and aspects of their personal histories and home
backgrounds. The two main criteria were their final marks in teaching
and educational theory. Only seven variables were significantly

correlated with final teaching marks, three of these being
general assessments of their abilities and others being the
personality traits of conscientiousness, self-control and
sensitivity. So far as teacher's personality characteristics
as a predictor of teaching ability are concerned, a general
pattern of the results that have been obtained is exemplified by
those for Cattell's 16 P.F., the instrument that has been most
frequently used in British studies. Morrison and McIntyre
(1973) report that significant correlation with ratings of
teaching ability have been found with any consistency only for
factor G (Conscientiousness) and even for this factor,
several non-significant correlations have been reported. Getzels
and Jackson (1963) have reviewed the findings of such studies
and report that very little is known for certain about the
relation between teacher's personality and teaching effectiveness.

The kind of people one have in teaching necessarily
affects the kind of teaching one gets. It is a common belief
that social class and economic status must likewise be important
factors of the merits of the teacher and his work. It can be
agreed that low economic status limits the opportunity one gets
for academic or professional training which in turn affects
the development of cognitive attributes. Eble (1969) however
reports a review of researches on predictor criteria of teacher
effectiveness and concludes that researches have failed to
substantiate like for such characteristics as intelligence, age,
experience, cultural background, socio-economic background,

sex, etc. Only slight positive correlation has been shown between scholarship and teaching effectiveness. Gupta (1977) in India has shown that efficiency in teaching increases with greater academic qualifications and training. He also found that good housing conditions affect efficiency favourably. Nair (1962) found that academic achievement alone is not a good predictive criterion for teaching success and that socio-economic status has got a low positive correlation with teaching ability.

It can be concluded from the above discussion that the scope of research in the area of the effect of demographic variables on teacher effectiveness and particularly their effect on the competence gained during pre-service training is still a vast one. Moreover, when innovative approach like microteaching is being introduced in teacher-education programme, it becomes all the more interesting and imperative to study the extent to which these variables may affect the training of the would-be teachers. Research in this area is strictly limited. Bell (1968) has shown that substantially there was no significant relationship between the improvement made in teaching by the experimental group and the control group and certain demographic variables which indicate that there was possibility of microteaching to be used successfully regardless of student's background and academic standing in teacher training programme. Das et al. (1978) have found that there are no sex, differences in the development of general teaching competence of students trained through microteaching technique. They have also shown that qualification of a student-

teacher as a variable has been found to affect their development of general teaching competence.

1.8 The Present Study

The foregone sections have discussed the limitations as well as the way out of the present day practice teaching programme in teacher education. Studies conducted in India in this field indicate that microteaching is an effective technique in the modification of teacher behaviour. Some of the studies point out that it is a better technique of training than traditional training approach. Tiwari (1967) found that teachers became more alert to the individual needs of the pupils when trained through microteaching. Chudasama (1971) found that microteaching is a better technique for developing indirect teacher behaviour. According to Marker (1972), microteaching is a better technique than conventional approach in the development of certain skills viz. reinforcement and silence and non-verbal cues. Passi and Shah (1974) have shown that it is an effective technique in developing the skills of questioning, reinforcement and silence and non-verbal cues. According to Singh (1974) microteaching is a more effective technique than conventional approach or interaction analysis in the modification of teacher behaviour.

Such studies however, were sporadic and lacked comprehensiveness in arriving at wider generalizations. A large scale experimental field-study was taken up in 1975-76 by the Department of Teacher Education, NCERT and Centre of Advanced Study in Education

at Baroda. The main finding of the study was that student-teachers trained through microteaching or modified microteaching technique acquired higher teaching competence than those trained through traditional training technique or usual practice teaching programme (Das, et al. 1976). Studies have also been carried out to find out the relative effectiveness of various components such as modelling, feedback, etc. NCERT study found no significant difference between the feedback provided by supervisors and that given by peer supervisors. The effectiveness of microteaching if practised under simulated or real classroom conditions is yet a disputable concept. According to Allen and Ryan (1969), microteaching is real teaching but according to Passi and Lalitha (1977) it is not completely a real teaching situation. The question of setting up a complete microteaching unit with the aid of costly hardware like CCTV is also a paramount one and Shah (1975) has shown that, even when no videotape equipment is available, teachers may take advantage of the controlled and scaled-down teaching environment and microteaching sessions without such equipments like videotape and CCTV does help the student-teachers to improve their communication in classroom. That microteaching can prove useful at in-service level has been shown in a study by Sheth and Desai (1979) wherein it is shown that microteaching treatment leads to significant modifications on the part of teachers.

What are the areas that need further investigations in microteaching ? Trott (1977) citing Allen and Ryan summarises

the following four :

1. In-house studies designed to optimise the procedure
   and sequences in the microteaching situation.

2. Research in modelling and supervisory techniques.

3. Task analysis of the teaching act and investigation
   of the relationship between teaching behaviour and
   student performance.

4. Aptitude X Treatment interaction studies to try to
   provide optimal training procedures for teachers with
   different abilities, interests and backgrounds.

Microteaching is on the way of becoming an established
thing for the teacher training colleges, yet further investiga-
tions are still necessary as stated above. The present study
evolves out of the contemplations of the following aspects of
microteaching approach and its implementation in training
colleges :

1. Apart from a slight development in the direction of
   embodying microteaching in practice teaching, most of the
   work in practice teaching is done in the traditional
   manner. Even if microteaching is not implemented fully in
   the programme, the idea can still prove useful. Borg,
   et al. (1970) have developed mini-courses which depend
   upon modelling and, in the courses, the involvement of
   supervisor is eliminated. Such a sophisticated system is
   still a distant dream but a system of auto-instruction
   along with the traditional pattern of training may yield a
   better dividend. Centre of Advanced Study in Education at
   Baroda has developed handbooks for different skills and the

effect of such an auto-instructional material on teaching competence can be compared with that arising out of a regular microteaching approach.

2. Trainee's personal variables play an important role in the training process and the ultimate development in teaching competence. Allen and Ryan have suggested such aptitude X treatment studies to provide for optimum training procedures. Intelligence, socio-economic level, teacher aptitude, achievement motive, personality factors, anxiety, etc. are such variables and a study of their effect on the ultimate development of teaching competence through microteaching may prove interesting and leading to insight for laying better procedures for microteaching.

3. Whether microteaching sessions be conducted in simulated conditions or in real situation before school students is a disputable aspect of the approach and tradition leads one to fear that there can be no teaching and in turn no training in simulated condition where the peers act as students in the teaching process. It was the experience of the researcher, long before microteaching came in real earnest, that when confronted with peers as students, trainees tended to take things lightly. Griffiths (1972) comments, 'Many microlessons have the atmosphere of a pub chat about them.' Thus, a comparison of these two microteaching approaches and of these two with auto-instructional-cum-traditional approach would give a new insight in the implementation of microteaching practice.

4. Microteaching can be said to have been implemented fully only when it becomes a regular full-scale programme of a teacher training college and this presents certain administrative difficulties. Besides personnels trained in microteaching, only a few training colleges have experimental schools attached to them and for most of the colleges, the programme of practice teaching is run in collaboration with the local schools. If microteaching is to be adopted as a regular practice and that too in a real situation, facilities to be had from the schools, the arrangement of microteaching time table in confirmity with the school time table and maximum possible use of the facilities available are points that need careful consideration.

To summarize, the question of the development of general teaching competence is linked with personal background of the trainee, administrative facilities for the training techniques to be adopted and the selection of the training approach. Figure 3 illustrates the concept of this structure.

It is clear from the figure that teacher trainees, under the influence of their personal demographic variables and according to administrative facilities available, pass through different training programmes with an ultimate goal of developing instructional skills which in turn lead to the development of general teaching competence. The present study tries to analyse the effects of different training approaches on the development of general teaching competence, the interaction

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          ┌─────────────────┐
          │  Demographic    │
          │   variables     │
          └────────┬────────┘
                   │
                   ▼
          ┌─────────────────┐
          │    Trainee      │
          └────────┬────────┘
                   │
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          ┌─────────────────┐
          │ ·Administrative │
          │    factors      │
          └─────────────────┘
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Microteaching Real   Traditional with Auto-imstruction   Microteaching Simulated
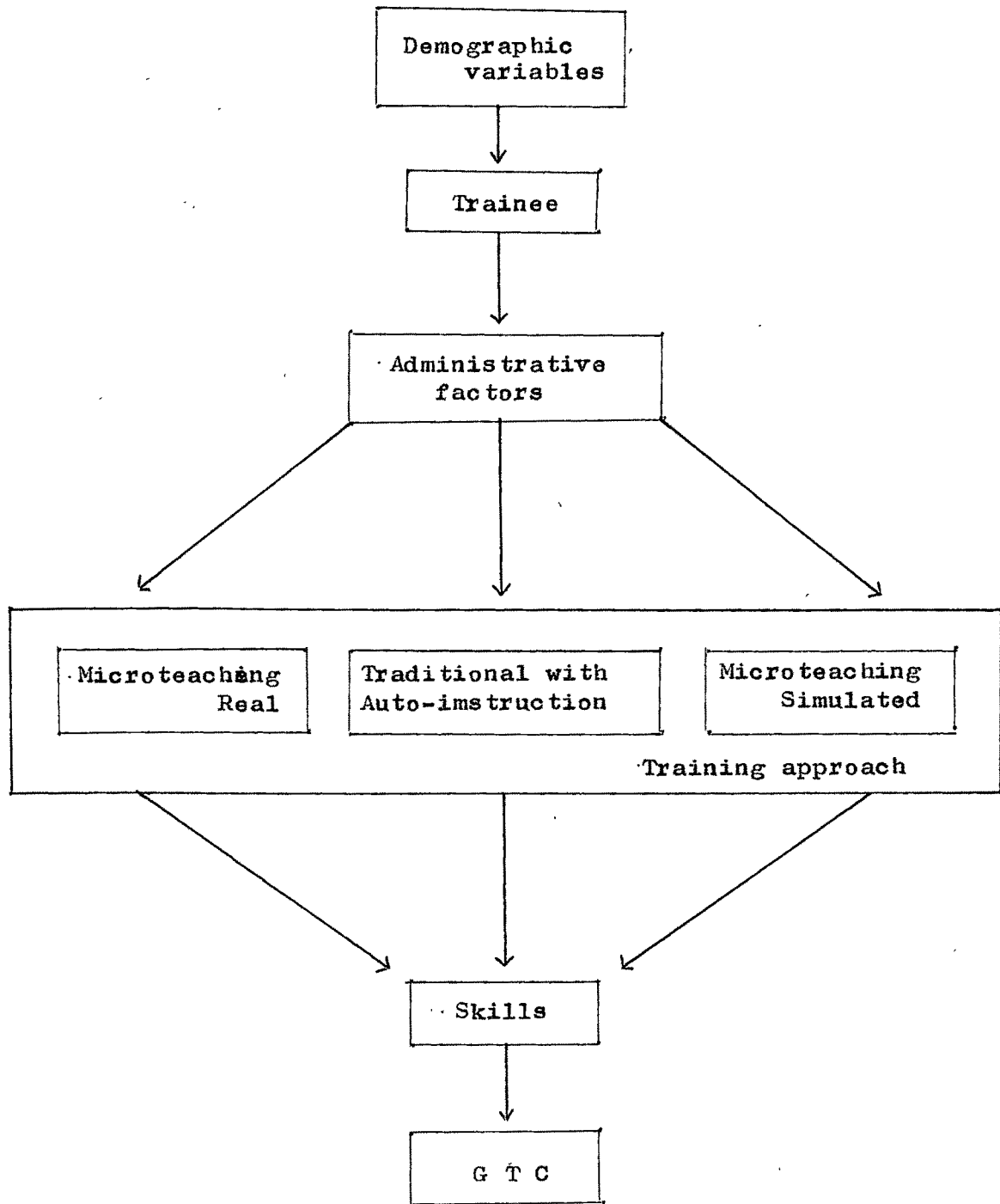
Training approach

Skills

G T C

.Fig. 3   Flow diagram for the development of GTC

with and effect of demographic variables on such development and also tries, not in an empirical way, to understand the administrative hurdles in the process of making microteaching a routine programme for teacher training colleges.

Having discussed the significance of this study, the researcher, in the next chapter, gives a brief theoretical aspect of microteaching and reviews the researches in the area.

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