

CHAPTER - I

INTRODUCTION

Historical Background of Teacher Education

Components of Teacher Education Programme

Weakness in Present Teacher Education Programme

Restructuring of TEP

Practice Teaching Programme

Main Inadequacies in the Existing Practice Teaching

Continuum Training Experiences

Definitions of Micro-teaching

Definition and Nature of Teaching Skill

Nature of Teaching Skill

Classification of Teaching Skills

Theoretical Conceptualization of Micro-teaching

The Applications of the Idea Needs

The Statement of the Problem

Operational Definitions of the Terms.

Significance of the Problem

Scope and Limitations of the Study

Objectives of the Study

Hypotheses of the study

Scheme of Chapterization

CHAPTER - I

INTRODUCTION

"Teaching is at the heart of education and the single most important action that the nation can take to improve schools is to strengthen teaching. The teacher who meets high and rigorous standards can galvanize the entire system." [Kelley; J.A. 1989].

In the modern system of education, nearly for the last three hundred years, the task of preparing the teaching force has been the responsibility of Teacher Education Programmes [TEP], conducted in special institutions called College of Education or Training Colleges [In the early period they were called Normal Schools].

Teacher Education is a continuous process and it's pre-service components are inseparable. As the first step; the system of teacher education will be overhauled.[Ministry of Human Resource Development; Government of India, 1986].

In October, 1987 America constituted the "National Board for Professional Teaching" standards under the presidentship of Kelley, J.A. to review the initial educational policy and to modify it. The said report deals with the preparation and continuing professional education of teachers and the number of ingredients as working environment of teachers. According to the report the quality and tone of a school depends upon the types of education it imparts and the quality of education invariably lies on the body of teachers working.

If one thinks of improving the schools; the basic agent called 'the teacher' is to be changed completely. It is left to the teacher to shape and reshape the schools and mould them in the desired directions.

"If a nation is to have a future with promise, it must have world class schools, and that if it is to have world class schools; it must have a world class teaching force" [Kelley, J.A. 1989].

It means that the future of any nation depends upon quality of schools, which ultimately depends upon the quality of its teaching force.

The nation now finds it's schools falling short in meeting the challenges of the modern world. The strength of the system essentially depends on the capabilities of people who teach and on their training. Teacher education is, therefore, an important input in the professional preparation and growth of competent teachers.

Newer techniques are being researched and experimented to make the various components of the teacher training programme fool and proof / sound and one such newly studied technique is the TOV technique [Technique of Overt Verbalization - TOV] which is of prime interest to the researcher and which forms the basis around which this study is undertaken.

However to place TOV in its correct position it will first be necessary to go down the lanes of history of teacher education components.

Historical Background of Teacher Education :

The 'Normal School' established by Della Salle in 1685 at Rheim; [Cole, L. 1965]; is considered as the origin of modern teacher training institutions. These institutions were first established in India by the Danish Missionaries in the last quarter of the 18th century, the purpose of which was training teachers for the primary

level. The beginning of the 20th century saw training of teachers for the secondary level.

The major components of the curriculum in the early Normal schools consisted of (a) general education; and (b) teaching practice under the supervision of an experienced teachers.

As the pedagogical knowledge went on increasing the Philosophical and Psychological basis of education were added to the curriculum of teacher education. The structure of the components of Teacher Education Programme (TEP) which evolved some time in the latter half of 19th century, has to this day remained unchanged.

Components of Teacher Education Programme :

De Land Sheere (1987, pp.79-82); identified four specific components of teacher education in the contemporary world, while discussing the fundamental concepts of teacher education. These components are as follows :

- 1) General education
- 2) Specific subject mastery
- 3) Psychology and education study
- 4) Applied education.

1) General Education :

The general education component of TEP includes an acquaintance with one's physical environment, and introduction to the basic ideas of science, physical and biological, the precise and effective use of languages as a means of communication and appreciation of higher values of life and finally, an understanding of the process involved in working and living together. It constitutes

the set of knowledge, skills and affective and psychomotor behaviour learned to contribute to a harmonious development of an individual in a given environment.

The individual should receive general education in order to:
i) understand his environment, ii) modify it and iii) analyze it critically.

It aims at a critical discovery and acquisition of meaningful factual knowledge, principles, methods, health science, literature, aesthetics, philosophy, politics and ethics. It includes development of cognitive skills, ability to communicate, to obtain information to work independently and also in group, to socialize and so on.

General education usually continues after university graduation and can not be standardized, but it's level should be high for all.

2) Specific Subject Mastery :

Teachers must be quite competent from the point of view of content mastery. The high quality of teaching of the subject requires recent and advanced knowledge of the subject content. From that point of view the curriculum of teacher education contains one or two subjects from the following :

- a) Mother tongue and History,
- b) Mathematics and Physics,
- c) Arts,
- d) Any one foreign languages, Music, Physical Education.
- e) Natural Science and Geography.

In brief Kelley J.(1969) explains the reason for teachers having subject mastery is that 'teachers should have a rich understanding of the subjects they teach and appreciate how knowledge in their

subject is created, organized, linked to other disciplines and applied to real world settings.' (Kelley, J.A. 1989, pp.14).

3) Psychology and Education Study (Pedagogy) :

Pedagogy is the set of theories and rules governing teaching practice. With the quick development of educational theory in 20th century a large number of disciplines have emerged and piled up instead of integrating functionally as philosophy of education, teaching method, history of education, educational psychology, sociology of education, measurement and evaluation, technology of education etc.

In addition to particularistic knowledge of the subject, teachers should have an understanding of the individual and social learning theories, child development theories etc. to form his decisions about 'how to teach'.

The knowledge of the laws of behaviour, learning process, developmental stages and ways of guiding, is a prerequisite of teacher education. An active introduction of experimental psychology should help the understanding of learning processes. Sociology and cultural anthropology will help in interpreting socially bound behaviour. Introduction to group dynamics should also be a part of teacher education.

The main psychological aspects of the teachers inventions are as follows :

- i) Self expression : Teacher's concern is with students' self-concept hence the teachers task is to facilitate expression of pupils.
- ii) Empathy : to learn to understand the others to accept them as they are.

iii) Autonomy : including tolerance of and positive reaction to aggression and negative evaluation from others.

iv) Feedback : Informing others of the reactions of self to their behaviour.

v) Positive perception of others while developing positive self-image.

Thus the study of psychology should make the teachers efficient in these five components.

The subject specific pedagogical knowledge is a repertoire of representations that combines instructional techniques with subject matter. It includes knowledge of the most appropriate ways to present the subject matter to students through unologies, demonstrations, experiments etc.

4) Applied Education :

The last component of teacher education programme is basically applied in nature; and hence it is the set of studies and actions developed for instruction and independent learning. Every time, the scientific knowledge to solve the problems that arise, will not be available, the teacher will have to make his own decisions based on his experiences.

Curriculum development and evaluation are also part of applied education. Along with the stages of curriculum development, the teachers should be trained to prepare the instructional activities. The instructional activities include, defining objectives, selecting content of learning experiences, choosing the appropriate method, and classroom organization, collecting or developing necessary material

7

and finally, making decisions about formative and summative evaluation.

Practice in laboratory schools and internship play a very important role in teacher education.

These four components, i.e. general education specific subject mastery, pedagogy and applied education are common elements of TEP, in the contemporary world. But that does not mean these are the only components of TEP. The number and nature of components depend upon the various patterns of TEP prevalent today.

The two major patterns that exist in India are :

- 1) Four year integrated course run by the comprehensive colleges.
- 2) A one year pattern, it is assumed that the general education is the responsibility of academic colleges and the remaining components, viz. pedagogy and applied education form the core of Teacher Education Programme.

In India, one year teacher education is the most prevalent pattern and it is going to stay for a long time in future, too, for variety of reasons. The nomenclature of these components differ from nation to nation. In India, they are nomenclated as follows :

- i) General education - General education
- ii) Specific subject - Specialization at the degree level and mastery
content course or content-cum-methodology
(1988) in four year pattern, C-C-M (1978)
Workshops on C-C-M (1988).
- iii) Applied education -
 - i) Special training programme packages.
 - ii) Core training programme packages.

- iii) Teaching Practice, Block teaching;
Internship (NCTE, 1978)
Practicum or field work (NCTE, 1988).

The four components discussed so far have remained almost unchanged for the last one hundred and fifty years. As a result, they have lost their relevancy to the needs and expectations of schools. Hence it can be said that the inflexibility of the teacher education curriculum is the only stable salient feature of TEP.

All the commissions, committees and experts and scholars of education in India and abroad, have, therefore repeatedly and constantly pointed out and underlined weaknesses in the contemporary teacher education programme. Allen, D.W. and Ryan, K.A. (1969), Stones, E. and Morris, S. (1972); Passi, B.K. (1975); Turney, et al. (1976); Das, et.al. (1976, 77.79); Petrie, H.G. (1985); NPE (1986); Kelley, J.A. (1989); Rammurti, A. (1990) are a few among them. These inadequacies can be shortly summarized as follows :

Weaknesses in present Teacher Education Programme

1. Candidates selected for training do not possess (i) an aptitude for teaching (ii) sound knowledge of the subject and (iii) a positive attitude towards teaching profession.
2. There is no clarity about the objectives of TEP in general and teaching practice in particular.
3. Duration of TEP is too short to develop their personality, broaden their outlook and develop healthy attitudes, interests.
4. Supervision of all practicum components is subjective and impressionistic.

5. The existing programme does not provide adequate opportunities to the student-teachers to have enough competency to face the various types of situation faced in their real teaching life.
6. There is no provision of individualized training.
7. No models or standards of performance are available.
8. Arrangements regarding practice-teaching are not serious to the task of teaching. Irresponsibility, aimlessness and indifference to children, lack of innovative measures in teaching are great obstacles in the development of pedagogical skills.
9. The feed-back given to the student-teachers is always global, haphazard and indiscriminatory.
10. No attention is given to mastery learning and accountability.
11. The gap between the training practices and real situation leads to a number of limitations as the growth of content stagnates, methodology gets stale and contact with academic discipline becomes weak.
12. The training techniques designed and adopted are assumed to be aimed at developing many competencies and affective characteristics simultaneously. It is not clear which technique is effective for developing what aspect of teacher preparation and to what extent.
13. The training procedures are based on education without scientific knowledge.
14. At the preparatory stage lesson planning, workshops are rarely held lesson plans are checked superficially.

Hence, there is a global cry for qualitative improvement in the existing TEP.

The demand of qualitative improvement therefore, can not be ignored by teacher educators, experts and researchers working in the field. There are certain movements in the history of Indian education which were directed towards the qualitative improvement in TEP. They are the two National Policies on Education (1968 and 1986) which underlined the importance of teacher education. Based on these National Council of Teacher Educators NCTE (1978 and 1988) proposed two frameworks of teacher curriculum. These frameworks accelerated reconstruction of TEP all over India (NPE 1986, Kelley, J.A. 1989; Rammurti, A., 1990).

Restructuring of TEP :

The Teacher Education Programmes (TEP) are for both preservice and inservice teachers. The possible reformation in both the type of TEP is possible on two dimensions viz.

- 1) Improvement in TEP and
- 2) Redirection of TEP.

If these two terms have been used by Eyaut, M. (1987; 733-734) in context of inservice teacher education programme, they are equally applicable to preservice TEP.

a) Improvement : It is usually regarded that those who enter the teaching professions are imperfect because they have had limited basic training; secondly they have not kept up with their subjects and finally, they are ignorant of the latest developments in education. The charge of their inefficiency is directed not at the teacher's

knowledge but at the teachers' skills. Hence improvement is necessary. This is basically due to inadequacies of preservice teacher education. Hence, there is need for the improvement of TEP.

Improvement in TEP is essential because the product of TEP i.e. 'training teacher' inherits certain inadequacies and defects with him/her; when he/she enters the teaching profession. This is called 'defect paradigm' or defect approach' in TEP.

b) Redirection: It means changing the programme as per the changing needs. Its rationale is based on the need for the educational system to keep abreast with the changes in the wider society and for schools to relate these changes in their local community.

The TEP needs redirection from time to time in accordance with cultural, economic and technological changes in society and this redirection is usually governed by the social-political process.

The above change was suggested with a view to incorporate some novel concepts like working with the community, content cum-methodology, interdisciplinary subject like, teacher and education in the emerging Indian Society. It also deemphasized theory component giving nearly 60 to 80 % weightage to this component [NCTE, 1978].

So far as practice teaching programme is concerned NCTE (1978) did not suggest drastic changes in the programme except inclusion of micro-teaching in the component of applied education.

So 'Improvement' should be the prime concern so far as the research on teacher education is concerned.

Remedies for the peresisting chronic problems as well as the newly emerging problems of teacher education cannot be searched in

the traditional approaches and techniques of teacher training. Unfortunately, the recent Commission's Report (NCTE 1988) does not provide any promising guideline in this respect. The conventional formative training experiences such as -

- i) Study of school environment,
- ii) Visits to various centres,
- iii) Collection of statistical data,
- iv) Observations of lessons of teacher educators and teachers,
- v) Meetings with innovative teachers,
- vi) Preparation of lesson plans,
- vii) Practice teaching and block teaching, cited by the Committee would not serve the purpose both for 'Improvement' as well as 'Redirection'.

In brief, the proposed framework neither fulfils the requirements of improvements nor the redirection. Unless, effective techniques for improvement are proposed it is not possible to go for redirection in teacher education. What is therefore, required is the basic improvement in the core of teacher education programme i.e. 'Teaching Practice'.

The present component of practice teaching was in existence even in the world's first Normal School (Cole, L. 1965) and has almost remained unchanged over two centuries. The feature of the programme as it exists today has been discussed below:

Practice Teaching Programme :

Practice teaching is the core component of teachers' professional

training which provides the student-teachers, experience of teaching in real field. At present, these training programmes are arranged in the following two ways :

- i) Day-to-Day stray lessons and
- ii) Block teaching or Internship Programme.

Both the practice teaching programmes are stereotyped and conventional in nature. Teacher-educators deliver lectures on theory or pedagogical theory bases and principles of teaching techniques, in which they discuss Herbart's steps, evaluation, lesson planning and how to observe the lessons. This theoretical discussion is followed by series of demonstration lessons in different subject. After every lesson a brief discussion is held in respect of qualities as well as inadequacies of the lesson. All the student-teachers observe all the demonstration lessons and participate in the follow-up discussion.

After having acquaintance with the stages of the lesson and observation of a model, the actual practice teaching begins. The lessons are arranged in practising schools without disturbing the school time-table. The student-teachers contact the respective subject teachers in the schools immediately after announcement of the lessons and collect their units. They prepare lesson plans as per guidelines. These plans are revised twice or thrice; under the guidance of teacher-educator, till satisfaction. After getting the lesson plan assessed the student-teachers conduct the lesson as per the allotment already done. The college supervisors observe the lessons fully or sometimes partly. After the lesson observation the supervisor discuss

the performance in which feed-back for further improvement is given.

The organization of practical work emphasizes stray lessons for practice teaching. The other alternative to stray lessons in real condition is block teaching or internship. In such programme student-teachers work in practising school for a longer time and on a continuous basis. They also perform other functions of a school teacher. In such programme student-teachers work as apprentice-teachers.

There may be some minor variations in the above discussed programmes, but the main features are more or less the same. The programme of practice teaching was uncritically being conducted until the seventies. But during the seventies it was subjected to heavy criticism by many.

(Stones, E. and Morris, 1972; Morris & McIntyre, 1969, Paris, 1969).

However, the present techniques employed in block teaching and internship are far from the basic concept inherited in these strategies. Hence, a few words are essential to explain these concepts.

1) Internship : According to Zeichner (1979) the two major types of induction programmes are i) internship and ii) beginning teachers programmes. He identified three types of internships. (a) fifth year internship for liberal arts graduates, (b) five or six year integrated preparation programme, (c) Teacher corps internship.

Mc Donald (1982) defined internship as including ... at least half-time teaching of no less than five or six months with full

responsibility assigned to the interns for the group of classes which they teach. People have wrong notions about internship. As it is defined 5 months for part-time teacher and 2 months for full time teachers are at least required. It is possible only in 4 years integrated course. Therefore, experiences are organized in block teaching.

2) Block Teaching :

In stray lessons the duration is short and isolated units are taught. In block teaching the student-teachers get experience of continuous teaching for one week or so. The lessons are not planned as per stray lessons. A single unit is taught during the period, thus two or three periods are taken in a day. Day to day lesson closure and introduction is avoided. Closure is usually in the last period. The student-teachers finally administer a unit test and check the assignments.

Besides teaching the student-teachers undertakes other work such as contact with parent and pupils, they also share partly some other responsibilities such as correction of work, education, guidance etc. Generally, block teaching is done in this way.

This training programme was being practised unchanging till 1970 but during the seventies it was severely criticized by many experts, scholars and educationists and several inadequacies were pointed out. They are summarized as follows :

Main Inadequacies in the existing practise teaching :

- 1) In practice teaching programme, the student-teachers confine to structure stereotype of teachers.

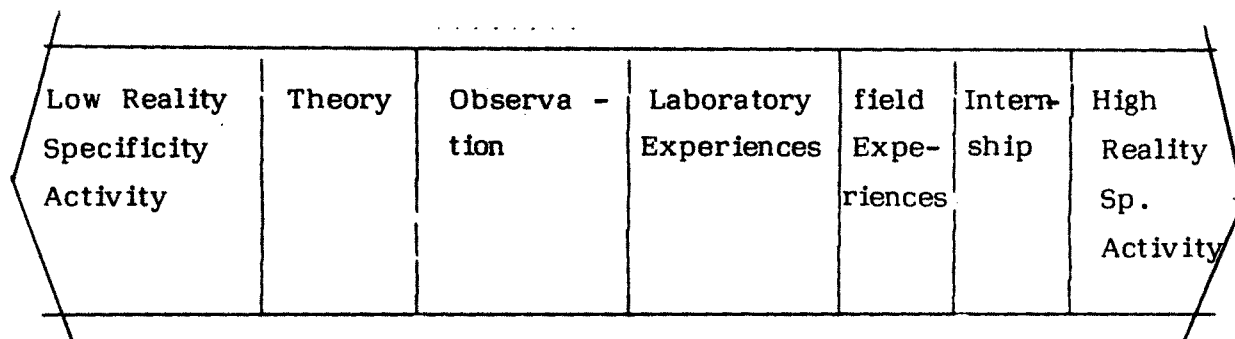
- 2) Theoretical knowledge and practice teaching are not harmoniously blended together. There is a wide gap. The two streams are greatly diversified.
- 3) The prospective teacher trainee, learns teaching skills through practice teaching by direct imitative interaction with adult teachers.
- 4) The student-teachers do not go beyond the observed teaching. They try to adopt the teacher-educators' teaching style or the style preached by them.
- 5) In practice teaching stray lessons are emphasized the major deficiency of this system is the artificiality of lessons and their uselessness in giving teachers consistent practice in taking the same group of children through the successive stages of learning a subject unit.
- 6) The training programmes are essentially concerned with the instructional means employed by teachers rather than outcome of teaching. The training programme stress on methods, steps and skills; but do not stress on the relationship between teaching and achievement.
- 7) The experience of teaching practice after discussion of theory and demonstration is a sudden and drastic experience, which threatens the student-teacher, and creates hindrances in acquisition of teaching behaviour.
- 8) The guidance the student-teachers receive from teacher-educators is general in nature and is rarely related to any body of pedagogical principles. Much of the students time on extended practice goes on without guidance.

- 9) The practice teaching is conducted more as a legend or ceremonial function rather than logical and systematic fashion. Its theoretical base is yet untested.
- 10) The emphasis on 'lessons' seems to be based on the misconception that the training of the teacher is restricted only to his guided performance in the classroom.

In brief, the traditional teaching practice does not correspond as continuum of training experiences which forms the basis of the training programmes in the other profession.

Continuum training experiences :

The continuum of training has been, first time, made explicit by Gregory, T.B. (1972). It has been represented in the Fig.No.1.1



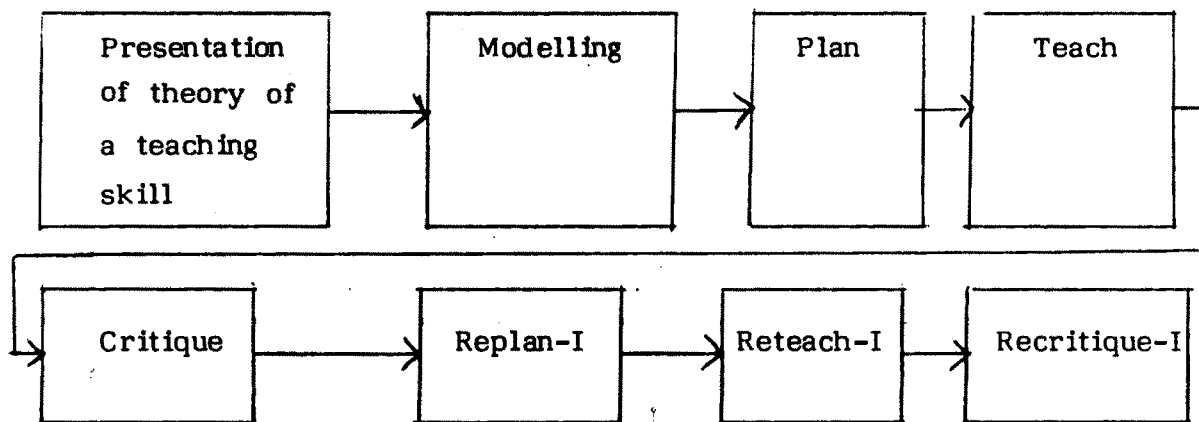
Dimensions of Teacher-education programme

According to this continuum, the training experiences in the initial stage should have low reality, specificity and minimum activities, and the complexities of the training experiences should gradually go on increasing on these dimensions. Hence, the initial stage of training programme should be of discussion of theory in which student-teachers should be more passive. In the theory lectures only on the broad general principle would be discussed and student-teacher would be still far away from the reality whereas the ultimate training

experience such as internship would be characterized by high activity, high reality and high specificity, as it would be organized in the actual work-place.

In essence microteaching consists of a short teaching period, a small class and small unit, a follow up critique and reteach session using improved course of of action which has been planned after critique session. It enables the trainees to acquire the teaching skills.

The process of microteaching is schematically represented



A Standard Microteaching Cycle

The cycle presented above is repeated until acceptable mastery level is achieved. The various definition of microteaching include the above mentioned salient features. Some of the definitions are presented below:

Definitions of Microteaching :

Microteaching is defined as a "system of controlled practice that makes it possible to concentrate on specific teaching behaviour and to practise under controlled conditions." (Allen and Eve, 1968).

Singh, L.C. (1979) has also defined it as [he focuses on immediate feed-back of microteaching] "a new design for teacher training which provides trainees with information about their performance immediately after completion of their lesson."

Jangira, (1980) defines microteaching as "a training setting for the student-teachers where complexities of normal classroom teaching is reduced by a practising a particular teaching skill; for 5-10 minutes on 5-10 pupils using single concept."

The concept of microteaching thus evolved has not only grown, but has been modified in various ways. However, basically the technique belongs to a set of new departures based on analytic approach. The major premise underlying the technique is that the complex teaching act can be analysed in to simple, limited and well defined components called, 'Teaching Skills'. The concept of teaching skill has recent origin and it is mainly a contribution of microteaching to the field of teacher education.

Definition and Nature of Teaching Skill :

Brown (1975) defines teaching skill as, 'a set of related teaching acts or behaviours performed with the intention to facilitate pupils learning'.

Joshi, A.N. (1981) has also defines it as 'a set of behaviours, the occurrence of desirable behaviours and the avoidance of undesirable behaviours both being positively associated or assumed to be associated with certain instructional objectives or change in pupil.'

The above cited definition give emphasis on two points :

- i) the set fo teaching acts or behaviours; and ii) their hypothesized or empirically tested association with certain educational or pedagogical objectives.

However, researchers in India and abroad have not attempted to explore the nature of teaching skill; and hence, all the definitions seem inadequate. It is pointed out by Joshi, A.N. (1984) that the concept of teaching skill has been evolved without unfolding the nature of teaching skill. Some thought, therefore, must be given to the nature of teaching skill.

Nature of Teaching Skill :

Teaching behaviour as a concept of human behaviour has not been studied in a systematic sequential and integrated fashion. The perceptual cognitive and behavioural processes associated with teaching skill and their interrelationships are not yet known (Hargie, 1982).

The teaching skills have the following characteristics :

- i) Teaching skill is a set of behaviours which serves one and only one pedagogical functions.
- ii) Teaching skills have three components viz.: perception, conception and action.
- iii) Purely cognitive skills do not go under purview of teaching skills.
- iv) Teaching skills have dimensions of non-verbal behaviour, message of communication and reciprocity of communication.
- v) Teaching skill is a set of strictly overt or observable behaviour.

From the above characteristics, the teaching skill can be defined as, "a composite set of overt verbal and non-verbal behaviour exhibited by a teacher as a culmination of prior perceptual and cognitive processes in an interactive situation with pupils; and serves one and only one pedagogical function (Singh, L.C. and Joshi, A.N. 1990).

A large number of teaching skills have been identified abroad as well as in India. The number of skills is over increasing. Hence it necessitates classification of the skills.

Classification of Teaching Skills :

- i) Teacher education has grouped the skills in relation to areas of educational objectives, such as, social, mental, emotional, psychomotor and aesthetic development of child written by Asian Institute (1972).
- ii) Flanders classified skills on the basis of speaking, listening, models in classroom interaction. The two main categories of the skills are a) Responsive skill and b) Initiation skills.
- iii) Lalitha (1975) suggested three classes of skills :
 - a) Pre-Instructional skills, b) Instructional Skills,
 - c) Post-Instructional Skills.
- iv) Menon, M.B. et al. (1984) give nine clusters of skills.
 - a) Skills of planning and perception, b) Presentation skills. c) Skill of organizing group interaction. d) evaluation skills, e) Problem-solving skills, f) skills of guidance and counselling, g) Organizational Skills, h) Skills

to work in team and i) Leadership skills.

- v) Joyce, B. et al. (1985) suggested broader classification of teaching skills as - a) Naturalistic teaching skill b) Curriculum based skills, c) School climate teaching skills, d) Theory driven teaching skills.

However, all the above formats of classification are horizontal but not vertical, and some of the skills classified, totally fall out of review of teaching skill.

Joshi, A.N. (1986) proposed more relevant taxonomical structure of classification of teaching skills from training point of view.

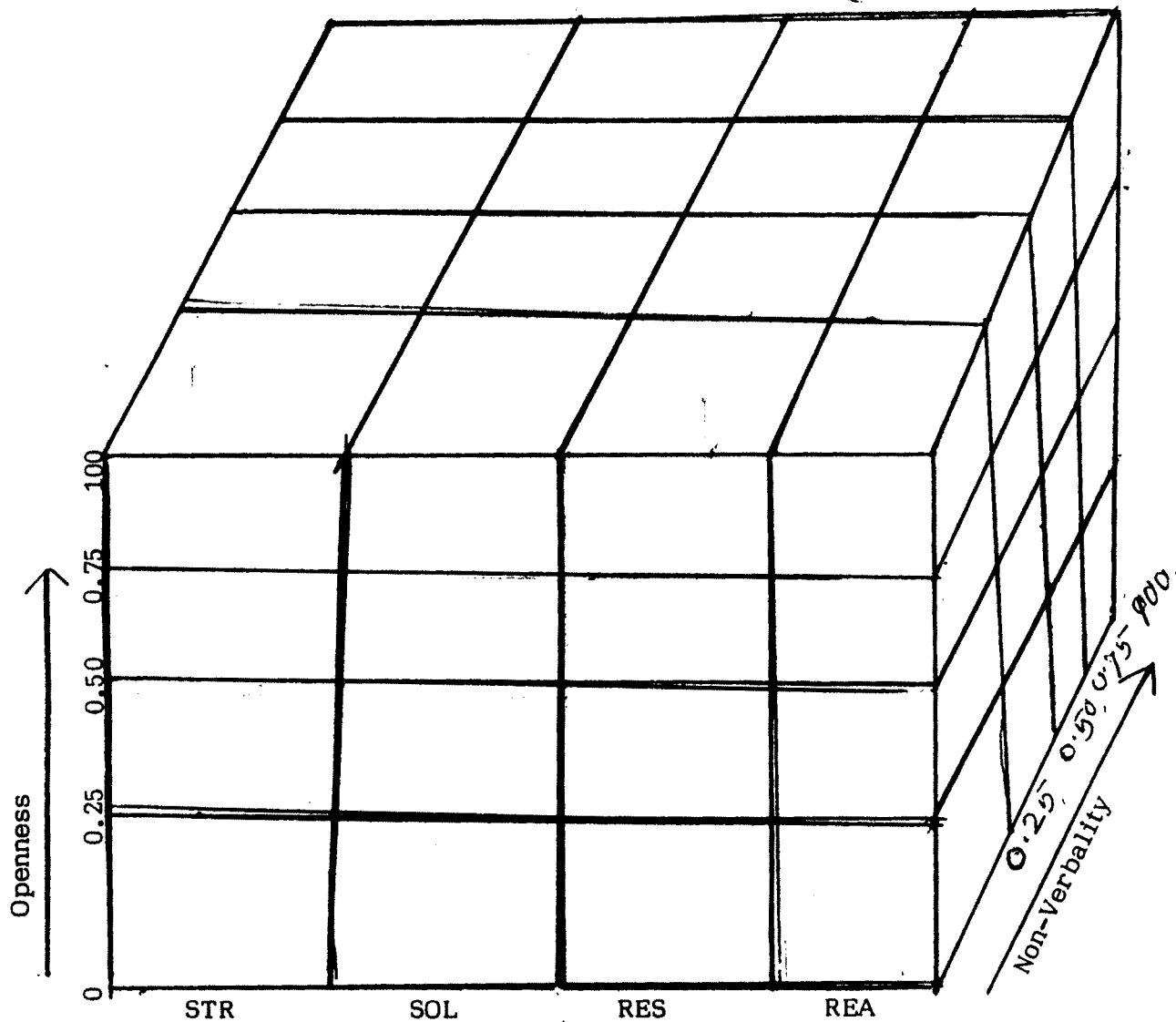
He had given three dimensions of the structure taxonomy viz. i) openness of teaching skills, ii) non-verbality of skills; and iii) nature of moves in teaching to which the skill belongs.

Openness of a skill depends upon the degree to which the performer has to respond to the spatial and temporal demands that occur in the environment. So in case of open skill, the responses or behaviour of a teacher is determined more by the environment around than the teacher himself.

Non-verbality of skills depends upon the proportion of non-verbal components of the skill.

The third dimension deals with the four moves which occur in classroom interaction. The moves are, i) structuring (STR), ii) socialization (SCL), iii) Responding (RES); and iv) Reacting (REA), (Bellack, et al. 1966).

The structure can be represented in the fig. No 1.2



THREE DIMENSIONAL STRUCTURE OF TAXONOMY OF TEACHING SKILLS

The complexity level of skill and, therefore, difficulty level acquisition goes on increasing from single move based, closed, verbal skill to multimoves based, open skill with large proportion of non-verbal components.

To summarize the discussion on microteaching. It can be said that it has made many significant contributions to the process of education. It functioned not just as a technique; but worked as key for unlocking the new perspectives in the process of training; such as, addition of concept of teaching skill, needs for flexibility in training, underscoring the importance of immediate, accurate and critical feed-back and search for the psychological basis of modelling and the other components involved in training.

The search for theoretical conceptualization of microteaching was attempted by many. Macleod, G.R. (1987) tried to discern these attempts.

Theoretical Conceptualization of Microteaching :

Microteaching was not based on solid theoretical conceptualization and research evidence. According to Macleod, G.R. (1987), four distinct models of participant learning underlying microteaching programme may be discerned, they are as follows :

- a) Easy Pragmatist Model,
- b) Behaviour Modification,
- c) Social Skill Training Model,
- d) Cognitive Models - Its emphasis is on the :
 - i) Participant thinking about teaching,
 - ii) Incongruity between intent and action and
 - iii) Information processing.

Brown, G.A. (1975) considered the teaching skills as social skills and developed a complete programme of microteaching based on the same.

According to him, each trainee has a store of central processes, i.e. linguistic skills, cognitive abilities, personality variables and attitudes. The manifestations of skills produce change in pupils. These changes are perceived by trainees. Perception of feed-back is determined by central processes of the trainees. The microteaching programme developed by Brown, G.A. (1975), has, therefore three major constituents, viz. a) planning, b) performance and c) perception which are linked in cyclic fashion.

The Brown's social skill model postulates a cognitive stage between perception and performance (i.e. Planning) and assumes a fairly direct and simple relationship between the two Ps.

However, this relationship is not so simple. It is usually complex and problematic (Trower, 1979).

This view is supported by Bandura (1977). He put forth in his 'Social Learning Theory', that there are many intermediary cognitive processes between perception and performance. These cognitive processes as stated by him, are symbolic representation, awareness of consequences of actions, formulating abstract rules of generating behaviour, mental planning rehearsal of the skill to be acquired. Hence, apart from perception, planning and performance we need to have many more steps and sub-steps catering to cognitive demands so as to enhance them.

In this context, Joyce, B. and Weil, M. (1978) give elaborate systems of teacher-training.

Joyce, B and Weil's Training Approach :

Both have suggested four components of teacher training, these are as follows :

- 1) Presentation of Theoretical Base,
- 2) Demonstration of correct performance,
- 3) Planning and peer-teaching with feed-back,
- 4) Transfer of Training.

Each component has specific goals and these goals are obtained through a series of sub-steps involved in each component.

A number of weakness are prevalent in the existing teacher programme. Some of them are as follows :

- i) Lack of appropriate modelling,
- ii) Weak component of lesson planning,
- iii) Teaching Practice based on lower.

(Ministry of Human Resource Development, Government of India, 1986).

The main component of the existing teacher education programme is training for teaching task. Therefore, the provision of practice lessons in the teacher education and the programme is designed as follows :

- 1) Lecture of theory,
- 2) Demonstration Lessons,
- 3) Preparation of lesson plan,
- 4) Practice lesson,
- 5) Feed-back.

These steps are based on behaviouristic models and aim at the modification of internal behaviour but not the underlying student-teachers thought process, training teachers in emphasizing the external performance of a particular set of teaching skills,

neglecting the conceptual theoretical and decision making roles of teachers. In short, the cognitive aspect of teaching skill acquired is totally ignored in this approach.

According to cognitive point of view the performance of any skill is controlled by its corresponding covert representation and failure in performance is caused by its inadequate coding and retention in memory. The teaching skills programme is adequately coded in memory through repeated execution of the desired teaching pattern and ultimately the pattern gets routinized. The routinized pattern is performed without prior visualization or thought. Thus, the modelled or desired teaching pattern in memory, need to be ensured in teacher training programme. There are many aids to accomplish the exercise of carefully done lesson planning.

However, lesson planning serves this function only when it is carefully done and is followed by its systematic mental rehearsal. Mental rehearsal increased. 1) Vividity of coding in memory and its retention, 2) Accelerates development of routines and 3) Ultimately improves skilled performance. As mental rehearsal is completely a private activity and inaccessible to external security and intervention, it can be overtly done by verbalizing the plan and this is the origin of the technique of overt verbalization (TOV).

Technique of Overt Verbalization (TOV) is defined as a process of envisioning the future teacher performance and verbalizing it in as detail as possible (Joshi, A.N. 1988).

The idea ostensible seems to be very simple but the ways of implementing it are yet to be paved.

The applications of the idea needs :

- i) Identification of the roles of the teacher educator and peers in the process.
- ii) Formulation of strategies of interventions by the supervisors and feed-back in pre-active and post active seasons.
- iii) Development of tools and supports system.
- iv) Enulsuging social system and principples of reaction of supervisors; and
- v) Identifying the non-verbal behaviour associated with overt verbalization of lesson plan and trocing their associationship with teaching performance.

The task of systematization of the process was done by earlier researchers [Pujari, S.Y.1988; Kurade, H.R. (1990)]. However, the researcher in his previous study on student-teachers non-verbal behaviour and teaching performance has found that there is a relationship between teaching performance and some of the components of non-verbal behaviour.

There has not been a thorough study of the fifth need mentioned above i.e. of non-verbal behaviour that occur at the time of overt-verbalization and relating it with the mental state of the student-teacher and his/her teaching performance. Hence, the present study will be undertaken.

THE STATEMENT OF THE PROBLEM

■AN INVESTIGATION INTO STUDENT-TEACHERS NON-VERBAL BEHAVIOUR DURING THE USE OF THE TECHNIQUE OF OVERT

VERBALIZATION AND ITS RELATIONSHIP WITH MENTAL STATE AND TEACHING PERFORMANCE."

Operational Definitions of the terms :

Investigation

An Investigation to conduct thorough examination of -

Overt Verbalization (OV) :

i) It can be defined as a process of envisioning the future teaching performance and verbalizing it in as detail as possible.

ii) It is description done in advance by a teacher trainee, imagining as if he/she is teaching in a classroom.

Non-Verbal Behaviour :

The facial movements and movement of limbs that occur during overt verbalization in the student-teacher is called as non-verbal behaviour.

It may be of the following four types :

- i) Facial movement,
- ii) Movement of hands,
- iii) Movement of legs and
- iv) Movement of sitting posture.

Teaching :

The purposeful behaviour exhibited by student-teacher during their classroom practice-teaching is called as teaching.

Mental State:

Anxiety, confusion, and fear exhibited by the student-teacher during overt verbalization is defined as the mental state. And this is the moderator variable in this study. The

following mental states have been taken into consideration in this research namely,

- i) Anxiety : Uneasiness due to indefiniteness of recall,
- ii) Confusion : Uneasiness due to disorder or jumbledness of recall.
- iii) Fear : Uneasiness due to dread, alarm or danger of inability to recall.

Special Category Mental State :

This special category of mental states includes those mental states which result from a combination of two or more of the above mentioned three mental states namely, anxiety, confusion, depression and fear.

Significance of the Problem :

When the lesson plan is ready, during overt verbalization several non-verbal behaviours are exhibited by those student-teachers whose mental image of the lesson plan is blurred.

These non-verbal behaviour occur in the form of anxiety, confusion, depression and fear leading to ineffective teaching.

This study will help to identify the mental state of student-teachers during classroom teaching and suggest measures to counteract these effects for effective teaching.

Scope and Limitations of the study :

The results of the study will be of tremendous use for B.Ed. student-teachers, training colleges and Planners in the field of education.

The present study is limited to 33 student-teachers of the B.Ed. course Shivaji University, Kolhapur 1992-93, College of Education, Peth-Vadgaon with Marathi as their medium of instruction.

Objectives of the Research : The major objectives of the study are -

- 1) To find out the relationship between the verbal mistakes committed by student-teachers during TOV and their teaching performance.
- 2) To find out the relationship between the verbal mistakes and the non-verbal behaviour which occur before, and after the verbal mistakes in student teachers during technique of overt verbalization (TOV).
- 3) To predict the student-teachers mental state during TOV which may be related to several non-verbal behaviour.

Objective No.3 is a major objective. It involves finding out the relationship between the three mental states namely anxiety, confusion, fear and the 34 non-verbal behaviour (as stated in

To find out the relationship of each of the three mental states with each of the 34 non-verbal behaviours.

34 minor objectives have been along with their hypothesis for each of the three mental states and the 34 non-verbal behaviours namely 3.1, 3.2, 3.34 .

Obj.No.3.1 To find out the relation between the movements of neck and mental states namely anxiety, confusion, fear and special category.

- Obj.No.3.2 To find out the relation between the movement of the eyebrows and the mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.3 To find out the relationship between the movement of the closing the eyes and the mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.4 To find out the relationship between the movement of the lips and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.5 To find out the relationship between the movement of the hand above the hair on the head and mental states namely, anxiety, confusion, fear and special category.
- Obj.No.3.6 To find out the relationship between , movement of scratching behind the ear and head and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.7 To find out the relationship between moving the hand over the forehead and eyebrows, and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.8 To find out the relationship between the movement of twitching the nose distastefully and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.9 To find out the relationship between moving the hand over the eyes, cheek, nose, etc. and mental states namely anxiety, confusion, fear and special category.

- Obj.No.3.10 To find out the relationship between the movement of placing the finger or tip of the pen on the lip and mental states namely, anxiety, confusion, fear and special category.
- Obj.No.3.11 To find out the relationship between the movement of placing closed palm over the cheek and resting the hand over the index finger and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.12 To find out the relationship between clasping the chin between the thumb and index finger and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.13 To find out the relationship between the movement of placing the head on both the palm and moving the chin towards the index finger and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.14 To find out the relationship between the movement of placing the elbow on the table and resting the chin on the palm and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.15 To find out the relationship between the movement of placing/putting the hand/hands on the thigh and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.16 To find out the relationship between the movement of rubbing the thumb on the other fingers and mental states namely anxiety, confusion, fear and special category.

- Obj.No.3.17 To find out the relationship between the movement of playing with different objects and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.18 To find out the relationship between the movement of the hand holding the pen and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.19 To find out the relationship between the movement of the hand not holding the pen and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.20 To find out the relationship between the movement of both the hands and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.21 To find out the relationship between the movement of both the knees and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.22 To find out the relationship between the movement of the right knee and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.23 To find out the relationship between the movement of the left knee and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.24 To find out the relationship between the movement of crossing feet and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.25 To find out the relationship between the movement of stretching out the feet and mental states namely anxiety, confusion, fear and special category.

- Obj.No.3.26 To find out the relationship between the movement of folding the feet backwards and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.27 To find out the relationship between the movement of toes up and down; and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.28 To find out the relationship between the movement of removing and putting footwears and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.29 To find out the relationship between the movement of shifting forward in the chair and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.30 To find out the relationship between the movement of shifting backward in the chair and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.31 To find out the relationship between the movement ^{sit} of trying to / straight and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.32 To find out the relationship between the movement of change in crossing of legs and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.33 To find out the relationship between the movement of resting body on arm of the chair and mental states namely anxiety, confusion, fear and special category.
- Obj.No.3.34 To find out the relationship between the movement of lifting one side and mental states namely anxiety, confusion, fear and special category.

Objective No.4.

4) To find out the relationship between the verbal mistakes committed by student-teachers during TOV and the mental state in accordance with the lesson plan.

Hypothesis :

The following hypothesis will be studied in the present study:

- 1) There is no relationship between the verbal mistakes committed by student-teachers during TOV and their teaching performance.
- 2) The verbal mistakes and the non-verbal behaviour which occur before, during or after the verbal mistakes in student-teachers during TOV are unrelated.
- 3) There is no relationship between the student-teachers mental state during TOV and the various non-verbal behaviours.

Minor Hypothesis

Hypo.No.3.1 There is no relationship between the movement of neck and mental states namely anxiety, confusion, fear and special category.

H.No.3.2 There is no relationship between the movement of the eyebrows and the mental states namely anxiety, confusion, fear and special category.

H.No.3.3 There is no relationship between the movement of closing the eyes and the mental states namely anxiety, confusion, fear and special category.

- H.No.3.4 There is no relationship between the movement of the lips and mental states namely anxiety, confusion, fear and special category.
- H.No.3.5 There is no relationship between the movement of the hand above the hair on the head and mental states namely anxiety, confusion, fear and special category.
- H.No.3.6 There is no relationship between the movement of scratching behind the ear and head and mental states namely anxiety, confusion, fear and special category.
- H.No.3.7 There is no relationship between moving the hand over the forehead and eyebrows, and mental states namely anxiety, confusion, fear and special category.
- H.No.3.8 There is no relationship between movement of twitching the nose distastefully and mental states namely anxiety, confusion, fear and special category.
- H.No.3.9 There is no relationship between moving the hand over the eyes, cheek, nose, etc. and mental states namely anxiety, confusion, fear and special category.
- H.No.3.10 There is no relationship between the movement of placing the finger on tip of the pen on the lip and mental states namely anxiety, confusion, fear and special category.
- H.No.3.11 There is no relationship between the movement of placing closed palm over the cheek and resting the head over the index finger and mental states namely anxiety, confusion, fear and special category.
- H.No.3.12 There is no relationship between the clasping the chin between the thumb and index finger and mental states namely anxiety, confusion, fear and special category.

- H.No.3.13 There is no relationship between the movement of placing the head on both the palm and moving the chin towards the index finger.
- H.No.3.14 There is no relationship between the movement of placing the elbow on the table and resting the chin on the palm and mental states namely anxiety, confusion, fear and special category.
- H.No.3.15 There is no relationship between the movement of placing/ putting the hand/hands on the thigh and mental states namely anxiety, confusion, fear and special category.
- H.No.3.16 There is no relationship between the movement of rubbing the thumb on the other fingers and mental states namely anxiety, confusion, fear and special category.
- H.No.3.17 There is no relationship between the movement of playing with different objects and mental states namely anxiety, confusion, fear and special category.
- H.No.3.18 There is no relationship between the movement of the hand holding the pen and mental states namely anxiety, confusion, fear and special category.
- H.No.3.19 There is no relationship between the movement of the hand not holding the pen and mental states namely anxiety, confusion, fear and special category.
- H.No.3.20 There is no relationship between the movement of both the hands and mental states namely anxiety, confusion, fear and special category.

- H.No.3.21 There is no relationship between the movement of both the knees and mental states namely anxiety, confusion, fear and special category.
- H.No.3.22 There is no relationship between the movement of the right knee and mental states namely anxiety, confusion, fear and special category.
- H.No.3.23 There is no relationship between the movement of the left knee and mental states namely anxiety, confusion fear and special category.
- H.No.3.24 There is no relationship between the movement of the crossing/feet and mental states namely anxiety, confusion, fear and special category.
- H.No.3.25 There is no relationship between the movement of stretching out the feet and mental states namely anxiety, confusion, fear and special category.
- H.No.3.26 There is no relationship between the movement of folding the feet backwards and mental states namely anxiety, confusion, fear and special category.
- H.No.3.27 There is no relationship between the movement of toes up and down; and mental states namely anxiety, confusion, fear and special category.
- H.No.3.28 There is no relationship between the movement of removing and putting footwears and mental states namely anxiety, confusion, fear and special category.
- H.No.3.29 There is no relationship between the movement of shifting forward in the chair and mental states namely anxiety, confusion, fear, and special category.

- H.No.3.30 There is no relationship between the movement of shifting backward in the chair and mental states namely anxiety, confusion, fear and special category.
- H.No.3.31 There is no relationship between the movement of trying to sit straight and mental states namely anxiety, confusion, fear and special category.
- H.No.3.32 There is no relationship between the movement of change in crossing of legs and mental states namely anxiety, confusion, fear and special category.
- H.No.3.33 There is no relationship between the movement of resting the body on arm of the chair and mental states namely anxiety, confusion, fear and special category.
- H.No.3.34 There is no relationship between the movement of lifting one side and mental states namely anxiety, confusion, fear and special category.
- 4) The verbal mistakes committed by student teachers during TOV and the mental state in accordance with the lesson plan are unrelated.

ASSUMPTIONS :

The following two assumptions have been accepted :

- 1) When the student-teachers mental image of lesson plan is vivid they do not commit any mistakes during classroom teaching.
- 2) If the student-teachers mental image of the lesson plan is blurred during classroom teaching, it is exhibited in the form of non-verbal behaviour anxiety, confusion and fear and this affects their teaching performance.

SCHEME OF CHAPTERIZATION

CHAPTER-I - INTRODUCTION

Chapter one deals with a brief history of teacher education its components, inadequacies in the existing teacher education programme (TEP) and the growing need for restructuring the entire teacher education programme. Further, it covers the concept of practice teaching and brings out weaknesses therein. Finally give them in the correct order, it puts together statement of the problem, definitions of terms, scope and limitations of the problem, underlying assumptions, significance, objectives of the study and the hypothesis to be tested.

CHAPTER-II - REVIEW OF RELATED LITERATURE

This chapter presents the review of related research literature on teacher training namely in the following areas .

- i) Mastery learning, ii) Training strategies, and
- iii) Microteaching conducted in India and abroad.

CHAPTER-III - PROCEDURE AND RESEARCH DESIGN

This chapter is composed of the values of experimental method, choice of experimental design, validity and reliability. It also takes into account dependent, Independent and moderate variables, and gives selection of the required sample, data processing, tools and implementation of the programme.

CHAPTER-IV - ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the analysis of data in accordance with stated objectives i.e. by calculating the coefficient of correlations for objective number I and II; and using the Chi-square for objective number III and IV. Based on the statistical calculations, interpretation has been undertaken.

CHAPTER-V - SUMMARY, CONCLUSIONS , RECOMMENDATIONS AND TOPICS FOR FURTHER RESEARCH

It is the summarizing chapter in which main conclusions, implications of study, and recommendations for further research have been discussed.