CHAPTER-I
INTRODUCTION

Teacher education is the foundation stone of nation's intellectual power which shapes the power profile of the nation in the community of the world nations, thus, it is rightly said that progress of a country particularly of a democratic country depends upon the quality to its teachers and for this reason teaching is the noblest profession among all the professions. Doga (2010) emphasized on the fact that in a changing scenario one has to acquaint himself with life knowledge required for himself and his associates. All the formal and informal activities and experiences that help to qualify a person to shoulders the responsibilities as a member of the educational profession or to discharge his responsibilities more effectively.

Patil (2010) stated that quality of education primarily depends on the efficiency and effectiveness of teaching-learning process. Kothari Commission (1964-66) begins its report with the remarks that the destiny of India is being shaped in its classrooms. Hence, in order to improve the quality of education it is necessary to have a sound programme of teacher education. Irrespective of levels and types of education.

Rastogi and Chanchal (2010) stated that pre-service education of prospective teachers provides a wide variety of
experiences designed to develop teaching competency. Teachers play a pivotal role in the process of implementation of the policies, formulated to achieve the desired goal in the qualitative improvement of education. Rayans (2004) pointed out that in educational scenario, teachers act as a 'pivot' on which the entire process of education rest on. Teachers have been called nation builders in every period and in every society. Teacher themselves really are the key persons in developing good community. Sabu (2010) emphasized that in the present era drastic changes are required to meet the goals of education by increasing teacher competency. Thomson (2010) opined that teacher should encourage such a classroom environment that is inviting respectful, supportive, inclusive and flexible among students. Singh (2009) stated that teachers are considered the most important resource for a school. Kukreti (2005) remarked that competent teachers possess higher mean scores on knowledge, creative and humanistic values than their incompetent counterparts. The Education Commission (1964-66) observed that of all the different factors which influence its quality of education and its contribution to national development, the quality, competence and character of teacher are undoubtedly the most significant.
Nand (2006) also emphasized that the strength and success of any educational institution depends primarily on the professional competence, self less devotion of teachers and the extent to which they know and love their subjects and pupils. Sood (2003) felt the need of orientation of the teachers regarding child development.

Savelsbergh (2002) pointed out that there is increasing awareness the skilled perception precedes and determines appropriate action in education.

Sodhi and Suri (2000) pointed out that the teachers were the leaders and shapers of the classroom and students freedom and give them responsibility. Gupta (1977) focused that teaching competency is the more essential availability required for an effective and successful teacher. Shrimati Hansben Mehta in her Presidential address on the occasion of the first conference of training colleges in India held at Baroda on 23rd to 25th November (1950) rightly remarked that he teacher occupies a pivotal position in all scheme of educational reconstruction.

Perlberg (1970) opined that the theoretical courses to which greatest attention is given at present in teacher education -are mainly verbal, abstract and sometimes even vague. Buch and Yadav (1974) pointed out that much dissatisfaction has been shown about the training provided to the teacher.
Thus, the need to find out a proper solution for removing the defaults in the existing practice teaching programme was fulfilled and micro teaching arrived in the scene with a view to solve the varied problems.

1.1 CONCEPTUAL FRAMEWORK

1.1.1 Micro Teaching

Micro teaching has been described as an important innovation in teacher education. Micro teaching is a training procedure aimed at simplifying the complexities teaching procedure the trainee is engaged in a scaled down teaching situation. Allen (1968) described micro teaching as a scaled down teaching encounter in class size and time. Passi (1976) stated that it is a training technique which requires pupil teachers to teach a single concept using specified teaching skills to a small number of pupils in a short duration of time.

Allen and Eve (1968) explained that micro teaching is a system of controlled practice that makes it possible to concentrate on specific teaching behaviour and to practice teaching under controlled conditions. Bell (1985) suggested that microteaching group showed significant gain in teaching performance from initial lesson to final lesson.

Clift et al. (1976) explained that micro teaching as a teacher training procedure which reduces the teaching situation
to a simpler and micro controlled encounter achieved by limiting the practice teaching to a specific skill and reducing teaching time and class size. Smith (1971) found positive effect of micro teaching lesson in the gradual improvement in the performance of the student teachers.

Tiwari (1967) found that micro teaching technique could be used as a training technique in developing insight among student-teachers and thus making them better teachers. Singh (1974) concluded that the student-teachers trained through micro teaching significantly changed their verbal teaching behaviour in classroom as compared to the student-teachers trained in the traditional classroom.

Bhattacharya (1975) found micro teaching, a more suitable technique to develop the teaching skills. Dosajh (1975) reported that micro teaching was adjusted as decidedly a superior technique for the training of pre-service teachers in the development of various classroom teaching skills self concept of student-teachers can be enhanced significantly through micro teaching practice in simulated conditions.

Jangira et al., (1981) concluded that training of in-service science teachers in the five teaching skills, selected for the experiment, through micro teaching is likely to improve the competence. Rai (1977) concluded that micro teaching being
controlled practice of teaching can be a very good tool for providing training to teachers in component skills of teaching. Sharma (1984) discovered a positive gain in teaching efficiency as a result of pre-practice in micro teaching programme.

Lohithakshan (2005) defined in his Dictionary of Education that a method used for training teachers in specific tasks – like questioning, class-room management, etc. Usually a ten minute session is provided and a small group of pupils 5-10 in number assigned for the trainee. He has to handle the class for the short period. His performance will be videotaped, which will be later subjected to an analysis and discussion by the teacher-educators and fellow-trainees to see how far he has succeeded in mastering the specific skill.

In simple words we can say that micro teaching is a scaled down teaching encounter in terms of (i) time, as it lasts for five to ten minutes, (ii) class-size, as a trainee teacher a group of five to ten pupils, and (iii) task, since the trainee practices only one specific teaching skill.

Mathew (1978) focused that for the development of general teaching competence the effect of microteaching is significantly than that of equivalent traditional group of acquiring same teaching skills.
Kallenback and Gall (1969) compared the effectiveness of microteaching approach and conventional approach in training elementary school and found that micro teaching approach was superior to the other in terms of time required for training. Ward (1970) focused that microteaching improved the attitude of staff as well as students towards education. Young & Young (1970) explained micro teaching as a devices which provides the novice and experienced teachers a like, new opportunities to improve teaching.

Harris (1970) pointed out value of micro teaching that micro teaching experiences promoted use of background in information provision of concrete materials utilizing children's observations, allowing developing conclusions, helping children to verify conclusions. Singh (1989) pointed out that micro teaching was a better technique than conventional approach in the development of certain skills.

Singh (1989) accepted that the teaching strategies were significantly effective in gaining understanding of microteaching and in developing a positive attitude towards teaching. Thurkral and Madan (2003) accepted that students who taught by using skills of micro teaching were confident and efficient as compare to their counter parts.
Linn (1972) opined that microteaching can subsequently improve students skills in evaluating aspect of teaching. Buch (1975) explained micro teaching as teacher education technique which allows teachers to apply well defined teaching skills to a carefully prepared lesson in a planned series of five to ten minutes encounter with a small group of real classroom students, often with an opportunity to observe the performance video tape. Panda (2004) focused that the student teachers receive microteaching lessons were significant better than others taught through traditional techniques on four teaching skills sets induction, questioning, explaining and blackboard summary.

Asija (1990) suggested that microteaching helps in developing skills in an integrated form and is better than the conventional training. Dwivedi (1988) investigated that the skills related to observation and information locating are better developed by microteaching than by conventional teaching.

Clift (1976) explained that a teacher training procedure which reduces the teaching situations to a simpler and more controlled encounter achieved by limiting the practice to a specific skill and reducing teaching time and class size.

Abraham (1974) reported that microteaching was effective in developing the skills of fluency in questioning and probing
questions. Joshi (1974) pointed out that microteaching was effective in developing the skills of reinforcement and silence and non verbal cues.

Bhattacharya (1974) reported that this technique with poly technique teachers and proves that micro teaching was more effective than the conventional technique is two development of indirect teacher behaviour. Brunis (1978) suggested that the effectiveness of microteaching and feedback in the development of the skills of recognizing attending behaviour and teacher’s liveliness among in service teachers. Wadhwa (1988) suggested that micro teaching is a functioning powerful and valuable instrument.

Tripta (1989) pointed out in a case study of microteaching as an innovation and has foreseen the need of an organization which would promote innovation in teacher education. Gandhi (1992) investigated that on three variables direct and indirect influence teacher talk and pupil talk- microteaching was superior to traditional approach.

According to the Encyclopedia of Education (1971) edited by Deighton micro teaching is a real, constructed scaled down teaching encounter which is used for teacher training, curriculum development and research.
1.1.2 Indian Model of Micro Teaching

Jangira and Singh (1982) described Indian model of micro teaching:- Teaching (6 Minutes); Feedback (6 Minutes); Re-plan (12 Minutes); Re-teach (6 Minutes); Re-feedback (6 Minutes); Total (36 Minutes) Fig. 1.1 also depicts the Indian Model of Micro Teaching.

![Diagram of Micro Teaching Cycle]

In simple words we can say that micro teaching is scale down teaching encounter in the terms of time, last size and task.

1.2 TEACHING SKILLS

As is mentioned earlier micro teaching based on analytical approaches to teaching in which teaching is analyzed into limited but well defined components called teaching skills. These teaching
skills are a group of teaching acts/behaviours intended to facilitate pupils' learning directly or indirectly Gage (1965) defined the teaching skills as specific instructional activities and procedures that a teacher may use in his classroom. Allen (1966) postulated that skill is an act of teaching. It can be defined in terms of teaching acts and behaviours.

1.2.1 Skill of Probing Questioning

Questioning is a powerful device of teaching. Through this device, the teacher transacts a lot of learning experiences. It is essentially a teacher-controlled device for promoting though, making appraisal and moving students towards desired goals. Arockiam (1990) found that primary school teachers improve their questioning skill through the self-learning package and training on questioning strategy.

- Components of Questioning Skill

The skill of probing questions consists of the following five component behaviour or techniques:

- **Prompting**: Prompting is a technique of probing or going deep into the pupil's initial response and leg him from incorrect or no response to the correct response with series of hints or prompt through step by step questioning process.
• **Seeking further information:** It is technique of getting additional information from the pupil to help them to reach the criterion response.

• **Refocusing:** While refocusing, the teacher persuades the responding pupil either to relate his response with something already studied by him or to consider implications of his response in a more complex and noble situation.

• **Redirection:** Redirection technique is usually applied in 'no response' or 'incomplete response' situation.

• **Increasing critical awareness:** This technique is used in a correct response situation to increase critical awareness in the pupil.

Thus we can conclude that this is the most important technique of the learning process.

### 1.2.2 Skill of Increasing Pupils’ Participation

This skill includes activities on the part of the pupils and teacher both. Pupil activity includes his/her verbal responses and initiation. Teacher activity includes both verbal and non-verbal behaviour which stimulates pupil participation. Somvir (1985) reported that criteria of teacher effectiveness were significantly related to indirect pupils’ participation and response.
• **Components of the Skill**

The components of the skill are given below:

- **Creating set:** ‘Set’ in a classroom may be defined as mental readiness on the part of pupils before learning any task.

- **Questioning:** A question is a stimulus in the classroom that elicits pupils’ participation in terms of pupil response. Lower order questions, Higher order questions, Long answer type questions, Open ended questions, Prompting questions and Redirected questions

- **Encouraging pupils’ participation:** The teacher should make use of verbal and non-verbal behaviours for providing due encouragement to the pupils. Encouraging words, statements, gestures, and non-verbal cues, all help in this direction. Use varied types of encouraging behaviour, Feedback may be given to every behaviour, Minimize the use of either verbal or non-verbal behaviours and Minimize the use of repeating pupils’ responses.

- **Pausing:** Pausing can be defined as deliberate silence introduced by the teacher during classroom interaction, so as to increase pupils’ participation.
1.2.3 **Skill of Reinforcement**

Reinforcement skill is also known as feedback. Reinforcement means the strengthening the inbuilt force to respond. Psychologically, reinforcement is a technique in strengthening the psychological behaviour of the learner to learn in the classroom, the responding pupils need social approval of their behaviour. Dubey (1989) found that the feedback training strategy was effective in developing the feedback-giving and feedback-receiving competence of student-teachers and the feedback training strategy improved the feedback-giving and feedback-receiving competence of student-teachers and intelligence further contributed in the development of feedback-receiving competence.

- **Components of Reinforcement Skill:**

  The skill of reinforcement has the following behavioural components:

  **Desirable Behaviours**

  - **Use of Positive Verbal Reinforcer:** It involves giving verbal or linguistic expressions which act as reinforcer, like saying ‘good’. It means they increase the chances for the pupils to respond correctly. They may be divided in the categories like below:
Praise Words, Accepting Pupils’ feeling and Repeating pupil’s response.

- **Use of Positive Non-verbal reinforcer:** When a teacher uses gestures and performance behaviour (without words) to reinforce the students responses, it is known as positive non-verbal reinforcement. This component has four elements: nods and smiles, moving towards the responding pupil, giving a friendly look and writing pupil’s responses on the blackboard.

- **Use of Extra-Verbal reinforcement:** This type of reinforcer falls midway between positive verbal and non-verbal reinforcers. These reinforcers are such remarks as ‘hm-hm’, ‘Uh-Uh’ or ‘Aaaah’ etc.

**Undesirable Behaviours:**

- **Use of Negative Verbal Reinforcer:** Verbal behaviour of the teachers that brings about negative reinforcement i.e. decreasing the chances for the pupils to participate in the classroom or respond correctly. These reinforcers can be divided into the categories given below:
  
• **Use of Negative Non-verbal reinforcer:** Negative non-verbal reinforcers are those non-verbal behaviours of the teacher that bring about negative reinforcement. This can be done through such behaviours like ‘frowning’, widening of eyes steering, ‘nodding the head’, tapping impatiently with hands’ avoiding the particular pupil and moving away from him. However, this type of reinforcement should be used with caution as it leads to disrupt rapport between pupils and the teacher. It may also hurt their ego and discourage them.

• **Wrong Use of Reinforcement:** It is only the proper and right use of the possible reinforcers that bring encouraging results.

### 1.2.4 Skill of Recognizing Attending Behaviour

A teacher may talk and lecture, but actually teaching occurs only when children learn. In order to create proper classroom climate, it is necessary to recognize various levels of attending behaviour of the pupils, such as, very much attending behaviour, average attending behaviour, and non-attending behaviour.

Singh (1995) found that the student-teachers trained through micro teaching only showed the following modification in their classroom behaviours: An increased use of behaviour in
categories, ‘Accepted feelings’, ‘Praise or encouragement’, ‘Using pupil’s ideas’, ‘Asking questions’, ‘Giving directions’, and ‘Criticising or justifying authority ‘Silence’ or ‘Confusion’ was adequately minimized. There was considerable increase in ‘Teacher-talk’ particularly in ‘Indirect-teacher talk’ (which changed the ratio of ‘Indirect-influence’ over ‘Direct-influence’). The overall behaviour pattern of ‘Indirectness’ remained, more or less, unchanged.

- **Components of skill:**

- **Rewarding the Attending Behaviour of the Pupils:**
  Through this behaviour the teacher rewards the attentive pupils in order to sustain their attention. This can be done by using verbal reinforces like ‘good’, ‘fine’, ‘right’.

- **Giving Directions:** This type of teacher behaviour would include giving directions or criticizing pupils who are less attentive. For example, when two pupils are talking, the teacher looks at them and says, ‘Stop talking’, ‘Pay attention’.

- **Asking Questions:** While explaining the teacher asks evaluative questions in order to check whether or not pupils are attentive. Thus, questioning helps the teacher to obtain feedback from pupils about their attending behaviour.
• **Accepting Feelings and for Ideas of Pupils:** In a classroom when a teacher is teaching, he recognizes the non-attending behaviour from postures and facial expressions of the pupils.

• **Using silence and Non-verbal Cues:** The teacher uses silence and non-verbal cues whenever he does not want to distract the attention of the class.

  By silence we mean giving meaningful pauses. It may be long or short, but the teacher uses silence.

1.2.5 **Skill of Achieving Closure**

‘Achieving Closure’ is similar to a stage known as ‘recapitulation’ in the Herbartian Steps, according to which it is a process of associating new facts with the old knowledge, applying new knowledge in various situations, and ensuring repetition of the facts in the best possible way. It is generally necessary to use this skill at convenient points during the lesson for definite summing up and revision of the meaningful facts taught. This may be termed as ‘sectional recapitulation’.

Khan (1985) concluded that student-teachers treated with the technique of skill-based micro teaching were found to be more effective in General Teaching Competency then those trained in the traditional method of teaching.
- **Components of the Skill**

- **Consolidation of the major points by the teacher the pupils:** This involves synthesizing the main points covered during the lesson into a meaningful whole. The teacher has consolidated the main points by putting a few questions to the pupils. So, it is mostly the questioning approach that has been used.

- **Providing opportunities for the pupils to apply the new knowledge to various situations:** This helps the teacher in locating gaps in the pupil’s understanding. This involves mostly testing situations where both the teacher and the pupils receive feedback immediately about their performance.

- **Linking the pupil’s new knowledge gained during the lesson (present knowledge) with their previous knowledge:** Past knowledge of the pupils includes the knowledge of the pupils which they had acquired before presenting the lesson in hand and it helps the pupils to see the relationship between them.

- **Linking present knowledge with future learning:** The term ‘future learning’ refers to the home-task or assignment given to the pupils after present knowledge has been taught during the lesson. If linking has to be
brought about between the present knowledge and the future learning, the assignment should be appropriate.

1.3 MULTIMEDIA

Now a day, we live in a changing scenario of media. The idea of multimedia utilization is increasingly being applied in various educational areas, from preschool programmes to adult education and industrial and military training.

Multimedia means more than two media. A combination of media selected for use in a particular unit should be based not only according to how suitable each of the media is to its particular purpose in the unit, but also according to how well and in what ways each supplements the others in providing information, and how each reinforces the learning effect of the others. Swamy (2010) opined that the use and awareness about internet effect the teaching competence. While the spread of the school-level continuum, the range of subject matter involved, the diversity of curriculum and specific classroom objectives, and so forth obviates the presentation of a single set of multimedia selection criteria, two general guidelines should be observed.

- Other factors being equal, the teacher should select media combinations that will provide a variety of appropriate sensory experiences, and
• Media, materials and methods should be selected or designed as much as possible in terms of specified outcomes desired.

Kashyap (2006) opined that the context of global era our everyday lives is saturated with media. With the multimedia magic touch traditional educational system is turned into systematized learning contrast equipped with modern devices of education technology. Shah and Patel (1999) tried out of multimedia package in the subject of banking for the polytechnic students of Gujarat and reported that the learners regarding the use various media components of the multimedia package creates a long lasting effect on students.

Helenjoy (2005) explained that computer technology in the form of Computer Assisted Instruction (CAI) and Internet helps in achieving better than that prescribed by the teacher. It makes the task of the teaching quite easy, interesting, methodical and scientific as the teacher becomes quite capable of attaining the teaching objectives with greater efficiency and effectiveness.

Anderson (1995) suggested that perceived knowledge rather than experience is a predictor of micro computer anxiety and the computer anxiety affects the ability of individuals to use computer. Barker (1995) examined that information technology
such as computer mediated communications, electronic publishing, intelligent agents, video conferencing, video on demand, and virtual reality are growing and maturing to produce, intelligent multimedia virtual classrooms.

Singh (1995) studied the effectiveness of UGC countywide classroom programme on models of teaching with interactive mode and without talkback. He reported that the group with interactive mode and one without talkback differed significantly. The achievement of the interactive group was significantly higher than the achievement of the group without talkback.

Behra (1990) stated that the in actual classroom interaction ETV teachers significantly difference from Non-ETV teachers on teacher response ratio; Teacher Question Ration, and Pupil imitation ratio, teachers also pointed out power failures, mechanical disorders and unsuitable time slot as some of the vulnerable problems. Dhurunkar (1992) suggested that comparative studies be taken up to assess the effectiveness of educational broadcasts in South Asian Countries. Another point that needs attention is the need to fuse together folk and electronic media.

Sinnothambi (1991) developed a video programme on energetic in chemistry for higher secondary students and accepted that the experimental group learnt more concepts and
gained more on the achievement test in energetic. Giri (1990) accepted that utilization of ratio broadcast was more in urban schools than in rural ones.

Antonysamy (1989) accepted that learning through viewing of the video films was more effective then learning through charts. Kalimuthu (1991) suggested that the students received instruction through the video programme gained more and learnt more concepts as compared to students of the control group. Narayansamy (1991) prepared a video programme for sixth grade students to teach Tamil vocabulary and reported that experimental group learnt more Tamil words using the programme than the control group.

Kaur (2005) pointed out the extent of impact of TV programmes on rural adults is related to their literacy, sex and viewing time. Purushothaman and Stell (1994) declared that the teachers present with video lessons made the most desired impact rather than traditional one. Becker (1993) stated that teacher's attitudes towards technology must be favourable in order to achieve successful professional development programs that aim at long lasting effects on the standards of student accomplishment.

Hubbard (1991) also pointed out the need for greater involvement of computing skills in teacher education and the
potential beverage for instruction not only for science teacher but also for the art teachers. Hoffman (1994) accepted that Internet is the largest information network of the networks uniting people and computer around the globe. It is a powerful communication tool, a giant information super highway system connecting computers and the local, regional and global network together.

Singh (1995) reported that students enjoyed working through video package rather than traditional method. Kontos (1997) opined that effective teachers need to be knowledge and skilled in the application of new technologies in order to extend teaching effectiveness. Singh and Kaur (1997) remarked that the duration of television viewing did not influence viewers on braveness, tidiness, self-confidence, cheerfulness, friendship and leadership.

Mishra and Nathpal (2002) pointed out that the internalization of values with successful learning is possible when activities were related to the child's experience. Lang (2004) accepted the effect of learning styles, computer attitude and classroom technology on student performance and motivation of Auburn University. Mordecai (2006) reported that the use of internet resources in Nigerian University to enhance efficiency and effective service in academic pursuit.
1.4 TEACHING COMPETENCE

Teaching competence defined as adequacy for a task of required knowledge skills and abilities. It emphasizes on the ability to do rather on the ability to demonstrate knowledge. As such in teaching competency based teacher education has become a special designation for an educational approach. In the present scenario we need competent teachers to meet challenges of teaching learning process. National Policy on Education (1986) has also recommended that norms of accountability should be strictly followed with incentives for the good performance and disincentives for the non performance, Veer (2004) emphasized that teacher should possess teaching skills and competencies so that his task may be easy, useful and effective.

Teacher education through suggested reform under NCTE may produce human teacher resources for better and brighter self-reliant future India. Teacher education is the vehicle for preparing those who wish to practice in the teaching profession. Gupta (1977) focused in his article "Role of Education programme in teacher effectiveness" in the journals of Indian education that teaching competency is the more essential availability required for an effective and successful teacher. Chardenas (2002) reported that teachers working in an open school climate were better in teaching competency and teacher
effectiveness than those employed in school with autonomous, familiar controlled and class climate.

Kalia (2006) focused that elementary teachers and elementary principle found teacher preparation programme in Texas doing the more effective job in the competencies of the teaching method of strategies and students level. Gill (1990) evaluated that the new curriculum was suitable for developing teaching competence among the student teacher.

Dubey (1999) accepted that there are psychological correlates between teaching competency and their effectiveness. Kumaraswamy (2004) opined that the female teachers were better than the male teacher in certain dimensions of competency namely in communicative and interactive. Kukreti and Saxena (2005) suggested that competent teachers possess higher mean scores on knowledge, creative and humanistic values than their incompetent counterparts.

By accumulating all the studies, which are discussed in foregoing pages, investigator feels that in the present scenario when every aspect of education needs a drastic change to suit changing development of time, it is very much necessary to increase teacher competency. The present study was undertaken with a view to investigate the effect of micro teaching and use of multimedia on teaching competence of prospective teachers.
1.5 THE PROBLEM

The plethora of researchers conducted on micro teaching, teaching competence, multimedia and teaching skills. A number of studies on micro teaching have focused upon that there are different factors, which determine the quality of education and its contribution to national developments. The quality competence and character of teachers are undoubtedly very significant. Allen and Eve 1968; Clift et al. 1976; Mathew R. 1978; Sood 2003; Perberg 1970; Rayns 2004; Kukreti 2005; Savelsbergh 2002; Bhattacharya 1974; Brunis 1978; Wadhwa 1988; Gandhi 1992; Tripta 1989. Another salient feature emerging from the review if literature is that a number of studies conducted on multimedia (Singh 1995; Behera 1990; Sinnothambi 1991; Antonymsamy 1989; Kaur 2005; Hubbard 1991; Becker 1993; Purushothaman and Stell 1994; Kalia 2006; Dubey 1999; Kukreti and Saxena 2005; Kumaraswamy 2004; Kashyap 2006; Helenjoy 2005; Anderson 1995.

The literature available on teaching competence is mainly focused that teacher should possess teaching skills and competencies so that his task may be easy useful and effective. National Policy on Education 1986; Veer 2004; Gupta 1977; Kalia 2006; Bagga 2005; Arora and Panda 1998.
There is paucity of research on effect of micro teaching and use of multimedia.

Hence, it was thought worthwhile to undertake the problem for research titled;

EFFECT OF MICRO TEACHING AND USE OF MULTIMEDIA ON TEACHING COMPETENCE OF PROSPECTIVE TEACHERS.

1.6 SIGNIFICANCE OF THE STUDY

There are so many techniques to modify teacher behaviour and different researchers conducted research in their field. As Arora & Panda (1998) found the qualities of the teachers which creates excellence in all walks of life. Whereas Bagga (2005) emphasized that an essential ingredient of teacher's professional equipment pertains to in-serve education. Rayans (2004) pointed out that in educational scenario, teachers act as a pivot on which the process of education rest on. Sabu (2010) emphasized that in the present era drastic changes are required to meet the goals of education by increasing teacher competency. Hedge (2009) stated that teachers are the social doctors. Antonysamy (1989) accepted that learning through viewing of the video film was more effective then learning through charts. Kaur (2005) pointed out the extent of impact of TV programmes on rural adults is related to this literacy, sex and view time.
Singh and Mishra (2009) found that e-learning may be effective in developing cognitive ability of pupil teachers.

After undergoing a review of literature researcher found micro teaching was used as a teacher training technique and multimedia was also used to make teaching learning process meaningful. So the researcher wanted to see the effect of microteaching and use of multimedia on teaching competence. This research would be helpful in understanding the effect of microteaching and use of multimedia on teaching competence. The results of this research would prove as guidance to prospective teachers and would in a way help them to develop professionally. This would also benefit educational planners and administrators for making policies and plans.

1.7 OPERATIONAL DEFINITIONS:

The key terms used in the study were operationally defined as under:

- **Effect:**

  In this study effect refers to a particular treatment given to a subject to bring about to desired behavioural change. This change will be observed in Teaching Competence.

- **Micro Teaching :**

  A method of teacher training whereby teacher trainers gain stimulated teaching experience with few students in small
groups and employing audio and or video recording for playback and discussion.

- **Multimedia**

  Multimedia means more than two media of communication involved in a learning package.

- **Teaching Competence**

  Teaching competence means the ability to use knowledge, understanding and practical skills to perform effectively for instance at national standards required in employment. Teaching competence can be knowledge, attitudes skills, values or personal values, Teaching competency can be acquired through talent, experience or training.

- **Prospective Teachers**

  Prospective teachers refer to those who are studying in Bachelor of Education (B.Ed) Course.

1.8 **OBJECTIVES**

The following objectives were undertaken:

- To study the effect of micro teaching skills on teaching competence of prospective teachers.

- To study the effect of microteaching on teaching competence of prospective teacher through skill of probing questioning.
• To study the effect of microteaching on teaching competence of prospective teacher through skill of pupils' participation.

• To study the effect of microteaching on teaching competence of prospective teacher through skill of reinforcement.

• To study the effect of microteaching on teaching competence of prospective teacher through skill of recognizing attending behaviour.

• To study the effect of microteaching on teaching competence of prospective teacher through skill of achieving closure.

• To study the effect of multimedia on teaching competence of prospective teachers.

• To study the effect of conventional method of teaching on teaching competence of prospective teachers.

• To study the interaction of micro teaching, multimedia and conventional method.

• To study the interaction of micro teaching and conventional method.

• To study the interaction of multimedia and conventional method.
1.9. DELIMITATIONS

The present study was delimited with respect to the following:

- The study was confined to the B.Ed. prospective teachers.
- The students of Mata Harki Devi College of Education for Women, Odhan, Jan Nayak Ch. Devi Lal College of Education, Sirsa, Lala Dheeramal Arora National College of Education, Sirsa affiliated to Kurukshetra University, Kurukshetra were included in the sample.
- The study was confined only to five micro teaching skills.
  - Skill of probing questioning.
  - Skill of increasing pupils' participation.
  - Skill of reinforcement.
  - Skill of recognizing attending behaviour.
  - Skill of achieving closure.
- The study was confined to use of slide projector, compact disc and over head projector.