CHAPTER - I
INTRODUCTION

Education is the most important element in the teaching-learning process. This is capable and proficient enough to develop the qualities of hand, heart and head of the child. In other words, optimum development of the child solely depends upon the personality and teaching efficiency of the teachers. Kothari Commission (1964-66) stated that we lay great emphasis on making science an important element in the school curriculum. Thus, we recommend that science and mathematics should be taught on a compulsory basis to all children as a part of education during the first ten years of schooling. In addition, the students should be provision of special course in these subjects at the secondary stage, for there of more than average ability. The competence of the teacher plays a pertinent role in teaching activity to achieve the pre-specified goals of education. The competence of teacher is associated with different aspects of teacher’s personality viz. cognitive, affective and psycho-motor which include intelligence, aspiration level, creativity, interest, attitude, achievement, motivation, values, emotional maturity, physical and mental health, mental and manual skills etc.

Investigator observed that science laboratories were not being used. It shows that there is no significant stress on learning science by doing practice. Even through Kothari Commission report has clearly mentioned that science knowledge of given by practice, otherwise it is vague/useless to search for creative activity in teaching science the slogan seems to have laid dormant, trying to search for creative activity in science teaching once again draws a blank in most of the schools.

Talking of methods of teaching, the traditional lecture notoriously ineffective as teaching technique despite its widespread use, in views of such a situation Dr. Radha Krishnan said, “Indian education needs drastic reconstructions, almost a revolution. We need to bring about major improvement in the
effectiveness of Higher Secondary and Intermediate Science Education and teacher training college to improve the quality of the teachers.”

Not only in the education is process, also in the nation’s development, the role of the teacher is very important. Teacher’s ability, quality and character are some of the factors, which affect the status of teaching and also the progress of a nation. The old saying, “Teachers are born not made is a subject of serious criticism.” All the teachers who are in teaching profession today, are not born teachers, some of them are not competent enough to mould the younger, immature, up growing generation of the secondary school, they do not have interest in teaching and lack teaching attitude, and that is why teaching profession is facing crisis and confidence today.

The teacher’s place is very important in the society. He acts as the pivot for the transmission of intellectual technical skill from generation to generation and helps to keep the lamp of civilization burning. Dr. Radha Krishnan has proved great confidence upon personality of teachers. According to him teacher’s role is not confined to any particular time but that of generations to come. True teachers are effective and outstanding ones. They act as the lighthouses of knowledge and fountainheads of inspiration through age. They influence society not for a few years but for generations. They are supposed to involve themselves in planning, implementing and evaluating the different programmes both curricular and co-curricular. They have to take active interest in improving and bringing about effective desired changes in the education system. Therefore, it is said, “Give me good teachers; I shall give you good administrators. Give me good administrator; I shall give you good education.”

Teacher’s role in unique education cannot be overlooked because he affects eternity and infinity. He has universal appeal and immortal contribution in nation building. He enlightens as well as inspires generation after generation. It is rightly said that ordinary teachers speak, average teachers explain, good teachers demonstrate and outstanding teachers inspire. Some people appear to be especially
well tailored for their work. Whenever persons in any profession are well suited by their personalities for the demand and responsibilities of their profession, they are likely to be successful in it. Generally it is true also for teachers. So far no one has discovered any dependable means for altering personality sufficiently to make person amenable to profession or vocation for which they have no internal. Personality is important and it is aptitude probably the place to begin with when we consider a person for teaching. But with all the ancient wisdom with respect to teacher’s being borned, personality alone is insufficient for a teacher’s success. The transmission of knowledge skill or competence always involves instruction methodologies that ideally at the disposal of the teacher. The choice of each approach, methodology or strategy is highly depended on the teacher’s definition of learning, teaching, knowledge, or the nature of the learner. Educators; through the ages have made evident in their ways of doing things the very expression of their beliefs on what teaching should be like and why. Teaching is a profession and professionalism is more than the opposite of amateurism. It is more than high prestige and it is more than high income. In the making of a teacher there are in general three kinds of knowledge which contributes to his competence, they are as follows:

(i) General knowledge
(ii) Specialized knowledge
(iii) Professional knowledge

The intellectual teaching is undeniable. A good teacher will have to cherish learning and will be personally involved in intellectual activities. He will respond to intellectual stimulation of many kinds as reading, research, writing and study. In most of the cases he chooses teaching as a career because due to keen interest in certain academic area. Teacher is more than an intellectually competent and stimulating person. He is more than an expert in a specialized area of subject matter. He is professional in teaching.

Mankind is always benefited by teaching profession. Teachers have conviction that what they are doing is helpful to people. There is a personal
satisfaction involved in doing the work of teaching profession. This feeling is more than the performance of a service for people or the earning of substantial income. It seems rather obvious that a teacher makes a contribution to the improvement of human beings. India has always expressed tremendous faith and confidence in the ability of education to improve not only the lot of mankind but also quality of living of its citizens. Teaching is practical and young ones of our society have much to learn from teachers. It is a task of teachers to do major part of preparing them for living in the society and become productive members of it.

Teacher’s attitude and interest towards teaching must be reflected in his day-to-day teaching and all other activities. His competency in teaching must influence his pupil indirectly and inspire them. His teaching must influence pupil’s behaviour, his value, attitude and interest i.e. his whole personality constantly, continuously and imperceptibly. He must be sympathetic and kind to the students, parents and others in the community. Teacher’s performance is the crucial input in the field of education. Whatever policies may lay down in the ultimate analysis they have to be interpreted and implemented by teachers much through their personal example as through teaching learning process.

**Henry Von Dyke** said, what is teaching? Ah! There you have the worst paid and the best rewarded of all vocations. Do not enter in unless you love it. For the vast majority of men and women, it has no promise of wealth and fame, but to whom it is dear for its own sake are the ability of mankind. I sign the praise of the unknown teacher, kind of himself and leader of mankind.

### 1.1 TEACHING COMPETENCE

Teaching constitutes one of the major tasks of a teacher. Competency over this task of teaching is the essence of a successful educational system. The development of teaching competency among teachers necessitates a clear understanding of the term as well as the method for its assessment. With more than half a century of research in this area, there has been no consensus regarding the meanings of the terms ‘teaching’, ‘competency’ and hence ‘teaching competency’
itself. A competent teacher should have not only mastery over his or her subject matter, but his or her competency should be measured by students. It is true that effective learning is the result of successful teaching, but successful teaching does not depend only upon the methods used, because methods and procedures of teaching are means but not end.

The concept of teaching competency in India emerged from Competency Based Teacher Education (CBTE) programme (Passi and Sharma, 1981). There are several definitions and views expressed by various educationists on the meaning and evaluation of teaching competency.

As regard the term teaching although defined in different ways (Bhattacharya, 1974), there has been a trend in perceiving the process analytically as constitution a host of activities (Brown, 1975; Gage, 1972). This analytical approach to perceive teaching has given a basis for innovations in B.Ed., like microteaching (Allen & Ryan, 1969). The term ‘competency’ has also been a debatable term. It refers to the criteria that determine teacher’s effectiveness. Although the reviews of research on teacher effectiveness (Ebel, 1969) point out the futility of efforts in identifying teacher effectiveness criteria, the recent upsurge in research provides a cautious optimism (Rosenshine, 1971). It can now be stated with fairly high confidence that pupil outcomes like pupil achievement, students liking may be taken as the criteria of teacher effectiveness (Flanders and Simon, 1969). But the term ‘Teaching Competency’ as defined by various authors includes more than mere teacher’s effects of pupil outcomes. According to some authors it includes knowledge, attitude, skill and other teacher characteristics (Haskew, 1956; Wilson, 1973). Some others perceive teacher competence as teacher’s behaviour that produces intended effects (Medley and Mitzel, 1963; Biddle, 1964). Arriving at a more comprehensive definition, Rama (1979) defines teacher competency as ‘the ability of a teacher manifested through a set of overt teacher classroom behaviours which is a resultant of the interaction between the presage and the product variables of teaching within a social setting.’ This lack of
consensus of the term ‘teaching competency’ highlights the difficulty of its measurement. If measurement of teaching competency has to be valid, objective and reliable one has to delimit to such variables that can be subjected to scientific study. While arrive at a definition of the term it may be pointed out that teaching process is determined by knowledge, a set of abilities, attitudes and skills (presage variables) which in turn determine pupil outcomes. Thus the term ‘teaching’ is defined as a set of observable teacher behaviours that facilitate or bring about pupil learning and ‘teaching competency’ means an effective performance of all the observable teacher behaviours that bring about desired pupil outcomes. Based on the micro-criteria approach to study ‘teaching’ (Gage, 1963), teaching is perceived as a set of teaching skill where in a teaching skill is a set of teaching behaviours that facilitate or bring about a specific instructional objective. In other words, teaching competence involves effective use of these various teaching skills.

It is not essential that popular teacher among her or his students is also a good or competent teacher, but a competent teacher is one whose students have better knowledge about the subject matter. Commonwealth Report (1974) also states that to be a competent teacher “the teacher must have knowledge of child development, of the material to be taught and suitable methods of teaching it, or the culture of this pupils (which may not be his own and of some interest of his own), his skills must enable him to teach, advise and guide his pupils, community and culture with which he is involved, his attitudes should be positive without being aggressive so that his example is likely to be followed…… as he transmits explicitly and implicitly the national aims and ideals and moral and social values”.

The effective teaching of a teacher plays an important role in making him or her competent teacher. The schools having good and effective teachers can succeed in reshaping the country. Good teachers are responsible to improve the quality of teaching because the quality of a teaching is recognize to a nation as judged by the quality of its citizens. The later is mostly determined by the educational system in the nation which in turn is decided by what type of teacher’s demand.
CLASSIFICATION OF TEACHER COMPETENCY

There seem to be different ways of classifying teacher competencies. One has to look at it in terms of teacher functions. Essentially, teachers have two major roles in the classroom:

i) to create the conditions under which learning can take place i.e. the social side of teaching.

ii) to impart, by a variety of means, ‘knowledge’ to their learners i.e. the task oriented side of teaching.

The first we could term as the ‘enabling’ or management function and the second, the instructional function. These complement each other as the later would be, more or less impossible without the former. In practice, it is very difficult to separate the two and often, one performs both functions simultaneously.

Management function

What does the management of the learning group entail? While setting up learning activities in the classroom, the teacher is often required to play a managerial role which includes motivating, organising the learning group, classroom management (control and discipline) and evaluation.

Instructional function

The instructional side of a teacher’s role includes different presentations and communication skills like lecturing, questioning, explaining, dramatizing, using audiovisual aids etc. Another way of classifying teacher competencies is to look at teaching essentially as something that is obtained in the classroom i.e. classroom interaction involving the teacher, the students and the different contexts/opportunities that are set up for facilitating learning. These contexts/opportunities include the different teaching modes (discussions, demonstrations, lectures etc.), evaluation, motivation, classroom management, and constitute the process aspect of teaching. These have certain antecedents to it that mainly include planning and knowledge of subject matter.
1.2 TEACHING APTITUDE

Teaching is an act of improving instructions to the learners in the classroom situation. It is traditional classroom teaching in which the teacher gives information to students, or one of the students reads a text-book, while the other students silently follow him in their own text-books. This traditional concept of teaching is not acceptable to modern educators.

A teacher with teaching aptitude encourages students to use active techniques to create more knowledge and then to reflect on and talk about what they are doing and how their understandings are changing. Effective teaching requires a large repertoire of skills and the ability to put these skills to use in different situations. Good teachers improvise. The better teachers, however, are proactive; that is, they are active information processors and decision-makers. They are strongly committed to the importance of content delivery and tend to be task-oriented.

Modern concept

The teaching is to make the pupil to learn and acquire the desired knowledge, skills and also desirable ways of living in the society. It is a process in which learner, teacher, curriculum and other variables are organized in a systemic and psychological way to attain some predetermined goals.

Definitions of Teaching

Morrison (1934) teaching is an intimate contact between a more mature personality and a less mature one which is designed to further for the education of the later.

Clark (1970) teaching refers to activities that are designed and performed to produce change in students’ behaviour.

Edmund Amidon (1967) teaching is defined as an interactive process, primarily involving class room talk which takes place between teacher and pupil and occurs during certain definable activities.
**Aptitude**

The word ‘aptitude’ is derived from the word ‘Aptos’ which means fitness for. It is often used interchangeably with the term ability. Ability refers to a general trait if an individual that may facilitate in the learning of a variety of specific skills; but aptitude is different from ability as under:

Ability is concerned with present. It indicates the combinations of skills, habits and powers which an individual now has and which enables him to do something. Aptitude looks to the future and on the basis of the habits, skills and abilities that an individual now has, predicts what he, with training, may become and what success he may have in a given occupation or position.

Aptitude refers to mental capacity, native or acquired. It is the part of a person’s mental equipment which gives him a special fitness for any kind of endeavor. Such an aptitude may be the result of either an innate endowment or of special training or both.

Therefore, in a simple way, aptitude may be concerned a special ability or a specific capacity besides the general intelligence ability which helps an individual to acquire a required degree of proficiency or achievement in a specific field.

In many spheres at everyday life, we usually come across the individuals who wider similar circumstances excel the others in acquiring certain knowledge of skills and prove themselves more suitable and efficient in certain specific abilities. Individuals having the same level of intelligence may not show the same results if they are put to the same work. Something other than intelligence is also required to be successful and that something, other thing being equal, who enables an individual to learn the task more successfully, may be characterized as aptitude. For having clear understanding of the term ‘aptitude’, following definitions are given by different scholars.

**Definitions of Aptitude**

According to encyclopedic dictionary aptitude is a capacity to acquire proficiency in a given line with a given amount of training.
Bingham (1937) aptitude is a condition or set of characteristic regarded as symptomatic of an individual’s ability (fitness on capacity) of which one essential aspect is his readiness to develop an interest in exercising his ability.

Freeman (1971) an aptitude is a combination of characteristics indicative of an individual’s capacity to acquire (with training) some specific knowledge, skill or set of organized responses, such as ability to speak a language, to become musician, to do mechanical work.

Traxler (1957) aptitude is a condition, a quality or a set of qualities in an individual which is indicative of the probable extent to which he will be able to acquire under suitable training, some knowledge, some skill or composite of knowledge, understanding and skill, such an ability to contribute to art or music, mechanical ability, mathematical ability or to read and speak a foreign language.

Basic Aptitude

It is very difficult to give the number of aptitude that people possess. However, basic aptitudes with which educational institutions are primarily concerned may be stated as art aptitude, clerical aptitude, manual aptitude, mechanical aptitude, medical aptitude, scholastic aptitude, scientific aptitude, teaching aptitude.

Teaching Aptitude

Specific skill in teaching is named as teaching aptitude, which essentially plays a significant role to influence pupil achievement. Teaching aptitude refers to

1. Cognitive abilities necessary to get along in school students and with teaching skills and other requirements of teaching behaviour.
2. Psycho- motor abilities including perceptual motor competent.
3. Connective abilities like love for reading, interest in people and events.

Jones was of the view that aptitude is more than potential ability or ability expectancy. It implies fitness for job, we call it success expectancy. Basically, it includes intelligence, ability of various kinds and personality factors necessary for
success. It is a combination of these. It refers to those qualities characterizing a person’s way of behavior which serve to indicate how well he can learn to meet and solve a certain specified kind of problems (Bingham 1937), Traxler (1957), “Aptitude is a condition, a quality or a set of qualities in an individual which is indicative of the probable extent to which he will be able to acquire under suitable training, some knowledge, skill or composite of knowledge, understanding and skill, such as ability to contribute to art or music, mechanical ability, mathematical ability or ability to read and speak a foreign language.” Freeman (1971), “An aptitude is a combination of characteristics indicative of an individual’s capacity to acquire (with training) some specific knowledge, skill or set of organized responses, such as the ability to speak a language, to become a musician, to do mechanical work.” In this way, by taking note of one’s present abilities and capacities we may come to know that one has an aptitude for learning and becoming successful in a particular area. While concluding, we may observe that while one has mechanical aptitude others may have musical, scientific, legal, medical and other professional scholastic or artistic aptitudes.

**Difference between Intelligence and Aptitude**

Intelligence is concerned with general mental ability of an individual. But aptitudes are concerned with specific abilities- sensory, motor, perceptual, mechanical, artistic and professional ability. Thus aptitude refers to specific aspects of intelligence.

In the words of Blum and Balinsky aptitude involves intelligence, interest, personality and the influence of the environment through learning and training.

### 1.3 INTELLIGENCE

In our day-to-day conversation we often comment that a particular child or individual is very intelligent or is not intelligent. All such comments are based on our observation of the performance or behaviour of the individual concerned in comparison to others of his group. Interest, attitude, the desire for knowledge, communicative skill and similar other attributes contribute towards his
performance or behaviour. However, there is something else which is also responsible to a large degree. In psychology this is termed ‘Intelligence’. In ancient India our great Rishis and saints named it Viveka.

Intelligence is generally considered as the ability of an individual to learn and adapt to new environment. The term intelligence is used to explain the differences in the mental ability that are the product of age and maturation. Intelligence means ability to acquire and apply knowledge and it is innate and inborn. Intelligence is a hypothetical construct. According to widely accepted popular notion intelligence is defined as capacity to learn. Intelligence is learning aptitude, coupled with abstract thinking and problem solving skills. The psychologists regard intelligence in a manner slightly different from the way the man on the street does. Different psychologists have given various definitions of intelligence. According to David Wechsler, intelligence is the aggregate or global capacity of an individual to act purposefully, to think rationally and to deal effectively with his environment. Intelligence in the ability to learn or understand or to deal with the new or trying situations. It is the skilled use of reason. Intelligence is the ability to apply knowledge to objective celeriac (as test).

There is no agreed definition of intelligence. In fact there are as many definitions of intelligence there rewriters on the subject. It is traditionally acknowledged by the parents and the teachers that intelligence is the most important single variable which effects success in school and in life. In general term, intelligence means the aggregate or the global capacity of the individual to act purposefully, to think rationally and to deal effectively with the environment. Intelligence as concept has been understood in different ways by different psychologists and has, therefore a wide variety of definitions.

**Binet (1905)** ability of an individual to direct his behaviour towards a goal.

**Freeman (1937)** intelligence is represented in behaviour by the capacity of individual to adjust himself to new situation, to solve new problems, to learn.

**Burt (1949)** it is the power of readjustment to relatively novel situation by organizing new psycho-physical co-ordination.
According to Stern (1914) intelligence is a general capacity of an individual consciously to adjust his thinking to new requirements. It is the general mental adaptability to new problems and conditions of life.

According to Thorndike (1914) intelligence may be defined as the power of good responses from the point of view of truth or fact.

Wechsler (1944) intelligence is the aggregate or global capacity of an individual to act purposefully, to think rationally, and to deal effectively with his environment.

According to Stoddard (1943) the ability to undertake activities that are difficult, complex and abstract and which are adaptive to a goal, and are done quickly and which have social value and which lead to the creation of something new and different.

It is concluded that intelligence must be understood as the mental capacity or mental energy available with an individual at a particular time in a particular situation. This mental capacity helps him in the task of theoretical as well as practical manipulation of things, objects or events present in his environment in order to adapt to or face new challenges and problems of life as successfully as possible. His capacity or the fund of mental energy available with him can be judged only in terms of the quality of his behaviour or performance. Therefore, intelligence as a sort of mental energy in the form of mental or cognitive abilities, available with an individual which enables him to handle his environment in terms of adoption to face novel situations as effectively as possible.

Kinds of Intelligence

It is found from general experience that an individual doing better in one area may not do well in other areas. One may be better at dealing with abstract ideas and concepts, yet he may be poor in social dealings. One may do well in practical life situations, but may lack the ability to think in abstract terms. From such experiences, Thorndike extracted three kinds of intelligence. These areas-
1. **Abstract Intelligence**

   This is the kind of intelligence which manifests itself in the management of abstract concepts. It includes all types of verbal activities, science, mathematics and other fields where thought is carried out with non-concrete objects. Thus, it solves the problems which have been represented by symbols, signs, words, numbers, etc.

2. **Concrete Intelligence**

   This kind of intelligence is exhibited in the management of concrete things. It also refers to manipulate objects (i.e. mechanical ability). It is found with engineers, highly skilled workers, craftsman and others who deal with concrete objects.

3. **Social Intelligence**

   It refers to the ability to deal with the social environment. It is commonly found with lawyers, politicians, business executives, salesmen, teachers, statesmen, and the like. It is the ability of an individual to react to social situations of daily life. Adequate adjustment in social situations is the index of individual’s social intelligence.

**Misconceptions about Intelligence**

There are a number of misconceptions prevalent about the nature and concept of intelligence. For the clarification let us be clear that what is not meant by intelligence:

1. Intelligence is not knowledge though acquisition of knowledge depends, to great extent, on intelligence and vice versa.
2. Intelligence is not memory. A very intelligent person may have dull memory and vice-versa.
3. Intelligence is not guarantee against abnormal behaviour, backwardness and delinquency in spite of fact that it is one of the major factors contributing towards achievement adjustment and character formation. No two individuals
are exactly alike. Some are bright; others dull, some are quick, other slow, some solve problems quickly and directly, others fumble over them for a long time and some adapt themselves to new situations easily, while others experience difficulty. The teacher is conscious that there are individual differences in intelligence. The modern psychology pays utmost attention to these individual differences.

It is said that intelligence is the ability when we have some aim or question in mind;

(a) To discover relevant qualities and relation of objects or ideas that are present before us and;

(b) To evoke other relevant ideas

In other words intelligence is the capacity for rational constructive thinking directed to the attainment of some end. It is an ability to observe one’s own mental process and to deduce correlation.

**Intelligence and different occupation**

Usually scholars, executives in business and government and scientist possess high abstract intelligence. A successful civil engineer presumably possesses high abstract as well as high mechanical intelligence. A successful criminal lawyer possesses high abstract as well as social intelligence. It is crude generalization on doubt. But teaching profession demands intelligence to be objective in the school society and outside the school society, to learn and score more and more knowledge as we see in every day like or in the knowledge of the students; to recombine behavioural pattern and act properly in novel situation. School is complex society where teacher has to face difficult situation and while doing so he has to use social values. He has to save his energy, time and money and efforts and has to reach his goal.

1.4 **TEACHERS ATTITUDE**

Attitudes are considered as important factor in teaching learning process. Attitude is a mental position with regard to a fact or state. It is a feeling or emotion
towards a fact or state. Attitude is an organism state of readiness to respond in a characteristic way to stimulus as an object, concept or situation. Attitude is a learned predisposition to act in a consistent way towards particular persons, objects or conditions. Educational institutions seek to encourage in students those attitudes that will desire them to learn. The teacher must understand how his pupils think and must plan his teaching so as to stimulate logical ways of thoughts. He must therefore, know the mental position of his pupils and the laws governing the influence on mind upon mind. The concept of attitude has been defined variously. Sherif and Sherif see an individual’s attitude, as a set of categories for evaluating, for judging various social stimuli - person, objects, events etc. Further that his social attitudes are learned and established, through social interaction and that they are a matter of degree rather than being all or none positive or negative. Attitude is one of the important components of manifestation of professionalism. Teaching profession requires teachers not only with improved knowledge and teaching competence but also with healthy professional attitudes and desirable teacher – like qualities; How a teacher performs his/her duty as a teacher is dependent to a great extent on his/her attitudes, values and beliefs.

Anastasi writes an attitude is often defined as a tendency to react favourably or unfavourably toward a designated class of stimuli, such as a national or racial group, a custom or an institution. Thus, defined attitude cannot be directly observed but must be inferred from overt behaviour, both verbal and non-verbal.

Freeman says that an attitude is a dispositional readiness to respond to certain situations, persons or objects in a consistent manner which has been learned and has become one’s typical mode of response. An attitude has a well-defined object of reference.

Thurston denotes attitude as the sum total of a man’s inclination, feelings, prejudices or bias, preconceived notions, ideas, fears, threats and convictions about any special topic. Thus, a man’s attitude about pacifism means here all that he feels and thinks about peace and war. It is admittedly a subjective and personal affair.
Thus, an attitude is a point of view, substantiated or not, true or false, which one holds towards a person, object, task or idea. The point of view can be positive, negative, hostile or indifferent. One’s attitude can account for his behavior and/or performance.

**Nature of attitude**

i. **Attitudes are learned**-They are not the part of physiological system, nor are they inherited. Further, it is frequently stated that attitudes are learned through experiences.

ii. **Attitudes have referents**-They relate to objects, people, ideas, events etc.

iii. **Attitudes are social learning**-They are gained in interactions with other people in house, temple and school etc. of others.

iv. **Attitudes have readiness to respond**-The predisposing to behave in a given way to a given object is readiness.

v. **Attitudes are effective**-The feeling and effective parts of attitude are seen as the person’s preference plus, minus or in between.

vi. **Attitudes vary in intensity**-The degree of intensity of an attitude towards an object may or not may be sufficiently strong to result behaviour.

vii. **Attitudes have time dimensions**-They may be suited to the current situation and be of little use to another time as change may occur.

viii. **Attitudes have duration factors**-They may persist consistently over a rather long time in person’s life.

ix. **Attitudes are evaluations**-They may be evaluations of liking, but also of probabilities and possibilities of the further events and consequences.

x. **Attitudes are inferred**-They are inferred from behaviour, which may or may not be perfect indicator, Inferences drawn by the observer may also not be congruent with the internal selectiveness of the person.

xi. **Attitudes are adopted**-There is some sort of social inheritance, which the individual obtains for the first time by following the example of the family. As he grows, the attitude of his friends in school/college/university, etc. becomes his own. Perhaps this is the primary source of attitude.
xii. **Attitudes are formed due to the process of differentiation**—From several attitudes special attitudes are formed. Due to certain ill feelings for certain teachers, the students start hating everything related of the institution. Similarly due to certain good feelings towards to teacher and students start loving a subject.

xiii. **Some attitudes are formed due to some shock or tragedy**—Generally when the individual is not prepared for the tragedy; this becomes the basis of long standing attitudes.

**Teachers Attitude towards Teaching**

An effective teaching must have a positive attitude towards teaching as a profession and attitude is an important aspect to understand the quality teaching. An attitude is an important concept to understand human behavior. Attitude determines what each individual will see, hear, think and do. Attitude can be positive or negative. People’s attitude towards their professions has an effect on their performance. A teacher with the right attitude makes a lasting impact on students learning. A teacher with the right attitude goal will mix and match all the available tools and techniques to suit the teaching-learning process unique to a given subject or topic or class.

Educationists and educational planners in India have started realizing that only securing enough teachers will not do, as what equally important is securing the right type of teachers. Unless such teachers are found, the secondary schools cannot deliver the goods that are expected of them. Fundamentally the success of the secondary education does not depend either on the definition of aims, statements of objectives or discussion of subject values but on the academic and professional preparation of the teachers, for the professional preparation of the teachers the study of attitudes held by them is very important. How a teacher performs his study, as a teacher is dependent to a great extent on his attitudes, values and beliefs. A positive favourable attitude makes the work not only easier but also more satisfying and professionally rewarding. A negative unfavourable
attitudes makes the teaching harder, more tedious and unpleasant. In addition a teacher’s attitude not only affects his behaviour in the classroom but also influences the behaviour of his students. Moreover effective and productive learning on the part of pupils can be achieved by employing teachers with desirable attitudes or by shaping their attitudes in the desired direction.

**Datt (1951)** under the study to see the Attitude of teachers in Delhi towards teaching profession and found that the co-efficient of co-relation between attitude and age come out to be =.99 which is almost negligible. Women teachers were found possessing more co-efficient of correlation than the males. The main difference was found statistically significant. The teaching experience was 9 which indicated teaching experience had no effect on attitude towards teaching profession.

**Ahmad and Baxter (2007)** in a co-operative research carried out by a young Pakistani and a young Indian, both working for international Non-Governmental Organization, explores how text-books help determine political and social attitude, especially attitude towards Indian and Pakistani. Teachers may create either positive or negative attitudes towards teaching-learning situation in the classroom. Planning is important in every classroom situation. If certain attitudes are important enough to teach, they are important enough to be planned. Planning enables the teachers to approach an affective topic positively and to prevent an exemplary model for the students. Teacher may not expect or want certain affective behaviour and make some kind of controlling response. How teachers’ response provides social reinforcement for the students. Teacher can anticipate undesirable affective behaviour, determine alternative appropriate behaviour and teach students. Teacher’s attitude towards an individual student also has an important effect on student affective behaviour and the attitude-learning environment of the classroom. Teaching is the best profession. Teacher’s attitude towards teaching may be positive or negative but is of great significance for efficient and effective functioning of any institution.
1.5 TEACHER EFFECTIVENESS

Teachers pave the way for enlightened society. Effective teacher does it effectively. An effective teacher may be understood as one who helps in a development of basic skills, understanding, proper habits, desirable attitude, value judgment and adequate personal adjustment of the students.

In addition to being instructors and advisors, teachers should be expected to act as leaders and decision makers are directly involved in the operation of schools, such as making and implementing education policies and operation school programs. It means teachers should work not only for their individual classroom but also for the whole school system. The secondary teacher plays a pivotal role in the formative year of the child. He plays an important role in education system and hence apart from teaching in the classroom- the care, sympathy and affection of the teacher- help the child to maintain balanced emotional setup.

For the physical development of the children, elementary teacher provides opportunities to the children to participate in games, sport and physical exercise, necessary information about personal hygiene, food values and cleanliness. It works as a safeguard against the development of irrational worries regarding abrupt development which takes place in the bodies of the children. For the development of social traits in the child and to make him a good citizen, the elementary teachers play a very crucial role. In all the environments, social development of the child is well directed and well-shaped by elementary teachers. They teach their students how to co-operate and keep good relation with all family members and society.

They arouse in the children the qualities like friendship, leadership, co-operation, dutifulness, responsibility, pity and unity. As a friend, philosopher and guide to the student, the elementary teachers try their best to motivate student which ensure the smooth journey to the goal of their life. The secondary school teacher has the rare privilege of shaking the most precious material of the land, the boys and girls, during their crucial periods of development.
In all the countries and all the civilizations, the secondary teacher has always been essential for the welfare of the group and improvement of its culture. Teacher is indispensable for the preservation of any nation. He is the fountain head of knowledge. He has the delicate task of drawing out of the best of body, mind and spirit in child and man. The teacher is the architect of our future generation. It is he who moulds the national character and prepares the future generation of the country.

So, the crucial and vital importance of teachers in the man making process cannot be overestimated. In a true sense the teacher is a guide, who is directing the journey of those whom he teaches. A good teacher should be a good inspire and the process of inspiration should be based upon the process of impression,indoctrination, instruction, training, regimentation, etc, more or less insists upon the process of imposition which results in dehumanization of individuals. In the literal sense, the teacher effectiveness is defined in terms of what the teacher pupils do; the assessment of teacher effectives through effects on students , in terms of gains, growth, changes all of which involves measurement of changes in behaviors and some of which can be attributed to the impact of individual teacher.

Anyone attempting to define an effective teacher must start by identifying teacher’s “primary tasks.” From individual social point of view, the teacher’s primary task is to develop individual’s power and abilities to equip him with necessary skills, values and attitudes so as to make him a useful member of society. It is in this light that we must study the concept of teacher effectiveness. The classroom is for all round development of the child. The pivotal role of a teacher in nation building is universally recognized.

Teacher effectiveness plays a pivotal role in teaching learning process. It being the hub of programmed needs, close observation and critical analysis as the enrichment in effectiveness may have direct bearing on the learning outcomes of the pupils. Only effective teachers are able to realize the real goal of education to their students. An effective teacher is indispensable even in the most equipped
system of education. The teacher effectively may have the way for progressive and productive society. Teacher effectiveness refers to the effect that the teacher’s performance has on pupils. Like teacher performance, teacher effectiveness depends in large on the context in which the teacher performs.

Teacher effectiveness means perception, the optimum. It is universally accepted that the quality of a nation depends upon the quality of its citizens, and in turn, the quality of citizens depends on the fundamental measures in the quality of teachers. Teacher is highly valuable in our society. We entrust to his care and feeling intellectually and emotionally. Our only living concrete representations are extent. It is universally accepted that the quality of a nation depends upon the quality of its citizens, and in turn, the quality of citizens depends on the fundamental measures in the quality of teachers. Our only living concrete representations are extensions of our self. This makes teaching a very self-conscious profession. A teacher may inspire and influence his students. The teacher plays a central role in the learning process of pupils. Teaching is also considered as the guiding force of human growth and development.

Teaching at present has made the work of the teacher more challenging and difficult. Instead of having concern to him only with a few patterns of effective presentation of subject matter, the modern teacher’s responsibility is to see that everything goes on level of efficiency and productivity on the part of the teaching. It refers to the height of maturity and learning indicating that teacher grows with more experience and learns more and more. He is able to perform his best in the process of education.

The importance of a teacher in the educational process is unquestionable. However, the entire edifice of education is shaky if the teacher is weak and ineffective. An effective teacher is amongst the foremost factor contributing to educational improvement and we are trying hard to achieve. After independence, millions of rupees have been spent to open new schools, provide them with adequate teachers, satisfactory equipment and facilities, to bring qualities,
improvement in education and to devise better techniques of teaching and means for assessing students’ achievement. But all this is of no use and the developmental targets are bound to remain unachieved unless schools are staffed with effective teacher. It is they who influence and shape the competence and character of the pupils.

Effective teacher are crucial to any nation’s progress and success of a system of education depends upon teacher’s involvement. Hence the identification of effective and competent teaching personnel constitutes one of the most important aspects of all the educational system. Effective teachers are those who achieve the goals which they set for themselves or which others set for them (e.g. Commissions on Education Ministry of Education, Legislators, Govt. officials and/or School Administration). As a consequence, those who study and attempt to improve teacher effectiveness must be cognizant of the goals imposed on the teachers that teachers establish for themselves or both. That effective teacher must possess the knowledge and skills needed to attain the goal, and must be able to use that knowledge and those skills appropriately if these goals are to be achieved. In contrast, the use of knowledge and skills in the classroom is referred to as ‘teacher performance’. Thus that who investigate and attempt to understand teacher’s performance with the accomplishment of teacher goals is teacher effectiveness. Effective teacher tends to be aware of and actively pursues goals. A quality teacher and competent teacher is the one who captivates the learner. Therefore, a teacher should be a perfect wellbeing who lives his life to the maximum and sets the same trend for his learner. He must be an epitome of wholesomeness of cognitive, connative and affective domains, well behaved, well informed, well enlightened, and self-motivated, self-evaluated, having scientific attitude, real thirst for knowledge and moving towards the apex. Such a teacher will be labeled as qualitative, skilled and competent, which every civilized and progressive society aspires to incorporate as a vital part of its ethos.

In the literal sense, the teacher effectiveness is defined in terms of what the teacher pupils do; the assessment of teacher effectives through effects on students, in terms of gains growth, changes all of which involve measurement of changes in
behaviors and some of which can be attributed to the impact of individual teacher.

Definitions of Teacher Effectiveness

In the literal sense, the teacher effectiveness is defined in terms of what the teacher pupils do; the assessment of teacher effectiveness through effects on students, in terms of gains, growth, changes all of which involve measurement of changes in behaviors and some of which can be attributed to the impact of individual teacher.

Humayun Kabir (1950) states without good teacher even the best system is bound to fail, with good teachers even the worst of system can largely overcome. Teacher effectiveness plays a pivotal role in teaching learning process. It being the hub of programme needs close observation and critical analysis as the enrichment in effectiveness may have direct bearing on the learning outcomes of the pupils. Only effective teachers are able to realize the real goal of education to their students.

Barr (1950) explains teacher effectiveness is a relationship between teacher, pupils and other persons concerned with the educational understanding by limiting and facilitating aspect of immediate situation. The success of educational process depends, to knowledge and skills, falls on a great extent, on the personality characteristics of the teacher who is the cornerstone of the arch of education.

Monroe (1952) Monroe’s view on defining teacher effectiveness, the major definitions may be broadly categorized into four standard namely- (i) Competencies implying his role as director of learning (ii) A degree to which an agent produce effect (iii) A relationship between teachers, pupil and other persons. (iv) The teacher characteristics.

Rammerd (1954) Effectiveness is a degree to which an agent produces effects. Usually there categories of effects are (a) pupil (b) school operation (c) school community.
Mowver (1960) defines an effective teacher as one who arouses positive emotional reaction, which among other things facilitates independent student involvement with learning material.

Bindal (1964) offered a ‘seven variable model’ for the investigation of teachers effectiveness. In this model (a) formative experiences (b) teacher properties (c) teacher behaviours (d) Immediate effects (e) Long term consequences: serves as main sequence variable (f) Classroom situation and (g) School and community contexts: serve as contextual variables.

Hall (1964) in teacher Encyclopedia stated the effective teacher understands behavior; they are well informed and love learning. Such type of concept cannot come to a teacher unless he has a good knowledge of the subject.

According to Combs (1964) an effective teacher is unique human being who has learnt to use his self effectively and sufficiently for carrying out his own and social purposes. He is not a teaching machine but a sensitive human being, who is conscious of his role and responsibilities as a teacher.

In the words of Crow and Crow (1964) a good teacher and the quality of his teaching have always been of paramount importance to free man and to a free society. It is true to say that effective teachers may pave the way for and enlightened society. On the country, poor teaching would contribute to the perpetuation of ignorance and intellectual stagnation. The aims and objectives of education depend, to a large extent, upon the effectiveness of teachers who make these institutions. Thus, efficient teachers become the ‘sine-qua-non’ of our educational system.

The Indian Education Commission (1964-66) observed all the different factors which influence the quality of education and its contribution in national development; the quality, competency and character of teachers are undoubtedly the most significant. Nothing is more important than securing a sufficient supply of high quality result to the teaching profession, providing them with the best possible professional preparation and creating satisfactory condition of work
facilities, especially in view of urgent need to raise standards of the highest level.

Flanders and Siman (1965) define teacher effectiveness is an area of research which is concerned with relationship between characteristics of teacher, teaching acts and their effects on the educational outcomes of classroom teaching. An effective teacher may be understood as one who helps development of basic skills, understanding, proper work habit, desirable attitude, value judgment and adequate personal adjustment of students.

Crawford and Bradshaw(1968) view an effective teacher as the one who is able to:

(a) Encourage and promote student understanding
(b) Develop study skills;
(c) Mould desirable attitude towards ideals of education; and;
(d) Contribute to the emotional adjustment of pupils.

Ryan (1969) remarked that an effective teacher may be understood as one who helps in the development of basic skills, understanding, proper work habits, desirable attitude, value judgment and adequate personal adjustment of the student.

Dickson (1980) viewed teacher effectiveness is a demonstrated repertoire of competencies involved with (1) Teaching plans and materials (2) Class Room procedure; (3) interpersonal Skill and (4) learner, reinforcement involvement reflected in teaching behavior.

Passi and Sharma (1982) while studying teaching effectiveness of secondary school teachers observed that the effective teacher is one of who has clear concept of the subject matter, ability to write clear objectives for his course, ability to organize learning material, ability to communicate his knowledge to the students successfully and to deal with classroom situations.

Medley (1982) asserts teacher effectiveness must be defined and can only be assessed, in it terms of behaviour and learning of students, not behaviours of teachers.
**Gupta (1984)** defined teacher effectiveness as the capacity of a teacher to bring about the agreed change in his/her students. Effective teacher have always promoted understanding and tolerance by adopting new responsibilities and cope up with the changing career expectations.

**National Policy on Education (1986)** has stated, among many other things that of all the factors which determine the quality of education and its contribution to the national development, the teacher is undoubtedly the most important. It is on his personal qualities and character, his educational qualifications and professional competence that the success of all educational endeavour must ultimately depend.

**Nitsaisook (1987)** described the activities that make teachers effective like variety of activities and experience e.g., Case studies, demonstration, discussion with peer group, training programme etc.

Thus, the task of identifying effective teachers is crucial. The researcher in the present study has attempted to adopt, balanced view of all the researchers and decided to include those teaching aspects, which are more preferred by supervisors and seniors teachers. There are aspects of teaching behaviour in the present study prescribed by **Mutha & Kumar.**

(a) Information Source  
(b) Motivator  
(c) Disciplinarian  
(d) Advisor and guide  
(e) Relationship with pupil, fellow-teacher, principals and parents  
(f) Teaching skill  
(g) Co-curricular activities  
(h) Professional knowledge  
(i) General appearance and habits in relation to class-room  
(j) Class-room management and  
(k) Personality characteristics.
Anyone attempting to define an effective teacher must start by identifying teacher’s primary tables from individual and social point of view, teacher’s primary task is to develop individual’s power and abilities to equip him skills, values and attitudes so as to make him a worth useful member of society. We must study the concept of teacher effectiveness.

Effective teacher’s traits include buoyancy, considerateness, cooperativeness, emotional stability, ethicalness, expressiveness, forcefulness, intelligence, judgment, objectivity, physical energy, reliability, resourcefulness and scholastic proficiency. Teacher effectiveness is the effective linkage of teacher competence and teacher performance with the accomplishment of teacher goals. It mainly depends on the teacher characteristics such as knowledge base, sense of responsibility, and inquisitiveness; the student characteristics such as opportunity to learn, and academic work; the teaching factors such as lesson structure and communication; the learning aspects such as involvement and success; and the classroom phenomena such as environment and climate, an organization and managements. If the teachers take care of these factors, their effectiveness can be enhanced to the optimum level. Effective teaching depends on highly competent teachers.

Importance of Teacher Effectiveness

Teacher effectiveness plays a pivotal role in teaching learning process. It being the hub of program needs, close observation and critical analysis as the enrichment and effectiveness may have direct bearing on the learning outcomes of the pupils. Only effective teacher are able to realize the real goal of education to their students. An effective teacher is indispensable even in the most equipped system of education who teaches effectively may have the way for progressive and productive society. Teacher effectiveness refers to the effect that the teacher’s performance has on pupils. Like teacher performance, teacher effectiveness depends in large on the context in which the teacher performs.

The importance of a teacher in the educational process is unquestionable.
However, the entire edifice of education is shaky if the teacher is weak and ineffective. An effective teacher is amongst the foremost factor contributing to educational improvement. Which are trying hard to achieve? After independence, corers of rupees have been spent to open new schools, provide them with adequate equipment and facilities, to bring qualities improvement in education and to devise better techniques of teaching and means for assessing students’ achievement. But all this is of no use and the developmental targets are bound to remain unachieved unless schools are staffed with effective teacher. It is they who influence and shape the competence and character of the pupils.

Effective teacher have always promoted understanding and tolerance by adopting new responsibilities and cope up with the changing career expectations.

Effective teacher are crucial to any nation’s progress and success of a system of education depends upon teacher’s involvement. Hence the identification of effective and competent teaching personnel constitutes one of the most important aspects of all the educational system.

Effective teachers are those who achieve the goals which they set for themselves or which others set for them (e.g. Commissions on Education, Ministry of Education, Legislators, Govt. officials and/or Schools Administration). As a consequence, those who study and attempt to improve teacher effectiveness must be cognizant of the goals imposed on the teachers of the goals that teachers establish for themselves or both. That effective teacher must possess the knowledge and skills needed to attain the goal, and must be able to use that knowledge and those skills appropriately if these goals are to be achieved. In Medleys (1982) terms, the possession of knowledge and skills falls under the heading of ‘teacher performance’. Thus that who investigate and attempt to understand teacher’s performance with the accomplishment of teacher goals is teacher effectiveness. Effective teacher tend to be aware of aware of and actively pursuit goals.

A quality teacher and competent teacher is the one who captivates the
learner. Therefore a teacher should be a perfect well-being who lives his life to the maximum and sets the same trend for his learner. He must be an epitome of wholesomeness of cognitive, cognitive and effective domains, well behaved, well informed, well enlightened, and self-motivated, self-evaluated, having scientific attitude, real thirst for knowledge and moving towards the apex. Such a teacher will be labeled as qualitative, skilled and competent, which every civilized and progressive society aspires to incorporate as a vital part of its ethos.

**Aspects of Effective Teaching Include**

- Having a positive attitude
- The development of a pleasant social / psychological climate in the classroom
- Having high expectations of what pupils can achieve
- Lesson clarity
- Effective time management
- Strong lesson structuring
- The use of a variety of teaching methods
- Using and incorporating pupil ideas
- Using appropriate and varied questioning

However, effective teaching methods are context specific. What is needed for a teacher to be effective can vary depending upon factors such as:

- The type of activity in the lesson
- The subject matter
- The pupil backgrounds (such as age, ability, sex, socio-economic status and ethnicity)
- The pupils’ personal characteristics (such as personality, learning style, motivation and self-esteem)
- The culture / organization of the department, school and LEA.
1.6 JUSTIFICATION OF THE STUDY

The place and importance of a teacher in a society can never be underestimated as he is regarded as the backbone of educational system, maker of mankind and architect of the society. From the Hindu stand point, a child receives second birth in the hands of the teacher who sharpens his habits, tasks and character. He has to modify, reshape and smoothen. Book may teach a child, but a teacher educates him.

Teacher is the pivot of educational system and an essential requirement for a progressive nation. If teacher is not well adjusted then his intellect, imagination and creative power may tend deteriorate. So, good adjustment of the teacher is necessary for his better performance. Only well-adjusted teachers and positive thinking teachers can work to their best. Such studies will naturally highlight very fruitful and important suggestions.

Teaching is a skill. A skilled teacher generally should have higher teaching aptitude. He can create the interest of the students in the classroom. With the development and expansion of education in the country, teaching aptitude has become an important factory and point in the concern of the present era. Today there is a great dearth of ‘Real Teachers’. Deterioration in the great standards of education is the great problem. The present study examines teaching competence, teaching aptitude towards teaching profession of the teacher. A nation cannot be above the level teacher. The status of teachers in society tells us about the culture and social environment. Teachers, who make the curriculum lively, give life to the whole system of education and such teachers’ teaching competency, teaching interest, teacher attitude affect the future of students.

In a developing country like India where even the target of full literacy is not achieved and where country has to continue steady progress of school children if the teachers are not competent then there is little hope in the bright future of the coming generation. With incompetent teachers, it will be a difficult task to continue the progress of whole nation. Teachers must be efficient in teaching and
must have ability to live on with comfort and at the same time interested in the job best owed upon them.

There are five main preliminary matters involved in arriving at a system for the evaluation of teachers. The first is the purpose of the evaluation; the second is the target category of teachers to be assessed; the third is the conception of teachers, work that is adopted the fourth concerns the dimensions of teaching quality about which judgments are to be made and fifth is the approach to establishing the validity of the assessments. The researcher will study the general teaching competencies among secondary school teachers and will find out if there is any difference between the general teaching competency of male and female teachers, rural and urban teachers and will find out if any increase in the general teaching competency of teachers as the teaching experience increases. The researcher will also study the teaching attitude, teaching interest, teacher’s effectiveness and intelligence and will find out the correlation of general teaching competency with teaching effectiveness, teaching attitude, teaching interest and intelligence. No doubt the study will be beneficial to the teachers.

We all know that teacher is the builder of nation. He is like a gardener who helps different flowers (child with individual differences) to grow in a proper manner so that by their fragrance they make the garden more beautiful and attractive. In the same manner, students are developed by the teacher to their maximum so that they become a useful and dedicated citizen for the development of nation. Teachers are like the candle who take individual in the light from the darkness. But in the present scenario we find that there are a lot about 500 educational institutions in Haryana only which develop the teachers. As it is common nation about teaching profession that it is for those who does not get any job in other areas. Students by pressure and by getting no other option enter the field of teaching by chance. They do not have a proper attitude towards teaching profession.

The teaching profession is universal regarded not only as one of the most important profession of civilized life, but also the noblest of all. It is therefore,
important that those individuals who adopted the teaching profession should have right kind of attitude towards the work. Only teachers with favorable dynamic attitude towards their work can play the real role of nation builders. To make the teaching goal oriented and to improve the function and environment of any institution; It is essential to measure the attitude of students towards teaching profession with the co-relation of moderation variables. The investigation after reviewing a lot of literature on teaching profession by Datt (1952), Goel (1952), Hale (1954), Virk (1954-55), Buch (1959), Leton (1961), Aggarwal (1968), Bomambalam and Visvesvaricism (1966), Sangwan (1968), Malhotra (1969), Kakkar (1970) and Dosanjh (1970), McKellips Kay (1970), Dogra (1972), Kaur (1983), Bhalwanker (1984), Mohanty (1990), Flores (2001) Dodeen and his colleagues (2004) on teaching profession has related the importance of studying these variables. This study would be desirable to improve the quality and efficiency of teaching to produce efficient teachers. Therefore, the investigator felt to undertake his present investigation on an attitude towards teaching.

The effectiveness of the process of education depends on effectiveness of the teachers. Only effective teacher can implement the government policies. A teacher is a symbol of hope for the whole education system. Education to be perceived as universal phenomena. It is adequately organized and regulated through formal institution like school and colleges. The quality, competency and character of teacher are undoubtedly very significant. Nothing is more important than to secure or sufficient supply of higher quality personnel to the teaching profession, providing them with the best possible professional preparation and to create satisfactory conditions of work to make their teaching more effective. In colleges of education only effective teachers can further produce effective teachers. So, teacher effectiveness becomes very important question for education and researcher. The NCERT emphasized upon some points regarding management, infrastructure, salary, workforces in order to improve the effectiveness of teaching.

Aptitude is considered to be an important characteristic of an individual, which can predict the future success or failure of an individual in one occupation.
or areas of occupations. Aptitude may be described as a specific ability or a specific capacity distinct from the general intellectual ability, which helps an individual to acquire degree of proficiency or achievement in a specific field.

Attitude towards teaching among teachers is of great significance for efficient functioning of colleges of education. No institution can successfully achieve its goal unless and until it has competent faculty. Attitude plays an important role in teacher’s effectiveness. Positive attitude is the key factor for a success in life. Teacher effectiveness depends upon their attitude. There is a great need to study the effectiveness of teachers in relation to their attitude toward teaching. To make the teacher goal oriented and to improve the function and environment of any institution; it is essential to measures teacher effectiveness correlates with other variables. Thus, in this context effective teacher education attains a crucial role. In fact, it becomes a core condition to ensure high proficiency and quality of school education. Improving teacher performance through most effective teacher preparation is an essential ingredient in solving most educational problems. Educationists all over the world have started realizing that only securing enough teachers will not do most important is securing the right type of teachers with right type of knowledge, skills, attitudes and competence.

The effectiveness of education depends upon quality of teachers working in an institution. The quality of teachers in turn depends upon the quality of training received by them in different training institutions. As we know the quantitative and qualitative improvement of elementary and secondary educations has raised problems of solutions of right type of teachers and enriching programmes of teacher preparation. Thus necessitates not only improving the knowledge and teaching competency of a teacher but also to inculcate in them desirable teacher like qualities. We know the teaching profession is one of the most important art of guiding students through a variety of selected teaching methods and methodologies, it should therefore, attract the brightest minds, finest personality and most committed young people. As a profession, it requires people who have

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right type of aptitude and attitude for teaching in bound to be a successful teacher in future. As a teacher, we should enrich ourselves with different teaching methodologies in order to change the behavior of learners keeping in view their individual differences.

After reviewing the related studies on general teaching competence in correlation with different psycho-demographical variables, the trend of research emerges out that ample number of researches have been conducted by many researchers. But the researcher has found few studies in correlation to the teaching competence, teaching aptitude, intelligence, attitude towards teaching and teacher effectiveness. Therefore, the researcher intends to study the general teaching competencies and components affecting teaching competence of science teachers in colleges of education in Haryana. Primarily, the researcher studied the teaching aptitude, intelligence, attitude towards teaching and teacher effectiveness in correlation to general teaching competency of science teachers. Further, the researcher also find out if there is any difference between the general teaching competence and different components of teaching competence of male and female science teachers. No doubt the study will be beneficial to the teachers.

1.7 STATEMENT OF THE PROBLEM

A STUDY OF COMPONENTS AFFECTING TEACHING COMPETENCE OF SCIENCE TEACHERS IN COLLEGES OF EDUCATION IN HARYANA

1.8 OPERATIONAL DEFINITION OF THE KEY TERMS USED

Teaching competence

Teaching competence is the ability of a teacher manifested through a set of overt teacher classroom behaviours which is a resultant of the interaction between the presage and the product variable of teaching within social setting (Rama, 1979).

In the present study teaching competence refers to total scores obtained by science teachers teaching in colleges of education on General Teaching Competency Scale (Passi and Lalitha).
Components of Teaching Competence

1. **Teaching Aptitude**

   Aptitude is a capacity to learn certain skill and abilities which are necessary for success in particular area of work.

   In the present study teaching aptitude refers to scores obtained on Teacher’s Teaching Aptitude Questionnaire by Prakash and Srivastva.

2. **Intelligence**

   According to Wechsler Intelligence is the aggregate or global capacity of the individual to act purposefully, to think rationally and to deal effectively with his environment.

   In the present study intelligence refers to scores obtained on Wechsler Adult Performance Intelligence Scale Indian Adaptation (WAIS) by Ramalingaswamy (1974).

3. **Attitude Towards Teaching**

   In the present study attitude towards teaching refers to scores obtained on Teaching Attitude Inventory by Ahluwalia (1978).

4. **Teacher effectiveness**

   Flanders & Simon (1969) Teachers effectiveness is an area of research which is concerned with relationship between the characteristics of teachers teaching acts and their effects on the educational outcomes of classroom teaching.

   In the present study teacher effectiveness refers to total score obtained on Teacher Effectiveness Scale by Kumar and Mutha (1974).

5. **Science Teachers**

   In the present study science teachers refers to the teachers working in Colleges of Education in Haryana Teaching Physical Sciences and Life Sciences subjects.

6. **Colleges of Education**

   In the present study Colleges of Education are the Secondary Level Teacher Training Institutions (B.Ed. Colleges) of Haryana.
1.9 **OBJECTIVES OF THE STUDY**

The study was carried out with the following objectives:

1. To study the relationship between components of planning teaching competence and teaching aptitude of science teachers in colleges of education.

2. To study the relationship between presentation teaching competence and teaching aptitude of science teachers in colleges of education.

3. To study the relationship between closing teaching competence and teaching aptitude of science teachers in colleges of education.

4. To study the relationship between evaluation teaching competence and teaching aptitude of science teachers in colleges of education.

5. To study the relationship between managerial teaching competence and teaching aptitude of science teachers in colleges of education.

6. To study the relationship between teaching competence and teaching aptitude of science teachers in colleges of education.

7. To study the relationship between planning teaching competence and intelligence of science teachers in colleges of education.

8. To study the relationship between presentation teaching competence and intelligence of science teachers in colleges of education.

9. To study the relationship between closing teaching competence and intelligence of science teachers in colleges of education.

10. To study the relationship between evaluation teaching competence and intelligence of science teachers in colleges of education.

11. To study the relationship between managerial teaching competence and intelligence of science teachers in colleges of education.

12. To study the relationship between teaching competence and intelligence of science teachers in colleges of education.
13. To study the relationship between planning teaching competence and attitude towards teaching of science teachers in colleges of education.

14. To study the relationship between presentation teaching competence and attitude towards teaching of science teachers in colleges of education.

15. To study the relationship between closing teaching competence and attitude towards teaching of science teachers in colleges of education.

16. To study the relationship between evaluation teaching competence and attitude towards teaching of science teachers in colleges of education.

17. To study the relationship between managerial teaching competence and attitude towards teaching of science teachers in colleges of education.

18. To study the relationship between teaching competence and attitude towards teaching of science teachers in colleges of education.

19. To study the relationship between planning teaching competence and teacher effectiveness of science teachers in colleges of education.

20. To study the relationship between presentation teaching competence and teacher effectiveness of science teachers in colleges of education.

21. To study the relationship between closing teaching competence and teacher effectiveness of science teachers in colleges of education.

22. To study the relationship between evaluation teaching competence and teacher effectiveness of science teachers in colleges of education.

23. To study the relationship between managerial teaching competence and teacher effectiveness of science teachers in colleges of education.

24. To study the relationship between teaching competence and teacher effectiveness of science teachers in colleges of education.

25. To study the difference between planning teaching competence of most effective and least effective science teachers in colleges of education.

26. To study the difference between presentation teaching competence of most
effective and least effective science teachers in colleges of education.

27. To study the difference closing teaching competence of most effective and least effective science teachers in colleges of education.

28. To study the difference evaluation teaching competence of most effective and least effective science teachers in colleges of education.

29. To study the difference between managerial teaching competence of most effective and least effective science teachers in colleges of education.

30. To study the difference between teaching competence of most effective and least effective science teachers in colleges of education.

31. To study the difference between teaching competence of male and female science teachers in colleges of education.

32. To study the difference between attitude towards teaching of male and female science teachers in colleges of education.

33. To study the difference between intelligence of male and female science teachers in colleges of education.

34. To study the difference between teaching aptitude of male and female science teachers in colleges of education.

35. To study the difference between teacher effectiveness of male and female science teachers in colleges of education.

1.10 HYPOTHESES OF THE STUDY

The study was being formulated out with the following hypotheses:

1. There exists significant relationship between planning teaching competence and teaching aptitude of science teachers in colleges of education.

2. There exists significant relationship between presentation teaching competence and teaching aptitude of science teachers in colleges of education.

3. There exists significant relationship between closing teaching competence and teaching aptitude of science teachers in colleges of education.
4. There exists significant relationship between evaluation teaching competence and teaching aptitude of science teachers in colleges of education.

5. There exists significant relationship between managerial teaching competence and teaching aptitude of science teachers in colleges of education.

6. There exists a significant relationship between teaching competence and teaching aptitude of science teachers in colleges of education.

7. There exists significant relationship between planning teaching competence and intelligence of science teachers in colleges of education.

8. There exists significant relationship between presentation teaching competence and intelligence of science teachers in colleges of education.

9. There exists significant relationship between closing teaching competence and intelligence of science teachers in colleges of education.

10. There exists significant relationship between evaluation teaching competence and intelligence of science teachers in colleges of education.

11. There exists significant relationship between managerial teaching competence and intelligence of science teachers in colleges of education.

12. There exists a significant relationship between teaching competence and intelligence of science teachers in colleges of education.

13. There exists significant relationship between planning teaching competence and attitude towards teaching of science teachers in colleges of education.

14. There exists significant relationship between presentation teaching competence and attitude towards teaching of science teachers in colleges of education.

15. There exists significant relationship between closing teaching competence and attitude towards teaching of science teachers in colleges of education.

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16. There exists significant relationship between evaluation teaching competence and attitude towards teaching of science teachers in colleges of education.

17. There exists significant relationship between managerial teaching competence and attitude towards teaching of science teachers in colleges of education.

18. There exists a significant relationship between teaching competence and attitude towards teaching of science teachers in colleges of education.

19. There exists significant relationship between planning component of teaching competence and teacher effectiveness of science teachers in colleges of education.

20. There exists significant relationship between presentation component of teaching competence and teacher effectiveness of science teachers in colleges of education.

21. There exists significant relationship between closing component of teaching competence and teacher effectiveness of science teachers in colleges of education.

22. There exists significant relationship between evaluation component of teaching competence and teacher effectiveness of science teachers in colleges of education.

23. There exists significant relationship between managerial component of teaching competence and teacher effectiveness of science teachers in colleges of education.

24. There exists a significant relationship between teaching competence and teacher effectiveness of science teachers in colleges of education

25. There exists no significant difference between of planning teaching competence of most and least effective science teachers in colleges of education.
26. There exists no significant difference between of presentation teaching competence of most and least effective science teachers in colleges of education.

27. There exists no significant difference between of closing teaching competence of most and least effective science teachers in colleges of education.

28. There exists no significant difference between of evaluation teaching competence of most and least effective science teachers in colleges of education.

29. There exists no significant difference between of managerial teaching competence of most and least effective science teachers in colleges of education.

30. There exists no significant difference between of teaching competence of most and least effective science teachers in colleges of education.

31. There exists no significant difference between mean teaching competence total scores of male and female science teachers in colleges of education.

32. There exists no significant difference between mean attitude towards teaching total scores of male and female science teachers in colleges of education.

33. There exists no significant difference between mean intelligence total scores of male and female science teachers in colleges of education.

34. There exists no significant difference between mean teaching aptitude total scores of male and female science teachers in colleges of education.

35. There exists no significant difference between mean teacher effectiveness total scores of male and female science teachers in colleges of education.

1.11 DELIMITATIONS OF THE STUDY

The study was delimited to the following:

i. The study was conducted in Haryana state only;

ii. The study was restricted on the science teachers teaching in colleges of education;
iii. The study of variables-teaching competence and components affecting teaching competence viz.
   
   a. attitude towards teaching,
   
   b. intelligence,
   
   c. teaching aptitude, and
   
   d. teacher effectiveness.

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