INTRODUCTION

Teaching

Teaching is an important part in the process of education. It is not a process of simply giving knowledge; it is an interaction between the teacher and the learner, where the role of the teacher is to bring desired change in the learner’s behaviour. In this way teaching is a process that facilitates learning. Previously teaching was giving information and imparting knowledge. Teaching was regarded as bipolar process and the teacher and the subject matter were its two poles. The child was totally ignored. No attention was given to his needs and desires. The child was nonentity and was measured by the adult yardstick.

But, nowadays, the concept of teaching has undergone a radical change. Child has become the focus of the educative process. In the light of this, teaching is to cause the pupil to learn and acquire the desired knowledge, skill and also desirable ways of living in the society. The learner, teacher and curriculum are organized in a systematic and psychological way to attain some predefined and predetermined goals. Now teaching is a tri-polar process the three poles are the learner, the teacher and the subject matter.

Teaching is considered to be an art as well as a science. As an art, it emphasizes the imaginative and artistic ability of the teacher in creating a worthwhile situation in the classroom to enable the students to learn. As a science, it focuses on the logical and mechanical steps to be followed to attain an effective accomplishment of goals.

Therefore, teaching is the task of a teacher which is performed for the development of a child. Teacher has to modify, reshape, smoothen and sometimes to reconstruct the raw material placed at his disposal. Teaching is a chain of activities which are linked together in a systematic manner. One activity leads to another till the goal is achieved.

Teaching is an intimate contact between a more mature personality and less mature one, which is designed to further the education of the learner (Morrison 1934).
Therefore teaching is the process that helps the individual to learn and acquire the desired skills, habits and knowledge and also helps in modification of behaviour.

Competence

Competence means capability and capacity, it is the outcome expected from the performance of profession related functions. The general ability to solve professional problem may be regarded as competence.

Competence may ordinarily be defined as adequacy for the purpose, suitable, sufficient or as equally qualified, admissible or capable.

Teaching Competence

Teaching competence refers to a set of knowledge, abilities, beliefs teacher possess and bring to the teaching situation. It is the knowledge possessed by teacher about the teaching process.

Teaching competence may be defined as any single knowledge skill or professional value which (i) a teacher may be said to possess and (ii) the possession of which is believed to be relevant to the successful practices of teaching.

Teaching competence is an effective performance of all the observable teacher behaviour that brings about desired pupil outcomes based on the micro-criteria approach to study ‘teaching’ (Gage 1963).

In the light of these definitions it can be concluded that teaching competence includes:-

- Knowledge, attitude, skills and other teacher characteristics.
- Effective performance with the use of instructional material.
- Ability to function effectively in school and classroom.

Teaching competence is the ability of a teacher manifested through a set of overt teacher classroom behaviour which is a resultant of the interaction between the presage and the product variables of teaching within a social setting.

Skills

Dictionary meaning of skill is ‘knowledge’ or ‘expertness’. So teaching is a social process in which a teacher by virtue of his ideal position, status, knowledge and experiences influences the behavior of the less experienced pupil and helps him to
develop according to the needs and ideals of the society. It is not primarily telling. It’s helping other people learn. That means the focus is on the learners, not the teacher.

**Teaching Skills**

Teaching may be viewed as a group of skills known as Teaching Skills. A Teaching Skill is defined as a group of teaching acts or behaviours intended to bring desirable change in the pupil’s behavior. To promote order and learning in the classroom every teacher should possess essential teaching skills. No one can teach something to someone without doing it in some particular way, and that way of teaching has significant effects on the entire teaching and learning situation.

Teaching skills are specific instructional techniques and procedures that a teacher may use in the classroom. They represent an analysis of the teaching process into relatively discrete components that can be used in different combination in continuous flow of the teacher’s performance.

Bhushan and Ahuja (2002) said that the complex task of teaching is analysed into limited but well-defined components (which are called teaching skills) that can be taught, practised, evaluated, predicted, controlled and understood.

In Baroda General Teaching Competence Scale by Passi and Lalita (1976) 21 teaching skills are mentioned as:-

1. Skill of writing instructional objectives
2. Skill of introducing lesson
3. Skill of fluency in questioning
4. Skill of probing question
5. Skill of illustrating with examples
6. Skill of explaining
7. Skill in stimulus variation
8. Skill of silence and non-verbal cues
9. Skill of increasing pupil participation
10. Skill of prompting pupil participation
11. Skill of reinforcement
12. Skill of using black-board
13. Lecturing skill
14. Skill of discussion
15. Demonstration skill
16. Skill of Narration
17. Skill of using audio visual aids
18. Skill of class management
19. Skill of pacing the lesson
20. Planned repetition
21. Skill of giving assignment

Therefore teaching skills are those activities of teaching that are specifically effective in bringing about a desirable change in pupils.

**Attitude**

Attitudes are simply expressions of how much we like or dislike various things. Any given attitude is a summary of the evaluation made of different characteristics of the attitude object.

According to Fishbien and Ajzen (1975), “Attitudes have three components: Affect, Behavioural tendencies, and Cognition. The Affective component describes one’s emotional reactions towards attitude object; The Behavioural component includes behaviours associated with the attitude object; and The Cognitive component includes beliefs, facts and information about the attitude object”.

According to Skinner(2004), Attitude have been defined as ideas with emotional content, important beliefs, prejudices, biases, predispositions, appreciations, and as states of readiness or set.

Attitude can be a healthy, sharing, loving treasure of hope, and allowing everyone else to feel hope, energy and interest.

**Attitude Towards Teaching**

The attitude of the individual towards the profession or occupation, he has chosen for himself makes a very significant difference in his task of acquiring professional efficiency and also in getting psychological satisfaction from his work. A favourable attitude towards the chosen profession implies the presence of a high
degree of motivation in respect to duties and responsibilities that the chosen field imposes.

A positive and favourable attitude makes the work of teaching easier, satisfying and professionally rewarding. On the contrary, a negative attitude makes the teaching task harder, more tedious and unpleasant. In addition a teacher’s attitudes not only affect his behaviour in the classroom but also influence the behaviour of his students. Effective and productive learning on the part of the pupils can be achieved by employing teachers with desirable attitudes. Therefore attitude towards teaching must have bearing on the process of teaching and also on competence and success in teaching.

**Self-Efficacy**

Self-efficacy is the belief in one's effectiveness in performing specific tasks. It has been described as the belief that one is capable of performing in a certain manner to attain certain goals. It is a belief that one has the capabilities to execute the courses of actions required to manage prospective situations. It has been described in other ways as the concept has evolved in the literature and in society: as the sense of belief that one’s actions have an effect on the environment; as a person’s judgment of his or her capabilities based on mastery criteria; a sense of a person’s competence within a specific framework, focusing on the person’s assessment of their abilities to perform specific tasks in relation to goals and standards rather than in comparison with others’ capabilities.

Self-Efficacy refers to learned expectations that one is capable of carrying out a behavior or producing a desired outcome in a particular situation (Schunk 1985).

Scheier & Carver (1992) states, “Self-Efficacy underlines people’s faith in their ability to carry out particular behavior or produce a desired outcome.”

Bandura (1986) remarks, "People who regard themselves as highly efficacious act, think, and feel differently from those who perceive themselves as ineffectual, produce their own future, rather than simply foretell it."

**People with a strong sense of self-efficacy:**

- View challenging problems as tasks to be mastered.
- Develop deeper interest in the activities in which they participate.
• Form a stronger sense of commitment to their interests and activities.
• Recover quickly from setbacks and disappointments.

People with a weak sense of self-efficacy:
• Avoid challenging tasks.
• Believe that difficult tasks and situations are beyond their capabilities.
• Focus on personal failings and negative outcomes.
• Quickly lose confidence in personal abilities (Bandura, 1995).

People who expect to be successful tend to exert greater effort and show greater persistence when faced with challenging tasks- thereby increasing their likelihood of succeed (George, 1994).

Occupational Efficacy

Occupational Efficacy of a teacher or teacher efficacy is how a teacher feels about his or her ability to do their job. A more contemporary word for efficacy could be confidence. If a teacher feels confident that he or she can teach all students, regardless of their race, ethnicity, learning ability, or background, and achieve their objective, then that teacher would be described as being highly efficacious. Teachers who have high occupational efficacy, tend

- to persist in failure situations
- to take more risks with the curriculum
- to use new teaching approaches
- to get better gains in children's achievement
- to have more motivated students

Occupational efficacy in teacher refers to the extent to which the teacher believes he or she has the capacity to affect student’s performance (Bergman, McLaughlin, Bass, Pauly & Zellman, 1977).

Components of Occupational Efficacy:

1. **Confidence:** Confidence is a belief in your own ability to do things and be successful.
2. **Control:** Control is sense of command over the situations.
3. **Adaptability**: Adaptability is the capability of being adjusted/ adapted according to the demands of the situations.

4. **Optimism**: Optimism is the hopefulness about the future and positive thinking.

5. **Personal Effectiveness**: Personal effectiveness is the inclination continuous development.

**Personality**

The term personality has been derived from the Latin word ‘persona’ means the mask which the Greek actors commonly used to wear on their faces when they worked on the stage and convey an impression of what an individual represents or typifies. In this sense, personality is taken to refer to the outward aspect of an individual and how it attracts others. According to Guilford (1959) an individual’s personality is a unique structure of traits, the structure that distinguishes him as an individual and account for his unique and relatively consistent way of interacting with his environment.

While a man’s intelligence, his bodily strength and skills are certainly parts of his personality, yet the term personality refers chiefly to his emotional and social qualities together with his drives, sentiments and interests.

Personality type means classification of individuals according to pattern of their behaviour tendencies as one person behaves in a pleasing way, another in irritating way one acts energetically and another languidly. Many attempts have been made by psychologists to classify personality but Jung’s typology is widely known and accepted one. A person may be classified in two behavioural dimensions- Introvert and Extrovert.

Introvert people tend to live with their own thoughts and avoid socializing. They are shy, avoid people and enjoy being alone.

Extrovert people have chief interest in other people and events around them. Their orientation is towards the external world. They deal people intelligently in social situations.

Ambivert people are well balanced physically and emotionally and have the type of personality that makes them wonderful persons to be around. They have the capacity to utilize the extrovert and the introvert to get the most out of each.
EMERGENCE OF THE PROBLEM

We are living in the age of perfection and quality, which exists due to the advancements in the field of science and technology. It needs a drastic change in our social, economic, political and educational setup. In educational field we want to get rid of traditional and outdated educational system and we want quality and competency in every sphere of education. Therefore it is must for every teacher to be competent in his field. Only a competent teacher can shoulder heavy responsibilities of nation building. To be competent means to have clear set of goals, adequate skills, dedication to teaching, determination for continuous growth and learning, a sound professional attitude and a strong sense of occupational efficacy. Teachers are expected to use best practices and strategies to meet the challenging demands of their career.

In today’s world of globalization, India needs well-trained, highly motivated, skilled, dedicated and professionally sound teachers. In this perspective, teacher-education institutions must have to take the responsibility and should make efforts to equip the prospective teachers with capabilities, teaching skills, and proper teaching behaviour. But a little effort is being made to investigate that to what extent teaching strategies, methods and skills used by our teacher education institutions are successful in developing proper teaching competence, a positive attitude towards teaching, occupational efficacy and good personality characteristics among prospective teachers.

After reviewing the related literature few studies were found which had been tried to assess the attitude of the student teachers towards teaching and some investigators tried to find the relationship of attitude towards teaching with teaching skills and teaching training like. But no attempt has been found which try to study and to compare the teaching competence and attitude of student teachers in relation to type of institution and discipline.

As we know that efficacy beliefs of an individual directly affect his performance in any task therefore it is also applicable in the field of teaching. Teacher’s occupational efficacy is the precondition for his success as a teacher. While studying the related literature the investigator found some studies which tries to study the relationship of self efficacy of teachers with other teacher related variables such as
and few studies were found about the self efficacy beliefs of students but no study was has been found about the occupational efficacy of student teachers.

Teacher’s personality plays vital role in the education of children. Attitudes, interests, abilities, behaviour and expression of teacher leave far-reaching and deep impressions on children. Keeping in mind that the teacher’s impact on pupil’s personality is tremendous and teachers should have well-adjusted and well-developed personality researchers tried to study teacher personality in relation to various other factors. But the present investigator had not found any study which found the relationship of personality of teacher trainees with their teaching competence, attitude towards teaching and occupational efficacy.

A complete overview of the related literature makes us able to conclude that sufficient work has been done on the chosen variables separately but not even one study is found which try to find the relationship of teaching competence of student teachers with their attitude towards teaching, occupational self efficacy and personality in relation to type of institution, gender and discipline. Therefore we can say that the present study will add up new dimensions to the existing area of the studies in this field.

OPERATIONAL DEFINITIONS OF KEY TERMS

Teaching Competence: Teaching competence in the present study includes the demonstration of the skills required by the teacher trainees that are essential for carrying out the instructional activity in the classroom and facilitating learning.

Attitude towards Teaching: Attitude towards teaching refers to the attitude of the teacher towards his profession, classroom teaching, child centered practices, educational process, pupils and teachers.

Occupational Efficacy: Occupational efficacy is the belief of the teacher in his competence to tackle novel tasks and to cope with adversity in a broad range of stressful or challenging encounters across various domains of functioning.

Personality: Personality is the sum total of a person’s ideas, emotions, and behavior, including the rational and irrational, the conscious and unconscious, and the defensive and learned behavior patterns. Personality develops from both genetic factors and environmental factors. Personality may be of extrovert, introvert and ambivert type.
**Teacher Trainees:** Teacher trainees mean the students B. Ed. class of colleges of education of Punjab affiliated to Panjab University, Chandigarh.

**STATEMENT OF THE PROBLEM**

The problem may be stated as:

A STUDY OF TEACHING COMPETENCE OF TEACHER TRAINEES IN RELATION TO THEIR ATTITUDE TOWARDS TEACHING OCCUPATIONAL EFFICACY AND PERSONALITY

**DELIMITATIONS OF THE STUDY**

The present study has been delimited to the following areas:

1. Study was restricted to 584 teacher trainees from colleges of education of Punjab affiliated to Panjab University Chandigarh.
2. Study was delimited to 230 male and 354 female teacher trainees.
3. Study was delimited to 287 trainees of science and 297 of arts discipline.
4. The present study was delimited to variables i.e. Teaching Competence, Attitude towards Teaching, Occupational Efficacy and Personality.

**OBJECTIVES**

1. To study the relationship between teaching competence, occupational efficacy and attitude of teacher trainees towards teaching.

1a. To study the relationship between teaching competence, occupational efficacy and attitude of male teacher trainees towards teaching.

1b. To study the relationship between teaching competence occupational efficacy, and attitude of female teacher trainees towards teaching.

1c. To study the relationship between teaching competence, occupational efficacy and attitude of teacher trainees of science discipline towards teaching.

1d. To study the relationship between teaching competence, occupational efficacy and attitude of teacher trainees of arts discipline towards teaching.

2. To study the relationship between teaching competence, occupational efficacy and attitude of teacher trainees towards teaching with respect to personality type (extrovert, introvert and ambivert).
2a. To study the relationship between teaching competence, occupational efficacy and attitude of male extrovert teacher trainees towards teaching.

2b. To study the relationship between teaching competence, occupational efficacy and attitude of male introvert teacher trainees towards teaching.

2c. To study the relationship between teaching competence and occupational efficacy and attitude of male ambivert teacher trainees towards teaching.

2d. To study the relationship between teaching competence, occupational efficacy and attitude of female extrovert teacher trainees towards teaching.

2e. To study the relationship between teaching competence, occupational efficacy and attitude of female introvert teacher trainees towards teaching.

2f. To study the relationship between teaching competence, occupational efficacy and attitude of female ambivert teacher trainees towards teaching.

2g. To study the relationship between teaching competence, occupational efficacy and attitude of extrovert teacher trainees of science discipline towards teaching.

2h. To study the relationship between teaching competence, occupational efficacy and attitude of introvert teacher trainees of science discipline towards teaching.

2i. To study the relationship between teaching competence, occupational efficacy and attitude of ambivert teacher trainees of science discipline towards teaching.

2j. To study the relationship between teaching competence, occupational efficacy and attitude of extrovert teacher trainees of arts discipline towards teaching.

2k. To study the relationship between teaching competence, occupational efficacy and attitude of introvert teacher trainees of arts discipline towards teaching.

2l. To study the relationship between teaching competence, occupational efficacy and attitude of ambivert teacher trainees of arts discipline towards teaching.

3. To analyze the percentages of teacher trainees on the basis of personality type (extrovert, introvert and ambivert).

3a. To analyze the percentages of teacher trainees on the basis of personality type (extrovert, introvert and ambivert) with respect to their gender.
3b. To analyze the percentages of teacher trainees on the basis of personality type (extrovert, introvert and ambivert) with respect to their discipline.

4a. To study the significance of difference in mean scores of teaching competence of teacher trainees in relation to their gender.

4b. To study the significance of difference in mean scores of teaching competence of teacher trainees in relation to their discipline.

5a. To study the significance of difference in mean scores of occupational efficacy of teacher trainees in relation to their gender.

5b. To study the significance of difference in mean scores of occupational efficacy of teacher trainees in relation to their discipline.

6a. To study the significance of difference in mean scores of attitude of teacher trainees towards teaching in relation to their gender.

6b. To study the significance of difference in mean scores of attitude of teacher trainees towards teaching in relation to their discipline.

7. To study the conjoint contribution of attitude towards teaching and occupational efficacy and its prediction on teaching competence of teacher trainees.

7a. To study the conjoint contribution of attitude towards teaching and occupational efficacy and its prediction on teaching competence of extrovert teacher trainees.

7b. To study the conjoint contribution of attitude towards teaching and occupational efficacy and its prediction on teaching competence of introvert teacher trainees.

7c. To study the conjoint contribution of attitude towards teaching and occupational efficacy and its prediction on teaching competence of ambivert teacher trainees.

8a. To study the conjoint contribution of attitude towards teaching and occupational efficacy and its prediction on teaching competence of male teacher trainees.
8b. To study the conjoint contribution of attitude towards teaching and occupational efficacy and its prediction on teaching competence of female teacher trainees.

9a. To study the conjoint contribution of attitude towards teaching and occupational efficacy and its prediction on teaching competence of teacher trainees of science discipline.

9b. To study the conjoint contribution of attitude towards teaching and occupational efficacy and its prediction on teaching competence of teacher trainees of arts discipline.

**HYPOTHESES**

1. There exists no significant relationship between teaching competence, occupational efficacy and attitude of teacher trainees towards teaching.

1a. There exists no significant relationship between teaching competence, occupational efficacy and attitude of male teacher trainees towards teaching.

1b. There exists no significant relationship between teaching competence occupational efficacy, and attitude of female teacher trainees towards teaching.

1c. There exists no significant relationship between teaching competence, occupational efficacy and attitude of teacher trainees of science discipline towards teaching.

1d. There exists no significant relationship between teaching competence, occupational efficacy and attitude of teacher trainees of arts discipline towards teaching.

2. There exists no significant relationship between teaching competence, occupational efficacy and attitude of teacher trainees towards teaching with respect to their personality (extrovert, introvert and ambivert).

2a. There exists no significant relationship between teaching competence, occupational efficacy and attitude of male extrovert teacher trainees towards teaching.
2b. There exists no significant relationship between teaching competence, occupational efficacy and attitude of male introvert teacher trainees towards teaching.

2c. There exists no significant relationship between teaching competence and occupational efficacy and attitude of male ambivert teacher trainees towards teaching.

2d. There exists no significant relationship between teaching competence, occupational efficacy and attitude of female extrovert teacher trainees towards teaching.

2e. There exists no significant relationship between teaching competence, occupational efficacy and attitude of female introvert teacher trainees towards teaching.

2f. There exists no significant relationship between teaching competence, occupational efficacy and attitude of female ambivert teacher trainees towards teaching.

2g. There exists no significant relationship between teaching competence, occupational efficacy and attitude of extrovert teacher trainees of science discipline towards teaching.

2h. There exists no significant relationship between teaching competence, occupational efficacy and attitude of introvert teacher trainees of science discipline towards teaching.

2i. There exists no significant relationship between teaching competence, occupational efficacy and attitude of ambivert teacher trainees of science discipline towards teaching.

2j. There exists no significant relationship between teaching competence, occupational efficacy and attitude of extrovert teacher trainees of arts discipline towards teaching.

2k. There exists no significant relationship between teaching competence, occupational efficacy and attitude of introvert teacher trainees of arts discipline towards teaching.
2. There exists no significant relationship between teaching competence, occupational efficacy and attitude of ambivert teacher trainees of arts discipline towards teaching.

3a. There exists no significant difference in mean scores of teaching competence of teacher trainees in relation to their gender.

3b. There exists no significant difference in mean scores of teaching competence of teacher trainees in relation to their discipline.

4a. There exists no significant difference in mean scores of occupational efficacy of teacher trainees in relation to their gender.

4b. There exists no significant difference in mean scores of occupational efficacy of teacher trainees in relation to their discipline.

5a. There exists no significant difference in mean scores of attitude of teacher trainees towards teaching in relation to their gender.

5b. There exists no significant difference in mean scores of attitude of teacher trainees towards teaching in relation to their discipline.

6. The prediction of teaching competence among teacher trainees on the basis of conjoint contribution of attitude towards teaching and occupational efficacy will be significantly higher as compared to their separate prediction.

6a. The prediction of teaching competence among extrovert teacher trainees on the basis of conjoint contribution of attitude towards teaching and occupational efficacy will be significantly higher as compared to their separate prediction.

6b. The prediction of teaching competence among introvert teacher trainees on the basis of conjoint contribution of attitude towards teaching and occupational efficacy will be significantly higher as compared to their separate prediction.

6c. The prediction of teaching competence among ambivert teacher trainees on the basis of conjoint contribution of attitude towards teaching and occupational efficacy will be significantly higher as compared to their separate prediction.

7a. The prediction of teaching competence among male teacher trainees on the basis of conjoint contribution of attitude towards teaching and occupational efficacy will be significantly higher as compared to their separate prediction.
7b. The prediction of teaching competence among female teacher trainees on the basis of conjoint contribution of attitude towards teaching and occupational efficacy will be significantly higher as compared to their separate prediction.

8a. The prediction of teaching competence among teacher trainees of science discipline on the basis of conjoint contribution of attitude towards teaching and occupational efficacy will be significantly higher as compared to their separate prediction.

8b. The prediction of teaching competence among teacher trainees of arts discipline on the basis of conjoint contribution of attitude towards teaching and occupational efficacy will be significantly higher as compared to their separate prediction.

SAMPLE

This study has been conducted on a sample of 584 teacher trainees from the class B.Ed. from various Colleges of Education of Punjab affiliated Panjab University, Chandigarh. Multi-stage stratified random sampling technique has been used. At first stage list of various colleges of education has been prepared then colleges was selected randomly from list. At next stage 584 teacher trainees has been taken from selected colleges (230 male and 354 female). Because of less number of science students in colleges of education each and every teacher trainee from science group i.e. Teaching of Science, Teaching of Home Science, Teaching of Computer Science and Teaching of Mathematics (287) has been taken which was present on that day. 297 teacher trainees have been selected randomly from arts group i.e. Teaching of Social Studies, Teaching of History, Teaching of Economics, Teaching of Fine Arts and Teaching of Physical Education.

METHOD

The present study was a descriptive survey which has been conducted on 584 teacher trainees from various colleges of education of Punjab.

TOOLS USED

The following tools have been used to collect data:-

1. GENERAL TEACHING COMPETENCE SCALE (Passi and Lalitha, 2009)
2. TEACHER ATTITUDE INVENTORY (Ahluwalia, 2006)
3. PERSONALITY INVENTORY (Singh and Singh, 2011)
4. OCCUPATIONAL EFFICACY SCALE (prepared by the investigator)

**STATISTICAL TECHNIQUES**

Following statistical techniques have been used for the analysis of data:-

1. Descriptive statistics i.e. mean, standard deviation was used to ascertain the nature of distribution of scores on the variables of Teaching Competence, Attitude towards Teaching, Occupational Efficacy and Personality.
2. Differential statistics i.e. t-ratios was calculated to see the difference between means.
3. Percentage analysis was done.
4. Correlational statistics was employed to see the relationship between the variables under study.
5. Step up regression technique, multiple R’s along with F-ratio was used to examine the relative weightage contributed by Attitude towards Teaching, Occupational Efficacy to the prediction of Teaching Competence.
6. Graphical representation was done wherever required.

**CONCLUSIONS**

After analyzing the result of present study, the following conclusions can be drawn:

**Correlational Analysis:**

1. A significant relationship exists between teaching competence, occupational efficacy and attitude of teacher trainees towards teaching.
2. A significant relationship exists between teaching competence, occupational efficacy and attitude of male teacher trainees towards teaching.
3. No significant relationship exists between teaching competence and occupational efficacy and teaching competence and attitude of female teacher trainees towards teaching but a significant relationship exists between their occupational efficacy and attitude towards teaching.
4. A significant relationship exists between teaching competence, occupational efficacy and attitude of teacher trainees of science discipline towards teaching.
5. A significant relationship exists between teaching competence, occupational efficacy and attitude of teacher trainees of arts discipline towards teaching.
6. A significant relationship exists between teaching competence, occupational efficacy and attitude of extrovert teacher trainees towards teaching.
7. A significant relationship exists between teaching competence, occupational efficacy and attitude of introvert teacher trainees towards teaching.
8. A significant relationship exists between teaching competence, occupational efficacy and attitude of ambivert teacher trainees towards teaching.
9. A significant relationship exists between teaching competence, occupational efficacy and attitude of male extrovert teacher trainees towards teaching.
10. A significant relationship exists between teaching competence, occupational efficacy and attitude of male introvert teacher trainees towards teaching.
11. A significant relationship exists between teaching competence, occupational efficacy and attitude of male ambivert teacher trainees towards teaching.
12. A significant relationship exists between teaching competence, occupational efficacy and attitude of female extrovert teacher trainees towards teaching.
13. In the case of female introvert teacher trainees no significant relationship exists between their teaching competence and occupational efficacy and teaching competence and attitude towards teaching but a significant relationship exists between their occupational efficacy and attitude towards teaching.
14. In the case of female ambivert teacher trainees a significant relationship exists between their teaching competence and occupational efficacy but no significant relationship is there in their teaching competence and attitude of female ambivert teacher trainees towards teaching. A significant relationship also exists between occupational efficacy and attitude of female ambivert teacher trainees.
15. A significant relationship exists between teaching competence, occupational efficacy and attitude of extrovert teacher trainees of science discipline towards teaching.
16. A significant relationship exists between teaching competence and occupational efficacy of introvert teacher trainees of science discipline but no significant relationship is there in their teaching competence and attitude of
introvert teacher trainees of science discipline towards teaching. A significant relationship exists in occupational efficacy and attitude of introvert teacher trainees of science discipline towards teaching.

17. A significant relationship exists between their teaching competence, occupational efficacy and attitude of ambivert teacher trainees of science discipline towards teaching.

18. A significant relationship exists between their teaching competence, occupational efficacy and attitude of extrovert teacher trainees of arts discipline towards teaching.

19. A significant relationship exists between their teaching competence, occupational efficacy and attitude of introvert teacher trainees of arts discipline towards teaching.

20. No significant relationship exists between teaching competence and occupational efficacy ambivert teacher trainees of arts discipline but a significant relationship exists between teaching competence and attitude of ambivert teacher trainees of arts discipline towards teaching and also between their occupational efficacy and attitude towards teaching.

**Percentage Analysis:**

1. From the total sample of 584, 52.23% teacher trainees are extrovert in nature, 33.73% are introvert and 14.04% teacher trainees are ambivert in nature. Therefore we can say that more than half, of the teacher trainees are extrovert, more than one third of the total sample are introvert and rest are ambivert in nature.

2. 50.49% of extrovert teacher trainees are male and 49.51% are female teacher trainees. 27.41% introvert trainees are male and 72.59% are female. 26.83% of ambivert teacher trainees are male and 3.17% are female teacher trainees.

3. Out of 230 male teacher trainees 66.96% are of extrovert personality, 23.48% are of introvert personality and 9.57% are of ambivert personality. Total 354 are female teacher trainees out of 42.66% are extrovert, 40.40% teacher trainees are introvert and 16.95% are ambivert in nature.

4. From extrovert teacher trainees 48.20% teacher trainees are from science discipline and 51.80% are from arts discipline. From introvert teacher trainees 53.81% trainees are from science discipline and 46.19% are from arts
discipline. Ambivert teacher trainees are 82 in number out of them 41.46% are from science discipline and 58.54% are from arts discipline.

5. From science discipline 51.22% of the teacher trainees are of extrovert personality, 36.93% are of introvert personality and 11.85% are of ambivert personality. From arts discipline 53.20% are extrovert, 30.64% teacher trainees are introvert and 16.16% are ambivert in nature.

**Differential Analysis:**
1. A significant difference is there in the mean scores of teaching competence of teacher trainees in relation to their gender.
2. A significant difference is there in the mean scores of occupational efficacy of teacher trainees in relation to their gender.
3. A significant difference exits in the mean scores of attitude of teacher trainees towards teaching in relation to their gender.
4. No significant difference exists in the mean scores of teaching competence of teacher trainees in relation to their discipline.
5. A significant difference is there in the mean scores of occupational efficacy of teacher trainees in relation to their discipline.
6. A significant difference exists in the mean scores of attitude of teacher trainees towards teaching in relation to their discipline.

**Regression Analysis:**
1. The contribution of occupational efficacy and attitude towards teaching after combining them to the teaching competence of teacher trainees is significant.
2. The contribution of occupational efficacy and attitude towards teaching after combining them to the teaching competence of extrovert teacher trainees is significant.
3. The contribution of occupational efficacy to teaching competence is significant but after combining attitude towards teaching to it, its contribution to teaching competence of introvert teacher trainees is not significant.
4. The contribution of occupational efficacy to the teaching competence of ambivert teacher trainees is not significant. After combining both the variables attitude towards teaching contributes significantly to the teaching competence of ambivert teacher trainees but the contribution of occupational efficacy is significant.
The contribution of occupational efficacy to teaching competence of male teacher trainees is significant but after combining attitude towards teaching to it, its contribution to teaching competence is not significant.

The contribution of occupational efficacy and attitude towards teaching after combining them to the teaching competence is not significant. In the case of female teacher trainees the combined effect of occupational efficacy and attitude towards teaching is less than the separate effect of occupational efficacy on teaching competence it may be due to the fact that some other contradictory variables show their effect.

The contribution of occupational efficacy to teaching competence of teacher trainees of science discipline is significant but after combining attitude towards teaching to it, its contribution to teaching competence is not significant.

The contribution of occupational efficacy to teaching competence of teacher trainees of arts discipline is significant but after combining attitude towards teaching to it, its contribution to teaching competence is not significant.

EDUCATIONAL IMPLICATIONS
The results of our study are helpful for and are able to guide the educational colleges, teacher educators, and other teacher training institutions. As a significant relationship was found to be in the attitude towards teaching and teaching competence so sincere efforts should be made for developing desirable attitude in teacher trainees towards the profession adopted by them but proper screening and testing system should be there to measure attitude towards teaching at pre-training level.

Occupational efficacy of a teacher is a powerful predictor of how a teacher will act i.e. his teaching effectiveness and teaching behavior. As a significant relationship was also found to be in the occupational efficacy and teaching competence, attempts should be made to develop occupational efficacy of the teacher trainees at training level and of teachers by providing them opportunities of professional growth and in-service educational facilities, so that they may work with confidence at every step of their professional life.

As a significant difference was found to be in teaching competence, occupational efficacy and attitude towards teaching of teacher trainees in relation to their gender, female trainees have more teaching competence, occupational efficacy and favourable attitude towards teaching than male trainees; more attempts should be
made to develop these attributes in male trainees also by providing them opportunities to enrich their knowledge and teaching skills.

A significant difference was found to be in occupational efficacy and attitude towards teaching of teacher trainees in relation to their discipline. Trainees from science discipline have high occupational efficacy and more favorable attitude towards teaching than trainees from arts discipline. So serious efforts should be there to develop proper attitudes and efficacy among trainees from arts discipline, by providing them the opportunities for experimentation and develop their scientific outlook. More co-curricular activities should also be provided to inculcating scientific values, positive attitudes, adjustability and confidence among them.

SUGGESTIONS
1. The present study was limited to 584 teacher trainees from different colleges of education affiliated to Punjab University, Chandigarh. The study may be conducted on large sample of other Universities can be taken.
2. A study of teaching competence, attitude towards teaching, occupational self efficacy and personality of teacher trainees from different states can also be undertaken.
3. A comparative study of teaching competence, attitude towards teaching, occupational self efficacy and personality of teacher trainees from different universities and from different states can also be undertaken.
4. A comparative study of teaching competence, attitude towards teaching, occupational self efficacy and personality of teacher educators from different universities and from different states can also be undertaken.
5. In-service teachers from schools and colleges from different regions can be taken to conduct the same kind of research to study their teaching competence.
6. A comparative study of teaching competence, attitude towards teaching, occupational self efficacy and personality of in-service and pre-service teachers can also be undertaken.
7. A comparative study of teaching competence, attitude towards teaching, occupational self efficacy of in-service teachers in relation to their teaching experience can also be undertaken.
8. Study can be taken up with regard to other correlates of teaching competence, attitude towards teaching and occupational self efficacy like teaching efficiency, teaching aptitude, teaching effectiveness and other teacher related variables.