

Χηαπτερ Τωο

REVIEW OF RELATED LITERATURE

- ❖ **Theoretical View Points on
Teacher Aptitude**
- ❖ **Studies on Teacher Aptitude**
- ❖ **Studies on Academic
Achievement in Teacher
Education**
- ❖ **Studies on Teaching Interest**
- ❖ **Studies on Attitude Towards
Teaching Profession**
- ❖ **Studies on Teacher Perception
of Teacher Effectiveness**
- ❖ **Studies on Self concept in
Teaching**

❖ **Meta Analysis**

Review of related literature is a significant aspect of any research work to know, what others have learned from similar research situations and to help in the formation of hypothesis for the study. As Fox (1969) pointed out, it becomes part of the accumulated knowledge in the field and so contributes to thinking and research that follow.

The present study is an attempt to estimate the extent of relationship of Teacher Aptitude with Academic Achievement in teacher education and with certain psychological variables like Teaching Interests, Attitude towards Teaching Profession, Teacher Perception of Teacher Effectiveness and Self Concept in Teaching of primary teacher trainees of Kerala. The general trend shown by these studies can be considered while interpreting the results of the study.

The investigator, in this chapter, presents a survey of major studies reviewed in the area along with a conceptual framework on Teacher Aptitude and these are classified under headings like

2.A. THEORETICAL FRAME WORK ON TEACHER APTITUDE

2.B. REVIEWED STUDIES

Reviewed studies are again classified into six headings viz.,

2.B. 1. STUDIES ON TEACHER APTITUDE

2.B. 2. STUDIES ON ACADEMIC ACHIEVEMENT IN TEACHER
EDUCATION

2.B. 3. STUDIES ON TEACHING INTEREST

2.B.4. STUDIES ON ATTITUDE TOWARDS TEACHING PROFESSION

2.B.5. STUDIES ON TEACHER PERCEPTION OF TEACHER
EFFECTIVENESS

2.B.6. STUDIES ON SELF CONCEPT IN TEACHING

2.B.7. META ANALYSIS

2.A. THEORETICAL FRAMEWORK ON TEACHER APTITUDE

In the present chapter an attempt has been made to bring together the important theoretical viewpoints regarding Teacher Aptitude.

The concept of aptitude is reconstructed. Modern interpretation emphasises readiness to learn in particular instructional situations and recognises conative and affective as well as cognitive sources of aptitude.

Two problems make it little difficult to give a satisfactory definition of aptitude. First, is it inherited? Second, Is it a unitary trait or a combination of many traits?

Individuals differ greatly in their gifts and capacities, such differences being both quantitative and qualitative. In general, there are three classes of individuals, differing quantitatively with respect to their general mental equipment. They are the talented or gifted persons, the average persons, or persons of medium ability and the sub normal.

2.A.1. APTITUDE

Aptitude refers to a natural or acquired capacity or ability especially a tendency, capacity or inclination to learn or understand (Webster's Medical Dictionary, 2002). It refers to part of a person's mental equipment which gives him a special fitness for any kind of endeavour. Such an aptitude may be the result of either an innate endowment or of special training or both. The mental and physical qualities giving rise to differences in aptitude are difficult to distinguish.

Warren's Dictionary says, "Aptitude is a condition or a set of characteristics regarded as symptomatic of an individual's ability to acquire with some training, some knowledge, skills or set of responses such as ability to speak a language". When we refer to a person's aptitude for mathematics or music we are referring to his future too. But his

aptitude, however, is a present condition having something to do with the future.

Bingham makes a careful analysis of the term aptitude and confines its use to prognosis. According to Bingham, an aptitude involves:

1. Ability to acquire skills, knowledge, attitudes, etc.
2. Readiness to acquire.
3. Satisfaction in the job.

Bingham again explains, "Aptitude is a measure of the probability of success of an individual with training in a certain type of situation". He points out that aptitude is abstract in nature.

It can be further explained:

- It is symptomatic or indicative of one's ability for particular work or job.
- It has predictive value.
- Training facilitates this capacity to become the actual ability.
- This is not a single factor, but, a composite of several elements.

According to Thorndike, there are three types of aptitudes, viz., abstract or mechanical, concrete and social. Aptitude is further classified as verbal, numerical, spatial, motor, musical, social, intelligental, natural, mechanical, teaching, academic, learning, etc.

Aptitudes stabilise in the early years of life, but there is no time of demarcation after which there is no effect on the formation of aptitudes. Generally it is considered that aptitudes are formed upto puberty.

Aptitude is thus a present condition with a forward reference. It is a condition or set of characteristics regarded as indication of potentialities, but we can't be very sure that a person possessing a particular aptitude is going to succeed later in a job or occupation calling for the use of aptitude, because, aptitude as stated is a present condition and it may be influenced by other factors.

2.A.2. MEASURING APTITUDE

Aptitude test attempts to predict the capacities or the degree of achievement that may be expected from individuals in a particular activity. Aptitude tests measure and describe special abilities, capacities or talents which are supposed to determine the level of achievement that can be expected from individuals in specific fields of study and activity.

Aptitude, like intelligence fall under the domain of mental measurement, but it is less confused and more specific in its nature.

The most common forms of aptitude tests are those used to judge scholastic promise and these are used in employment and educational counselling. The content of an aptitude test, however, need not be bound

to a particular domain because the user will not want to make inferences about that domain.

Aptitude tests are measures of potential abilities that foreshadow success on related task of some future time. The purpose is predictive and their focus often is narrowed to a single ability or small collection of related abilities.

Aptitude tests, like intelligence tests, are not always easy to distinguish from achievement tests, because on the surface the content seems interchangeable. There are differences – sometimes subtle and sometimes gross – that help developers of aptitude tests accomplish purposes that achievement tests ordinarily are not intended to serve.

Aptitude tests measure ability to succeed in a particular kind of training. Scholastic aptitude tests measure ability to succeed in college or school. Vocational aptitude tests measure the likelihood of success in vocational training or in an occupation. For constructing an aptitude test in music, for e.g., one has to consider the factors which enter into good musical performance, like, ability to remember between differences in pitch, rhythm, pattern, intensity, etc. Present level of achievement in these tasks must provide a predictive index. Someone who has the aptitude to do clerical work has the prerequisite skills in manual dexterity, attention to detail and speed with repetitive tasks to complete many types

of clerical work effectively and efficiently. In most walks of life, past performance is the best predictor of future performance in the same realm of activity.

For measuring aptitude, we can use the following methods:

Method I says, "measuring unitary factor and its comparison as an index of aptitude.

Method II – the aptitude of a candidate is known on the basis of his success or failure in an initial period.

Method III – includes Aptitude tests.

These are three types.

- (i) Factorial tests.
- (ii) Differential tests for measuring general aptitudes.
- (iii) Aptitude test for broad areas such as mechanical, musical, vocational, etc.

Aptitude tests have proved useful in selecting individuals for particular courses of study. For research, in selection of candidates for particular profession, aptitude tests can be used.

TEACHER APTITUDE

A variety of factors seem to go along with Teacher Aptitude and is depended upon certain personal traits, intellectual and temperamental and these often will enable the teacher to get over even drastic constraints imposed on his performance.

Related studies also revealed that, there are so many factors which have dominant roles on Teacher Aptitude. Dushyant Kaur, in a study established that Academic Achievement, Teaching Aptitude and the personality traits as the predictors of success in Elementary Teacher training.

William Cooley and Paul Lohnes, argued that "yesterday's achievement is today's ability and tomorrow's aptitude".

Teaching needs three qualities. Knowledge is the first, communication skill is the second, aptitude is the third (The Hindu, 2002, Sept. 3). "A poor teacher tells; a good teacher teaches; an excellent teacher demonstrates; an outstanding teacher motivates". Time and again we hear these proverbial sayings from various sources at different occasions.

The ability of a teacher is decided in classrooms while presentation. Sitting in a good teacher's class those with aptitude, always probe whether

they can teach like this and then believe they can. Students' aptitude is well influenced by the classes they sit in and the teachers who teach them in their student days from primary to college.

How teachers can be identified as teachers with teacher aptitude? Good teaching looks effortless because a teacher's knowledge and experience are invisible. Teaching is a tricky blend of action, a way of contextualising knowledge. Good teaching is, in fact, complex and challenging, and even the best teachers face difficulties translating formal knowledge into effective practice (Blase, 2006).

Teaching has to be a dialogue, not a monologue. Teachers have to find innovative and effective technologies to present new concepts for motivating children. The classes have to be interactive with dialogue and sufficient learning materials.

A teacher with good teacher aptitude must be aware of the following essentials of teaching viz., plan a lesson, motivate students, curricular statements related, learning materials, teaching-learning strategies, essentials of the content, consolidation, elaborations, group activity, continuous and comprehensive evaluation, discipline, multi-level and multi grade activities, effective communication and interaction, etc.

From the past to this technological era itself, a teacher has to face so many problems inside or outside classrooms. They are related to cognitive, methodological, parental, societal, administrative, managerial, communicative, interactive and student based.

A creative teacher can solve problems which are new to him, in a divergent manner. A teacher with creativity can arranged and implemented new ideas and technologies in the teaching-learning process in a different way.

According to Hadfield, "mental ability is the full and harmonious functioning of the whole personality". A mentally able teacher can teach, guide and inspire his students properly to attain the goals of life.

Each generation of pupils grow up in a new context of patterns of interactive with others and in dealing with information technology. The learning experiences set up by teachers now must be tailored to the needs of pupils as they exist now; otherwise school will be experienced as an unreal world with outdated activities and knowledge. Teacher Aptitude is not something a teacher acquire at one moment in his professional development and then maintains in that same form thereafter. Rather it is an ever-changing requirement based on continuing professional development and critical reflection about one's own teaching.

2.B. REVIEWED STUDIES

2.B.1. STUDIES ON TEACHER APTITUDE

Review of related studies on teacher aptitude indicates that it is associated with several attributes which are related to teaching profession. Studies point out the complex nature of teacher aptitude, related variables and extent of relationship between them. Research on teacher aptitude has yielded better understanding about the impact that teacher ability has on student development.

The reviewed studies related to Teacher Aptitude are given below.

Adval (1952) in a study found that female teacher trainees have greater aptitude in teaching than male teacher trainees.

Banergy (1956) in a study of the inter-relation of two aspects of training viz., practice teaching and theoretical studies with general intelligence and teaching aptitude on a sample of student teachers found positive correlation between these variables.

In the study of predictors of teacher effectiveness, Sharma (1971) found that, besides other variables such as academic grades, socio-economic status, teaching experience, teaching aptitude is also a predictor of teacher effectiveness.

Sharma (1971) in a study on the predictors of teacher effectiveness at elementary level and on follow up after one year's of training found, teaching aptitude, academic grades, socio-economic status, teaching experience and age to be sound predictors of teacher effectiveness.

Vashishta (1973) in a study of predictive efficiency of admission criteria for B.Ed students found that academic grades, teaching aptitude and attitude towards teaching to be the best predictors of teacher effectiveness.

Ekstorm (1974) investigated the relationship between cognitive characteristics of teachers, their teaching behaviour and academic success of their pupils. Two major components found as affecting student achievement are (1) Teacher knowledge and (2) Teacher aptitude. In this study it was hypothesized that certain matches between teacher and pupil knowledge, skill, aptitude and cognitive style tend to facilitate pupils learning.

Thakkur (1977) in a study of teacher's effectiveness and their educational attitude in relation to their rapport with students and their survival and job satisfaction in the profession, found that female teachers have greater aptitude in teaching than male teachers. It was also reported that there exists significant relationship between teaching aptitude and general intelligence.

Ekstorm (1978) studied the relationship between teacher aptitude and knowledge, teaching behaviour and pupil outcomes. It was found that only cognitive style and one aptitude component (level of aspiration) are found related over both grade levels and subject.

In an attitudinal and personality study of Mutha (1980), it was found that effective teachers have significantly higher scores than ineffective teachers, confirming aptitude as a significant predictor of effective teaching.

Vyas (1982) studied the relationship of select factors with teaching success of prospective teachers in Rajasthan. It was found that, female teacher trainees have positive and significant relationship between teaching aptitude and teaching effectiveness. But, teaching success when assessed by "Teacher's Self Rating Measure", found no relationship between teaching success and teaching aptitude of either male or female teachers.

In the study of aptitude and achievement as predictors of performance on teacher competency, Ken and Kleine (1984) found a relatively small, but significant relationship between the overall competency factor and achievement variables. The competency factor is also correlated significantly with aptitude variables.

Sharma (1984) studied the effect of sex on teaching aptitude. No significant effect of sex was found on teaching aptitude.

Donga (1987) found that teacher aptitude is not a factor to control the adjustment behaviour of the student teachers. The study also suggests that female teacher trainees are more adjusted than male trainees. Trainees of different colleges differed significantly in adjustment. Trainees coming from science faculty have the lowest adjustment.

A comparative study of creative and non-creative B.Ed pupil teachers in relation to teaching effectiveness, self concept and some personal values, Singh (1987) found positive and significant correlation between teaching aptitude and teaching effectiveness.

A study of some psychological correlates of successful teachers, Kukreti (1990) found that there is a positive relationship between aptitude and success in teaching.

Feezel and Jerry (1993) conducted a study on preparing teachers through creativity games. Creative teaching which involves creating innovative lessons, games, materials, and assignments to challenge students, can be stimulated in teacher education students by stirring up their thinking and encouraging them to explore different paths.

Skipper and Charles (1993) conducted a study about the Instructional preferences of preservice teachers at three different levels of Academic aptitude. The study revealed that preservice teachers with varying academic ability are different in their preferences for the objectives and teaching methods of humanistic education and this should be recognized in development of Instructional strategies.

In a study, 'Determinants of teacher effectiveness', Beena (1995) found that teaching aptitude is a significant predictor of teaching effectiveness.

In a study of teaching aptitude of student teachers. Sajan (1999) found that there exists significant difference in teaching aptitude between male and female student teachers. The study also revealed that the level of achievement in degree examination has no influence in predicting teaching aptitude.

Rodger (2007) in a study examined a possible aptitude treatment interaction between teaching clarity and student test anxiety. Results revealed significant beneficial main effects for high vs low teacher clarity for both achievement motivation measures, but no aptitude treatment interaction between teacher clarity and student test anxiety.

Yeh (2007) in a study suggested that preservice teachers with high levels of C.T. dispositions, CT skills, and Intra personal intelligence as well as those with judicial thinking styles, are mindful, analytical and reflective in their teaching practices and therefore more likely to continually improve their skills in teaching aptitude.

In a study of self-esteem and teaching aptitude of DT Ed. students, Ranganathan (2008) found that there is a significant positive relationship between high self-esteem and teaching aptitude and there is no significant difference between males and females and the level of self-esteem and teaching aptitude.

Studies on Teacher Aptitude reviewed and their findings are consolidated in Table 1.

TABLE 1

Summary of Studies on Teacher Aptitude

Sl. No.	Author	Year	Major findings
1.	Adval	1952	Female teacher trainees have greater aptitude in teaching than male trainees
2.	Banergy	1956	A positive correlation between practice teaching and theoretical studies with general intelligence and teaching aptitude
3.	Sharma	1971	Teaching aptitude is a significant predictor of teacher effectiveness
4.	Sharma	1971	Teaching aptitude, academic grades, socio-economic status, teaching experience and age to be sound predictors of teacher effectiveness.
5.	Vashistha	1973	Academic grades, teaching aptitude, and attitude towards teaching are the best predictors of teacher effectiveness.
6.	Ekstorm	1974	The major components which affect student achievement are, teacher knowledge and teacher aptitude
7.	Thakkur	1977	Significant relationship between teaching aptitude and general intelligence.
8.	Ekstorm	1978	Cognitive style and one aptitude component are found consistently related.
9.	Mutha	1980	Teacher aptitude is a predictor of effective teaching
10.	Vyas	1982	A positive and significant relationship between teaching aptitude and teaching effectiveness, but no relationship between teaching success and teaching aptitude.
11.	Ken and Kleine	1984	Teacher competency factors are significantly correlated with aptitude variables.

Sl. No.	Author	Year	Major findings
12.	Sharma	1984	No significant effect of sex on teaching aptitude
13.	Donga	1987	Teacher aptitude is not a factor to control the adjustment behaviour of the student teachers. Female trainees are more adjusted than male trainees.
14.	Singh	1987	Positive and significant correlation between teaching aptitude and teaching effectiveness.
15.	Kukreti	1990	Positive relationship between aptitude and success in teaching .
16.	Feezel and Jerry	1993	Preparing student teachers through creativity games by stirring up their thinking and encouraging them to explore new paths
17.	Skipper and Charles	1993	Preservice teaching with varying academic aptitude are different in their preference for the teaching methods.
18.	Beena	1995	Teaching aptitude is a significant predictor of teaching effectiveness.
19.	Sajan	1999	A significant difference in teaching aptitude between male and female. The level of achievement in degree exam has no influence in predicting teaching aptitude
20.	Rodger	2007	Significant beneficial main effects for high vs low teacher clarity for achievement and motivation measures, but no aptitude treatment interaction between teacher clarity and student test anxiety.
21.	Yeh	2007	Pre service teachers become mindful, analytical and reflective in their teaching practices, and, therefore, more likely to continually improve their skills in teaching aptitude.
22	Ranganathan	2008	Significant positive relationship between high self-esteem and teaching aptitude and no significant difference between males and females.

Conclusion

Review of related studies indicates the importance of Teacher Aptitude and the variables that affect teacher aptitude. Some of the studies show gender difference in Teacher Aptitude, but some show no gender difference. Self-esteem, teacher effectiveness, success in teaching, Teacher competency factors, general intelligence, attitude towards teaching, Academic grades, teaching experience, age, SES, etc., are some of the variables that are related to Teacher Aptitude. Several studies show that Teacher Aptitude is capable of predicting teacher effectiveness. Teacher Aptitude is based on practice teaching and theoretical studies. The related studies reviewed, give a better understanding of the nature of Teacher Aptitude and the related variables and the relationship between them.

2.B.2 STUDIES ON ACADEMIC ACHIEVEMENT IN TEACHER EDUCATION

Effective teachers have a good command of their subject matter and have a better academic performance. Without conceptual competencies a teacher can never create a strong basement of academic development in his students.

As so many reforms and recommendations occur in the field of evaluation system, like, formative and summative evaluation, continuous and comprehensive evaluation etc., the marks or scores gained by a

student is the ultimate word of achievement now also. Academic Achievement becomes the corner stone of the developmental path of education and really, it becomes a strong determinant of effective teaching.

Though there are so many studies related to academic achievement in different areas of student related problems, studies related to student teachers, teachers and teaching profession are very few in number.

The reviewed studies related to academic achievement are presented below.

Gopalacharyalu (1984) in a study of relationship between certain psychology factors and achievement of student teachers in teacher training institutes of Andhra Pradesh, tried to find out whether differences in the psycho-sociological factors of student teachers accounted for significant differences in their achievements. He also tried to identify the psycho-sociological factors that significantly predicted the achievements of student teachers. The results showed that attitude towards teaching and attitude towards training influence achievement in theory and total achievement significantly. It was also found that age and locality of student teachers have significant influence on achievement in theory and total achievement.

Patil (1984) studied the relationship between interest, attitude and intelligence with teaching in relation with other variables like achievement, sex etc. of B.Ed student teachers and found that intelligence, attitude and interest are positively correlated with teaching.

Wali (1985) examined the relationship between various demographic correlates, academic background of teachers and teaching effectiveness. Implications for teacher preparation, such as, inculcating proper values, proper selection and giving due importance to family background have been drawn on the basis of the study of six factors.

Bose (1993) studied the correlates of teacher effectiveness of 160 student teachers and found that positive significant relationship exists between teacher effectiveness and each of the predictor variables like intelligence, teaching attitude, self confidence and previous academic achievement.

Cornelius (2000) investigated the factors affecting teacher competence of teacher trainees at the secondary level revealed that intelligence, attitude towards teaching profession, and academic achievement of teacher trainees are the discriminating factors of the different groups of subjects.

Smith and Kenneth (2000) conducted a study on Self Concept and verbal academic achievement of primary and secondary student teachers. Results revealed that significant difference between the two cohorts of student teachers on the self reported measures of self concept and test anxiety. The results also reveals that verbal academic self concept has significant and positive direct effect on verbal academic achievement. The indirect effect of verbal academic self concept mediated by worry component of test anxiety, is found to be significant for secondary student teachers. Results supported the proposition that an individual's self concept has a major direct influence on the worry component of test anxiety and in addition, a more dominant direct effect on verbal academic achievement.

Yeung and Watkins (2000) investigated twenty seven student teachers' personal sense of teaching efficacy in Hong Kong. The results pointed out that teaching efficacy is viewed in terms of the dimensions of concern for instructional participation and learning needs of pupils, communication and relationship with pupils, academic knowledge and teaching skills, lesson preparation, management of class discipline, teaching success, commitment and a sense of self confidence.

Studies on Academic Achievement in Teacher Education reviewed and their major findings are consolidated in Table 2.

TABLE 2

Summary of Studies on Academic Achievement in Teacher Education

Sl. No.	Author	Year	Major findings
1.	Gopalacharyalu	1984	Attitude towards teaching and attitude towards training influence achievement in theory and total achievement of student teachers.
2.	Patil	1984	Intelligence, attitude and interest are positively correlated with teaching
3.	Wali	1985	Inculcating proper values, proper selection and due importance to family and academic background are major factors including teacher education programme
4.	Bose	1993	Significant relationship exists between teacher effectiveness, and each of the predictor variables like intelligence, teaching attitude, self confidence, and previous academic achievement
5.	Cornelius	2000	Intelligence, attitude towards teaching profession and academic achievement of teacher trainees are the discriminating factors of the different groups.
6.	smith and Kenneth	2000	Self concept has a major direct effect on verbal academic achievement of student teachers.
7.	Yeung and Watkins	2000	Teaching efficacy is viewed in terms of the dimensions of concern for instructional participation and learning needs of pupils, communication and relationship with pupils, academic knowledge and teaching skills, lesson preparation, management of class discipline, teaching success, commitment and a sense of self confidence.

Conclusion

Studies, though they are very few in number, emphasized the importance of academic background of teachers and student teachers. Attitude towards teaching and training influence achievement of student teachers. Academic Achievement is a major factor for the proper selection of teacher candidates. Academic Achievement is associated with a number of factors viz., Intelligence, Interest, attitude, self confidence, teaching effectiveness, mental ability etc. Academic Achievement of teachers and student teachers is an area of future research, which the researchers have to notice.

2.B.3. STUDIES ON TEACHING INTEREST

According to Crow and Crow (1973) "interest may refer to the motivating force that impels us to attend to a person, a thing or an activity, or may be the effective experience that has been stimulated by the activity itself. In other words, interest can be the cause of an activity and the result of participation in that activity." Out wants, motives and basic needs are very much linked with interests.

Teaching interest has been found as one of the major determinants of teacher effectiveness, (Grewal 1975). Teaching Interest occupies an important role in the characteristics related to Teaching profession. An

interested teacher can inculcate interest for the subject in students and all other activities, in and out of the school, that he deals.

Studies related to teacher efficiency revealed that Teaching Interest is highly related to Teaching success and only interested teachers can open the world of wonders to their students.

Though there are so many studies on interest in different areas, studies related to Teaching Interest are very few in number.

The reviewed studies related to Teaching Interest are given below.

Beet (1973) in a study, summarised the usage of practical projects, science activities and teaching aids usable in teaching. It was also pointed out that teacher interest is the decisive factor influencing the whole teaching learning process.

Stedman, *et al.*, (1977) in a study found that a significant relationship exists between teacher interest and pupil attitudes in one area out of four areas measured.

Tibbetts (1979) presented an example of what can happen when a teacher is deprived of all decision making powers with respect to her job. Denial of autonomy leads to decline in the teacher's interest and a consequent loss to students.

Elementary student's progressive disinterest in school was partially explained by Breen (1979) in a study. Results showed slight but significant relationship between teacher interest and student attitude towards subject areas.

Aggarwal (1980) conducted a study on the motivational factors on the selection of teaching as a profession among teacher trainees of Haryana. The motivational factors identified were: desire to continue education, possibility of doing good to the country, fondness of teaching, security of job, and parent's wish fulfilment.

Goyal (1980) studied the relationship among attitude, job satisfaction, adjustment and professional interest of teacher educators. The study found that teachers are favourably inclined towards their profession and are satisfied in their job.

Willie (1981) studied the relationship between age and teacher interest in continuing professional education. It was concluded that age-related alternatives in continuing education programme should be made available to teachers.

Rana (1981) in a study found that a majority of Home Science College teachers have moderate level of value commitment and interest in teaching.

Mohanty (1990) made critical analysis of reactions of pupil teachers towards teaching profession. It was found that majority of the pupil teachers are interested in the field of education.

Gitlin (1994) in a study, examined teacher's attitudes about professional voice involved discussion among group of colleagues about professional issues, addressing three areas of concern about dialogue: teacher interest, administrative support from the teacher's perspective and constraints. They suggested the importance of personal narratives to encourage teacher voice and teacher interest.

Vadasy (1991) in a study, Varying levels of inservice training and support in use of class wise peer tutoring (CWPT) were provided for 44 elementary teachers whose classes included students with learning disabilities. Analysis of teacher's survey responses, teacher's classroom observations, and interviews of six implementers indicated that level of support did not significantly influence teacher interest.

Jarrett (1999) examined the effects of previous experiences in science learning on prospective elementary teacher's interest and confidence in teaching science. The study reported on the effect of an inquiry-based science methods course on teacher interest and confidence. They found that elementary school experience, plus the number of science courses taken in college, predicted initial confidence and teacher interest.

Ruhland (2002) studied factors important to determine a business teacher's interest in continuing or not continuing in the teaching profession. The survey consisted of four sections: educational preparation, teaching experience, skills and interests in teaching, and demographics. Findings were (1) the retention rate of respondents is very good (2) 86% are still teaching (3) secondary business teachers who initially did not have teaching interest and a strong commitment to the teaching profession are more likely to leave the teaching profession.

Sundaram and Gandhi (2003) studied the interest of teacher trainees in teaching undergoing diploma course in teaching of Tamilnadu. The study found that interest in teaching of student trainees is not influenced by their type of school; parental occupation or their subject background. Among 16 criterion variables four variables, viz., marital status, native place, place of school and mode of admission can significantly influence interest in teaching of student teachers.

Kadijevich (2006) examined preservice teacher's interest to attain educational technology standards. The study revealed that, the direct effects of support on attitude and of attitude on interest are positive and significant.

Long (2006) in an investigation of teacher interest, revealed that student perceptions of teacher interest are represented by items related to

both teacher effectiveness and individual differences. Findings indicated that the teacher interest is a complex construct comprised of cognitive, affective, motivational and volitional dimensions.

Suja (2007) in a study found that attitude towards teaching, interest in teaching and teaching experience have significant main effect on job commitment of teachers.

Kadijevich (2008) studied teacher's interest to achieve educational technology standards ("interest") in terms of their computer attitude ("Attitude"), computer experience ("Experience") and the professional support to achieve these standards offered to them from their institutions ("Support"). By applying a two-group path analysis, it was found that to improve "interest", we need to improve "Attitude" by means of "experience". The analysed data evidence that a desired role of 'Support' can be achieved when 'support' respects 'Experience'.

Tanner (2008) in a study documented the unfortunate status of social studies and a lack of teacher interest, and poor instructional methods. The often overlooked and most detrimental factor is that most elementary teachers have not been taught the nature and purpose of social studies, because majority of courses that they have taken deal with methodology and pedagogy rather than content. Studying the student performance expectations associated with each standard can help

preservice teachers to see practical application of each standard in the elementary classroom.

Studies on Teaching Interest reviewed and their major findings are consolidated in Table 3.

TABLE 3
Summary of Studies on Teaching Interest

Sl. No.	Author	Year	Major Findings
1.	Beet	1973	Teacher Interest is the decisive factor influencing the whole teaching-learning process.
2.	Stedman, <i>et al</i>	1977	Relationship is found between Teacher Interest and pupil attitude in one area out of four areas measured.
3.	Tibbetts	1979	Denial of autonomy leads of decline in the teacher's interest and a consequent loss to students.
4.	Breen	1979	Conveyance of teacher interest disinterest in a subject may be significant in student attitude development.
5.	Aggarwal	1980	The motivational factors on the selection of teaching as a profession are: desire to continue education, possibility of doing good to the country, fondness of teaching, security of job and parent's wish fulfillment.
6.	Goyal	1980	A favourable relationship among teaching attitude, job satisfaction, adjustment and professional interest.
7.	Willie	1981	Age-related alternatives in continuing education programmes should be made available to teachers.
8.	Rana	1981	Value commitment, which implied interest in teaching for its own sake, is predominant in

Sl. No.	Author	Year	Major Findings
			the professional commitment.
9.	Mohanty	1990	Majority of the pupil teachers are interested in the field of education.
10.	Gitlin	1994	Importance of personal narratives to encourage teacher voice and teacher interest
11.	Vadasy	1997	Level of support do not significantly influence teacher interest
12.	Jarrett	1999	The elementary school experiences plus the number of courses taken, can predict initial confidence and teacher interest.
13.	Ruhland	2002	Teachers who initially do not have teaching interest and a strong commitment to the teaching profession are more likely to leave the profession.
14.	Sundaram and Gandhi	2003	Marital status, native place, place of school and mode of admission can significantly influence the interest in teaching.
15.	Kadijevich	2006	The direct effects of support on attitude and of attitude on interest are positive and significant
16.	Long	2006	Teacher interest is a complex construct comprised of cognitive, affective, motivational and volitional dimensions.
17.	Suja	2007	Attitude towards teaching, interest in teaching and teaching experience have significant main effect on job commitment.
18.	Kadijevich	2008	To improve teacher's interest, need to improve attitude by means of experience.
19.	Tanner	2008	Content oriented courses can develop teacher interest.

Conclusion

Studies reviewed in the area of Teaching Interest reveal a clear picture that it is a decisive factor influencing the whole teaching - learning process. Some studies show positive relationship of teaching interest with teacher attitude and also with pupil attitude. Job satisfaction, adjustment, intelligence, level of support, commitment etc., are significantly related with teaching interest and studies reveal that interest can be developed through experiences. Professional autonomy helps to create teacher interest and it leads to student attitude development.

2.B.4. STUDIES ON ATTITUDE TOWARDS TEACHING PROFESSION

Attitude towards Teaching Profession is an emotionalised tendency, organized through teaching experiences to react positively towards teaching." It is a learned emotional response, set for or against teaching. Individuals will have positive attitudes towards those objects which enable them to achieve the values held and form negative attitudes towards objects which hinder the achievement of values.

Studies reviewed in this area are presented below.

Roy (1971) studied the relationship between teacher attitude and teaching efficiency and found a positive relationship between them.

In a study conducted by Sukhwal (1976) on attitudes of married lady teachers towards teaching profession, those teachers who have favourable attitude towards teaching profession has the highest percentage of problems in actual work situations.

George G. Austin (1979) conducted a study on the effect of student teaching and pretesting on student teachers attitude and found that attitude of student teachers can be improved by student teaching experience provided that they are not pre-tested concerning their attitudes.

Diran Taiwo (1980) studied the influence of previous exposure to science education on attitude of preservice science teachers towards science teaching. Major finding was: previous exposure to science education as a discipline before registering for bachelor's degree in science education in Nigerian Universities seems to significantly affect the attitude towards science teaching.

Bhandarkar (1980) in a study on polytechnic teacher's attitude towards teaching profession and its correlates, found that attitude towards teaching profession is not significantly related to the qualification of the teachers.

Ramakrishnaih, (1980) revealed through his study, that women teachers have a significant and more favourable attitude towards teaching than men teachers.

Gupta, (1984) conducted a study on Attitude of Teachers and found that male and female teachers differ significantly in attitude towards teaching profession.

Rawat and Sreevastava (1984) conducted a comparative study of the attitude of male and female teacher trainees towards teaching. Significant difference was found between male and female teacher trainees in their attitude towards teaching profession.

Khatoon (1985) in a study on the relationship between teacher's classroom verbal behaviour and attitude towards teaching and found that teachers' attitude towards teaching has nothing to do with the teachers' influence in classroom.

Austin (1985) found significant differences between attitudes of teachers and principals concerning various aspects of main streaming practices. Teachers show a great deal of concern about classroom behaviour and academic progress of students, whereas principals tend to show a greater concern about philosophy of students.

Mahapatra (1987) studied the comparative role of intelligence, attitude and vocational interest towards success in teaching. It was found that intelligence, attitude towards teaching and vocational interests are predictor variables of teaching success.

Ramakrishnaih, (1989) analysed the attitude of college teachers towards teaching profession and it was found that (i) generally college teachers have a favourable attitude towards teaching (ii) Teachers below 35 years of age have a more favourable attitude towards teaching than the middle age group and the high age group.

Poozhikuth (1989) found that female teachers have high attitude towards teaching than male teachers and age is not significantly associated with attitude towards teaching whereas length of service is associated with attitude towards teaching.

Karp, Karen and Silliman (1991) conducted a study on the Elementary School Teachers' Attitudes toward Mathematics. The teaching behaviour and instructional methods of elementary school teachers were investigated to determine whether teachers with positive attitude toward mathematics employ different methods in mathematics instruction than those with negative attitudes. Overall, teachers with negative attitudes employed methods that fostered dependency whereas

teachers with positive attitudes encourages student initiative and independence.

Pugh Ava and Others (1991) conducted a study, an Investigation of Preservice Teachers' Attitude toward Theory and Practical Application in Teacher preparation. To determine program effectiveness, students were surveyed at the end of the spring and fall semesters for 6 years, examining their attitudes towards theory and practical application in teacher education. The study noted whether they felt competent about subject matter, audiovisuals, classroom management and routine, and communication. Results found their attitudes more positive in the fall on all four measures.

Ruscoe, Gordon and Others (1991) analyse the Qualitative and quantitative perspectives on Teacher Attitudes. Since 1988, teacher analysis suggest that simultaneous involvement with more than one type of restructuring has a positive effect on teacher attitudes. In subsequent interviews with teachers and administrators. While showing appreciation for shared decision making, teachers more often accounted for their positive attitudes by describing a supportive administrative style.

Koontz and Franklin (1992) in their study 'An Assessment of Teacher Trainees Attitude' towards selected Instructional Media, they selected two groups: 168 students and 170 preservice teachers. Based on

the final results of the study, it was concluded that a formal course in the selection and utilization of instructional media can function as a primary factor in the development of student's attitudes in a positive direction.

Mathai (1992) found that attitude towards teaching profession is a significant predictor variable of success in teaching.

In the study, the effects of Hands-on, Minds-on Teaching Experiences on Attitudes of Preservice Elementary Teachers (1992) Pedersen and Mecurdy examines the effects of a science method course on the attitude of the preservice elementary teachers (N=145) toward teaching science. Results indicated a significant positive change in attitude that was not significantly different for low and high science achievers.

Piel, John and Others (1992) conducted a study in the Educational Attitudes of Preservice Teachers. Two populations of undergraduate students (preservice elementary education majors and noneducation majors) were compared with respect to their attitudes toward learning. Data suggest that education majors' attitudes reflect generalized ambivalence toward important subject areas taught in elementary school, with significantly more positive attitudes displayed toward reading and literature. In spite of highly visible recommendations for more extensive academic coursework, results indicate the impracticability of addressing

teacher competence through added coursework before appropriate attitude adjustment processes have been planned and implemented.

Twille, Less-Doll and Others (1992) conducted a study in improving Academic Achievement in Inner City Schools: Do Attitude of Parents and Teachers Make a Difference? A study was done to determine whether or not the attitude of parents and teachers were related to the academic achievement of elementary school students. Seventy-one teachers, 49 parents, and thirty-two fourth grade students served as participants. Teachers' responses were used to supplement the development of the "Parent Teacher Attitude Questionnaire" (PTAQ). Parents completed pretests of the PTAQ. "Parent Version," were exposed to strategies designed to facilitate academic achievement and were then administered post tests of the PTAQ-P-Students were tested on a pretest-posttests basis in English, Mathematics and reading student's scores were compared using dependent 't' tests. Performance in all academic subjects improved significantly. Parent's responses to the PTAQ-P did not change significantly. The Teacher performance factor of the PTAQ-P was significantly related to two academic tests: the English Pre-test and the Mathematics post test. The school requirement factors was found to be significantly related to the reading pretest. Changes in parent's responses

to the test were positively correlated with three of the student's academic gain scores. .

Baxter and Anthony, G. (1993) conducted a study on improving Teaching candidates' Attitudes toward Learning Theoretical knowledge. Study tested the hypothesis that teacher candidate who were exposed to a theory oriented normative model and given theory - oriented reinforcement within a practice-oriented context would manifest more positive attitudes toward learning theoretical knowledge than those who were not so exposed. Results proved the hypothesis is plausible.

Benton, Gary and Others (1993) conducted a study about the Professional Development School's Impact on Student Teacher's Attitudes. The purpose of this study was to determine if student teacher's attitudes toward their student teaching experiences differed significantly after the addition of professional development school experiences. Two groups of student teachers were compared. A one way analysis of variance revealed significant differences for 7 of the 38 items.

Goodwin, Deborah, Derring, Rosemarie (1993) in their study, the interactive Video Approach to preservice Teaching Training: An Analysis of students' Perceptions and Attitudes, investigated the integration of interactive video technology in to a traditional teacher education programme, analysing student attitudes about classroom management

strategies. Students completed a survey following a seminar demonstration of an interactive videodisk on classroom management. Subjects revealed positive attitudes toward the use of interactive video.

Huber, Tonyal, Kline, Frank (1993) conducted a study on Attitude toward Diversity: Can Teacher Education programme really make a difference. They concluded that teacher education programme was revised to develop sensitive, nurturing teachers who understand student diversity. Pretests and post tests examining students' professional and personal opinion about diversity found that field experiences create significant differences in attitudes toward diversity and social distance preference in educational settings.

Skariah (1994) studied creativity of teacher trainees' in relation to their self concept, attitude towards teaching profession and success in teaching and found that high teaching success group and high attitude towards teaching group are more creative than the other groups.

Anderson, Dewayne studied (1995) about the preservice Teacher's Attitude toward children. Results from a teacher attitude questionnaire given to 1,405 preservice teachers revealed large differences in attitudes toward children, associated with age, gender, and major. The most positive were females in elementary, least positive males in secondary. Those in special education were most positive, in music art and physical

education least positive. Whether these attitudes manifest themselves in the classroom remains unknown.

Kumar (1995), in a study, found that there is significant difference in the attitude of male and female teacher trainees towards teaching profession.

Reddy (1995) studied the attitudes of student teachers and success of student teachers, and reported that attitude of teachers do not significantly influence the success of student teachers.

Roos, Marie and Others in their study (1995), the Influence of Early Field Experiences on the attitudes of Preservice Teachers, investigated the effects of early field experience on the attitudes of elementary preservice teachers toward teaching. Pre-test and post-test data were collected by means of an instrument employing a semantic differential scale measuring attitudes toward teaching. Results offer support for the inference that these preservice elementary teachers have positive attitudes toward teaching prior to early field experience and have even more positive attitudes toward teaching after their easily field experience.

Balan (1996) found no significant gender difference in attitude towards teaching of student teachers of Kerala and there exists significant

relationship between attitude towards teaching and self concept of the female student teachers.

Chidolue, Mercy.E (1996) conducted a study. In this study, relationship between teacher characteristics and classroom environment, student achievement, and student attitude in high school biology classes were studied in an export factor design involving 11 teachers and 375 biology students in Nigeria. Significant positive relationships are found between teacher experience, teacher locality, student attitude and achievement.

Marso & Pigge (1996) investigated the relationship between pre and post preparation development of attitudes, anxieties and confidence about teaching, and candidates success or failure in making the transition to teaching on 241 teacher candidates, and it was found that teacher preparation itself, has an impact upon teacher candidates' affective characteristics.

Monahan, Robert and Others (1996) conducted a study of Rural Teachers' Attitudes toward inclusion. Over 60% of respondents indicated that inclusion will not succeed because of resistance from regular education teachers. They do not have the instructional skills and educational background to teach special needs students; regular education teachers prefer sending special needs students to special education

classroom rather than having special education teachers deliver services in the regular classroom, special and regular education teachers should demonstrate collaboration with all special needs students in the regular classroom; necessary resources are not available for inclusion to succeed; and special needs students improve their social skills when in a regular classroom, but they need more attention and assistance than the regular education teacher can provide.

Downing, Jan, Filer, Janet and Others (1997) conducted a study about the science process skills and Attitudes of preservice Elementary Teachers. This study examined whether there was a relationship between preservice elementary teachers' competency in science process skills and attitude towards the field of science. Study data came from 46 students enrolled in an elementary course. Data analysis found a significant positive relationship between how well teachers performed science process skills and their attitudes toward science. The two subscale that significantly correlated with the performance of science process skills are the confidence in learning science scale and the teacher scale.

Pigge and Others (1997) studied the development of Attitudes toward Teaching career in a Longitudinal sample of Teacher Candidates Progressing Through Preparation and Five Years of Teaching. The study revealed that the development of attitude toward teaching does not follow

the same pattern for all teacher candidates and suggested a possible explanation for the sometimes apparent contradictions noted in the findings from previous research of teacher attitude development.

White, Pamela and Joy (1997) conducted a study about the "Effects of Teaching Techniques and Teacher Attitude on Maths Anxiety in Secondary Level Students". The purpose of this study was to determine if teaching techniques and teacher attitudes tend to reduce math anxiety. The MARS pretests and post test comparison indicated that both the control and experimental groups began and ended the study with the same level of anxiety. Likewise both groups started the study on the same basic skill level and performed on the same level at the end of the study.

Marso and Pigge (1998), in a study, found that candidates teaching 7 years after commencement of teacher preparation possess theoretically more desirable affective traits than non teaching candidates.

Cornelious (2000) investigated the factors affecting teacher competence of teacher trainees at the secondary level, revealed that intelligence, attitude towards teaching profession, and academic achievement of teacher trainees are the discriminating factors of the different groups of subjects.

Pushpam (2003) while examining the attitude of women teachers towards teaching profession on a sample of 725 teachers found significant and positive relationship between attitude of women teachers towards teaching profession and job satisfaction.

Devi (2005) in a study, found that moderate and highly significant correlation exists between success in teaching and the predictor variables like, role conflict, attitude towards teaching profession and job satisfaction. It was also reported that role conflict and Attitude towards teaching profession are the two variables capable of significantly and efficiently discriminating between successful and less successful groups of women teachers of Kerala.

Suja (2007) in a study found that attitude towards teaching, interest in teaching, and teaching experience have significant main effect on job commitment of teachers

Studies reviewed on Attitude towards Teaching profession reviewed and their major findings are consolidated in Table 4.

TABLE 4

Summary of Studies on Attitude Towards Teaching Profession

Sl. No.	Author	Year	Major Findings
1.	Roy	1971	Positive relationship between teaching attitude and teaching efficiency.
2.	Sukhwal	1976	Teachers with favourable attitude towards teaching profession revealed the highest percentage of problems in actual work situations
3.	Austin	1979	The attitude of student teachers can be improved by a student teaching experience.
4.	Diran Taiwo	1980	Previous exposure to science education significantly affect the attitude towards teaching
5.	Bhandarkar	1980	Attitude towards teaching profession is not significantly related to the qualification of the teachers.
6.	Ramakrishnaiah	1980	Women teachers have a significant and more favourable attitude towards teaching profession than men teachers
7.	Gupta	1984	Male and female teachers differ significantly in attitude towards teaching profession.
8.	Rawat and Sreevastava	1984	Significant difference between male and female teacher trainees in their attitude towards teaching profession
9.	Khatoon	1985	Attitude towards teaching profession has nothing to do with the teachers classroom behaviour
10.	Austin	1985	Significant difference between attitude of teachers and principals of mainstreaming practices

Sl. No.	Author	Year	Major Findings
11.	Mahapatra	1987	Intelligence, attitude towards teaching and vocational interests are predictor variables of teaching success.
12.	Ramamkrishnaih	1989	Teachers below 35 years have a more favourable attitude towards teaching profession than junior and senior teachers.
13.	Poozhikuth	1989	Female teachers have high attitude towards teaching than male teachers and age is not significantly associated.
14.	Karp, <i>etal.</i> ,	1991	Teachers with negative attitudes employed methods that fostered dependency where as teachers with positive attitudes encourages student initiative and independence.
15.	Pugh <i>et al.</i> ,	1991	Attitudes of preservice teachers' toward subject matter, audio visuals, class room management routine and communication are highly positive.
16.	Ruscoe et al.,	1991	Teachers more often accounted for their positive attitudes by describing a supportive administrative style.
17.	Koontz and Franklin	1992	A formal course in the selection and utilization of instructional media can function as a primary factor in the development of student's attitudes in a positive direction
18.	Mathai	1992	Attitude towards teaching profession is a significant predictor variable of teaching success.
19.	Pedersen and Mecerdy	1992	A significant positive change in attitude towards science teaching and that is not significantly different for low and high science achievers

Sl. No.	Author	Year	Major Findings
20.	Piel <i>et al.</i> ,	1992	The impracticability of addressing teacher competence through added course work before appropriate attitude adjustment processes have been planned and implemented.
21.	Twillie, <i>et al.</i> ,	1992	Attitudes of parents and teachers are highly correlated to student's academic achievement.
22.	Baxter and Anthony	1933	Teacher candidates who were exposed to a theory of oriented normative model and given theory-oriented reinforcement within a practice-oriented context would manifest more positive attitudes towards learning theoretical knowledge than those who are not so exposed.
23.	Benton, <i>et al.</i> ,	1993	Student teachers' attitudes towards their teaching experiences differed significantly after the addition of professional development school experiences.
24.	Goodwin, <i>et al.</i> ,	1993	Student teachers revealed positive attitudes towards the use of interactive video technology.
25.	Huber, <i>et al.</i> ,	1993	Field experiences create significant differences in attitude towards diversity.
26.	Skariah	1994	High attitude towards teaching group and high teaching success group of trainees are more creative.
27.	Anderson, <i>et al.</i> ,	1995	Female preservice teachers in elementary schools show most attitudes toward children, whereas males in secondary show least attitudes.

Sl. No.	Author	Year	Major Findings
28.	Kumar	1995	Significant attitude difference in male and female teacher trainees.
29.	Reddy	1995	Attitude of teachers cannot influence success in teaching.
30.	Roose, et al.,	1995	Positive attitude towards teaching prior to early field experiences and have even more positive attitudes toward teaching after their easily field experience.
31.	Balan	1996	No significant gender difference in the attitude towards teaching of student teachers.
32.	Chidolue, et al.,	1996	Significant positive relationships are found between teacher experience, teacher locality, student attitude and achievement.
33.	Marso and Piggie	1996	Teacher preparation itself has an impact upon teacher candidates' affective characteristics.
34.	Monahan, et al.,	1996	Over sixty percentage of the regular education teachers prefer sending special needs students to special education classrooms.
35.	Downing, et al.,	1997	Significant positive relationship between science process skills and attitude towards science.
36.	Pigge, et al.,	1997	Development of attitude towards teaching does not follow the same pattern for all teacher candidates.
37.	White, et al.,	1997	Teaching techniques and teacher attitudes have no effect no maths anxiety.
38.	Marso and Piggie	1998	Teachers teaching seven years after commencement of teacher preparation possess theoretically more desirable affective traits.

Sl. No.	Author	Year	Major Findings
39.	Cornelius	2000	Attitude towards teaching profession is a discriminating factor of teacher competence of different groups.
40.	Pushpam	2003	Significant positive relationship between attitude towards teaching and job satisfaction of women teachers.
41.	Devi	2005	Moderate and significant correlation exists between success in teaching and attitude towards teaching profession.
42.	Suja	2007	Attitude towards teaching, interest teaching, and teaching experience have significant main effect on job commitment.

Conclusion

Studies reviewed on attitude towards teaching profession reveal that attitude towards teaching profession is a significant predictor of teaching efficiency. Studies prove that attitude can be improved through practical experience. It is also found that more effective and less effective teachers differ in attitude towards teaching. Previous exposure can increase the level of attitude. Some studies indicate that female teachers possess a high degree of attitude than male teachers. Teachers with positive attitudes encourage their students. Significant relationship of attitude towards teaching with variables like teaching interest, satisfaction, creativity intelligence, teaching effectiveness, commitment, achievement,

technology, teaching experience are established in a majority of studies. But a few studies show no relationship with the variables viz., qualification, class room behaviour, age, sex, locale, etc. However, attitude towards teaching is a significant variable related to teaching that majority of studies established its relationship.

2.B.5. STUDIES ON TEACHER PERCEPTION OF TEACHER EFFECTIVENESS

Teacher perception of Teacher effectiveness has been found as one of the major characteristic of effective teaching. Unless a teacher has better perceptions of effective teaching, he can never do justice to his profession.

Teacher effectiveness plays an important role in the teaching learning process. An effective teacher must have a current, thorough knowledge of the subject matter, show interest in teaching, and have an enthusiasm for the subject. Teaching is situational, and effective teaching depends upon human qualities inherent in the teacher.

Review of related studies showed that the diverse nature of teacher roles had made it impossible to identify a reliable, universal criterion of teacher effectiveness.

Ryans (1960) conducted a research on teacher effectiveness and found that teachers' classroom behaviour differ significantly when studied on the basis of gender, extent of teaching experience, area of specialization with in the profession, academic success and practice teaching.

Debnath (1971) studies some important determinants of teaching efficiency and found that age, experience, academic achievement and teaching are significantly related to teaching efficiency.

Raj (1971) studied teacher characteristics as perceived by pupils and teachers and found that students as a group give greater importance to professional qualities.

Roy (1971) studied the relationship between teacher attitude and teaching efficiency and found a positive relationship between these.

Chaya (1974) found that effective teachers have significantly better personality adjustment, favourable attitude towards teaching and emotional stability than ineffective teachers.

Arora (1976) found that effective teachers derive more satisfaction from their work than ineffective teachers.

Grewal's (1976) investigation showed that main predictors of teacher effectiveness are home, health, social, emotional and total

adjustments, dominance, submission and verbal and non verbal intelligence.

Gupta (1976) conducted a study on prediction of teacher effectiveness and found that highly effective teachers differ significantly with respect to 9 personality factors and the less effective teachers are less intelligent and are having lower self concept.

Maheswari (1976) studied the classroom verbal interaction pattern of effective and ineffective teachers. It was found that effective teachers use the categories of accept feeling, praise, use student ideas, student response and initiation, whereas, ineffective teachers employ lecture, direction and authority categories in the classroom behaviour.

Deo (1980) studied the personality and adjustment correlates of teaching effectiveness. It was found that high group is emotionally more stable, extrovert, dominant and the low group is emotionally more unstable, introvert and submissive, but, more sociable.

Mutha (1980) in a study found that the effective teacher has significantly higher scores on job satisfaction than the ineffective teacher and the significant predictor variables of teacher effectiveness are ascendance, submission, neuroticism, job satisfaction and teaching attitudes.

Srivastava (1980) in a study of the relationship between frustration and teaching efficiency of the student teachers, found that, frustration affect the teaching efficiency and no significant effect on gender difference.

Balachandran (1981) in a study of teaching effectiveness and student evaluation of teaching identified the factors of teaching effectiveness. They are: subject mastery and intellectual kindling, responsiveness, integrity and communicating ability, commitment of teachers, concern for the students' progress and informal academic help.

Perry (1981) pointed out that teacher's cognitive complexity may affect the way in which they view the classroom and organise the teaching activities.

Passi and Sharma (1982) found that there is positive relationship between teaching competency and liking of their pupils in their teaching behaviour in a study of the teacher effectiveness of secondary school teachers.

Al-Babtain (1982) found that there is no significant relationship between teacher student interaction and teaching effectiveness.

Wangoo (1984) in a study pointed out that personality adjustment, democratic leadership a high degree of intelligence and emotional content are the main characteristics of teacher effectiveness.

Subbarayan (1985) investigated that there is significant relationship between teacher effectiveness and self concept.

Wali (1985) examined the relationship between various demographic correlates, academic background of teachers and teaching effectiveness. Implications for teacher preparation such as inculcating proper values, proper selection and giving due importance to family background have been drawn on the basis of the study of six factors.

Veera Raghavan and Arunkumar (1988) observed that there exists significant difference in academic performance of students taught by high effective teachers and those taught by low effective teachers.

In a study of beginning first year teachers' perceptions of characteristics of effective teaching, Hill (1988) pointed out the following characteristics of effective teaching (1) caring and understanding relationship (2) relates to the kids and work with them at different levels (3) kind of positive interaction (4) ability to break things down to kids and (5) flexible and willing to try new things.

Mato (1988) studied the personality characteristics associated with teacher effectiveness as seen through Cattell's 16 P.F. test as compared to ineffective teachers and the factors are outgoing behaviour, intelligence and brightness, emotional stability and higher ego strength, happy go-lucky and enthusiastic conscientious, persistent and moralistic, venture some, socially bold, tender-minded and sensitiveness, polished and social awareness, self sufficient, resourcefulness and preferring own decisions and relaxedness.

Singh (1988) studied teaching efficiency in relation to job satisfaction and SES of secondary school teachers and it was found that teaching efficiency of rural and urban, trained and untrained teachers do not differ significantly and teaching efficiency of male and female teachers differ significantly.

Donga (1989) studies the effectiveness of certain predictors of teaching efficiency of student teachers and found that attitude towards children, general ability and professional knowledge are effective predictors of teaching efficiency.

Steffens (1990) examined the characteristics of teacher efficacy as perceived by teachers on a sample of 70 teachers found the following characteristics: 1) Knowledge of the subject matter, (2) A caring and

compassionate personality. (3) Enthusiasm (4) Organisation (5) A sense of humour (6) Love of children

Bose (1993) studied the correlates of teacher effectiveness of 160 student teachers and found that positive significant relationship exists between teacher effectiveness and each of the predictor variables like intelligence, teaching attitude, self-confidence and previous academic achievement.

In a study on role perception beliefs held by early childhood preservice teachers, student teachers and classroom teachers, Kahlick (1993) identified important factors in teaching roles; and highlight areas of discrepancy between what teachers believe to be important and "real world" practice.

Kurian (1994) in a study, 'Teacher perception of effective classroom instruction at secondary school level' found that male and female teachers differ significantly in their perception of effective classroom instruction.

Saxena (1995) found that both effective and ineffective teachers are well adjusted, derived satisfaction from their work, and have favourable attitude towards teaching profession.

Tom (1996) investigated the beliefs and ideas that preservice and inservice teachers held about themselves as teachers, the students they

teach, and the setting in which they teach at the university of Wisconsin white water. The study revealed that teacher factors like, intelligence, personality, background and preparation programme, contribute more to the overall effectiveness of teachers.

Ostrander (1996) analysed multiple judges of teacher effectiveness by comparing teacher self-assessments with the perceptions of principals, students, and parents on a sample of 93 teachers. Findings suggested that the use of multiple judges may provide unique perspectives of teacher performance, resulting in fairer and more comprehensive evaluations.

Mohan (1998) pointed out that teaching effectiveness may be fairly well characterised by three factors viz., behavioural dimension, attitudinal dimension, and entry-level competence.

Yeung and Watkins (2000) investigated twenty seven student teacher's personal sense of teaching efficacy in Hongkong. The results pointed out that teaching efficacy is viewed in terms of the dimensions of concern for instructional participation and learning needs of pupils, communication and relationship with pupils, academic knowledge and teaching skills, lesson preparation, management of class discipline, teaching success, commitment and a sense of self confidence.

Cornelius (2000) in a study on teacher competency of the B.Ed trainees found that intelligence, attitude towards teaching profession and academic achievement are the discriminating factors of different group of teachers.

Kagathala (2002) in a study found that area of schools and higher qualification affects teacher effectiveness.

Krishna Prasad (2002) found that teacher effectiveness is significantly related to temperament variables.

Chow *et al.*, (2002) studied teacher perception of appraisal in a sample of 527 elementary school teachers and reported that the appraiser-appraisee combination make a significant difference in teacher perception of the purposes and appropriateness of the appraisal.

Paul and Kumarvel (2003) in a study revealed that teachers differ in their effectiveness with respect to teaching experience, community, type of management and locale. It was also pointed out that rural teachers are more effective than urban teachers.

Johnson (2004) in a project study, identified a number of supports for teacher effectiveness. They are mentoring a curriculum that is adaptable and supportive of teacher learning and a professional culture in

which there is deep and sustained interaction between novice and veteran teachers.

Madsen, *et.al.* (2005) in a study, examined preservice and experienced teachers' ratings and comments on teacher effectiveness and student learning after observing video taped music classes. Analysis indicated that all groups make more comments about the teacher regardless of whether they watched the teacher tape or student tape. Experienced teachers are more critical in their evaluations and make more judgement statements than the undergraduate subjects. Total ratings of the teachers are significantly higher than those of the students. No differences are found due to focus of attention of observation.

Swars (2005) investigated perceptions of mathematics teaching effectiveness among elementary preservice teachers with high and low levels of mathematics teacher efficacy. Participants in this study included four elementary preservice teachers at a midsized university in the south eastern United States who had just completed a mathematics methods course. Data sources were the Mathematics Teaching Efficacy Beliefs Instrument and interviews. The interviews indicated that mathematics instructional strategies as well as past experiences with mathematics and their influences upon perceptions of teaching effectiveness are associated with mathematics teacher efficacy.

Wu (2005) examined the relationship between teachers' teaching effectiveness and school effectiveness. The major findings were: (1) The levels of teaching effectiveness measures of comprehensive high school teachers are moderately high, with good teacher student relationship, being the highest, and "teaching self efficacy" being the lowest (2) The higher the teachers' teaching effectiveness, the higher the school effectiveness. Gender, type of school, "teaching self efficacy," systematical presentation of instructional materials and good classroom climate are the five best predictors for school effectiveness.

Ding (2006) studied the relationship between teacher effectiveness and student's achievement as measured by test scores. A strong belief among policy makers and public as well as private funding agencies is that test scores are directly related to the quality of teaching effectiveness. This relationship implies that there could be a direct causality among teacher preparation, teacher quality and student achievement. Fundamental research issues and concerns as well as an alternative conceptual framework for studying the relationship of achievement and teaching are highlighted.

Heckert, *et al* (2006) investigated the relation of course, instructor and student characteristics to student ratings of teaching effectiveness, both overall and within the dimensions of pedagogical skill, rapport with

students, difficulty appropriateness, and course value/learning. Interest in the course content, expected grades, satisfaction with the time of day, and instructor sex, related significantly to all dimensions of teaching performance.

Lattuca, *et.al.* (2007) Studied the Qualitative methods to assess teaching effectiveness. Instruct or evaluation forms those scannable surveys that students use to rate the quality of their instructor and courses at the end of every term are the most common method of assessing teaching effectiveness in the United States. The authors identify and discuss qualitative sources of evidence and methods of assessment that can provide important and detailed information on the quality of teaching in a course or program. They also describe potential sources of information about and methods for assessing teaching effectiveness that can serve to expand conventional ways of thinking about summative evaluation of teaching.

Ranz (2007) explored teacher perceptions of the role of play in teaching and the implications for practice. Varying perceptions of the definition and place of play resulted in differing levels of willingness to include child initiated play that are spawned within the educational contexts. These perceptions led to inductively realized outcome variables of instructional goals, student products, and classroom climate.

Wang (2007) studied the impact of Information Entropy on Teaching effectiveness. Information entropy refers to the process in which information is sent out from the information source, transmitted through information channel and acquired by information sink, while the teaching process is the one of transmitting teaching information from teachers and teaching material to students. How to improve teaching effectiveness is virtually how to increase the transmission of effective information in teaching.

Begeny, *et.al.* (2008) in a study of teachers' perceptions of student academic abilities, suggested that teachers are generally accurate when estimating students with strong oral reading fluency skills, but teachers have more difficulty in judging students with average to low oral reading fluency.

Studies on Teacher Perception of Teacher Effectiveness reviewed and their major findings are consolidated in Table 5.

TABLE 5

Summary of Studies on Teacher Perception of Teacher Effectiveness

Sl. No.	Author	Year	Major Findings
1	Ryans	1960	Significant difference between teacher effectiveness and teachers' classroom behavior
2	Debnath	1971	Age, experience, academic achievement and teaching are significantly related to teaching efficiency
3.	Raj	1971	Students gave greater importance to professional qualities and teachers to personal qualities of a teacher
4.	Roy	1971	Positive relationship between teacher attitude and teaching efficiency
5.	Chaya	1974	Effective teachers have significantly better personality adjustment, more favourable attitude towards teaching, emotional stability
6.	Arora	1976	Effective teachers derive more satisfaction from their work.
7.	Grewal	1976	Main predictors of teacher effectiveness were home, health, social, emotional and total adjustments, dominance, submission and verbal and non verbal intelligence
8.	Gupta	1976	Low effective teachers are less intelligent and are having lower self concept
9.	Maheswari	1976	Effective teachers used the categories of accept feeling, praise, student ideas, student response and initiation, whereas, ineffective teachers employed lecture, direction and authority categories in the classroom behaviour.
10.	Singh	1976	Superior teachers are able to solve problems quickly

Sl. No.	Author	Year	Major Findings
11.	Chandra	1976	Efficiency of teachers increased with opportunities for more social services, more intellectual challenges and more independence
12	Deo	1980	High group is emotionally stable, extrovert, dominant and the low group is more unstable, introvert and submissive, but more sociable
13.	Mutha	1980	Significant predictors of teacher effectiveness are ascendance, submission, job satisfaction and teaching attitudes
14.	Srivastava	1980	Frustration affect the teaching efficiency
15.	Balachandran	1981	Factors affecting teaching effectiveness are subject mastery, intellectual kindling, responsiveness, integrity and communicating ability, commitment, concern for the student's progress
16.	Perry	1981	Teacher's cognitive complexity may affect the way in which they view the classroom and organise their teaching activities
17.	Passi and Sharma	1982	Positive relationship between teaching competency and liking of their pupils in their teaching behaviour
18.	AL-Babtain	1982	No significant relationship between teacher student interaction and teaching effectiveness
19.	Wangoo	1984	Personality adjustment, democratic leadership, intelligence and emotional content are the main characteristics of teacher effectiveness
20.	Subbarayan	1985	Significant relationship between teacher effectiveness and self concept

Sl. No.	Author	Year	Major Findings
21.	Wali	1985	Values, family background, proper selection, academic background as effective correlates of teacher effectiveness
22.	Veera Raghavan and Arunkumar	1988	Significant difference in the academic performance of students taught by high effective and low effective teachers
23.	Hill	1988	Caring and understanding relationships, positive interaction, flexibility are the characteristics of effective teaching
24.	Mato	1988	Effective and ineffective teachers differ in personality factors
25.	Singh	1988	Teaching efficiency of male and female teachers differ significantly
26.	Donga	1989	Attitude towards children, general ability and professional knowledge are effective predictors of teaching efficiency
27.	Steffens	1990	Knowledge of the subject matter, caring and compassionate personality, Enthusiasm, organisation, a sense of humour, Love of children are the characteristics of teacher effectiveness
28.	Bose	1993	Intelligence, self confidence, teaching attitude and previous academic achievement are significantly related to teacher effectiveness
29.	Kahlick	1993	Highlighted areas of discrepancy between what teachers believe to be important and "real world practice".
30.	Kurian	1994	Male and female teachers differ significantly in their perception of effective classroom instruction
31.	Saxena	1995	Both effective and ineffective teachers are well adjusted, derived satisfaction from their work and have favourable attitude towards teaching profession.

Sl. No.	Author	Year	Major Findings
32.	Tom	1996	Intelligence, personality, background and preparation programme contribute overall effectiveness of teachers
33.	Ostrander	1996	Use of multiple judges may provide unique perspectives of teacher performance
34.	Mohan	1998	Behavioural dimension, attitudinal dimension, and entry level competence are the fairer characteristics of teacher effectiveness
35.	Yeung and Watkins	2000	Teaching efficiency viewed in terms of learning needs of pupils, communication and relationship with pupils, academic knowledge and teaching skills, teaching success, commitment and self confidence.
36.	Cornelius	2000	Intelligence, attitude towards teaching profession, and academic achievement are the discriminating factors of different group of teachers
37.	Kagathala	2002	Area of schools and higher qualification of teachers affect teacher effectiveness
38.	Krishna Prasad	2002	Teacher effectiveness is significantly related to temperament variables
39.	Chow, <i>et al.</i>	2002	Appraiser-appraisee combination make a significant difference in teacher perception
40.	Paul and Kumarvel	2003	Teacher effectiveness differs with respect to teaching experience, community, type of management, and locale
41.	Johnson	2004	Supports for teacher effectiveness are mentoring a new curriculum that is adaptable and supportive, and a professional culture.
42.	Madsen, <i>et al.</i>	2005	Total ratings are significantly higher than those of the preservice students

Sl. No.	Author	Year	Major Findings
43.	Swars	2005	Mathematics instructional strategies as well as past experiences with mathematics and their influences upon perceptions of teacher effectiveness are associated with mathematics teacher efficiency
44.	Wu	2005	The higher the teachers' teaching effectiveness, the higher the school effectiveness
45.	Ding	2006	There can be a direct causality among teacher preparation, teacher quality and student achievement
46.	Heckert <i>et. al.</i>	2006	Interest in the course content, expected grades, satisfaction with the time, and instructor sex, related significantly to all dimensions of teaching performance
47.	Lattuca, <i>et.al.</i>	2007	Students rate the quality of their instructors and courses at the end of every term is the most common method of assessing teacher effectiveness
48.	Ranz	2007	Teacher perceptions led to the inductively realized outcome variables of instructional goals, student products and classroom climate
49.	Wang	2007	How to improve teacher effectiveness is virtually how to increase the transmission of effective information in teaching
50.	Begeny, <i>et al.</i>	2008	Teachers have more difficulty in judging students with average to low oral reading fluency

Conclusion

Studies reviewed reveal that teacher perception of teacher effectiveness is a determinant factor in the whole process of teaching and

learning. The complex nature of teaching can be observed from the studies that they include as many variables which are directly or indirectly affect teaching effectiveness. Age, experience, academic achievement, gender, personality, satisfaction, home, health, social and emotional adjustments, intelligence, subject mastery, commitment, concern, values, democratic leadership, attitude, interest, self concept, motivation, humour, love etc., are some of the variables that are significantly related to teacher effectiveness. Almost all the studies give an insight in to the diversity of teaching profession and the related factors affecting teaching.

2.B.6. STUDIES ON SELF CONCEPT IN TEACHING

Self-concept in teaching, as a powerful determinant of teacher behaviour, is developed by the way in which teacher experiences and interprets things that happen. The quest for understanding oneself plays a vital role in orienting the teacher to the world around him and enabling him to behave with confidence so that he can maximise his pleasure and minimise his pain in his professional area.

A considerable amount of research has been conducted to study the relationship between self concept in teaching and the major determinants of effective teaching.

The reviewed studies in this context are presented below.

Khattry (1973) studies the relationship between self concept and professional adjustment of three categories of teachers-primary, secondary and college. The study concluded that there exists a significant relationship between self concept and professional adjustment of the three groups of teachers.

Aspy and Buhler (1975) conducted a study to see the effect of teachers inferred self concept upon student achievement. It was found that the level of inferred self concept are positively related to the student's cognitive growth at 0.01 level of significance.

Mathew (1976) conducted a study of classroom behaviour of teachers and its relationship with teachers' creativity and self concept. The study found that there is no significant relationship exists between creative teacher and classroom behaviour. But a positive relationship exists between creative teacher and teacher's talk. There is no relationship between self concept of teachers and pupil initiation ratio.

Gomati Mani and Gonsalves (1977) conducted a study on self concept of student teachers in relation to their performance in practice teaching. They found that teachers with more teaching experience have better self concept than teachers with less teaching experience. Besides age has some influence on self concept. Lower age accompanied by better

self concept and more effective teaching. Socio-economic background have also influence on self concept.

Goswami (1978) in a study of self concept of adolescents and its relationship with scholastic achievement and adjustment found that adolescents with a good self concept are likely to achieve more than those with poor self concept.

Coney (1978) in an investigation, of self concept and school attitudes as measures of effectiveness of title VII intervention programme noticed significant relationship between self concept of ability and achievement.

Fritts (1979) in his study found that teacher attitudes towards the level of professionalism attached to the field of education are correlated with the variables of (1) level of university study, (2) teaching experience, (3) size of home school district and (4) gender. Analysis revealed that teachers do perceive themselves as a professional group, although with varying agreement on the priorities of professional group characteristics.

Rai (1983) investigated self concept of the prospective teacher and found that self concept of the prospective teacher is positive. The relationship of self concept with adjustment and intelligence are positive

and significant. It was also found that self concept could be very well predicted from an individual's intelligence and adjustment scores.

Convert (1984) examined the influence of varying the length of the student teaching practicum on the self concept of teachers and their motivation towards the profession. Research indicated that the notion that the longer the student teacher practicum the better is not true. While it is not yet clear what the optimum practicum length should be, it does appear that the governing factor might be the minimum time required to develop technical competence and self confidence rather than the period of time required to fully socialize a student into a teacher.

Subbarayan (1985) conducted a study to find out the relationship between teacher effectiveness, research and publication and self concept and found that relationship between teacher effectiveness and self concept is significant.

Chadda (1985) found that the distribution of the scores of self concept through profile analysis is not normal for the total group of teachers as well as for the sub samples.

Jayalatha (1991) studied attitude towards teaching profession and teacher's self concept as correlates of teacher perception of effective classroom teaching of secondary school teachers and found that the

relationship between teacher perception of effective classroom teaching and teacher's self concept is negative and not significant.

Sameer (1996) in a study of Teacher success in relation to self concept and attitude towards teaching profession of secondary school mathematics teachers of Kerala, found that self concept discriminates significantly between successful and less successful teachers.

Marsh (2000) conducted a study on multiple dimension of teacher's self concept. In this study, he integrated research literature on self concept and on student's evaluation of teaching effectiveness (SETs). The results showed that agreement between teacher self concept and SETs is moderate for teachers who had not previously received SET feed backs, but substantially higher for teachers previously received SET feed back.

Brown (2004) examined the relationship of self concept to changes in cultural diversity awareness of urban teacher educators. The sample consisted of 100 European American preservice teachers. The findings indicate that there is no significant relationship between total self concept and total cultural diversity awareness.

Ramesh and Thiagarajan (2005) found that the self concept of B.Ed trainees is high and there is no significant difference due to gender,

community, locality and optionals. The study also revealed that, the higher the qualification, higher is the self concept.

Sugathakumar (2005) in a study revealed that self concept and achievement motivation have significant relationship with teacher effectiveness. It was also found that self concept and achievement motivation are capable of predicting teacher effectiveness.

Rajani (2007) in a study found a significant correlation between self concept and job involvement of teachers. It was also found that significant difference in relationship of self concept and job involvement exists between aided and unaided; rural and urban teachers.

Studies on self concept in Teaching reviewed and their major findings are consolidated in Table 6.

TABLE 6

Summary of Studies on Self Concept in Teaching

Sl. No.	Author	Year	Major Findings
1	Khatry	1973	A significant relationship between self concept and professional adjustment
2	Aspy and Bubler	1975	Levels of inferred self concept are positively related to the student's cognitive growth
3.	Mathew	1976	A positive relationship between creative teacher personality and teachers' talk whereas no relationship between self concept of teachers' and pupil initiation ratio
4.	Gomati Mani and Gonsalves	1977	Teachers with more teaching experience have better self concept than with less teaching experience
5.	Gosmani	1978	Adolescents with a good self concept are likely achieve more than those with poor self concept
6.	Coney	1978	Significant relationship between self concept of ability and achievement
7.	Fritts	1979	Teachers do perceive themselves as a professional group, although with varying agreement on the priorities of professional group characteristics
8.	Rani	1980	Significant relationship between self concept and academic achievement
9.	Rai	1983	Self concept could be very well predicted from an individual's intelligence and adjustment scores
10.	Covert	1984	The notion that, the longer the student teacher practicum, the better is not true
11.	Subbarayan	1985	Significant relationship between teacher effectiveness and self concept
12.	Chadda	1985	Self concept of teachers differed significantly from their emotional adjustment

Sl. No.	Author	Year	Major Findings
13.	Jayalatha	1991	Relationship between teachers' perception of effective classroom teaching and their self concept is negative and not significant
14.	Sameer	1996	Self concept of teachers' discriminates significantly, successful and less successful teachers
15.	Hunt	1997	Relation between self concept, hope and academic achievement
16.	Marsh	2000	Agreement between teachers' self concept and student's evaluation of teaching effectiveness
17.	Brown	2004	No significant relationship between total self concept and total cultural diversity awareness
18.	Ramesh and Thiagarajan	2005	The higher the qualification, the higher is the self concept
19.	Sugatha Kumar	2005	Self concept and achievement motivation have significant relationship with teachers effectiveness
20.	Rajani	2007	Significant correlation between self concept and job involvement.

Conclusion

The reviewed studies prove that Self Concept is associated with several factors like academic achievement, qualification, creativity, hope, worry, anxiety, perception, success, effectiveness, experience, adjustment of teachers and also teacher trainees. Most of the studies show positive and significant relationship with these factors, whereas, some shows negative relationship also. Studies established that self concept in teaching is an important factor which determines the quality of teaching.

Meta Analysis

Studies reviewed in the areas of Teacher Aptitude, Academic Achievement, In Teacher Education, Teaching Interest, Attitude towards teaching profession, Teacher perception of Teacher Effectiveness and Self Concept in Teaching reveal that these variables are inter-related and complementary to each other. The studies indicate several other variables which are related to teaching and give a better understanding of them in different contexts, and different purposes. The variables associated with effective teaching are innumerable, such as, attitude towards teaching, interest in teaching, self concept in teaching, personality, adjustment, Teaching competency, academic achievement, teacher effectiveness, teacher perception, cognitive ability, teaching style, commitment, job satisfaction, teaching success, intelligence, gender, age, qualification, classroom climate, teacher behaviour, teacher communication, meta cognition, values, worry, anxiety, locale, concern for students' progress, motivation etc. The review suggested that there are no comprehensive studies covering the variables. viz., Teacher Aptitude, Academic Achievement, Teaching Interest, Attitude towards teaching, Teacher perception of Teacher Effectiveness and self concept in Teaching of teacher trainees of Kerala. The present study, in this context, is an attempt to fill the gaps, if any, in the studies conducted so far, and the findings of the study may initiate further investigation of this kind.

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