CHAPTER 2

REVIEW OF RELATED LITERATURE

Importance of review
Section A: Theoretical Overview-(a) personality, (b) teacher personality, (c) teacher effectiveness (d) theoretical models explaining teacher effectiveness, (e) evaluating teacher effectiveness, (f) tools and techniques for measuring teacher effectiveness

Section B: Related studies in Teacher Effectiveness - (a) Studies related with affective variables of teacher effectiveness, (b) studies related with cognitive variables of teacher effectiveness (c) Studies related with process variables of teacher effectiveness

Review of Literature: An Overview
IMPORTANCE OF REVIEW

A survey of literature on teacher personality, and teacher effectiveness would indicate that there are numerous studies conducted in this area. At the same time, the findings of majority of them are inconsistent, and inconclusive. In recent years, the problems related to this field have emerged as a challenge, and thereby research efforts increase considerably, and many attempts are still going on. It is at this juncture that a perusal of the earlier work done in this field becomes pertinent.

It may be remembered in this context that the review of related literature is an inevitable pre-requisite to any research work. One of the pre-conditions of any research is that the researcher must be thorough with the relevant theories in the field, the research reports, and all other related works. The progressive growth of any scientific discipline is marked explicitly by its professional literature. For any worthwhile study in any field of knowledge, the investigator needs an adequate familiarity with the research materials already available in the area.
Research is a process of exploration, it is an investigation of something new which may be hidden or unnoticed. In other words, it is the process of gathering, recording, and analyzing of relevant data about the problem in a selected branch of human activity. During this searching process, the past experience will have valuable importance. The researcher needs to acquire up-to-date information about what has been thought, and done in the particular area from which he intends to take up a problem for research.

A knowledge of related studies enables the investigator to define the frontiers of his field, and also to sharpen a nebulous idea. The development of a research design, and the determination of the size and scope of the problem, all depend, to a great extent, on the care, and intensity with which the researcher has examined the literature related to his topic for investigation. The review also helps to sharpen, and define understanding of existing knowledge in the problem area, and provides a background for the research project.

As Best and Kahn (1995) observe:

A summary of the writings of recognized authorities, and of previous research provides evidence that the researcher is familiar with what is already known, and what is still unknown, and untested. Since effective research is based upon past knowledge, this step helps to eliminate the duplication of what has been done ... 

To quote Creswell (1994): Quantitative studies include a substantial amount of literature to provide direction for research questions or hypotheses.
Thus the search for related literature is one of the most important steps in the research process. It is a valuable guide in defining the problem, recognizing its significance, formulating hypotheses, suggesting appropriate research design, and sources of data. With these in view, the theoretical aspects and specific studies already available on variables associated with the current theme have been surveyed, and brief accounts are presented below under the following major sections:

Section A: Theoretical overview
Section B: Studies on teacher effectiveness

The different aspects falling under these two sections are presented below.

SECTION A: THEORETICAL OVERVIEW

a. Personality

The present investigation is basically concerned with the role of personality variables in deciding teacher effectiveness. The area of personality has been the most dominant of all areas of research in psychology.

Personality is an all inclusive concept. It is the sum total of an individual's properties as a distinct and unique human being. The external properties are directly observed while the internal are only inferred from the pattern of overt responses. Thus the image of an individual's personality is only created from observation or inferences
regarding his response patterns. The concept of personality is derived from the pattern of response characteristics of the individual. The derivation is possible in the following three ways.

- The first is subjective, popular derivation based on subjective impressions formed by the individual's response patterns. This is highly subjective. It results in popular evaluative expressions like charming, dominating, weak or bold personality.
- The second kind of conceptualization of personality is based on an objective description of the overt responses of the individual. This view is held by behavioural psychologists.
- The third type is the organismic view which conceives personality as the inner pattern of person's characteristics.

Though it appears that the definitions of personality given by different theoreticians differ so widely, a closer analysis will show that variation is because of the varying emphasis given to the concept.

Kretschmer (1925) gave a bio physical approach to the definition of personality. To him, personality can be explained by reference to the body build of the individual. Watson (1930) gave behavioural emphasis to the definition of personality. Personality is the sum of activities that can be discovered by actual observations over a long enough period of time to give reliable information. Murphy (1948) gave a biosocial emphasis to his definition of personality. Personality is the interaction of the organism, and environment. He argues that personality is a structured organized environment field, each aspects of which stands in dynamic relation to each other aspect. There is organization within the
organism, and organization within the environment, but it is the cross organization of the two that is investigated in personality research.

Cattell (1970) focused his attention on the individual aspect of personality. To him, personality is that which permits a prediction of what a person will do in a given situation.

Allport (1948) gave a comprehensive definition of personality. After a survey of forty nine definitions of personality, he concluded that personality is the dynamic organization within the individual of those psycho physical systems that determine the unique adjustment to his environment.

Eysenck (1971) viewed personality as a more or less stable and enduring organization of a person's character, temperament, intellect, and physique which determine his unique adjustment to the environment.

Maddi (1976) views personality as an organized, and integrated whole of definite characteristics, and tendencies within the individual. He views that personality is the stable set of characteristics, and tendencies that determine those commonalities and differences in the psychological behaviours (thoughts, feelings, and action) of people that have continuity in time, and that may or may not be easily understood in terms of the social, and biological pressures of immediate situations alone.
b. Teacher Personality

The teacher is the maker of man. He is the yardstick that measures the achievement, and aspirations of the nation. The worth, and potentialities of a country get evaluated in and through the work of the teacher. The people of a country are the enlarged replica of their teacher. They are the real nation builders.

It needs no description that the teacher is the pivot of any educational system of the younger students. On him rests the failure or success of the system. If the teachers are well educated, and if they are intellectually alive, and take keen interest in their job, the success is ensured.

The teacher is a dynamic force of the school. There is no greater need for the course of education today than the need for strong men and motherly women as teachers for the young. As social engineers, the teacher can socialize, and humanize the young by their man like qualities.

Teacher is like an artist who blends colour, and texture into a painting to produce coherent impression. The effective teacher blends key behaviours to different degrees to promote student achievement (Borich, 1996).

Teacher's own personality affects student's personality development. He is infact the role model for the students. If he has self confidence, honesty, truthfulness, and tolerance, the students will
develop these qualities. Further, integrated development of student's personality is possible only if the teacher himself has an integrated personality.

The essential task of the teacher is to arrange the conditions of the learner's environment, so that the processes of learning will be activated, supported, enhanced, and maintained (Gagne, 1976). Teacher personality is a crucial factor in arranging the conditions of learner's environment for effective teaching.

c. Teacher Effectiveness

The functioning level of a teacher is generally measured using different constructs like teacher effectiveness, teaching competency, teaching proficiency, teacher performance, and number of other similar constructs. Since the study has been concerned mainly with the concept of teacher effectiveness as the criterion variable, attempts are made in this chapter to examine the current theoretical perspectives relating to this major construct.

Teacher effectiveness is a more inclusive, and comprehensive construct used in modern educational theory. It is concerned with the relationship between the characteristics of teachers, teaching acts, and their effects on the educational outcome of classroom teaching.

To Singh (1992)

'A teacher to claim effectiveness must pass on the contexts to the target group to see that the modus operandi passing the learning matter
gets in the learner. It causes change in the overt, and covert behaviour of the learner, for learning is nothing but a change in the behaviour of the pupil. The better, and manifest, this change in the pupils, the more effective is the teacher'.

The concept of teacher effectiveness has been defined differently in terms of the level of curricular achievement, qualities of the teacher, and the classroom practices. The following definitions elaborate how effectiveness covers pupil achievement.

'Teacher effectiveness is the act of teacher to bring development of basic skills, understanding, work habits, desirable attitudes, value judgements, and adequate personal adjustment of the students.'

- Ryans (1960)

'Teacher effectiveness is the teachers' effect to bring about a set of changes in the pupils behaviour under his charge'

- Gage (1972)

'Teaching effectiveness is the ability to produce good results.'

- Rajagopalan (1976)

'Teacher effectiveness is an amount of progress pupil makes towards some specified goal of education.'

- Medley (1984)

Flanders and Simon (1969) defined Teacher effectiveness in terms of certain qualities like, sense of humour, ability to explain, ability to
understand, ability to manage the class, and helping, and being fair with students.

Good (1959) explained teacher effectiveness in terms of classroom practices. He considered teacher effectiveness as the ability, and interaction between the physical, intellectual, and psychological interests of the students, content matter, ability of the teacher, and the evaluation procedures.

Singh (1992) on the basis of opinionnaires expressed by the educators, and experts in the field of education gave an operational definition of teacher effectiveness as “an effective teacher is one who has a clear concept of the subject matter, the ability to write clear instructional objectives for his course, ability to organize learning materials, ability to communicate his knowledge to the students successfully, and to deal with classroom situations.”

d. Theoretical models explaining teacher effectiveness

Many researchers have developed theoretical models for explaining, and interpreting teacher effectiveness.

(i). Rosen shine – Furst model

Rosen Shine and Frust (1971) identified eleven teacher variables that have shown promising relationships to pupil gains in cognitive achievements. Variables were identified after a detailed review of studies on teacher effectiveness. The following are the eleven variables.
A) Clarity: the cognitive clarity of teachers' presentation.

B) Variability: Teachers' use of variety during the lesson.

C) Enthusiasm: Teacher's vigour, power involvement, excitement or interest during classroom presentation.

D) Task orientated/business like behaviour: Degree to which the teacher is task oriented/achievement oriented or business like

E) Students opportunity to learn criterion material: Relationship between materials covered in class, and criterion pupil performance.

F) Use of student idea and general indirectness: Acknowledging, modifying, applying, comparing, and summarizing student's statements.

G) Criticism: Criticizing or controlling the pupil, extent to which the teacher shows hostility, strong disapproval or a need to justify authority.

H) Use of structuring comments: The extent to which the teacher used statements designed to provide an overview of or cognitive framework for completed or planned lessons.

I) Type of questions asked: Usually categorized as lower cognitive or higher.

J) Probing: Teacher responses to encourage the student to elaborate upon his answer.

K) Level of difficulty of instructions: Student perception of the difficulty of the instruction.
(ii). Model based on Pre-operational appraisal

This model describes teacher effectiveness in terms of variables which can be measured prior to the teaching act. According to Borich (1977), the teacher variables of this category are personality, attitude, experience, achievement, and aptitude variables.

1. Personality variables:

The personality variables which have been developed to describe teacher effectiveness are permissiveness, dogmatism, authoritarianism, achievement motivation, introversion-extroversion, abstractedness-concreteness, directness-indirectness, locus of control, and anxiety (general, and teaching).

2. Attitude variables:

Motivation to teach, and attitude towards children are the two important teaching variable, other being attitude towards teaching, attitude towards authority, vocational interest, attitude towards self, and attitude towards subject taught.

3. Experience variable

These are poor predictors of teacher effectiveness. Common variables coming under this category are, years of teaching experience, experience on subject taught, experience in grade level taught,
workshops attended, graduate courses, degrees held, and professional papers written.

4. Achievement and aptitude variables

Like experience variables, these are of little value in predicting teacher effectiveness. The previous achievement of the teacher has little value in predicting teacher effectiveness. But certain variables such as verbal fluency, reasoning, and logical thinking seem to have direct relation to teacher effectiveness.

(iii). The process product research model

Mitzel (1982) defined four newly recognized classes of variables related to teacher effectiveness on the basis of research findings. He referred first three as presage, process, and product criteria of teacher effectiveness. Presage includes pre-existing teacher characteristics, and teacher competencies, process criteria involves teacher performance, and pupil learning experience, product criteria include pupil learning outcome. He referred the fourth as environmental variables or the context variable which includes a variety of educational factors that affect pupil learning, but are not within the active control of the teacher.

(iv). Structure of teacher effectiveness model

Medley (1984) used Mitzel’s product to derive a model of the structure of teacher effectiveness. This structure describes five cells namely preexisting teacher characteristics, teacher competency, teacher performance, pupil learning experience, and pupil learning outcome,
each of which has been used one time or another as a criteria for evaluating teacher. He identified four more variables namely teacher training, external context, internal context, and individual pupil characteristics.

(v). Teacher competency approaches

A major research adopted by the theoreticians to explain teacher effectiveness is to identify the important characteristics to be possessed by a teacher.

Many attempts were made to identify the teaching competencies. Borich (1977) has identified the teacher competencies in three forms.

1. Knowledge competencies
2. Performance competencies
3. Consequence competencies

1. Knowledge competencies

Knowledge competencies specify the cognitive understanding, the teacher is expected to demonstrate. They are of two types-process, and content. Process competencies might include teacher ability to describe ways of effectively managing the class room or to identify specific behaviours associated with different methods of teaching. On the other hand, knowledge competencies related to content might include teachers' knowledge of subject matter. Both these competencies can be measured by paper pencil test or indirectly through observation of teaching performance.
2. Performance competencies

Performance competencies include the teaching processes, the teacher is expected to demonstrate. They refer to the behaviour of the teacher during instruction inside the classroom. To measure performance competencies, systematic observation of classroom behaviours are considered to be most appropriate.

3. Consequence competencies

Consequence competencies include pupil behaviours that are viewed as evidence of teaching effectiveness. They refer to pupil outcome produced by the use of proper knowledge, and performance competencies. Like knowledge competencies, these can specify both content, and process behaviour. Content related involves pupil’s mastery of subject matter usually measured by standardized achievement tests, and criterion referenced tests. The competencies that involves process refers to emotion, and attitude of pupils which are affected by the class room teacher. They can be measured by observing class room behaviour of pupils such as group problem solving, and class discussion or more directly by administering class room climate scales.

e. Evaluating Teacher Effectiveness

Evaluating teacher effectiveness is a complex process. Even from very early days of research on teacher effectiveness, controversy exists on what constitutes teacher effectiveness. Various researchers had
conducted studies to identify the criteria for evaluating teacher effectiveness.

The following are important criteria commonly used for measuring teacher effectiveness.

1. Process, product criteria

Mitzel (1982) devised a method of assessing teacher effectiveness. In this, teacher effectiveness is measured using three criteria namely presage, process, and product.

a) Presage criterion

Measures of intellectual ability, grades made in college, personal appearance, test scores, ratings usually made outside the classroom are to be used to measure teacher effectiveness.

b) Process criterion

Measures of teacher behaviour in the classroom like explanation, questioning, leading discussion, teacher-student interaction, information exchange are used to measure teacher effectiveness. It is measured directly through observation.

c) Product criterion

Student gain in subject matter knowledge, skills, and interest and other affective characteristics are used to measure teacher effectiveness.
It is measured directly with achievement tests, ratings, observation, and frequency counts of achievement, and performance.

Some researchers considered the product criterion method of assessing teacher effectiveness as unscientific (Soar, 1977), and Nair (1982). They consider that student achievement depends on other factors like pupil’s learning, study habits, intelligence, classroom discipline, and home environment.

Any one or combinations of these three types can be used for assessing teacher effectiveness.

2. Popham-Mc Neil-Millman method

This method was propounded by three researchers-Popham, Mc Neil, and Millman (1973). This method popularly known as PMM method makes use of the direct assessment of the impact of teaching in pupils. Teacher effectiveness is assessed using the direct measurement of pupil’s behaviour changes which are occurred as a result of teaching. The changes in knowledge, skills, and attitudes are all assessed in this method.

f. Tools and techniques for measuring teacher effectiveness

i. Rating forms

It is the most commonly used technique in research in teacher effectiveness. Ratings have been used as a criterion for evaluating teaching competence or for predicting outcome variables in the
classroom. Different types of ratings are used for measuring teacher effectiveness. They are:

a) Self rating

Self rating has proved of little use because there is a consistent bias. Rose (1993) and Nwosu (1995) strongly opposed the use of self rating on the ground that teachers are likely to be biased in their self assessment of teaching effectiveness.

b) Peer rating

In peer rating, colleagues are asked to rate the performance of the teacher. This method also seems to be based on marginal evidence.

c) Students rating

This technique is gaining popularity. The students are asked to rate their teachers on various attributes. The use of students rating for evaluating teacher effectiveness is the single most researched issue in all of higher education. Over 2000 articles, and books have been written on this topic over the past ten years (Ory 2001). Even though all precautions are taken, validity of students rating has been a matter of concern. Halo effect is found to be in students rating. Students rating should be combined with data collected from different sources using various methods such as peer rating, teaching portfolios, classroom observation or self evaluation (Ory, 2001).
d) Principal rating

One advantage of this rating is that the principal has a direct knowledge about each teacher's practices, and behaviours. But this technique also suffer from an upward bias in the evaluation scores. Ostrander (1996) compared evaluation of teachers by principals, parents, students, and the teachers themselves each using the same evaluation tool. Principals gave the highest evaluation scores out of the four groups.

e) Expert rating

An outside expert observes the classes of a teacher for some period of time, and forms a view of his/her teaching competencies.

ii. Existing records

It provides direct experiences of the formative experiences. Number of variables are examined for their impact in teacher effectiveness. Use of this technique is limited because they provide only limited information regarding teacher effectiveness.

iii. Self report

This is another technique used for assessing teacher effectiveners. In the self report, respondent is asked to provide information about him. Some times it becomes subjective. Self report is important in the assessment of formative experiences.
iv. Student test score (Examination results)

Since achievement is widely considered to be an important educational outcome, examination result is considered to be the easily accessible measure of teacher effectiveness. But this method of measuring teacher effectiveness is unscientific because student achievement depends in other factors like pupil's learning, study habits, intelligence, class room discipline, hard work, home environment (Soar (1977), Nair (1982)).

SECTION B: RELATED STUDIES

In this section, the specific studies already available on variables associated with teacher effectiveness have been presented.

The related studies collected are classified under three major headings.

1. Affective variables related with teacher effectiveness

   It includes the studies which show the relationship between personality and teacher effectiveness.

2. Cognitive variables related with teacher effectiveness

   It includes the studies which show the relationship of variables like intelligence and educational background with teacher effectiveness.
3. Process variables of teacher effectiveness

This section includes the studies related with general teacher behaviour, instructional behaviour, and teacher effectiveness.

a. Studies related with affective variables of Teacher effectiveness

This section include studies related with personality, and teacher effectiveness. The potential importance of teacher personality has long been of interest to educational researchers (Barr 1952; Del popolo, 1965; Tyler, 1960). In many studies personality characteristics have been found to be significantly related to teacher effectiveness (Gupta 1977, Singh 1978, Mutha 1980).

Sethi and Patel (1985) tried to investigate the relationship of creativity, intelligence, emotional maturity, and self acceptance to teacher effectiveness. The study showed significant relationship of creativity, intelligence, and emotional maturity to teacher effectiveness. The main effect of self acceptance was not significant.

Subarayan (1985) conducted a study on the relationship between teacher effectiveness, research and publication ability, and self-concept. The major objectives were (i) to develop and standardize a teacher effectiveness battery, (ii) to compare the ratings of students, colleagues and self, and self and students, (iii) to find the relationship between research, and publication ability, and teacher effectiveness, and (iv) to find the relationship between teacher effectiveness, and self-concept.
Wanchoo (1986) tried to investigate a range of essential personality characteristics which go with teacher effectiveness. Personality adjustment was found to be the most prominent factor which goes with teacher effectiveness. The other personality factors which are found to be predictors of teacher effectiveness were leadership quality, intelligence, and emotional stability.

Bemis and Cooper (1987) tried to find out the relationship between teacher personality, teacher performance, and their effects upon pupil achievement. It was found that EPPS scores of personality established a basis for predicting teachers' observed class room behaviour. The more effective teachers may be described as critical, willing to accept leadership, and interested in persuading, and influencing others.

Jones (1989) tried to analyse the students ratings on teacher personality, and teaching competence. Results showed that the teacher personality as perceived by students is still very significantly related to their ratings of teaching quality.

Mukundan (1990) while studying personality factors and adjustment of student teachers indicated that male teachers were gregarious, and thoughtful and showed high competence in teaching.

Kumar (1991) studied the relationship between teacher effectiveness, and personality traits among different groups of teachers. The study revealed that science teachers were more effective than art
teachers. Teacher effectiveness and personality traits of commerce teachers were negatively correlated.

Vashista and Varma (1991) compared the personality traits of effective and ineffective teachers. The researcher found that effective teachers possessed introvert type of personality while ineffective teachers had ambibert type of personality. Ineffective teachers lacked intellectual capacity and had emotional interference with their abilities.

Spark and Lipka (1992) tried to investigate the characteristics of effective teachers. They found that effective teachers were more warm hearted, socially outgoing, attentive, driven, respectful, generous in personal relations, hard to fool, and able to maintain interpersonal contacts.

Kent, Fisher and Fraser (1995) tried to investigate the relationship between teacher personality and interpersonal behaviour. The study demonstrated a moderate association between teacher personality, and interpersonal teacher beahviour. Teacher personality appeared to be consistently associated with teacher self image.

Shaughnessy, Self, Schwartz, and Naylor (1995) investigated the personality characteristics of outstanding teachers. Outstanding teachers were identified by principals using 16 PF. They found that outstanding teachers score high on emotional maturity, self sufficiency, and self control.

Savelsbergh and Staebler (1995) investigated the leadership style, personality preference, and effective teacher consultation. No significant
relations were found between the consultant teacher's effectiveness scores, and any of the leadership styles. The significant relation found was between personality preference and effectiveness in consulting. Variables of personality, namely, extroversion, and sensing were good predictors of effectiveness.

Dragana (1997) studied the teacher's personality characteristics and his/her effectiveness in teaching process realization. The teacher motivation, self actualization, and value orientations have been measured. Positive correlation between self assessment, and teachers' effectiveness was found. No special profile of effective teacher personality characteristics have been found.

Roberiro and Bhargava (1998) investigated the personality factors of teachers belonging to higher education. The study revealed that teachers of higher education level were in an average more introverts, less neurotic, act in a socially desirable way, and perceives themselves as internally controlled or responsible for their action.

Howard and Richard (1999) examined the relationship between personality type, and teacher effectiveness of technical education teachers. The study revealed that sensing-intuition temperament type was the best predictor of teaching effectiveness when compared with extraversion-introversion, thinking-feeling, and judgement-perception temperament types.

Kaur (2000) conducted a study to find out the impact of B.Ed programme on teacher effectiveness, personality, teaching aptitude, and
attitude towards teaching of prospective teachers. The investigators tried to evaluate, and enquire the change in drives, thoughts, beliefs, and behaviour of pupil-teachers as a result of the training programme consisting the whole curriculum. It was found that B.Ed programme was effective in bringing positive changes in teacher effectiveness, teaching aptitude, attitude towards teaching, and personality traits of prospective teachers.

March banks (2000) conducted a study to identify the personality traits of effective elementary teachers, and to determine the factors influencing the personality traits. He identified the traits of passion, patience, co-operation, authoritativness, and creativity were the essential traits of an effective elementary teacher. He identified gender as an influencing factor of personality traits.

Srivastava (2003) assessed the personality, and mental health status of the primary, and secondary teachers. The findings of the study showed that personality type influences the mental health of primary, and secondary teachers, and extrovert teachers enjoy better mental health as compared to introvert teachers in educational institutions.

Thornton, Gary and Hill (2005) investigated the personality preference profile of preservice teachers. The investigation revealed that personality types may relate to teacher success, and length of service.

Viswanathappa (2005) investigated the influence of attitude towards teaching and admission test rank on teaching competence of student teachers at secondary level. He identified attitudes of student teachers towards teaching as a predictor variable which predicts there teaching competence.
Malikow (2006) conducted a study to quantify student evaluated teacher effectiveness in order to ascertain the grade level, subject, and characteristics of exceptional teachers. The characteristics identified were challenging/had reasonably high expectations, sense of humour, creative, caring, flexible instructional style, and ability for explaining complicated material.

Naik (2006) tried to find out the effect of teacher personality, attitude, and teaching effectiveness on students achievements. The study revealed that there existed significant difference between the interaction effects of teachers personality type, and attitude towards profession on effectiveness in teaching.

Smithikrai (2007) examined the predictive power of personality variables on job success in a Thai sample. The research found that neuroticism was significantly negatively correlated with job success. Moreover, conscientiousness was the only personality trait consistently predicted job success of persons.

Zhang (2007) investigated the predictive power of personality traits on teacher’s teaching styles. Results indicated that teachers’ personality traits significantly contributed to teachers’ teaching styles.

b. Studies related with cognitive variables of Teacher effectiveness

This section includes studies related with intelligence, educational background, test scores, certification, and verbal skills with teacher effectiveness. Researches showed that teacher effectiveness is
significantly correlated with measures of teacher verbal skills, college entrance test, and post college certification examinations.

Wali (1985) conducted a factorial study of the teaching correlates of teaching effectiveness. This study of teaching effectiveness sought to find out the relationships between various demographic, and social correlates (such as age, caste, rural-urban background) academic background of teachers (experience, qualifications), motives, values, needs, job satisfaction, and teaching effectiveness, and to extract factors from these correlates.

The major findings were: 1. Correlation coefficients for educational qualification, salary, experience, family education and sources of income were significant. 2. Correlation coefficients for attitude to educational process, identity with the job, democratic value family prestige value, and a few needs were significant. 3. Six factors emerged from out of the correlation matrix, and they were designated as professional dignity (grade, salary etc), altruistic temper, professional involvement, democratic temper, family background, and humility.

Hans (1986) tried to establish the relationship among teaching style, learning gains, and teaching effectiveness. The major objectives of the study were (i) to compare teachers in respect of their personality attributes having direct and indirect teaching influence styles, (ii) to compare the effects of two teaching styles on learning gains in classroom situations, (iii) to compare the perception of the students in respect of teaching styles.
The major findings of the study were: 1. The indirect teaching style teachers in general were characterized by higher scholastic mental capacity, higher ego strength, less dominance, weaker super ego, alaxia, autia, shrewdness, radicalism, group adherence, and a high self-concept. 2. The indirect teaching style teachers were characterized by lower mental scholastic ability, lower ego strength, dominance, strong super ego, protension, alertness, conservatism, self-sufficiency, and low integration. 3. Teachers teaching through an indirect teaching style were able to develop greater learning gains among their pupils than teachers teaching through a direct teaching style. 4. Indirect teaching style teachers were perceived by their students to be more effective in teaching than the direct teaching style teachers.

Padmanabhaiah (1986) conducted to a study on a relationship between job satisfaction and teaching effectiveness of secondary school teachers. The major objectives of the study were: (i) to estimate the general level of dissatisfaction among secondary school teachers, (ii) to find out the influence of personal, and demographic variables on teacher’s job satisfaction or dissatisfaction, (iii) to find out the relationship between job satisfaction, and job-related variables, job satisfaction and (job discrimination index and job involvement), and general satisfaction variables (family satisfaction and life satisfaction), (iv) to identify the personality factors which influence the level of job satisfaction of teachers (v) to identify the personality characteristics that contributed to or affected teaching effectiveness.

The major findings were: 1. The teachers in general (72%) were dissatisfied with their job. 2. All the personal, and demographic
variables, except the variable 'qualifications of the teachers', could significantly influence the level of satisfaction with various job factors but not the total job satisfaction. 3. Male, and female teachers were not significantly different in the level of their overall job satisfaction/dissatisfaction. 4. Among the 11 personal, and demographic variables studied, only five-region, designation, age, experience and size of the family of the teachers could significantly influence the level of teaching effectiveness. 5. Out of 35 variables studied only a few possessed significant coefficients of correlation with teaching effectiveness.

Prakasham (1986) conducted a study of teacher effectiveness as a function of school organizational climate and teaching competency. The major objectives of the study were (i) to study the effect of school organizational climate on teacher effectiveness, (ii) to study the effect of teaching competency on teacher effectiveness, and (iii) to study the effect of school organizational climate on teaching competency.

The findings of the study were: 1. Teachers working in an open school climate were better in teaching competency, and teacher effectiveness than those employed in schools with autonomous, familiar, controlled, paternal, and closed climates. 2. Teachers working in schools situated in industrial areas were found better in teaching competency than teachers working in semi-urban and rural areas whereas teachers of semi-urban and rural areas were better in teacher effectiveness than the teachers of industrial areas. However, teachers working in schools situated in urban areas were better than teachers of all other areas on both teaching competency as well as teachers effectiveness. 3. No significant difference was found in the teaching competency, and
teacher effectiveness of the teachers working in government, and non-government schools in global terms. However, teachers working in schools run by local bodies were found better in teacher effectiveness and teaching competency than those working in government schools, Christian schools, and non-Christian schools. 4. No significant difference was observed between male, and female teachers on the tests of teaching competency and teacher effectiveness on the global scale. 5. A positive, and significant relationship was observed in the teacher effectiveness, and teaching competency of teachers in different types of organizational climates.

Tharyani (1986) conducted a study of the important factors affecting teacher-effectiveness of B.Ed. students. The objectives of the study were (i) to examine the role of IQ, attitude, academic achievement, and content knowledge factors on the teacher effectiveness, (ii) to examine, and identify the factors favourable for high teacher effectiveness, and (iii) to examine, and identify the factors responsible for low teacher-effectiveness.

The findings of the study were: 1. The IQ of teacher trainees was found to be a useful predictor. 2. Teachers' attitude towards their pupils did not show any significant relationship with teacher behaviour in the case of high achievers. 3. In the case of low achievers, it showed a negative significant relationship. 4. Students' knowledge in their respective subject area was found to be the best predictor.

Feldman (1987) investigated the relationship of scholarly accomplishment of research productivity, and scholarly accomplishment
of college teachers to teacher effectiveness. A very small association was found between scholarly accomplishment, and teaching effectiveness.

Mahapatra (1987) studied the comparative role of intelligence, attitude, and vocational interest towards success in teaching. The major objectives of the study were (i) to find out the relation of intelligence, attitude and interest towards teaching success, (ii) to identify the predictor having the highest predictive power for success in teaching, and (iii) to find out the relative position of other predictors.

The major findings of the study were: 1. Regional background did not have a significant effect on all the four variables studied. 2. Sex had a significant effect on these variables, namely, teaching success, intelligence, attitudes towards teaching, and vocational interest. 3. The coefficients of correlation between teaching success and intelligence, attitude, and interest were significant. 7. Among all the three predictors, the contribution of intelligence was 13 per cent. Intelligence was considered to be the most influential predictor.

Rao (1987) made an analytical study on classroom teaching of effective science teacher. The main objectives of the study were (i) to identify effective science teachers on the basis of selected criteria, and (ii) to analyse the teacher behaviour of selected effective science teachers with respect to their content processing behaviour, interactive behaviour, and teaching skill behaviour.

The major findings of the study were: 1. Among the content-processes employed by the effective science teachers to process the components of content, irrespective, of the topics and subject, analysis
and assumption content processes were found common with all the teachers. 2. Other content processes like categorization, application of principles, and logical reasoning were meagerly employed, only by a few effective teachers. 3. There was no concurrence in interactive patterns observed with the teachers. 4. Some of the teachers were moderately interactive, whereas a few were not at all interactive. 5. Teacher-initiated interactive patterns were often observed with all the effective science teacher. 6. The coordination between verbal and nonverbal skills was not prominent although using the blackboard, gestures, movement, focusing, and silence and nonverbal cues were observed with all verbal skills.

Kupgarnjanagool (1988) made an analysis of causal factors affecting teaching efficiency of the faculty members in teacher colleges. This research was designed to study the model of the causal factors affecting the teaching efficiency of the faculty members in teachers colleges studying the model of both direct, and indirect casual factors among grade point average in bachelor degree, qualifications, teaching experience, personal characteristics, love for, and faith in profession, attitude towards student body, relationship between faculty members, and student body, academic interest, publication and dissemination, recognition in academic field, competency in using instructional aids, classroom climate, and teaching efficiency.

The major findings of the study were the variables that affected teaching efficiency both directly and indirectly according to the quantity of total causal effects were the faculty members’ personal characteristics (.5659), attitude towards student body (.2119), academic interest (.1927),
relationship between faculty members and student body (.1968), classroom climate (.1769), qualifications (.1671), grade point average in bachelor degree (.1429), teaching experience (.1346), love for and faith in profession (.1248) and competency in using instructional aids (.1137). (2) The following variables had direct causal influence upon teaching efficiency: faculty members' personal characteristics (.3747), academic interest (.1926), classroom climate (.1769), attitude towards student body (.1457), competency in using instructional aids (.1137), and relationship between members and student body (.1123). (3) The following variables had indirect casual influence upon teaching efficiency: faculty members' personal characteristics (.1912), qualifications (.1671), grade point average in bachelor degree (.1429), teaching experience (.1346), love for and faith in profession (.1244), relationship between faculty members and student body (.0788) and attitude towards student body (.0662).

Lucas and Schemitz (1991) investigated the relationship between educational background, and effectiveness in teaching of student teachers. They find a significant relationship between teaching effectiveness scores, and scores on the college basic academic examination.

Swami (1992) conducted a study to find out the influence of intelligence, emotional maturity, and self-concept on teacher effectiveness of secondary school teachers. The study revealed that intelligence, and emotional maturity were significant factors of teacher effectiveness. Self concept was found to have no significant influence on teacher effectiveness.
Lynn, Onwueybuzie, Witcher and Terry (2003) surveyed preservice teachers regarding their perceptions of effective teachers characteristics, and whether those perceptions were related to educational beliefs. They identified student centeredness, effective class room, and behaviour management, competent instruction, ethics, enthusiasm about teaching, knowledge about subject, and professional commitment reflect effective teaching. There was no relationship between these perceptions, and respondent's year of study, educational belief, and preferred grade level for teaching.

Stronge and Hindman (2003) tried to find out the research domains of teacher effectiveness. Pre requisites of effective teachers, teacher as a person, class room management, and organization, organizing for instruction, implementing instruction, and monitoring students' progress, and potential were found to be the factors of teacher effectiveness.

Latha, Sangeetha, and Ananthasayanam (2004) studied the emotional intelligence, and teacher effectiveness of school teachers. They found that emotional intelligence did not influence effectiveness of teaching which is a contradiction to the concept of emotional intelligence.

Bansibihari and Surwade (2006) studied the effect of emotional maturity on teacher effectiveness. They found that emotional maturity influences teacher effectiveness. Emotionally mature teachers were found to be more effective than emotionally immature teachers.
Raju and Viswanathappa (2006) investigated the impact of educational qualification on the teaching competency of primary school teachers. The results showed that educational qualification has influence on teaching competency. Teachers with required qualifications performed better than the other group. Locality, sex, age, type of school, and experience had no influence in teaching competency.

Leigh Andrew (2007) tried to find out the relationship between teacher effectiveness, and student scores. Teacher fixed effects showed a significant association with some observable teacher characteristics. Experience has the strongest effect, with a large effect in the early years of a teacher’s career.

c. Studies related with process variables of Teacher effectiveness

Process which governs teacher effectiveness is a fertile area of research. Process variables refer to general teacher behaviour, instructional behaviour, and allied dimensions. Several studies have been conducted to identify the characteristics of effective teachers. Koker and Koker (1982) through extensive research have identified certain competencies namely instructional strategies, techniques or methods, communication with learners, and learner reinforcement, involvement or as pre-requisites to effective teaching.

Choudhari (1985) made a factorial study of the teaching competencies of teachers teaching English at the secondary school level. The major objectives of the study were (i) to determine the relationship of the competencies identified with the presage variables of teacher’s intelligence, her attitude towards teaching, her interest in teaching. (ii) to
determine the relationship of the competencies identified with the product variables of pupil achievement in English, and pupil liking for the teacher.

The major findings of the study were: 1. The pedagogical domain of teaching competency in English consisted of 12 competencies which were independent of each other. 2. The competency 'Structuring Questions' accounted for 32 percent variance, and correlated significantly with both the product variables. 3. All the competencies correlated positively with the product variables. 4. The demographic variables of teacher, sex, and educational qualifications had been found to have an impact on almost half the number of the competencies. 5. Teachers' intelligence, and attitude were found to be associated with some of the competencies.

Singh (1985) made a factor analytic study of teaching behaviour. The objectives of the research were (i) to study the factorial nature of the teaching behaviours of secondary school teachers, (ii) to study, and compare the factorial structure of teaching behaviour of science, social science, and language teachers, (iii) to study, and compare the factorial structure of the teaching behaviour of male, and female teachers, and (iv) to study, and compare the factorial nature of the teaching behaviour of urban, and rural school teachers.

The following conclusions were drawn: 1. Teaching behaviour of secondary school teachers was found to have eight skills, viz. skill of questioning, of explanation, of blackboard writing, of reinforcement, of
introducing a lesson, of summarizing the lesson, of teaching aids, and skills.

Wade (1989) tried to profile the effective vocational agriculture teacher by identifying distinguishing behaviours, and characteristics using selected teacher effectiveness criteria. The study revealed that enthusiasm towards work, motivating students by providing opportunities for successful learning activities, helping students to locate supplementary materials for subject matter content, using long range plans to guide the improvement of their programme, seeking ways to involve parents of students in program related activities.

Cruickshank (1990) tried to organize the characteristics of effective teacher behaviour from ten research studies. He organized the characteristics into seven main clusters. They include teacher character traits, what the teacher knows, what the teacher teaches, what the teacher expects, how the teacher teaches, how the teacher reacts to pupils, and how the teacher manages the class room.

Fennema and Franks (1992) built up a model for examining the teaching competency of Mathematics teachers. This model discusses the knowledge of teachers as it occurs in class room situation. Model includes components of teacher knowledge of the content of Mathematics, knowledge of pedagogy, knowledge of student’s cognition, and teacher’s beliefs.

Krainer (1994) proposed four dimensions of professional Mathematics knowledge of mathematics teachers. They are abilities, and attitudes in action, reflection, autonomy, and networking. The teacher
trainer should know whether these abilities, and attitudes can impact teachers self growth in their teaching experience.

Shah (1995) investigated the predictors of teacher effectiveness. He observed that out of the best predictors of teaching effectiveness positive contributors - nature of work, adaptability, attitude towards children, working conditions, mental ability, professional information, peace in job, intellectual self concept, knowledge of value, job attitude, intelligence, satisfaction with students, and satisfaction with promotion have predicted 72% and negative contributors ie., livelihood, political value, influencing opportunity, inadequate leisure, and psycho social hindrance have predicted 6% of teaching effectiveness.

Leou (1998) tried to establish teaching competency assessment models for Mathematics teachers. His model included four dimensions, namely, teaching skills, organization, and presentation of material, including communication between teachers, and student, and teaching attitudes.

Palmer (1999) examined the attributes of high quality science teachers at the junior high school level from the view of student's perception. They described presenting subject matter in an interesting manner, well integrated hands on activities, use of strategies to make lessons fun, and interesting for children, good communication, and enthusiasm as the attributes of high quality teachers.

Mujis (2000) tried to study the effect of teacher effectiveness on pupils progress in Mathematics. The study revealed that time spend in
teaching the whole class was found to be related to effective teaching behaviours, and thus indirectly to pupil progress.

Wray, Medwell, and Fox (2000) conducted a study on primary teachers, and identified the primary characteristics of effectiveness. They identified contextualized use of a range of skills, and knowledge, and making explicit the purposes, and procedures of literacy, and through modeling, and demonstration as the primary characteristics of effectiveness.

Witcher, Onwuegbuzie, and Minor (2000) studied the perception of two hundred, and nineteen preservice teachers about the characteristics of effective teachers. They identified, student centeredness, enthusiasm for teaching, subject matter knowledge, effective classroom, and behaviour management, competent instruction, ethics, and personality as the characteristics of effective teaching.

Gordon (2001) compared the high efficiency, and low efficiency elementary teachers regarding a variety of cognitive, and affective behavioural factors. The study revealed that high efficiency teachers were less likely to judge the student as having chronic behaviour problems, less likely to feel angry, less likely to feel confident about being able to manage misbehaviour.

Deborah Fitzpatrick, Higg Lc clure, Helen, and Rosemary (2002) studied the characteristics of effective teachers. They found that effective teachers shared similarity about learning, had empathy with the needs of able children, used encouragement, and praise, and stressed humor, and fun.
Reynolds and Mujis (2002) conducted a study to examine the type of teacher behaviour which influenced student achievement. The study revealed class room management, behaviour management, direct information, review, and practice, interactive teaching, varied teaching, and class room climate were the significant factors of teacher effectiveness. Also it was found that effective teachers tended to be effective in most of the above areas, rather than just one.

Vijayalekshmi (2002) investigated the factors affecting teacher effectiveness. From her study, she concluded that age was a significant factor of teacher effectiveness. Variables like sex, marital status, qualification, status of college, management, and subject of teaching have no influence in teaching effectiveness.

Walls, Nardi, Von Minden, and Hoffman (2002) investigated the perceptions of student teachers, beginning teachers, and experienced teachers regarding the characteristics of effective, and ineffective teachers. The study revealed the following characteristics as essential for effective teaching – teacher’s ability to create an appropriate emotional environment, skill in creating an effective learning environment, teacher motivation, emphasis on activities that actively involved students, class room techniques, and grading.

Paul and Kumaravel (2003) studied the teacher effectiveness of elementary school teachers. The findings revealed that factors like experience, community, type of management, and locality have significant influence in teacher effectiveness.
Wayne (2003) examined the relationship between student achievement gains, and the characteristics of teachers. This study reviewed systematically, and synthesized their results with deliberate consideration of each study’s qualities. Determinate relationships are described for four categories of teacher characteristics: college ratings, test scores, degrees, and coursework, and certification status.

Roul (2004) studied the teacher effectiveness of college teachers in relation to sex, locality, and management. He found that sex is a significant factor in teacher effectiveness. Locality, and management were seemed to have no significant influence in teacher effectiveness.

Anderson (2004) tried to examine the characteristics of effective teachers. The study revealed that the factors that contribute to the effectiveness of teachers were subject matter knowledge, various techniques, and methods of teaching, nurturing attitude, and high academic qualifications.

Woods (2004) tried to determine the defining qualities of effective teachers of the gifted. The researcher concluded that effective teachers were more flexible, had a rich variety of experience, had a broad, and varying interests, open, and approachable, and demonstrated a variety of teaching styles.

Acikgoz (2005) conducted to a study on teacher characteristics, and their effects on students attitudes. The study aimed at assessing their attitude towards their perceptions of teacher characteristics.
(professional, pedagogical, and personal), as well as learning. The results might illuminate the ways of reaching at a better learning atmosphere through self-assured, and self-esteem students.

Imhanlahimi and Agule (2006) assessed the biology teachers effectiveness in the instructional process using two instruments, and observation to determine the most objective and appropriate tool for assessing teacher effectiveness. The results showed that there was a strong agreement in the assessment by students and researchers. They found self assessment method as a biased one.

Agostino (2009) conducted meta-analysis to examine the degree to which teachers’ test scores, and their performance in preparation programs as measured by their collegiate grade point average (GPA) predicted their teaching competence. It was found that test scores were at best modestly related to teaching competence, and that performance in preparation programs was a significantly better predictor of teaching skill. Results revealed that test scores likely do not provide additional information beyond preservice performance to safeguard the public from incompetent teaching.

**THE REVIEW OF LITERATURE: AN OVERVIEW**

The research work surveyed, and presented above indicated the importance of Teacher personality and Teacher effectiveness. The review also stresses the need for further studies in the area to provide more light in the field.
Sixty five studies related with teacher effectiveness were reviewed. These studies were categorized under three headings - Affective variables related with teacher effectiveness, cognitive variables related with teacher effectiveness, and process variables of teacher effectiveness. Twenty four studies were reviewed under affective variables related with teacher effectiveness, seventeen studies under cognitive variables related with teacher effectiveness, and twenty four studies under process variables related with teacher effectiveness.

It is evident from the reported studies that much disagreement, and ambiguity exist with regard to teacher personality characteristics of effective teachers. Only a few studies were reported on teacher effectiveness of Mathematics teachers.

An important outcome of the review was that it highlighted the need for a factor analytical study on certain variables of Personality and Teacher effectiveness on a sample of Mathematics teachers. It was in this context that a hypothesis had been formulated in this regard, technique of factor analysis was used for analyzing and interpreting results.

Thus the review presented above was of much use for the present investigation to understand where we are at present, and what the future should be in the area of Teacher personality and Teacher effectiveness. Also the review provided adequate background for the present study in terms of formulating objectives and hypotheses, as well as research design.