CHAPTER II

A REVIEW OF RELATED STUDIES
2.1 INTRODUCTION

The review of related studies is one of the essential steps in research which helps to develop a proper perspective of the area under investigation. The review also helps to give support to the findings of the study. As the objective of the study is to investigate the relationship of inputs (Student teachers, teacher educators, academic motivation, Leadership Style, Organisational Climate, Teacher Morale, Physical Facilities, Teaching Methods, Finance) with the efficiency of Elementary Teachers Training Institutions, (J.B.T. Schools).

This review presents a compendium of research findings on selected inputs, i.e., student teachers, Teacher educators, Leadership Style, Organisational climate, Teacher Morale, Academic Motivation, Teaching Methods, physical facilities, and finance. These inputs have been hypothesized as critical indicators of the quality of the outputs of teacher education systems in Punjab. It covers works both done in India as well as in foreign countries.

The body of knowledge drawn from the review of works of these inputs will be established as a theoretical frame of reference in the analysis and interpretation of
the problems as well as provide guideline basis
for direction in drawing conclusion and the formulation
of recommendations.

In the West, in the past decade a number of
studies have been conducted on almost all the aspects
of colleges of education. In contrast, an extensive
survey of Indian literature on teacher education in
general and colleges of education in particular only
serve to emphasize the paucity of research work in the
field. Rush (1974) concluded that the total 611 Ph.D and
non Ph.D research projects that have been completed in
different areas of education up to 1973, only 42 (4 per cent)
are concerned with the area of teacher education.

To review the range of existing research on
teacher education requires some kind of classification.
The present review is based on the systems approach in
which first research on inputs into E.T.E.T.Is or Colleges
of Education is looked at, followed by an examination of
research on outputs.

2.2 RESEARCH ON THE INPUT 'STUDENT TEACHER'

The student teacher is an important input. The
trend in researches on student teachers reveal that age,
Academic Qualification, Teaching Experience, Teaching
Degree, Socio-Economic Status, nature and size of the
family, Teaching Background in the family, Residence
during training, Academic Motivation, expenditure incurred
on training etc. are related to their level of performance.

In a number of studies, the age variable has been related to the performance of the students. Carter (1956) and Texana (1966) concluded that the students who were older than the average in a particular class were more likely to belong to the under-achieving group than a student of an average age. Mathat (1970) found relationship between the age and the marks attained by the student teachers in theory and practice. Debmath (1970) found that age and teaching efficiency significantly related (.21).

The studies of Santhanam (1970) and Sharma (1970) did not support the above assumption and concluded that age variable did not affect the class interaction of student teacher. Sharma (1971) and Sinha (1965) concluded that the higher achievers as compared to lower achievers were a little younger, mostly unmarried and lived generally with their parents. Srivastava (1967) had related underachievements to age, socio-economic status, size of the family, number of siblings, birth order etc. while no generalization can be made on the basis of these studies, one might expect that students who are older than the average would exhibit lower level of academic performance.

In some studies the relationship between the Socio Economic Status of an individual and his level of
Performance has been investigated. Findings of the thirteen research studies reveal a trend, to the effect that Socio-Economic Status is directly related to academic performance. These studies include research by Breuse (1957), Caster (1959), Friedhaff (1955), Gerrits (1966), Gibboney (1959), Kaief (1959), Mcnighthouse (1958), Mueller (1953), Noll (1959), Ratchick (1953), Rosen (1956), Travers (1949). The emergent conclusion is the higher one's Socio-Economic Status, the higher his level of performance. This relationship holds for all educational levels.

The conclusions of Pathak (1972)'s study are that the overall Socio-Economic Status of higher achievers was significantly higher. The higher achievers were mostly from the top three occupational categories i.e. professional, semi-professional and clerical. Mathur (1963), Deva (1966) and Singh (1965) also found a significant positive correlation between Socio-Economic Status and academic performance of students.

Of special interest are some studies whose findings contrast with these results. Six studies report that Socio-Economic status is inversely related to the level of performance. They include studies by Boyce (1956), Davis (1956), Davis (1955), Mc Arthur (1954), (1960) and Sheray (1956). The studies of Chopra (1964), Jain (1963), Jha (1970) and Rao (1965) also found that there seems to be
no relationship between the socio-economic status of the individual and his level of performance. Sharma (1971) concluded that there is no significant relationship between socio-economic status and teacher effectiveness.

A few studies have probed into family variable and its effect on the performance of students. Sullivan (1968) found that 74 per cent of the trainees belong to joint family and 26 per cent to single family. Bern Stein (1958) states that family size is inversely related to the performance of the students; that is the larger the number of siblings, the lower the level of performance. Strodbeck (1956) has conducted research on the performance on the characteristics of family interaction in order to find its effect on the performance of students. He supported the above assumption. The general trends of findings are that the student who does well in academic performance comes from a family which has relatively small number of children. Similarly the variable of sex, martial status, rural-urban background, expenditure etc. are being looked into in order to study its effect on the performance of students. The study of Sheth (1975) indicates that urban and rural ratio is 27 : 73. Sullivan (1968) found that 26 per cent teachers trainees were single and 74 per cent were married. The findings of Desai (1974) were that 70 per cent of the student teachers were married.
There is a trend towards more women seeking admission in E.Ts.T.Is or colleges of education. Sullivan (1968) indicates that 79 per cent male and 21 per cent female are admitted to colleges of education and Sheth (1973) found that the 63 per cent are men and 37 per cent are women whereas Joseph (1967) found that more than 70 per cent are women. The finding on sex differences indicates that the level of academic performance of female is higher than that of male.

While the findings are not consistent, the general picture that seems to emerge on the basis of review is that a student who is younger in age, belongs to high Socio-Economic Status, has superior academic background possesses teaching experience and some teaching degree, and who belongs to single and smaller family, is likely to prove better output after the training than otherwise.

RESEARCH ON TEACHER-EDUCATORS:

Less is known about those who staff the Elementary teachers training institutions. Staffing the elementary teachers training institutions with good teachers is one of the most crucial tasks confronting educational administration. The nature of the challenge is to find teachers who are well-educated, well-trained dedicated and enthusiastic. Because of the second rate position that these
institutions occupy, it is difficult to obtain the kind of teachers we need. Shukla (1974) wrote that in general, the education faculty is academically and socially inferior to their counterparts in the "liberal" departments of the University or in other professional training institutions e.g., medicine, engineering, or technology. The American Commission on Human Resource and Advanced training (1954) pointed out that the college students now enrolled in education as well as the high school students who say, they are going into education rank very low in achievement and intelligence as measured by the tests and records used by the commission.

There are many assumptions made in the course of selecting and recruiting teacher-educators. They are considered as one of the very important inputs. The efficiency of elementary teacher training institutions depends to a great extent on the quality of its faculty members. The review which follows is concerned only with investigation relating to such aspects of teacher educators as age, professional and academic qualifications, teaching experience, professional growth, sex, marital status, social background, salaries, participation in and preference for various sorts of co-curricular activities, motivation etc. The studies reviewed below mostly focus on getting data about these variables. Very few studies have attempted
to relate these variables to the overall performance of a teacher education institutions.

Joseph (1967) found that 24% of the staff members had taken all their degrees in third class only, 28% satisfied the minimum qualifications laid down by the University for appointment in an institution of education. Pandey (1969) concluded on the basis of all India Survey that 5.1% were Ph.Ds while 31.76% were M.A., M.Eds. The highest percentage was of those who had M.A., B.Eds. The findings of Sheth (1973) study were that about 5.5% Teacher Educators possess degrees in first class 58.8% in second class and 35% in pass class. About 85% of the teacher educators possess a Masters-degree in Arts or Science. About 71% of them possess a Master’s degree in Education of whom 83% holding it in first class and 5.25% in second class about 16% persons Ph.D degree in education and about 37% hold a B.Ed degree in first class. The conclusion of Desai (1974) were that 40% of the teacher-educators have both Master’s degree in education and a Master’s degree in Arts/Science 57% hold M.Ed degree and 7% hold Ph.D in education.

The data on the qualifications of teacher educators indicate that the emerging picture is not discouraging. The percentage of well-qualified personnels
are on the increase. The point is that the present study assumes that there may be relationship between between the academic qualification of the staff and the institutional efficiency.

Data on professional growth and productivity of teacher educators are also available in some studies. Desai (1974) found that 50% of the teacher educators have attended one or the other course as a part of professional growth. Professional growth and productivity of the staff is associated with institutional efficiency.

Salaries of the staff of the institutions of education represent a major item of expense. This is suggested that teacher-educator is a very costly input. According to one estimate 60% to 70% of the budget goes away in paying salaries to the staff and on that account very little is left for undertaking programme for the improvement of the quality of teacher education.

It was reported that in America average twelve month salary paid to members of teacher education institution faculties was about $3000.

Arora K. and Chopra, R, 1969 found that mostly teacher-educators had teaching experience in secondary school which ranged from five to thirty years. Pandey (1969)
found that majority of teacher educators possessed teaching experience both at the college and school levels. The findings of Bhatt (1973) were that most of the teacher-educators in Gujarat have teaching experience in secondary schools, ranging from two to over 10 years. About 15% of the teacher-educators had previously experience of working as Principals of High schools with range from two to over 10 years. The numbers of teacher-educators joining an institution of education directly after passing B.Ed/M.Ed examination is very small.

Although the results are not available, but there are a number of predictor characterizations of a "quality" teacher educators which have been investigated and for which measurement has been attempted. They are:

1. Age
2. Experience
3. Martial Status
4. Socio-Economic Status
5. Sex
6. Speech and voice characteristics.
7. Factors influencing choice of teaching as career.
8. Social participation.
9. Expression of interests in participation in and preference for various sort of activities.
10. Scores on attitude scales and inventories and projective devices developed to measure various personality traits and emotional and social adjustment.

11. Amount of general and professional education.

12. Course marks or ratings representing performance in student-teaching.

13. Scores on test of professional information.


15. Course marks representing academic achievement.

In order to measure the effect of teacher-educator input on the efficiency of the elementary teachers training institutions. The data about a few of the above mentioned characteristics of teacher-educators have been calculated.

**Research on Input : Academic Motivation :**

It is not wrong to presume that there has developed among educationists an awareness about the existing intimate relationship between the academic motivation as an input and its effect on the achievement of students. The academic motivation has been vaguely visualised as level of pupil's motivation for learning. The overall research finding in the area of motivation is that it (motivation) gives both direction and intensity to the learning behaviour of an
Individual it is an essential condition for effective learning. It also implies some type of driving force within the individual which can have a positive or negative direction. What aspects of motivation are included in academic motivation (student's desire to do good work in an educational institution) is an important question for educators to understand. According to Frymier (1965-70), value, personality structure and curiosity for other things, affect academic motivation. Frymier's findings are that academic motivation is the result of a student's own personality and the kind of value he holds. Those students who are very perspective and who believe in the world of ideas are more apt to desire to do good work in school than those feel otherwise.

A question arises as to which are the forces in an educational institution that contribute to the development of academic motivation. Litwin and Stringer (1968) in their book "Motivation and Organisational Climate" have described the components of climate affecting motivation of students. The teacher's interaction with pupils, the staff morale, the leadership behaviour etc. are the principal components which affect academic motivation.

Hoesavran (1955) found that at both the college and High school levels a positive attitude towards school
and the opinion that education is valuable, have a slight positive relation to academic performance.

Frymier (1961, 1961 a, 1961 b), on the basis of his research has clearly drawn a behavioural and ideational picture of the low motivated student. These studies lend to substantiate the notion that highly motivated and low motivated youngsters are basically different, they think differently, feel differently and behave differently. He concluded that

(1) Low motivated students are unhappy.
(2) Low motivated students are thing-oriented.
(3) Low motivated students lack confidence.
(4) Low motivated students resist change.
(5) Low motivated students dislike change.

Rao (1965) found that attitude towards school was significantly related to the prediction of scholastic achievement. The variable of attitude towards school accounted for 66% of the predictability of the scholastic achievement.

Srivastva (1967) concluded that under achievement was related to low academic motivation. Bhatnagar (1967) concluded that need for achievement and academic achievement were positively correlated in respect of male students.
The findings of Sexana (1966) were that the ever achievers had a positive attitude towards school, study and school work. Pathepuria (1966) found that Scholastic success depend upon how joyfully the child applied his mind to the task. The study of Dhallwal (1971) indicates that both over achievement and under-achievement go with higher need for achievement in comparison to normal children. Singh (1965, 1971) found that scholastic attainment shows a higher positive correlation with academic motivation.

Desai (1972) found that 60 girls had a mean JIM scale score of 194.63 and 60 boys had a mean score of 193.90. Pupils who made higher JIM scale scores also made higher achievement score on a standardized test ability was controlled. There is high relationship between the teacher's estimate of their students to do good work in school with scores on JIM scale.

Amita Choksi's (1972) study suggests that students with higher academic motivation have high achievement motive and have better or higher perception of the self and the world.

Meela Shelat (1974) found that motivational level of students in schools with large size is greater
than is the case with relatively small sized schools. The main effect of the sex is also significant. The mean of motivation scores of boys is higher than that of the corresponding score of girls, but the gap is rather low. She concludes that academic motivation of students is thus a joint effect of both the sex of the students as well as the size of the educational institution.

Darji's (1975) finding in this regard is that students' motivation towards their educational institution is the result of many variables, like staff morale, organisational climate, the name of the institution, the teacher behaviour. The relationship between leadership behaviour patterns of Principals and academic motivation of their students cannot be established as the intervening variables which have strong influence on students' motivation.

The body of research, however, indicates that positive attitudes towards educational institutions are positively related to academic performance. This may lead to assumption that if highly academically motivated students join the E.T.A.T.Is, it is that they make better performance than those with low academic activation. In simple words, the quality of students performance (output) may be determined by academic motivation.
The research workers define leadership acts as behaviour of leaders and define leaders as those so designated by formal position or by status attributes. Leaders' behaviour is a function of the leader, the group, the task and outside pressures on the group, acting together.

Brown (1967) conducted a study of leadership in 170 Canadian schools using the leadership behaviour description questionnaire (LBDQ). He found two types of leader behaviour: system-oriented leadership and person-oriented leadership. The former responds to the needs of the staff members as persons. Brown also looked into the relationship between leadership styles and organisational output. He interpreted output in terms of teacher satisfaction, confidence in the Principal and a teacher's estimate of school performance using multiple regression analysis. Each output criterion was tested again, leadership variable in terms of each of the 12 standardised sub-scales scores and system and person factor scores. The findings indicate that teacher satisfaction and confidence in the Principal are sensitive to the perceived leadership of the school, but the teacher's estimate of the school's performance is not.
Halpin (1966) conducted a study on Craft Commanders and Educational Administrators. The sample was composed of two groups of subjects:

1. 64 Educational Administrators
2. 132 Aircraft Commanders.

The members of the two groups were described on the LBQD - Real and were asked to answer to the LBQD ideal. The leaders' own scores on the LBQD ideal were used to represent their ideology in respective leaders. In each instance, the ratio was significant at 0.01 level of confidence.

The comparisons of leadership ideology and leader behaviour of the administrators and commanders were made in terms of the group differences and were analysed in terms of the ratio of the mean differences between the number of leaders in each group who scored either above or below the means of the pooled samples and the differences in leadership styles were analysed according to number and percent of cases in each sample using the quadrant analysis technique.

Evidence supported the hypothesis that leaders who function within the two different institutional settings exhibit differences in leadership ideology and leadership behaviour. The administrators showed more consideration and less initiation of structure than the
Aircraft Commanders in both leadership ideology and leader behaviour are measured by the LBDQ. These differences may be attributed to differences between the institutional settings in which the two groups of leaders operate.

The leaders in both groups indicated that they showed more consideration and great initiation of structure than their group members perceived them as doing. This adds support to Halpin's earlier finding that the "Leader's belief in how he should behave is not strongly associated with how his group members describe his behaviour" Halpin (1966: 110).

In another study Halpin (1966:111-125) attempted an investigation of 50 Ohio school Superintendents to determine the relationship between the Superintendent's own perceptions of how he behaves on the two leadership dimensions as contrasted with the Board's and staff's perceptions and to discover the corresponding relationship between his, the Board's and the staff's beliefs concerning how he should behave as a leader.

The three groups, the staff, the Board respondents and the Superintendents themselves were asked to describe the Superintendent's leader behaviour on the LBDQ Real. The leadership ideology of the members of the same groups
was measured by having each respondent indicate on the LBDQ
ideal how he believed each Superintendent should behave.

Evidence indicates that the perceived leadership
of the 90 Superintendents differs significantly from the
ideal behaviour of a Superintendent as conceived by all the
respondent group. The leadership ideology of the Board and
staff members and of the Superintendents themselves is
basically the same that desirable effective leadership
is characterised by high scores in the initiating structure
and consideration dimensions. It supports the hypothesis
that the effective leader is one who delineates clearly the
relationship between himself and the members of the group
and establishes well-defined patterns of organisation,
channels of communication and ways of getting the job done.
At the same time his behaviour reflects friendship, mutual
trust, respect and warmth in the group (Halpin, 1966: 118).
It may be stated on the basis of the findings above that
there exists a positive relationship between leadership style
and organisational performance. Hellere (1966) studied the
leadership behaviour of public elementary school Principals
in the division of La Union using the LBDQ. He found that
Principals exhibit more consideration than Initiation of
Structure. They perceive as ideal behaviour good human
relations characterised by friendly attitudes, mutual trust and respect and warmth in personal relationship.

He also found that subordinate raters observed that Principals with longer experience in the service evidenced more consideration than those with shorter experience.

It may be stated, on the basis of the findings of studies by Black and Mouton (1964) Fiedler (1964) and Schwatz (1964) that there exists a positive relationship between leadership style and organisational performance while leadership style and organisational performance have virtually been rigidly researched on in the foreign countries, there still needs to be a thorough investigation of the relationship between these two variables in India. However, some doctoral studies have been reported. They are by Patel (1974) which revealed that on schools where leadership is task oriented with judicious blending of human relations, the effectiveness of supervision and the achievement index of pupils are high.

Shelat (1975), Pandya (1974) and Dariit (1973) demonstrated that Principals of secondary schools differ in their scores on Initiating structure and consideration, but the trend is to emphasise production or task achievement more and consideration less the latter is either accidental or a by product of the leadership behaviour.
It seems significant to determine what particular leadership style can bring about maximum organisational performance in local organisations. This should be one important concern of Indian researches on organisational dynamics since it cannot be assumed that the most effective leadership style in foreign context will be most effective in Indian context.

The works that have been reviewed above bear one thing in common they all reflect the two-theme convention of conceptualizing leadership style, i.e., task-orientation and people orientation. The formulation has provided the impetus for almost all researches in leadership behaviour during the past two decades. It has also provided the writer with a valid perspective for the investigation of leadership style as an important input which affects the institutional performance (output) in the present study.
It has been hypothesised that morale has a direct effect on teacher performance. Research supporting this contention is largely lacking. Morale is a prevailing mood and spirit conducive to willing and dependable performance. It also implies sincere genuine cooperation of the members of an organisation in the pursuit of common goals in a common effort. In general morale is a name for the degree to which members of a group or organisation are meaningfully motivated towards a group goal. For small group, it is a matter of involvement and a feeling of belongingness. For the organisation, it is the degree of identification of the members with it. The central dimension of the concept of the morale is identification of the personnel of an organisation with its goal or goals. Such an identification generates in individual remarkable energy to move whole-heartedly towards and targets or goal set to the group for achievement.

In an educational institution, morale means teachers confidence in the leadership of the Principal, their identification with the objectives of the institution and its programmes, solidarity and friendliness among them, human consideration for colleagues on the part of the Principal, high motivation and concern among the staff for raising the institutional achievement index.
From the above description it may be assumed that teacher morale as an input may be associated with the quality of teacher education. This assumption prompted the investigator to study the effect of teacher morale on the output of E.T.S.T.Is. Research on morale is examined as it constitutes a vital input.

Likert (1941) found that morale was related to productivity. Katz (1949) established a significant relationship between high morale and job satisfaction, satisfaction with wages and promotional opportunities, identification with organisation and pride in work group.

Warty (1950) found organisational structure to be an important variable in morale, the smaller, the less complex and the more decentralised in an organisation the higher is the morale. Murray (1953) suggests that the morale of an organisation is influenced by its turnover rates which in turn are determined partially by the way workers are treated. Education has been rather slow in recognising the value and influence of teacher morale as a factor affecting the quality of education. As the quality of output of an educational institution is assumed to be associated with teacher morale, leading educational morale.
Anderson (1953) found morale related to achievement. Hersleg (1957) has summarized the result of some two dozen published reports and found that in 54% of the reported survey high morale was associated with high productivity on 35% cases, morale and productivity were found not to be related, and in 11% cases high morale was associated with low productivity.

Steensberg (1958) found teacher morale highly related to the quality of educational programme. In an N.E.A. report made more than two decades ago it was found that only 38% of the teachers surveyed were classified as 'high morale' teachers. Another N.E.A. report ten years later reported that educators had lower morale than business industrial comparison groups.

Redefer (1959) conducted a comprehensive survey of teacher morale covering 5000 teachers in 24 schools system and found that faculty morale was closely related to the quality of education in individual schools.

Harsp (1959) in a study of 20 schools systems found that most common causes of poor morale were inadequate salaries, large classes, poor administrator support, lack of material and equipment and other work related conditions.

In later studies, Brayfield and Crckett (1955) and Harsberg (1957) found that relationship between morale
and productivity is much weaker than earlier investigators had assumed. Porter and Lawler (1968) and Vroom (1965) also reached a similar conclusion.

Cornell (1964) found that the amount of teacher participation in decision making was unrelated to the measures of teacher performance in the classroom and only slightly (although significantly) related to teacher morale. The most important influence on teacher morale was not the extent to which the teacher actually participated in decision making but his conception of its significance if he were to participate. In addition, administrative discouragement of participation lowered morale among the more professionalized teachers (as measured by above mean scores on the (Minnesota Teacher Attitude Inventory). But the level of morale among the less professionalized teachers was about the same regardless of the extent to which they were encouraged to share in decision making.

In one study in the U.S.A. the relationship between teacher morale and organizational climate was studied and it was found that the morale of teachers affects the climate of the entire school. In India, a similar conclusion was reached by Patel (1973), Kothai Pillai (1973) Shelat (1973) Darji (1973) Pandya (1973) Franklin (1975) and Choksi (1976).
Pillai (1974) found teacher morale closely correlated with school organisational climate and school quality. The school quality has been taken in the terms of academic achievement of students and the innovativeness of the school. The findings of Patel (1974) are that teacher morale significantly related to leadership acts, effectiveness of school supervision, organisational climate, and the overall progressiveness of the school. Sheth (1979) had earlier concluded that the promotion policy affected the teacher morale.

On the basis of the review here, it can be concluded that teacher morale does play a role in determining institutional achievement index or its quality either by direct influence as an independent variable or by indirect influence as an intervening valuable. It is considered that teacher morale is related to output of an institution meaning thereby that E,Ts,T,Is with higher teacher morale may achieve better than otherwise. The review of research seems to point out to possible relationships among teacher morale, student, teacher achievement index of the E,Ts,T,Is. The precise direction of these relationships can be indicated by further conclusive evidence. The inadequacy of empirical evidence in this area has provided the impetus for looking into the nature of the aforesaid relationship in the present study.
RESEARCH ON INPUT - ORGANIZATIONAL CLIMATE

During the past few decades administrative thought has undergone many changes. One of the most significant developments in the study of administration in recent years has been the apparent shift of focus from theory of administration to organization theory. Human behaviour in organization has always been a phenomenon of interest and concern. However, it has only been in recent years that organizational behaviour has emerged as a field of systematic study.

The growing sophistication of researches conducted demonstrating the influence of the schools organizational climate on students output in terms of the achievement as well as personality characteristics is catching the attention of the educational psychologists.

Argyris (1961) formulated the proposition that the needs of healthy individuals are not congruent with the demands of the formal organization. Since the needs of healthy individuals are in conflict with the traditional requirements of formal organization a disturbance will ensue, which tends to affect the functioning of the organization. Argyris' proposition provides an explanation for the difficulty in maintaining an organizational climate.
that is conducive to high productivity and employee satisfaction. It suggests that high productivity is the function of an organizational climate which will foster the integration of the task and people dimensions of the organization.

Goodrich (1962) investigated the influence of college environment on the achievement of students. He compared colleges with respect to the outputs of their alumni who later earned the Ph.D. degree.

Medill et al (1967) have attempted to assess the influence of different pedagogical and social dimensions of school environment on achievement of the students and found that the various dimensions of school environment had significant effect on student's performance.

Gentry and Kenny (1965) conducted a comparative study of the organizational climates of Negro and White Elementary schools. They found that the Negro faculties tend to view their schools as falling on the "closed" climate continuum (paternalistic or closed). While White teachers see their schools as having a bipolar distribution of the climate (Open or Paternalistic).
Pcbe (1969) found that student teachers in the "Open Climate" school perceive the efficiency of the student teaching situation more favourably than student teachers in a 'Closed Climate' school.

Hinton (1969) in a study of the effect of environmental frustration on creative problem solving concluded that the environmental frustration significantly reduced creative problem solving.

Forehand and Gilmer (1969) concludes the scientists' belief that behaviour is determined and after defining behaviour that it is a function of the interaction between personal characteristics and environmental variables. They go on to define "Climate" as a set of organizational properties which may influence the behaviour of individuals in organizations. When one moves from school to school, one finds that each appears to have its own personality. It is this "personality" that we describe as the "organizational climate" of the schools. Analogously "Personality" is to the individual what "Organizational Climate" is to the Organisation (Halpin and Croft, 1966).

It was for the first time in spring (1954) when the idea of the study of "Organizational climate of schools" was discussed at C.P.D.A. meeting, Kurt Lewin (1935) and
Milton Rokeach (1960) discussed the idea of openness and closedness in their work. But the first pioneer study in this field was conducted by Andrew W. Halpin and Croft (1963). They developed a research tool (CODD) which can be of help in determining the organizational climate of schools as well as of other agencies. One of the guiding assumptions of Halpin and Croft work as well as Sharma's (1968) research is that an organizational climate which will be most effective will be one in which it is possible for acts of leadership to emerge easily from whatever source. One essential determinant of school's effectiveness noted by Halpin and Croft was the ascribed leader's ability or lack of ability to create a climate in which he and other group members could initiate and consummate acts of leadership acts and leadership acts of sufficient "quality" in that they are accepted and that they also lead in increased group "effectiveness" then members of the group will seek to offer "leadership" required to make the group both "effective" and "efficient".

In terms of organizational climate, Halpin and Croft have identified six climates, from "open" at one end of a continuum to "closed" at the other. They found that a school possessing an open climate which they deemed as most effective was lively organization, moving towards
its goals while at the same time providing satisfaction to the members of the organization. An important aspect in the effective leadership of an organization is the perception of the leader held by the group with which he is working, as well as the perceptions of the group which the leader holds.

Alexander M. Feldsebel (1964) while defining the organizational climate as it is in Halpin and Croft investigated two possibilities.

(1) Organizational climate is a function of the Socio-Economic Status of school community that the school serves.

(2) The output of the school, as measured by Standard Achievement Tests was a function of the organizational climate as well as the Socio-Economic Status of school community.

Organizational Climate may be defined as patterns of school interaction that characterize an organization. The main units of interaction in this concept of climates are individuals, the group as a group and the leader. Halpin and Croft in their research into Organizational Climate deal with the both dimensions in the Gansel Theory. In fact, an open climate is defined as one in which there is
attention to both task achievement and social needs. The closed climate is defined as one which marks a situation in which the group members obtain little satisfaction in respect to other task achievement or social needs. In short, it is a situation where the leader is ineffective in directing the activities of the staff and at the same time he is not inclined to look out for their welfare.

Plaseton (1963) found stronger relationship (.61) between teacher satisfaction and climate, and an even stronger relationship (.68) between teachers satisfaction and Esprit were found. On the basis of the research the investigator concluded that the sub-tests of the organizational climate descriptive questionnaire provide reasonably valid measures of important aspects of the school Principal's leadership, in the perspective of interaction with his staff.

David Coles Smith (1966) conducted a study to answer the question what relationship, if any, exists between the OCDQ developed by Halpin and Croft and external characteristics of schools. As a result of the study the researcher found that the concept of organizational climate as identified by OCDQ was found to be empirically sound and viable. This study leads the investigator to conclude that the OCDQ was externally consistent as well as internally so, which adds further support to OCDQ as an instrument useful in identifying
organizational climates and may be considered empirical evidence supporting the conceptual and theoretical structure of OCDQ.

In an investigation of data on the responses of 303 teachers in 20 elementary schools in New Jersey on the LBDQ and OCDQ, Cook (1967) concluded that the leadership behaviour of elementary school principals differed from situation to situation and was instrumental in determining the organizational climate of their school. He also found that "Openness" or "Closedness" of an elementary school may be determined by an analysis of OCDQ scores.

Currier Sargent's (1966) research is also supportive of these findings he investigated that the teachers of schools having open climates rated high on teacher satisfaction as well as school effectiveness as compared to those of schools having closed climate. He found that there is a significant rank order co-relation between school openness and teacher agreement on the extent of this openness. There was no significant relationship between faculty size and school climate.

Sharma's (1968-69) research work is also supportive of these findings where the investigators found schools having "open" and "autonomous" climate were found to have significantly high achievement index as compared with closed climate schools.
Murphy (1966) found that significant difference between the personality factor means of teachers, and teachers and Principals who perceived different organizational climate. This indicates that the personality patterns of the perceiver may contribute to his perception of a school's organizational climate. It also indicates that the predictive importance of the personality factors vary from one climate to another.

Motilal Sharma (1968) carried out a comparative investigation of the organizational climates of Government and private secondary schools in Rajasthan, India. He found schools having "open" and "autonomous" climate, have significantly high achievement index as compared with closed climate schools. Coefficients of correlation between school achievement index and "Disengagement" \((-0.67)\), "Hindrance" \((-0.33)\), "Esprit" \((0.59)\), "Consideration" \((0.44)\). 'r' values in case of "Disengagement", "Esprit", "Aloofness", "Thrust", and "Consideration", found to be significant at .01 level whereas in case of "Hindrance", it was found to be significant at .05 level. Nature of the co-efficients of correlation shows that "Esprit", "Thrust" and "Consideration" adds to the high achievement index of the school while "Disengagement", "Hindrance", "Aloofness" affects school achievement adversely.
Amerjeet (1971) carried out an investigation of the organizational climates of the High and Hr/Seo. schools of Panchkula. He found schools having "open" and "autonomous" climate were found to have significantly high achievement index as compared with closed climate. No significant difference is found in all the dimension means associated with groups characteristics and leader's characteristics, of the organizational climate of Government and Private Secondary Schools.

RESEARCH ON INPUT PHYSICAL FACILITIES:

Earlier the provision of the physical facilities in E.Ts.T.Is has been conceptualized as an input. The physical facilities is a comprehensive term which includes building, ground, school furniture, library, laboratory etc. Usually it represents considerable quantum of investment. Physical facilities, therefore, may be viewed as an input.

It is maintained that inadequacy of physical facilities in Teacher Training Institutions is a distinct handicap in improving the quality of teacher education. The existence of proper facilities and their effective utilization provides a stimulating environment which directly or indirectly affects the performance of the institution.
Most of the research done in this area of teacher education include only brief description of plants, buildings, grounds, equipment, library and other facilities and the opinions about their adequacy or otherwise. Very few studies have attempted to find out the relationship of physical facilities with the performance (output) of teaching training institutions.

SIE- (Gujarat 1966) study revealed that more physical facilities are needed for the trainees. No institution had Science Laboratory and there was no reading facilities in these institutions.

Sharda Devi Arora K, Pandey and Bhatnagar T.K. S. (1970 N.C.E.R.T.) found that despite of the schools situated in vast field campuses, the buildings and hostels were poor, damaged and inadequate. None of these schools had electricity, any sanitary arrangements etc. There was no separate library room and librarians.

Batta (1970), however, concluded that there was no significant influence of any of the factors of the college environment on the student output. The college environment is the collective name for resources like teachers and their qualifications, student-teacher ratio,
floor area in relation to number of students, library services and other more intangible things such as the quality of management of the college and its tradition or reputation.

Arora K, Das Gupta H, Chopra H and Puri P (1974) concluded that there were poor physical facilities in many respects that is lack of Science Laboratories, inadequate buildings, inadequate accommodation in the hostels, no good libraries and no good books and magazines.

Mahendra Choksi (1976) has shown how weak physical plant along with unplanned and improperly regulated staff, recruitment procedures has made the programmes of the education of primary teachers poor.

Recently, Tikmani (1976) found the facilities of Administrative and Instructional blocks of instructional sides and materials and other essential conditions of record keeping etc, perceptibly weak in Primary teacher's Training Institutions.

On the basis of research review, it can be concluded that physical facilities do play part in determining the institutional achievement index. The research seems to point out to the possible relationship between physical facilities and output. The inadequacy of empirical evidence in this area motivated the present researcher for looking into the nature of aforesaid relationship in the present study.
Barbhajan Singh (1967) undertook a study to find out if there exists any tenable relationship between Higher Secondary School costs and quality of education. The criterion of quality of education applied was the performance of the pupils as judged by marks secured in the Higher Secondary Examination. The school costs taken into account were instructional, administrative, auxiliary, co-curricular and library costs. It was found that significant cost-quality relationship exists. On the basis of above research review, it can be concluded that the input of finance does play a significant part in raising the quality of education. The research seems to point to the possible relationship between financial input and performance of the institutions.

A number of studies on relative efficiency of different patterns of financing and effect of financial input on relative productivity of education have been conducted. As the evidence in regard to cost-quality relationship in teacher education in Indian situation is inadequate, so the precise direction of this relationship cannot be indicated. This is particularly true in case of P.T.I. or colleges of education. The inadequacy of empirical evidence in this area provides the rationale
for looking into the nature of aforesaid relationship in the present study.

**Research on Input: Teaching Methods:**

The problem of improved methods of educating teachers has been receiving the active consideration of educationists all over the world. During the last few years a new term "Educational Technology" has come increasingly in use and the term has been defined in different ways. It includes all the different methods, materials, equipment and logistical arrangements employed by the teachers. In other words, teaching methods help students teachers to learn to teach better. It includes lectures, group discussion, laboratory methods, dramatization, Project method, recitation, team teaching, micro-teaching, simulated teaching, individual study method, motion pictures, films strips, television, radio, recordings, graphic illustrations, models, teaching machines, language laboratory, overhead projectors, closed circuit television, programmed texts, computer assisted instruction etc.

For the purpose of making an intelligent and fruitful use of teaching methods, it is essential to conduct research studies to demonstrate that the quality of teaching and
learning is equal to and probably superior to that which
obtains when these are not used. A review of research in the
field leaves one with a great feeling of urgency to take up
research in the field of teaching methods. Discussion and
descriptive reports are plentiful but comprehensive basic
studies establishing relationship between teaching methods
as input and efficiency (output) of teacher education is
lacking. At the same time, there are little research
evidences relevant to Indian conditions. The following
pages present the review of studies done in the area of
teaching methods both in foreign countries as well as in
India.

More mature and more able pupils seem to profit
most from the lecture method.

1. Edmiston and Braddock (1941) found that the lecture
   method is superior to the recitation method but inferior to
   project and to the socialized recitation in holding the
   attention of high school students.

2. Jayne (1944) found that pupils taught by the lecture
   method showed greater immediate gain over the experimental
   group which utilized silent motion pictures dealing with the
   same topics. Those taught by the lecture method, however,
   suffered greater loss from forgetting.
Experimental Method:

The total experimental evidence relating to the laboratory method is distinctly favourable to this method as a general pattern of instruction but the studies vary so much in the details of laboratory procedure that generalization with reference to a particular laboratory method does not appear justifiable. A review of the pertinent literature suggests that effective provisions can be made for individual differences and for socializing experience through the use of laboratory method by a skilful and resourceful teacher.-

Project Method:

Collings (1923) found the project method favourable with teachers and students. Michener (1940) conducted series of experiment with pupils of various age and produced results favourable to project method as a method of teaching in the field of school studies when the solution of the problems and the modifications of behaviour are the major objectives.

Dramatization:

Some attention has been given to a method of teaching which places emphasis upon the dramatization of subject matter by pupils or by the teacher. Lohmeyer and Ojemann (1950) found that dramatic methods are superior to the
lecture or panel discussion when employed in a radio broadcast for classroom use.

Socialised Recitation:

Every attempt to develop the skills of cooperative living and group teachings for solving problems was projected through a pattern of teaching referred to as the socialised recitation. There is no evidence to indicate that the socialised recitation is an inferior plan of instruction when employed by a conscientious teacher and when evaluated in terms of its purported objectives.

Discussion and Tutorial Methods:

Gustakaw and others (1954) in an elaborate experiment involving 865 general psychology students failed to discover significant differences among recitation, discussion and tutorial methods in final examination marks.

G. Smith (1962) found computer programmes effective in matching student teachers and supervising teachers.

Hall (1964) found that colleges have attempted to improve student teacher's work by developing instructional material centres for their use during student teaching.

Allen and Gross (1965) found micro-teaching technique most useful with student teachers in improving their efficiency in teaching.
Several methods employing audio-materials have also been demonstrated to be effective. Popham (1960) found that tap-recorded lectures were as effective and as acceptable as the lecture-discussion method at the graduate level. Cook (1954) demonstrated that radio can be used effectively to teach Spanish.

Newman and Highland (1956) demonstrated that tape-recordings and a word-book were as effective as an Instructor who was rated as above average in instructional ability for teaching the unit of work.

Filmed courses have also been shown to be effective.

The effectiveness of programmed instruction to teach entire courses or segment of courses is equally impressive. Fry (1960) summarized studies utilizing teaching machines and showed that teaching machines programmes provided superior instruction. Izen and Kornaki (1960) reported that learning from teaching machines and from programmed texts score 10 per cent higher than the conventional class on an achievement test and that instruction time was reduced by 27 per cent.

Carpenter and Green-Hill (1955) and Carpenter and others (1958) described studies conducted to measure the effectiveness of televised college instruction. This programme of television studies is the most exhaustive and insightful of the many carried out in this field and confirmed the conclusions that television instruction is generally effective.
Brish (1994) reported that pupil achievement can improve significantly when television is used consistently throughout and concluded that television students usually do as well as other students and at times do better. He also reported on retention of learning, methods of teaching by television, value of feedback, attitudes towards television, amount of viewing and use of colour and visual materials.

**Research on Output:**

Output is a criterion used in assessing the quality of teacher preparation. Output is the function of a number of inputs purposely combined to achieve specific objectives. A full and precise judgement of the outputs of the E.Ts.T.Is is rather difficult. However, an approximate and useful judgement can be formed. There are three main difficulties in undertaking research into the outputs of E.Ts.T.Is. Firstly, the goals and objectives of teacher education are diffused and independently conceptualised. It is hard to say whether J.E.T.Schools are accomplishing their objectives if once we are unclear as to what these objectives are. Secondly, the range of specifiable outputs that can be defined unambiguously is small. This presents the question of
assessing the quality and quantity of teacher education.

Thirdly, it is much easier to study group of students during their training than it is to study teachers and teaching in the schools. In the present study, as mentioned earlier, the output of the E.Ts.T.Is has been perceived on one criteria, which is mostly used is the marks obtained by the student teachers in the final examination conducted by Punjab Education Department.

In the context of the present study, where it requires a number of years to measure precisely the output the above criteria may serve as indices of the performance of the E.Ts.T.Is and thereby may provide an insight into their functioning. The researches reviewed below thus, are confined to the above criteria and on that account the volume of research work that can be reviewed is small.

In works started before 1957 but published later by Flander (1965), four separate studies were reported. In the two studies measures of constructive pupil attitudes were the only product variables and in the other two studies, both attitudes and achievement measures were included. Bond (1949) studied the attitude change that is brought about the professional preparation and found that only one-third teachers rated high the contribution of education courses
to their teaching effectiveness. The studies conducted by Bond (1949), Miller (1964), Morrison (1966), Leamer (1965), Nelson (1964), Johnson (1966) and others also used positive pupils attitude scores as the production variable.

Brammel (1932) reported the relationship between the High School scholarship of a pupil and his probable success in college using the scholastic achievement as the criterion. Among the first to advocate the use of input-output analysis in education were economists from the RAND Corporation, J.A. Kershaw and R.N. MacKean. The proposed gathering of input and output data was from a large number of schools and the results were subjected to convariate analysis. The researches proposed achievement test scores as output measures and information about such school characteristics as the size of the library, the availability of the counselors, class size, teachers, qualifications and per pupil expenditure as inputs. The resulting analysis was used as a guide in the improvement of resource allocation within the educational system. Resources were shifted from the inputs that contribute least to achievement to the inputs that contribute most.

Banerji (1956 b) made the examination marks secured by the examinees as the basis for analysis. Reddier (1960) found
that the gradings of the performances of 63 per cent teachers during the study tallied with the classes secured by them in the B.T. Practical examination.

Start (1967) has recently made available findings from the study of selection, training and professional progress of teachers in the University of Manchester which show that there is no evidence that the competence of the teachers, as rated by his or her current head teacher is in any way related to the college at which the teacher was trained.

Wiseman and Start (1965) followed up a group of teachers five years after they had qualified and found that "college assessments have little relation to the Head teacher's estimate of the teacher after five years, practising the profession for which the college prepared them. This is true of both the theory assessment of the teacher and rating of his performance on teaching practice.

Mahata (1970) used attainment marks in theory and practice as the criterion of measurement of teaching ability and related it to personality traits. The values accepted by pupil teachers and their cognitive abilities and the composite scores are the best measure of teaching ability.
Sharma (1971) investigated the relationship between certain predictors and teacher effectiveness of 700 student teachers from elementary teacher education institution. Six predictors (aptitude, age, academic grades, teaching experience, sex, socio-economic status) and three criterion measures (Class-room, teaching rating, personality rating, the final marks in the training courses) were taken up for study. The main findings are that a significant relationship exists between the criteria of teacher effectiveness and academic grades teaching experience as predictors, sex and S.E.S. Variables are not significant.

2.12 CONCLUSION:

From the above review of research, the following conclusions can be drawn:

1. The age, academic qualification, teaching experience, teaching degree, socio-economic status, nature and size of family, teaching background in the family, residential facilities during training, expenditure incurred on training etc. all appear to be characteristics of the student teachers which are likely to be positively correlated or associated with his performance.
2. Similarly, age, professional and academic qualification, teaching experience, professional growth, sex, marital status, social background, salary, expression of interest in participation in and preference for various sorts of co-curricular activities and hobbies etc., all appear to be characteristics of teacher educators which are likely to be positively correlated or associated with output of E.Ts.T.Is.

3. Leadership style appears to be positively associated with organizational output.

4. There seems to be a possible relationship between organizational climate and institutional performance.

5. Teacher morale does play a role in determining the institutional achievement index. It appears that E.Ts.T.Is which have high teacher morale may produce quality output.

6. The body of research on academic motivation suggests that the performance of highly academically motivated pupils taught by the lecture method showed greater immediate gain over the experimental group which utilised teachers may be superior to low academically motivated students.

7. The research reveals that teaching methods as an input has great potentialities for improving the effectiveness of E.Ts.T.Is.
8. The review of research points to a possible relationship between physical facilities and institutional achievement index.

9. It may be said on the basis of research that finance does play a part in raising the quality of education. The possible relationship between financial input and output of E.Ts.T.Is. appears to be positive, but further research in Indian condition may provide a clear-cut evidence.

The present study is theoretically framed around the research conclusions summarized above. It is hoped that it will fill some gaps in previous research and at the same time provide a possible structure for future studies in the area of teacher education.

Though there is growing awareness about the importance of teacher education, but the volume of research on this area is less than it should be. There is need to give greater thought and to undertake the kind of research which is amply justified by the social and educational importance of this branch of educational activities.