CHAPTER V

SUMMARY, CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH
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In the previous chapter the data collected for the study were analysed and discussed in detail and the inference was drawn. In this chapter, summary, conclusions and recommendations for further research along with the limitations of the study are presented.

Education is the backbone of a progressing nation and the teacher is the pivot in any system of education as he/she has a key role to play in this total process. The success of an educational process depends on the character, ability and effectiveness of teacher who is the cornerstone of the arch of education.

Efficiency of an educational system is primarily determined by the efficiency of teachers, the identification of able and efficient teaching personnel constitutes one of the most important of all educational concerns. Although an educational system may have excellent material resources if the teachers are incompetent or indifferent to their responsibilities the whole programme is
likely to be ineffective. This points to the need for efficient teaching personnel in our educational institutions.

Teacher effectiveness is an area of research which is concerned with relationships between the characteristics of teachers, teaching acts and their effects on the educational outcomes of class-room teaching.

Teacher effectiveness is the degree to which the teacher produces effects or to the extent to which the teacher causes the attainment of educational objectives. The effects supposed to be produced on the pupils by the teacher as measured in terms of growth of pupils in achieving education objectives, attitudes of pupil towards the teacher and the behaviour of pupils in the class-room.

By teacher effectiveness is usually meant the teacher's effect on the realization of some value. Usually the value takes the form of some educational objective, defined in terms of desired pupil behaviours, abilities or characteristics. Hence the ultimate criterion of a teacher's effectiveness is usually considered to be his effect on his pupil's achievement of such objectives.
Effective teachers were affectionate and student oriented, they tended to place the personal relationship aspects of teaching secondary to the instructional aspects. They operated as professionals who saw their role as providing the students with what the students needed, in contrast to attempting to use relationships with students to satisfy their own emotional needs.

Effective teaching, in short, results in effective learning. The teacher and the learner are both responsible therefore, for teaching-learning process. The many variables which influence learning need to be known by teachers as well as students and in order to get the best from these variables, both the teachers and the learners should strive together. On the other hand, both the teachers and the learners need to be able to recognize what is effective teaching. The teacher's knowledge of effective teaching is, indeed, more important.

There are four main reasons for measuring teaching effectiveness. In order of importance they are: to help improve teaching, to develop some standard of acceptable performance, to help make decisions on promotions and to help make salary changes based on merit.
It is evident that even though the number of parsons seeking for teaching profession is more - "there is a great shortage of educationally qualified and competent teachers" (Aaval (1977)).

The result of teacher effectiveness is effectiveness in producing student-learning gains. This skill is almost universally recognised as important for teachers in general and especially for teachers working in the early elementary grades, but it should be obvious that it is only one of many possible criteria of teacher effectiveness.

Effective teaching involves orchestration of a large number of factors, continually shifting teaching behaviour to respond to continually shifting needs.

Effective teaching is not simply a matter of implementing a small number of 'basic' teaching skills. Instead, effective teaching requires the ability to implement a very large number of diagnostic, instructional, managerial and therapeutetic skills, tailoring behaviour in specific contexts and situations to the specific needs of the moment.
Effective teachers not only must be able to do a large number of things; they also must be able to recognize which of the many things they know how to do applies at a given moment and be able to follow through by performing the behaviour effectively.

Teachers role definitions for themselves and expectations for their students are among the most fundamental teacher characteristics associated with teaching success. The most effective teachers have realistic and correct expectations concerning their students. They recognised real, differences between students' present capacities and achievement levels, they used this information to plan learning experiences.

Effective teachers also had realistic and appropriate role definitions. That is, they recognised and accepted the fundamental notion that their primary responsibility as teachers is to teach. They took personal responsibility for their students' learning and were prepared to do whatever turned out to be necessary to ensure that such learning occurred. They viewed failure as feedback telling them that new or different approaches were required. Thus, they spent little time rationalizing
learning failures, responding instead with renewed effort to circumvent the problem through alternative approaches.

This concept of the effective teacher involves considerable dedication and professionalism.

Teaching is partly an art, because of the limited knowledge base relating teacher behaviour to student outcomes. Successful teachers make use of diagnostic skills to determine what principles apply to a particular situation and then following up with problem solving skills that will enable them to reach their goals.

Teaching presently is not amenable to a qualifying procedure or accountability device capable of assessing teaching skills validity.

Researchers should concentrate their effort on discovering cause and effect relationships that will help build up a knowledge base concerning effective teaching.

The training programmes for teachers should re-examine their own goal and techniques keeping in view of the changing concept of effective teacher and restructure its programme in the light of these challenges.
Because subjective ratings by principals/supervisors are notoriously unreliable, it is essential to operationally define teacher effectiveness by some reliable and objective method. The criterion is teacher success in producing student learning gains on standardized achievement tests.

Many research did not practically include observations of the teachers class-room behaviour and therefore did not produce information about the relationships between teacher behaviour and student outcomes.

The absence of solid data on effective teaching has usually misguided activists from advocating change, often writing in purple prose laden with moralistic zeal or righteous paternalism.

For education in our country, there should be a need for locating who are good effective teachers and how are they different from poor ineffective teachers. Education should be focussed on improving the quality of teaching. The aptitude towards teaching is definitely a determinant upon which the effectiveness rest. Hence studies that probe into the different aspects of the causes of effective
teaching and teaching aptitude are very important, as they can contribute to the selection of good teachers.

A major issue in the present day education is the question of what constitutes good and effective teaching. Biddle and Ellena (1964) accepted that nobody knew what a competent teacher was.

The questions raised while considering this crucial aspect of teacher effectiveness are: Do teachers know how to teach? and do they create interest and motivation in the students to learn?

A thorough enquiry into the modes and ways the teacher employs to impart knowledge, understanding and skills are necessary.

Researches in the area of teaching effectiveness are varied in content, methodology and criteria of teaching success. Teacher effectiveness was first perceived by researchers as a consequence of characteristics or personality traits of teachers. Attempts were thus made to identify these characteristics.

If the measure of the effectiveness of teaching is the quantity and quality of learning all teaching
methods should be founded on knowledge of what is the nature of learning and what factors affect learning.

Considering the multiplicity of variations in teachers, students and materials to be learnt, it is obvious that there cannot be any one best way of teaching, there may be many best ways of both teaching and learning. Many provocative and recurring questions have been asked about what constitutes effective teaching and what characteristics make competent teachers.

Growing consciousness about the limitation of research on teacher effectiveness and the compelling need to achieve the much needed break-through to meet the emerging challenge of teacher effectiveness stimulated concerted attempts to salvage the complicated situation.

The present study not only adds to filling a research gap, pertaining to the study of the effectiveness of teachers but also it offers pointers in selecting effective teachers.

The present study will be useful to improve the effectiveness of teachers by a process of feed-back that can be developed based on the students ratings of teacher
effectiveness. The study is also useful to re-allocate teachers to teach the subjects in which they have been rated to be as more effective. The study is also useful to identify the items most liked in the teacher effectiveness scale by students. This will have far reaching implication for planning or restructuring teacher educators' training or retraining programmes. The study also helps to find out if teaching aptitude is related with teaching effectiveness.

Therefore it becomes very necessary to explore empirically the factors affecting the teaching effectiveness and teaching aptitude of school teachers. Hence the present investigation was taken up with the following objectives in view

**Objectives of the Study :**

1. To study the extent of teaching effectiveness among urban secondary school teachers.

2. To study teaching effectiveness as rated by students.

3. To estimate the extent of influence of aptitude in teaching of teachers on their teaching effectiveness.
4. To estimate the extent of teaching effectiveness among the government, private and corporation secondary school teachers.

5. To analyse the differential effect of sex, age, teaching experience, marital status and qualification of teachers on their teaching effectiveness.

There are a number of factors that would affect the teaching effectiveness of teachers: sex, aptitude in teaching, age, teaching experience, attitude of teachers towards teaching, interest in teaching, aspirations of teachers are some of the factors that could affect the teaching effectiveness of teachers.

The problem under study may be stated as "Teaching Effectiveness of Urban Teachers (as rated by their students) in Relation to Their Teaching Aptitude".

The dependent variable was teaching effectiveness of urban teachers.

The independent variables were teaching aptitude, sex of the teacher, age of the teacher, experience in teaching. Different types of schools in which they are
teaching, different subject teachers, marital status of teachers, qualification of teachers.

The following dimensions were included in the teaching effectiveness of teachers.

1. Human Relations Dimension
2. Content Dimension
3. Instructional Dimension
4. Evaluative Dimension

The present investigation is limited to the effectiveness of teachers as rated by nineth standard students who were taught by their respective teachers who formed the sample for the present study.

The studies on teacher effectiveness have examined such factors as teacher behaviour related to teacher effectiveness (Good, 1976; Sprinthall, 1964; Brophy, 1974; Stanley, 1966). Dimensions of Teacher Effectiveness related to class-room teaching (Lulla, 1974; Maheswari, 1976). Teacher characteristics related to teacher effectiveness (Singh, 1974; Patel, 1974). Teaching effectiveness as rated by students/principals (Costin, 1970; Gage, 1963; Cordes, 1982; Payne, 1976; Baughman, 1977).

There are some studies which have also examined the relationship of aptitude of teachers towards teacher effectiveness (Sharma, 1971; Fattu, 1962; Gupta, 1976). There are also studies which have examined the aptitude of teachers towards their profession namely teaching (Rita, 1981; Shantakumar, 1982; Pandey, 1968; Updahyaya, 1976; Srivatsav, 1965; Shah, 1962; Sharma, 1969).

Even though these studies have examined many factors of teacher effectiveness, there are not many studies which have specifically tried to analyse the teaching effectiveness of teachers in relation to their teaching effectiveness.
Keeping this in view, the teaching effectiveness in this study is defined as follows:

**Operational Definition of Teaching Effectiveness:**

The teaching effectiveness is defined as a measure of impact of teaching of a teacher on his/her students as perceived by the target groups of students themselves. It includes such aspects of impacts as the extent of homophily between the teacher and the taught, the extent of the transference of content within the limits of the comprehensive level of the students, the pedagogical dimensions utilised in the process of instruction and the extent of the evaluation and feedback of the students.

In the present investigation, this has been examined in terms of the following four dimensions of teaching effectiveness:

1. Human Relations Dimension
2. Content Dimension
3. Instructional Dimension, and
4. Evaluative Dimension
Human Relations Dimension (HRD):

This dimension includes such teaching behaviours patterns with an impact on the students as empathy, understanding, concern, involvement, propriety and dignity in behaviour, enthusiasm and a sense of worry and anxiety about the academic progress and personality development of the students.

Content Dimensions (CD):

The content dimension of teaching effectiveness includes such aspects of teaching behaviour of the teacher, which has an impact on the students as the mastery over the content of a good study habit, acquisition of latest knowledge and to keep oneself abreast with the contemporary development and ability of clear thinking and tackling any question related to the content under discussion. The personal studious habits of the teacher one perceived by the students, inspires them to emulate and as such the impact is forceful on the students.
Instructional Dimension (ID) :

This dimension includes such aspect of teaching behaviour, that has an impact on the students as clarity in communication, richness in language, vocabulary and grammar, pedagogical approaches towards instructions, ability to question deeply and probingly, capacity to analyze a concept logically, conceptually and effectively and have an academic approach towards instruction including proper preparedness, effective execution and comprehensive conclusion of a lesson.

Evaluative Dimension (ED) :

This dimension of teaching effectiveness include such aspects of teaching behaviours as perceived by the students as the proper utilisation of knowledge of results for motivational purposes, using test results for the purposes of feedback and academic improvement, objectivity and fairness in the process of evaluation, ability to test periodically, systematic approach to the giving of assignments, correction of assignments and informing test results as also the personal concern in the academic progress of the students and a check on the parental involvement on the progress of their wards.
The above dimensions provide an index of teaching effectiveness of teachers as perceived and rated by their own students.

**Operational Definition of Teaching Aptitude:**

In the present study, teaching aptitude is defined as that readiness of mind of an individual teacher because of which he/she gets favourably disposed towards teaching as an activity in all its various aspects.

A teacher with a high level of aptitude would take a keen interest in teaching and looks forward for a deep and personal involvement in teaching and welfare of his/her students.

**Urban Teachers:**

In the present study it is confined to the study of the teaching effectiveness of teachers in relation to a few factors of teachers, who were teaching in schools of Bangalore city only. Thus the study is limited to teaching effectiveness of urban teachers only.
Statement of Hypothesis:

A few hypotheses were stated in order to examine the effects of independent variables studies on the teaching effectiveness of teachers:

Major Hypothesis:

1. There is no significant relationship between the teaching aptitude scores and the scores in the four dimensions of teaching effectiveness.

2. There is no significant difference in the teaching effectiveness of teachers with different levels of teaching aptitude.

3. There is no significant difference in the teaching effectiveness of male and female teachers.

4. There is no significant difference in the teaching effectiveness of teachers belonging to different age groups.
5. There is no significant difference in the teaching effectiveness of teachers with different lengths of teaching experience.

6. There is no significant difference in the teaching effectiveness of teachers working in Government, Private and Corporation high schools.

7. There is no significant difference in the teaching effectiveness of trained graduate teachers and trained post-graduate teachers.

8. There is no significant difference in the teaching effectiveness of teachers teaching Science and Arts subjects.

9. There is no significant difference in the teaching effectiveness of married and unmarried teachers.

These hypotheses were tested by formulating four minor hypotheses in respect of the four dimensions of teaching effectiveness of teachers.
Please continue...

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Sampling:

The population for the present study was all those teachers who were teaching at the ninth standard level of urban high schools in Bangalore. The sampling was done in order to get school representation, teacher representation as also at the student level. Nine schools were drawn randomly from among the Government, Corporation and Private Schools of Bangalore City.

The teachers were drawn in such a way that the teachers teaching different subjects like Social Studies, Science, Mathematics and languages could be included in the sample. Thus 60 teachers were drawn for the sample. In addition to the above, in order to get the ratings of the teaching effectiveness of teachers, students, studying in ninth standard taught by these teachers also were involved in the study. Six students were randomly selected to rate two teachers. Each student rated two teachers there are 360 ratings covering 60 teachers.

From a school 12 to 30 students were involved to rate four to ten of their teachers altogether. This was done on a random basis. Thus in the present study a total number of 60 teachers formed the subject for the investigation who were rated by the total number of 180 students.
Therefore the technique of sampling adopted was stratified random technique in the case of teachers and random technique in the case of students.

**Toolsof Research :**

The following tools were used for the collection of data:

1. Teaching Effectiveness Scale
2. Teaching Aptitude Scale.

**Teaching Effectiveness Scale :**

The teaching effectiveness scale was developed by Dr B G Sudha and B S Sathyanarayana (1986) at the Department of Education, Bangalore University, which is based on students rating technique. This tool has a total number of 93 items. It has four dimensions namely Human Relations Dimension, Content Dimension, Instructional Dimension and Evaluative Dimension.

Human Relations dimension has 20 items, Content Dimension has 22 items, Instructional Dimension has 29 items and Evaluative Dimension has 22 items.
Each item has four alternative responses namely

NT = Not True;  IT = I personally feel it is True;
MT = Many of us feel it is True; and AT = All of us feel it is True.

In the case of positive statements of the scale weightages of 0, 1, 2, 3 were given for NT, IT, MT and AT respectively. For the negative items this was reversed giving 3, 2, 1, 0 for NT, IT, MT and AT respectively.

Thus the range of scores on this scale for each area varied from 0 to 60 for human relation dimension and 0 to 66 for content dimension and evaluative dimension and 0 to 87 for instructional dimension.

Higher the score, higher would be the teaching effectiveness of teachers.

This tool was given to the 180 students - 6 students would rate 2 of their teachers by responding to these items. Therefore the teaching effectiveness in this research is measured by the students rating technique and a score gets as averaged from the 6 ratings would be the teaching effectiveness score of the teacher in each component.
Validity:

The items were screened and finalised by experts and therefore the content validity of the tool is assumed.

However an attempt was made to establish content validity by computing the coefficients of correlation among the dimensions of teaching effectiveness scale. It could be inferred that the obtained coefficient of correlation are positive and high (0.72 to 0.82), the instrument has demonstrated a high degree of validity for internal consistency.

Reliability:

In order to establish the inter-rater reliability of the scale, an attempt was made to compute the coefficients of correlation among six raters in respect of each teachers with respect to the four dimensions of the teaching effectiveness tool.

It could be seen that the obtained correlations range from 0.25 to 0.95, most of the obtained correlations were moderate, positive but significant.
Therefore the instrument has appreciable degree of inter-rater reliability.

The ratings of all the six raters were averaged in respect of each teachers in each of the dimensions of teaching effectiveness which was an index of the effectiveness of the teacher for the purpose of analysis.

Teaching Aptitude Scale:

This tool was developed by Dr B G Sudha and Sri B S Sathyanarayana (1982) at the Department of Education, Bangalore University, based on paired choice technique. This tool has a total number of 36 items. Each item has two alternatives, the content of each distractor reflects a particular level of aptitude of teaching. The distractors are arranged on a random basis. The distractors are to be scored with 1 and 2 depending on the degree of aptitude, indicated by the distractors. Thus the range of scores for the tool would be from 36 to 72. The tool is based upon the assumption of unidimensionality and inclusiveness in the sense used by Guttman, though no scalogram analysis was done to the response.

The tool constructors indicate that the instrument was originally based on the analysis and 40 items, each
one being a tetrad having 4 statements indicating the different degree of aptitude. Initially the respondents (200 urban and 200 rural teachers) were asked to order or rank the statement indicating their aptitude towards teaching. The analysis of t-test was done to determine the discriminative nature of each statement between the high and low aptitude groups.

Subsequently the terms in the tool were restructured depending upon the positive and negative t-values, clearly demarcating the level of aptitude of teachers. Thus the present scale in its final form was reduced to 36 items each having two alternatives indicating the degree of aptitude. The response made was also simplified by asking the respondents to underline one of the two statements expressing their extent of aptitude.

Validity:

The items were screened and finalised by experts and therefore the content validity of the tools is assumed. As the items for the final scale was based on the t-values and hence the items were discriminative therefore the tool has got validity.
This scale is a self-rating scale in which the teachers have to rate themselves about their aptitude.

In order to get the three criterion groups of high, moderate and low in respect of teaching aptitude. The scores obtained by the teachers were projected into the frequency distribution and $Q_1$ and $Q_3$ values were computed. The computed values were $Q_1=62$ and $Q_3=66$ for low and high aptitude groups. The scores from 63 to 65 were considered as moderate group.

**Reliability**

Rita George (1981) establishes the test-retest reliability of the instrument by administering it with 40 items to a group of 10 teachers with a time interval of four weeks.

The coefficient of reliability obtained was 0.90.

Shanta Kumar (1982) establishes the test-retest reliability of the instrument by administering it with 40 items to a group of 25 teachers with a time interval of 6 weeks. The coefficient of reliability obtained was 0.40.
The present researcher established the test-retest reliability for the instrument by administering it with 36 items to a group of 16 teachers with a time interval of four weeks. The coefficient of reliability obtained was 0.85.

Therefore the scale was deemed to be valid and reliable.

Administration of Tools:

The investigator personally went to the urban schools of Bangalore district and distributed the instrument and collected them from 60 teachers and 180 students each of whom rated two teachers, thus totalling to 360 rating. Six students have rated for each teacher and each student has rated two teachers.

The aptitude scale was distributed among the teachers, who rated themselves which were collected back by the teachers after sometime. The responses of the students and teachers were scored for the two scales. The scored responses were subjected to statistical analysis.
Statistical Analysis:

The collected data were tabulated for the purpose of analysis. The separate variance model of t-test was used for testing of the hypothesis for the significance of mean differences in the teaching effectiveness scores of various groups of teachers compared.

The present study has certain limitations and therefore the findings and conclusions must be viewed in the light of the limitations.

Limitations of the Study:

1. The study was limited to the Urban samples of teachers only.

2. The study was limited to the sample of 60 teachers only.

3. The obtained effectiveness scores may suffer from the ratings of the students who might have had certain bias in their rating.

In the light of the limitations above, the findings of the research must be viewed.
Findings of the Study:

The focus of the present investigation was the "Teaching Effectiveness of Urban Teachers (as rated by their students) in Relation to the Teaching Aptitude of Teachers". This was studied in respect of its four dimensions namely Human Relations Dimension, Content Dimension, Instructional Dimension and Evaluative Dimension.

The effect of such variables as teaching aptitude, sex of the teachers, age of the teachers, experience in teaching, marital status of teachers, qualification of teachers, different types of schools in which they are working, teachers teaching arts/science subjects and trained graduate and trained post-graduate teachers were treated independently.

The analysis of the results revealed the following conclusions on teaching effectiveness among 60 teachers as rated by 180 students which formed the samples for the present study.

The analysis has revealed a moderately low but positive relationship between the factors of teaching
aptitude and the different dimensions of teaching effectiveness. However, the group comparison by the t-test did not differentiate the groups of low, moderate and high aptitude in respect of their teaching effectiveness. This would perhaps indicate that though these two factors are related, the groups as such did not reveal any appreciable differences in their effectiveness as compared to their range of their aptitudes.

Fattu (1962) and Hawsam (1960) both reviewed the research on teacher effectiveness and concluded that such research had failed to substantiate links for teaching aptitude.

Sharma (1971) found five predictors namely teaching aptitude, academic grades, SES, teaching competence and age in order of their arrangement to be the best predictors of teaching effectiveness.

Male and female teachers did not differ from each other in three components namely Human Relation Dimension, Content Dimension and Evaluative Dimension. However, female teachers were found to be more effective in teaching than the male teachers so far as the instructional dimension of teaching effectiveness is concerned. This
is in conformity with the study which is done by Colombus (1963) where he has found that effectiveness of female teachers to be better than their male counterparts due to more job satisfaction of female teachers than that of male teachers. Chaya (1974) found that sex of the teacher had significant relationship with teacher effectiveness. Ryans (1960) observed that sex difference of teachers did not have effect in lower grades but they did in higher grades.

Age of teachers did not affect the teaching effectiveness of teachers in all its dimensions, when they were classified on three groups, namely, 31 years and below, 32 to 43 years, and 44 years and above. This is in conformity with the study by Santharam (1972) who reported that there was no significant relationship between age and teacher effectiveness.

Whereas some studies are not in conformity with this finding. Ryans (1960) found a negative relationship between age and teacher effectiveness. Chaya (1974) found that age had significant effect on effectiveness of teachers. Ryans (1960) in his teacher characteristic study found significant difference between teachers of different
age groups. Buch and Quarishi (1970) found that older teachers were less indirect than younger teachers, thus they concluded that age plays an important part in shaping the teacher influence.

From the analysis it was found that marital status had no significant effect on the teaching effectiveness of teachers in all its dimensions. This has supported the earlier studies of Chaya (1974) who found that marital status had no significant effect on the teaching effectiveness. Shantaram (1972) in his study found out that male and female teachers regardless of their marital status did not differ significantly with respect to their behaviour.

As a contrast, Colombus (1963) has found that married women were more professional than men.

There was no significant effect of length of teaching experience on the teaching effectiveness of teachers.

This has support of some studies such as Hawkins and Stoops (1966) who concluded that training and years of experience appear to have no significant advantage over either formal or informal evaluation for measuring teacher competence.
There was no significant difference in all the dimensions of the teaching effectiveness of trained graduate teachers and trained post-graduate teachers.

This is in conformity with the study made by Kulsum (1981) who concluded that there is no significant difference in the teaching effectiveness of teacher-educators who are B Sc/B A and B Ed and M Sc/M A and M Ed.

As a contrast to this Hall (1954) conducted that fully certified teachers were more effective when pupils achievement scores were used as an effectiveness criterion.

It was also found that there was no significant difference in the teaching effectiveness of teachers who were teaching science subjects and teachers teaching arts subjects.

This is in conformity with the study made by Raina (1970) who found that there was no significant difference between teachers who possessed M A, M Ed on the one hand and those who possessed B Sc, M Ed on the other hand.
Lupone (1961) stated after studying 240 elementary teachers: ".... the permanently trained, received higher rating in the ability to translate subject matter into living experience, the proficiency in using effectively related materials in class-room instruction, on understanding and more sympathetic attitude towards the child...." and similar characteristics.

Fattu (1962) and Howsam (1960) both reviewed the research on predictor criteria and teacher effectiveness and concluded that such research had failed to substantiate links for such characteristics as age, experience, sex, marital status, scores on aptitude tests, job interest and special aptitudes.

Even though the factors examined for their effect on teaching effectiveness of teachers did not bring about any variations among the groups compared except in the case of sex which was found to differentiate between male teachers and female teachers so far as their instructional dimension of teaching effectiveness is concerned. A comparison of the relative effectiveness of teachers in respect of the four dimensions studied, it was found that the teachers as perceived by their students were found
to be equally effective in all the dimensions which was just average indicating that as perceived by the students, the teachers are of average effectiveness. Because the obtained average value for the group of teachers as a whole were found to be 34.54 for Human Relations Dimension, 38.92 for Content Dimension and 51.20 for Instructional Dimension and 38.85 for Evaluative Dimension. The mean values obtained were around these values:

For Human Relations Dimension the range was 32.8 to 35.8
For Content Dimension the range was 37.1 to 40.3
For Instructional Dimension the range was 48.4 to 52.6
For Evaluative Dimension the range was 37.0 to 39.8.

Therefore it may generally be concluded that the effectiveness of teachers of various groups compared is relatively average and no specific groups recorded any high degree of effectiveness in teaching.

Educational Implications:

One of the basic concerns of any teacher training programme should center-around the preparation of effective class-room teachers with a healthy and positive aptitude towards teaching as a profession. The present
investigation focussed on these two basic issues and the findings of the research are quite revealing as their educational implications are significant.

Firstly it is to be noted that the aptitude of teachers by their self-reporting indicated that their aptitude is quite high. This may be due to the fact that there is a possibility of self-rating being high and as such the reported aptitude scores are high. Perhaps there is a need to examine more objectively the aptitude status of teachers which may lead to the development of programmes for inculcating proper aptitudes towards teaching among teacher-trainees. This should form a part and parcel of the programmes of teacher education.

It is also to be noted that the quality of teachers basically depends upon their attitudes and aptitudes towards teaching profession. One of the casualties in education is general and in teacher education particular is the quality of teachers as many of them enter into teaching profession not by choice but by force. This adds to the malady that is afflicting the teacher education programme. If stringent measures could not be applied while selecting and admitting the students to teacher education programme, some measures must be evolved and
enforced in order to give a proper orientation to the admitted students so that they may mentally be prepared for teaching profession before proper competencies and abilities could be developed through training programme among them.

The effectiveness aspect of teaching, the second important dimension of teacher education also needs a re-examination in the context of the quality of teachers needed in our country. The present investigation has made an attempt to assess the effectiveness by the target groups namely the students themselves, of their own teachers. The obtained values of teaching effectiveness scores of the 60 teachers studied in different subjects like Science, Social Studies, Mathematics and languages etc. indicated that as perceived by their own students, their effectiveness is not very spectacular but rather moderate. Among them, the women teachers were found to be slightly better in their effectiveness than men teachers in respect of instructional dimension. It being true that in general women teachers are more effective and competent than the men teachers, the present research does not provide any reason to assume that this effectiveness is something extra-ordinary.
It becomes obvious therefore that the teachers' training programmes must provide some dimensions of training, especially in communication, in order to make the teachers more effective in all the dimensions of teaching profession.

It is to be recommended that special courses related to effectiveness in communication including human relations are to be advocated to be introduced at the teachers' training programmes as development of content competency and effectiveness in teaching the content may not be sufficient for a teacher to be an effective teacher with an overall perspectives.

Many techniques that are available today under the various schemes of human resource development which is an emerging phenomenon in the context of education must be utilised properly to make the teachers effective. In this context, it may be suggested that transactional analysis, sensitivity training programmes, assertive communication programmes, programmes in meta-communication principles could be properly and effectively utilised for developing among teachers, effectiveness in teaching.
The following suggestions are offered for further research in this area.

Suggestions for further Study:

1. The study may be repeated on a rural sample.

2. Other factors such as teachers' competency, teachers' attitude, teachers' personality, job satisfaction may be studied in relation to the teaching effectiveness of teachers.

3. A similar study may be undertaken with different samples of teachers like primary teachers and college teachers.