5.1 INTRODUCTION

The present chapter is continued to main findings, discussion of results, educational implications and suggestions for the further research. After the interpretation of data, the investigator was in a position to draw certain findings. The same are prescribed in subsequent section: -

5.2.0 MAJOR FINDINGS

5.2.1 Findings of obtained data for overview of dependent and independent variables

5.2.1.1 Findings related to overview of extent of Use of ICT by teachers

The study indicated that 19 percent of the teachers in the total sample were making less use of ICT. Around 18.5 percent of respondents were found to be making more use of ICT and the remaining 62.5 percent using ICT moderately.

5.2.1.2 Findings related to overview of level of teachers’ Morale

14.5 percent of respondents of the sample were having low level of morale. Around 19.5 percent of respondents had high level of morale and the remaining 66 percent had moderate level of morale. This clearly indicated that secondary school teachers differ in their morale level.
5.2.1.3 Findings related to overview of the Attitude of teachers towards ICT

Out of total teachers of the sample, 14 percent were having negative attitude towards ICT and same percentage of teachers had positive attitude towards ICT and the remaining 72 percent had neutral attitude towards ICT.

5.2.1.4 Findings related to overview of the level of Technology Competence among teachers

15.5 percent of respondents of the sample were having low level of technology competence. Around 17.5 percent of respondents had high level of technology competence and the remaining 67 percent had moderate level of technology competence.

5.2.2 Findings of obtained data through Pearson product moment correlation

5.2.2.1 Findings related to relationship between the extent of Use of ICT by teachers and their Morale

The calculated mean and S.D. values for the dependent variable i.e. ‘Use of ICT’ by teachers were 72.94 and 19.79 respectively and that of the independent variable i.e. ‘Teacher Morale’ were 275 and 30.31 respectively. The coefficient of correlation between the two factors was found to be r = 0.688 i.e. positive correlation. This was found to be significant at 0.01 level of significance for the degree of freedom 198. Hence, it can be said that there is a significant positive correlation between the extent of use of ICT by teachers and their morale. Hence, the hypothesis ‘There is a significant positive relationship between the extent of ICT use by teachers and their morale’ was accepted.

Thus it can be said that as the morale of teachers increases the extent of use of ICT by teachers increases i.e. the teachers having high morale use ICT more/ in a better way.

5.2.2.1.1 Findings related to relationship between the extent of Use of ICT by male teachers and their Morale

The calculated mean and S.D. values for the dependent variable i.e. ‘Use of ICT’ by male teachers were 72.76 and 19.83 respectively and that of the independent variable i.e. ‘Male Teachers’ Morale’ were 273.51 and 30.68
respectively. The coefficient of correlation between the two factors was found to be $r = 0.690$ i.e. positive correlation. This was found to be significant at 0.01 level of significance for degree of freedom 98. Hence, it showed that there is a significant positive correlation between the extent of use of ICT by male teachers and their morale.

Thus it can be said that as the morale of male teachers increases the extent of use of ICT by male teachers also increases i.e. the male teachers having high morale use ICT more/ in a better way.

5.2.2.1.2 Findings related to relationship between the extent of Use of ICT by female teachers and their Morale

The calculated mean and S.D. values for the dependent variable i.e. ‘Use of ICT’ by female teachers was 73.12 and 19.86 respectively and that of the independent variable i.e. ‘Female Teachers’ Morale’ was 276.46 and 30.02 respectively. The coefficient of correlation between the two factors was found to be $r = 0.686$ i.e. positive correlations, which was found to be significant at 0.01 level of significance for degree of freedom 98. Hence, it showed that there is a significant positive correlation between the extent of use of ICT by female teachers and their morale.

Thus it can be said that as the morale of female teachers increases the extent of use of ICT by female teachers also increases i.e. the female teachers having high morale use ICT more/ in a better way.

5.2.2.2 Findings related to relationship between the extent of Use of ICT by teachers and their Attitude towards ICT

The calculated mean and S.D. values for the dependent variable i.e. ‘Use of ICT’ by teachers was 72.94 and 19.79 respectively and that of the independent variable i.e. ‘Teachers’ Attitude towards ICT’ was 131.86 and 15.04 respectively. The coefficient of correlation between the two factors was found to be $r = 0.762$ i.e strong positive correlation, which was found to be significant at 0.01 level of significance for the degree of freedom 198. Hence, it can be said that there is a
significant positive correlation between the extent of use of *ICT* by teachers and their attitude towards *ICT*. Hence, the hypothesis ‘There is a significant positive relationship between the extent of *ICT* use by teachers and their attitude towards *ICT*’ was accepted.

Thus it can be said that as the attitude towards *ICT* of teachers is positive the extent of use of *ICT* by teachers increases i.e. the teachers having positive attitude towards *ICT* use *ICT* more/ in a better way.

5.2.2.2.1 Findings related to relationship between the extent of Use of *ICT* by male teachers and their Attitude towards *ICT*

The calculated mean and S.D. values for the dependent variable i.e. ‘Use of *ICT*’ by teachers was 72.76 and 19.83 respectively and that of the independent variable i.e. ‘Male Teachers’ Attitude towards *ICT*’ was 131.11 and 16.08 respectively. The coefficient of correlation between the two factors was found to be $r = 0.778$ i.e. Positive correlation, which was found to be significant at 0.01 level of significance for the degree of freedom 98. Hence, it showed that there is a significant positive correlation between the extent of use of *ICT* by male teachers and their attitude towards *ICT*.

Thus it can be said that as the attitude towards *ICT* of male teachers is positive the extent of use of *ICT* by male teachers increases i.e. the male teachers having positive attitude towards *ICT* use *ICT* more/ in a better way.

5.2.2.2.2 Findings related to relationship between the extent of Use of *ICT* by female teachers and their Attitude towards *ICT*

The calculated mean and S.D. values for the dependent variable i.e. ‘Use of *ICT*’ by female teachers was 73.12 and 19.86 respectively and that of the independent variable i.e. ‘Female Teachers’ Attitude towards *ICT*’ was 132.61 and 13.96 respectively. The coefficient of correlation between the two factors was found to be $r = 0.749$ i.e. positive correlation, which was found to be significant at 0.01 level of significance for the degree of freedom 98. Hence, it showed that there is a significant positive correlation between the extent of use of *ICT* by female teachers and their attitude towards *ICT*.
Thus it can be said that as the attitude towards ICT of female teachers is positive the extent of use of ICT by female teachers increases i.e. the female teachers having positive attitude towards ICT use ICT more/ in a better way.

5.2.2.3 Findings related to relationship between the extent of Use of ICT by teachers and their Technology Competence

The calculated mean and S.D. values for the dependent variable i.e. ‘Use of ICT’ by teachers was 72.94 and 19.79 respectively and that of the independent variable i.e. ‘Teachers’ Technology Competence was 127.86 and 21.60 respectively. The coefficient of correlation between the two factors was found to be r - 0.508 i.e. positive correlation, which was found to be significant at 0.01 level of significance for the degree of freedom 198. Hence, it can be said that there is a significant positive correlation between the extent of use of ICT by teachers and their technology competence. Hence, the hypothesis ‘There is a significant positive relationship between the extent of ICT use by teachers and their technology competence’ was accepted.

Thus it can be said that as the technology competence of teachers increases the extent of use of ICT by teachers increases i.e. the teachers having high level of technology competence use ICT more/ in a better way.

5.2.2.3.1 Findings related to relationship between the extent of Use of ICT by male teachers and their Technology Competence

The calculated mean and S.D. values for the dependent variable i.e. ‘Use of ICT’ by male teachers were 72.76 and 19.83 respectively and that of the independent variable i.e. ‘Male Teachers’ Technology Competence were 127.32 and 22.40 respectively. The coefficient of correlation between the two factors was found to be r - 0.543 i.e. positive correlation, which was found to be significant at 0.01 level of significance for the degree of freedom 98. Hence, it showed that there is a significant positive correlation between the extent of use of ICT by male teachers and their technology competence.

Thus it can be said that as the technology competence of male teachers increases the extent of use of ICT by male teachers increases i.e. the male teachers having high level of technology competence use ICT more/ in a better way.
5.2.2.3.2 Findings related to relationship between the extent of Use of ICT by female teachers and their Technology Competence

The calculated mean and S.D. values for the dependent variable i.e. ‘Use of ICT’ by female teachers were 73.12 and 19.86 respectively and that of the independent variable i.e. ‘Female Teachers’ Technology Competence were 128.41 and 20.86 respectively. The coefficient of correlation between the two factors was found to be r = 0.471 i.e. positive correlation, which was found to be significant at 0.01 level of significance for the degree of freedom 98. Hence, it showed that there is a significant positive correlation between the extent of use of ICT by female teachers and their technology competence.

Thus it can be said that as the technology competence of female teachers increases the extent of use of ICT by female teachers increases i.e. the female teachers having high level of technology competence use ICT more/ in a better way.

5.2.3 Findings of obtained data through Analysis of Variance

5.2.3.1 Findings related to difference between male and female teachers in terms of ICT use in relation to their Morale

Gender Factor

The computed F-value for gender factor was 0.070, which was found to be non significant at 0.05 level of confidence. It indicated that there exists no significant difference between male and female teachers in terms of ICT use. Hence, the hypothesis ‘There is a significant difference between male and female teachers in terms of ICT use’ was rejected.

From this it may be concluded that gender factor does not affect the level of ICT use. Further the mean score of male teachers was 72.76 and it was slightly lower than the mean score of the female teachers i.e. 73.12 in terms of use of ICT. It indicates that the extent of use of ICT among the female teachers is marginally higher than their male counterpart.

Morale Factor

The computed F value for morale factor was 113.765, which was found to be higher than the table value 6.76 at 0.01 level of confidence. It indicated that there
exists a significant difference between high and low morale teachers in terms of ICT use. Hence, the hypothesis ‘There is a significant difference between the high and low morale level of teachers in terms of ICT use’ was accepted.

From this it may be concluded that morale factor has significant effect on the level of ICT use. Further the mean score of teachers possessing low morale was 61.33 and it was lower than the mean score of the teachers possessing high morale i.e. 85.27 in terms of use of ICT. It indicates that the extent of use of ICT among the teachers possessing high morale is higher than the teachers possessing low morale.

(Gender x Morale) Interaction Factor

The computed F value for interaction factor between gender and morale was 0.004, which was found to be lower than the table value 3.89 at 0.05 level of confidence. It indicated that there exists no significant difference between gender and morale of teachers in terms of ICT use. Hence, the hypothesis ‘There is a significant difference between the extent of ICT use by male and female teachers in relation to their morale’ was rejected. From this it may be concluded that there was no significant effect of interaction among gender and morale factor on the level of ICT use.

5.2.3.2 Findings related to difference between male and female teachers in terms of ICT use in relation to their Attitude towards ICT

Gender Factor

The computed F-value for gender factor was 0.082, which was found to be non significant at 0.05 level of confidence. It indicated that there exists no significant difference between male and female teachers in terms of ICT use. Hence, the hypothesis ‘There is a significant difference between male and female teachers in terms of ICT use’ was rejected.

From this it may be concluded that gender factor does not affect the level of ICT use. Further the mean score of male teachers was 72.76 and it was slightly lower than the mean score of the female teachers i.e. 73.12 in terms of use of ICT. It indicates that the extent of use of ICT among the female teachers is marginally higher than their male counterpart.
Attitude toward ICT Factor

The computed F value for attitude towards ICT factor was 213.340, which was found to be higher than the table value 6.76 at 0.01 level of confidence. It indicated that there exists a significant difference between teachers having positive and negative attitude towards ICT, in terms of ICT use. Hence, the hypothesis ‘There is significant difference between the positive and negative attitude towards ICT in terms of ICT use’ was accepted.

From this it may be concluded that attitude towards ICT factor has significant effect on the level of ICT use. Further the mean score of teachers having positive attitude towards ICT was 88.85 which was higher than the teachers having negative attitude towards ICT i.e. 60.18 in terms of use of ICT. It indicates that the extent of the use of ICT among the teachers having positive attitude towards ICT is higher than the teachers having negative attitude towards ICT.

(Gender x Attitude toward ICT) Interaction Factor

The computed F value for interaction factor between gender and attitude towards ICT was 0.153, which was found to be lower than the table value 3.89 at 0.05 level of confidence. It indicated that there exists no significant difference between gender and attitude towards ICT of teachers in terms of ICT use. Hence, the hypothesis ‘There is a significant difference between the extent of ICT use by male and female teachers in relation to their attitude towards ICT’ was rejected. From this it may be concluded that there was no significant effect of interaction among gender and attitude towards ICT factor on the level of ICT use.

5.2.3.3 Findings related to difference between male and female teachers in terms of ICT use in relation to their Technology Competence

Gender Factor

The computed F-value for gender factor was 0.046, which was found to be non significant at 0.05 level of confidence. It indicated that there exists no significant difference between male and female teachers in terms of ICT use. Hence, the hypothesis ‘There is a significant difference between male and female teachers in terms of ICT use’ was rejected.
From this it may be concluded that gender factor does not affect the level of ICT use. Further the mean score of male teachers was 72.76 and it was slightly lower than the mean score of the female teachers i.e. 73.12 in terms of use of ICT. It indicates that the extent of use of ICT among the female teachers is marginally higher than their male counterpart.

**Technology Competence Factor**

The computed F-value for technology competence factor was 58.217, which was found to be higher than the table value 6.76 at 0.01 level of confidence. It indicated that there exists a significant difference between high and low technology competence level of teachers in terms of ICT use. Hence, the hypothesis ‘There is a significant difference between the high and low technology competence level in terms of ICT use’ was accepted.

From this it may be concluded that technology competence factor affect the level of ICT use. Further the mean score of high technology competence group of teachers was 82.47 which were higher than the mean score of low technology competence group of teachers i.e. 63.59 in terms of the use of ICT. It indicates that the extent of the use of ICT among the teachers having high level of technology competence is higher than the teachers having low level of technology competence.

**(Gender x Technology Competence) Interaction Factor**

The computed F value for interaction factor between gender and technology competence was 0.374, which was found to be lower than the table value 3.89 at 0.05 level of confidence. It indicated that there exists no significant difference between gender and technology competence of teachers in terms of ICT use. Hence, the hypothesis ‘*There is a significant difference between the extent of ICT use by male and female teachers in relation to their technology competence*’ was rejected. From this it may be concluded that there was no significant effect of interaction among gender and technology competence factor on the level of ICT use.

5.3 **TESTING OF HYPOTHESES**

It may be concluded from the above findings that use of ICT by secondary school teachers is significantly related to morale level of teachers’, their attitude
towards ICT and technology competence factors. Findings show that teachers having high level of morale and technology competence use of ICT more/ in a better way as compare to teachers having low level of morale and technology competence. Similar findings are shown by attitude towards ICT factor, teachers possessing positive attitude towards ICT use of ICT more/ in a better way as compare to the teachers possessing negative attitude towards ICT. But gender has no significant effect on ICT use. The fundamental variable of the study included: (1) teachers’ morale level; (2) attitude towards ICT of teachers; (3) technology competence of teachers.

The retention of the three hypotheses of the study namely (1) There is a positive relationship between the extent of ICT use by teachers and their morale; (2) There is a positive relationship between the extent of ICT use by teachers and their attitude towards ICT; (3) There is a positive relationship between the extent of ICT use by teachers and their technology competence does prove the importance of these factors in assessing the extent of use of ICT by teachers, which indeed has the special impact on teachers’ teaching in present scenario of technology and communication, making teaching and learning an effective, purposeful and appropriate, especially at the secondary school level.

5.4 DISCUSSION OF RESULTS

This study explored the effective use of ICT by teachers in relation to important factors that influence the secondary school teachers to use ICT effectively in their classrooms. Present research also examined domains to assess the morale level, attitude of teachers towards ICT and technology competence of secondary school teachers.

This study primarily aimed at studying extent of use of ICT by secondary school teachers, adjudging their morale level, attitude towards ICT and technology competence level. The secondary aim was to see the relationship of use of ICT with other variables and also the difference of these variables in terms of use of ICT with respect to gender.
The subsequent chapter deals with the discussion of findings in sequence as:

- Discussion of results pertaining to Use of ICT
- Discussion of results pertaining to Teachers’ Morale
- Discussion of results pertaining to Teachers’ Attitude towards ICT
- Discussion of results pertaining to Teachers’ Technology Competence

**Discussion of results pertaining to Use of ICT**

Majority of the teachers of selected secondary schools of Haryana were found to be at moderate level in their use of ICT and approximately the same number of teachers were in low and high level of use of ICT. This could be ascribed to different types of reasons. Perhaps, it is because of availability of infrastructural facilities, working conditions, technological knowledge, commitment to pupils’ learning and concerns about their own professional growth which stand corroborated with the findings of Pelgrum (2001), Knezek and Christensen (2002), M. Rajesh (2003), Plessis & Webb (2012), Albugami & Ahmed (2015) and Chandra (2015) who found that poor working conditions and lack of infrastructure in schools may lead to less use of ICT by teachers. Similarly, those teachers who are motivated, encouraged and have strong commitments to their pupils’ learning and their own professional development integrated computers more easily within their teaching (Chandra, 2015; Copriady, 2014; Abbas Zare-ee, 2011; Becker & Riel, 2000; Becker, 1994; Hadley & Sheingold, 1993; Sheingold & Hadley, 1990). Use of ICT by teachers was also influenced by lack of knowledge and skill, technical problems and shortage of time as shown in the findings of Tosun & Baris (2011), Yang (2012), Bozdogan & Ozen (2014), Albugami & Ahmed (2015) and Elzbieta Gajek (2015).

Further, the results indicated that use of ICT by female teachers was marginally higher than their male counterparts. The reason could perhaps be that they had more command over their subject. Their confidence level and healthy relationship with the staff and students could be another contributing factor towards better performance. The results of this study were contradictory to the findings of Jamieson-Proctor, Watson, & Burnett, (2006).
Discussion of results pertaining to Teachers’ Morale

Percentage of teachers with high level of morale was comparatively higher than teachers with low morale. This may have been due to ten factors viz- teacher rapport with principal, satisfaction with teaching, rapport among teachers, teacher salary, teacher load, curriculum issues, teacher status, community support of education, school facilities and services and community pressures used for defining secondary school teachers’ Morale. Findings of Anderson (2000), Cooper (2001), Baylor & Ritchie (2002) also showed support of school administration, rapport among teachers, community support of education, total job satisfaction and student behavior as significant factors affecting morale of teacher.

Further mean score of teachers possessing low morale was lower than the mean score of the teachers possessing high morale in terms of the use of ICT. This indicated that the extent of the use of ICT among the teachers possessing high morale was higher than the teachers possessing low morale. These results were also in accordance with the study of Baylor & Ritchie (2002) that stated that those teachers who incorporate technologies, their own level of technical competence increases, as does their morale.

Results also indicated that there exists no significant difference between gender and morale of teachers. This was similar to the findings of Eggers (2012) but opposite to the findings of Savadanuthu (1994) and Blackbourn & Wilkes (2003) who stated morale of women teachers is higher than that of men teachers.

Discussion of results pertaining to Teachers’ Attitude towards ICT

The present study on the basis of attitude towards ICT revealed that the majority of the secondary school teachers’ attitude towards ICT was neutral. Reasons for being neutral could have been lack of availability of technology, less use of computer due to feeling of burden, lack of training in using computer, level of accessibility to school computers, lack of ICT knowledge and computer ownership. The results were in accordance with the findings of Na (1993) & Pelgrum (2001) who concluded that there is a significant correlation between computer access and attitude towards computer also there is a significant relationship between the proximity of computers and the number of access resources (home and school) on
the one hand, and, on the other, teachers’ attitudes toward computers. Similar results were shown by Varol (2013) who concluded that teachers’ attitude toward technology is at medium level and teachers’ ICT engagement predicts their attitude towards technology and self-confidence for teaching with technology.

Results also suggested that there is a significant positive correlation between the extent of ICT use by teachers and their attitude towards ICT. Similar results were shown by Kersaint, Horton, Stohl, & Garofalo (2003); Hew & Brush (2007); Drent & Meelissen (2008); Keengewe & Onchwari (2008); Demici (2009); Hue & Jalil (2013) and Lal (2014). They found that teachers who have positive attitudes towards technology feel more comfortable with using it and usually incorporate it into their teaching. Similarly Bullock (2004) found that teachers’ attitudes are a major enabling/disabling factor in the adoption of technology.

Results of the present study showed that the teachers’ attitudes towards ICT were the principal determinant of effective ICT use in classroom as supported by the findings of Demetriadis, et al. (2003) and Albirini (2006). Though the mean score of female teachers was a bit higher than the mean score of male teachers, it did not promise any noteworthy difference. Shah and Agarwal (1994), in their study evaluated teachers’ attitude towards computer education as well as Computer Assisted Instruction (CAI). The results showed positive attitude in all the groups, though female teachers showed more positive attitude towards computer-assisted instruction (CAI). However, Francis, 1994 and Jones, 1998 found a significant relationship between gender and attitudes toward computers. For instance, Francis (1994) found that males are more enthusiastic and more confident using computers than females. However, as far as the present study is concerned, whatever the difference between the scores of the male and female teachers belonging to secondary schools existed, it was due to fluctuation in sampling and chance factor.

One of the results related to attitude was that there exists no significant difference between gender and attitude towards ICT of teachers in terms of ICT use. These findings were in consonance with the findings of Rouquia (2001) & Annaraja & Joseph (2006) study on teacher trainees’ attitude towards ICT. Their findings indicated that there is no significant difference between male and female teacher
trainees in their attitude towards ICT. Similarly Cavas, Cavas, Karaoglan & Kisla (2009) also concluded that teachers’ attitude towards ICT do not differ regarding gender.

**Discussion of results pertaining to Teachers’ Technology Competence**

Secondary school teachers differ in their level of technology competence. This may be due to the teacher factors that involved beliefs about the way the subject should be taught and skills associated with competence in managing classroom activities and computer-handling technical skills as showed by Veen (1993), that teacher factors far outweighed the institutional or school factors. Despite essential technical support provided by the school and a positive attitude to IT from the school principal, personal level factors influenced teachers’ take-up of ICT.

Another finding of the present research was that as the technology competence of teachers increased, the extent of use of ICT by teachers was also found to increase i.e. the teachers with high level of technology competence made use of ICT more. This could have been due to teachers’ personal feelings. While the schools encouraged ICT use, the real take-up depended largely on teachers’ skills and attitudes to IT in general. These findings were in accordance with the results shown by Cox, Preston & Cox (1999) that teachers who have a high value for ICT and perceive it to be useful, completely transform their teaching. Afshari, Bakar, Luan & Siraj (2012) showed that computer competence has a positive relationship with the level of computer use.

The result concerning the relationship between the extent use of ICT by female teachers and their technology competence revealed that there exists a significant positive relationship between extent of ICT use by female teachers and their technology competence. Though the mean score of female teachers was a bit higher than the male teachers belonging to secondary schools, it did not reflect any noteworthy difference. Whatever the difference between the scores of the male and female teachers belonging to secondary school existed; it was due to fluctuation in sampling and chance factor. Thus, it can be concluded that the teacher technology competence is the principal determinant of effective ICT use in classroom as
supported by the findings of Knezek and christense (2002), Islleem (2003).

One of the results from present study showed that there exists no significant difference between gender and technology competence of teachers in terms of ICT use, which is contradictory from the study of Meredyth et al. (1999). They had concluded from their study that teacher’ characteristics, such as gender, computer ownership, computer experience, and school education level, as well beliefs about teaching and learning with computers, perception of their technological skills were all significant influences on the ICT classroom environment.

5.5 EDUCATIONAL IMPLICATIONS

The most outstanding characteristics of any research is that it must contribute something new to the development of the area concerned. So, an investigator should find out the educational implications of her study. This study has implications for teachers, students in particular and the whole educational system in general.

Technology is becoming more and more dominant in our society. Technology is all around us whether we want it to be or not: it is the vehicles we drive. Upgrades are being made and new innovations are being discovered every day in field of information and communication technology (ICT). ICT has had a major impact on our school systems and is still impacting it today. ICT enables all students to master more complex subjects via rich interactions with resources outside of classroom walls just as geographically distributed workers create, share, and master knowledge. Thus technology is impacting the young mind to a great extent. However, the issue is not whether instructional tools are more efficient at accomplishing current goals of education, but instead how much is this emerging technology being explored by teachers in their classrooms with high morale, positive attitude and required technology competence, so that it can provide an effective means of reaching essential educational objectives in the technology-driven evolution of a knowledge-based economy.

This research attempted to provide a few recommendations that may help in developing morale, attitude towards ICT and technology competence among secondary school teachers. These are offered in the subsequent section under the heading suggested implications of the present study.
This study revealed that majority of the secondary school teachers are at a moderate level of use of *ICT*. In order to make teachers reach a higher level of use of *ICT*, there is a need to implement more *ICT* resources and to provide opportunities to them to utilize and integrate *ICT* to its fullest potential in their classrooms.

Findings from the study also suggested that majority of the teachers have moderate level of morale, neutral attitude towards *ICT* and moderate level of technology competence. These in turn have affected educational objectives in present scenario of technology. For effective use of *ICT*, teachers should have more use of *ICT*, positive attitude towards *ICT*, high level of Technology Competence. Therefore, there should be a collaboration in working of the Principal, teachers, administration and society for high level of morale development in teachers. Teachers should be concerned about learners’ learning, their own professional development and keeping him/her self updated to have positive attitude and becoming technology competent.

Training programmes should be run by administration bodies to make teachers competent in using emerging *ICT* in their classrooms. Teachers should be encouraged and motivated by giving some awards and incentives on integrating technology in their classroom by principles and administration to develop positive attitude towards *ICT*.

Curriculum and time table should be flexible for utilizing full potential of *ICT* in teaching and learning so that teachers do not hesitate in integrating *ICT* due to lack of time and taking it as separate from curriculum.

It is concluded from the study that there is a positive correlation between use of *ICT* and all other variables. Efforts of teachers using *ICT* should be recognized and outstanding achievements of its teachers should be celebrated, so that it increases their morale and attitude towards *ICT*. Efforts to provide opportunities to attend special awareness programmes of *ICT* use should be provided to such teachers so that they become technologically competent as well.

Parents and community should also create supportive learning environment, towards use of *ICT*, which in turn affect teachers’ attitude towards *ICT*. 
To increase the level of teachers’ morale students’ and teachers’ collaboration across the world in sharing educational views on various internet facilities should be encouraged by school, teachers themselves and the parents.

Teachers’ requirements should be considered while developing educational softwares so that they use these ICT tools and develop a positive attitude towards ICT.

Since the use of information technology helps to develop leadership qualities and communication skills in the students, the teachers can encourage the learners to live a better life in the future. Today’s classroom environment is suitable for encouraging the students to face the challenges of globalised world. Thus efforts should be made by the state and the centeral government to support teachers in all possible ways to enhance use of technologies in the classrooms.

5.6 SUGGESTIONS FOR FURTHER RESEARCH

The study could be replicated

- to explore use of ICT by pre-service teachers.
- to explore use of ICT by teachers at different grade level.
- to explore use of ICT by teachers in relation to other factors like teachers’ adoption of ICT, self efficacy, teaching competence and perception.
- to explore use of ICT in government schools.
- on a large sample for validation and could be done in a whole state by taking a single or more factors at a time.

Tools for data collection can be developed to study use of ICT by students in different subjects at different grade level, as also to determine the extent to which it could be used within the existing conditions and parameters in schools and other educational institutions.