CHAPTER V: FINDINGS AND DISCUSSION

5.1.0 INTRODUCTION
5.3.0 MAJOR FINDINGS
5.4.0 DISCUSSION
5.5.0 IMPLICATIONS OF THE PRESENT STUDY
5.5.0 SUGGESTIONS FOR THE FURTHER STUDY
CHAPTER V
FINDINGS AND DISCUSSION

5.1.0 INTRODUCTION

After having presented the data analysis and data interpretation the next thing is to give a comprehensive and elaborative picture of the scenario that emerged from the process done in the previous chapter. In the present chapter an attempt has been made to provide the reader a gist of the study through major findings followed by discussion.

5.2.0 MAJOR FINDINGS

The major findings that emerged from the present study are as follows.

1. The achievement of the students in English grammar taught through CAI was found significantly higher than that of the students taught through traditional method. Hence it can be said that teaching English grammar through CAI is comparatively better than traditional method in terms of the achievement of the students.

2. The achievement of the students taught through only CAI was found significantly higher in English grammar than that of the students taught through traditional method. Hence it can be said that teaching English grammar through only CAI is comparatively more effective than the traditional method in terms of the achievement of the students.

3. The achievement of the students taught through CAI with Repetition was found significantly higher than the achievement of the students who were taught through traditional method. Hence it can be concluded that the teaching of English grammar through CAI with repetition was more fruitful than the teaching of English grammar with traditional method.

4. The achievement of the students taught through CAI with Discussion was found significantly higher than the achievement of the students who were taught through traditional method. Hence it can be concluded that the teaching of English
grammar through CAI with Discussion was more effective than the teaching of English grammar with traditional method.

5. From the three modes of the presentation of this CAI, the mode i.e. teaching through CAI with discussion was found significantly superior in comparison to other two modes i.e. only CAI and CAI with repetition in terms of students’ achievement in English grammar. No significant difference was found between two modes that only CAI and CAI with repetition.

6. CAI was also found to be effective in terms of the reaction of the students. As most of the students showed favorable reaction towards most of the components of CAI and CAI as a whole.

5.3.0 DISCUSSION

Technology has a great impact on most of the fields of the society and education has not lagged behind from that. Now-a-days people related to education have become aware to exploit the benefit of it. They also recommended the use of technology in teaching learning process. One of the things of the technology is computer and it has the advanced features related to the particular field. Thus the researcher had tried to make use of computer for teaching - learning process and tried to measure effectiveness of teaching of English grammar using the Computer Assisted Instruction (CAI) in different modes.

It can be seen from the reviewed literature that the technology has a greater impact on all the spheres of life including education, and teaching of English also can be benefitted with it. In the similar way there are reviewed studies, which support the findings of the present study and some of them show opposite result to the findings of the present study. Here the researcher is discussing the findings of the present study in relation to these two aspects.

Joseph (1983) has evolved a strategy for teaching English grammar at high school level. The strategy was based on PLM and it has showed the positive result in terms of the effectiveness of PLM. So the study by Joseph also supports the findings of the present study. Kapadia (1988) conducted study related to remediation of errors in
English grammar. To remediate the errors PLM was used and the in the line with present research it also showed positive result. **Dubey (1990)** used a play-way self learning technique and the traditional method of teaching Hindi at initial primary stage to compare the effectiveness. Similar to present study other method than the traditional one was found effective. It was also a self learning play way method which similar to the present study as the developed CAI also has the potential to be a self learning material. The teaching of English grammar in different modes also tested to find out the effectiveness. **Das (1998)** also conducted similar study. But the study done by Das was related to nursery rhymes in different modes. The result of the present study is in line with the results of earlier study that had shown that the use of computer was effective in teaching learning. **Khirwadkar (1998)** also studied the effectiveness of CAI and it also proved effective to teach chemistry to std. XI students, which is similar to the result of the present study. The study by **Zyoud (1999)** also supports the findings of the present study as it proved to be effective to teach vocabulary and grammar to Gujarati medium students. The foreign studies of **Gabrielle (2003)** also supports the findings of the present study and shows that systematically designed technology-mediated instructional strategies can positively effect motivation, performance, and self directed learning of the students. **Floyed (2006)** also shows the findings in line with the present study as it shows that the use of technology has positive effect on students’ achievement as it increases students’ achievements.

Besides above studies which support the findings of the present study, there are studies which do not support the findings of the present study. They are the studies conducted by **Sabharwal (1978), Charsky (2004)**. Both the studies meant to check the effectiveness of Programmed Auto Learning vis-à-vis other methods, it was found that the grammar translation method and the bilingual methods were more effective than the programme learning. The present study shows the opposite result to the study by **Sabharwal (1978)** where programme learning was not as effective as other two methods of teaching. The study by **Charsky (2004)** indicated that there was not a significant difference between the treatment groups in computer games and concept map and historical understanding.
The study of Sabharwal showed opposite findings which may be due to the type of programme learning in past. The type of programmed learning which is prepared in present include much more advanced aspects than which were used. The present CAI or programmed learning materials take care of more senses of the student. So it may be giving better result.

The findings of the present study showed that the developed CAI was more effective than the traditional method of teaching. It may be due to that the teaching through traditional method does not take care of inclusion of more senses of the students in comparison to that of CAI. Other reason can be that the students have to learn whatever the teacher teaches to them in the class, though they are interested or not but here the developed CAI has visual effect with animation which might have proved more effective then the hearing effect of the traditional method. In addition to that the developed CAI has pictures of life like situation and model structures related to them. The students might have made use of their understanding as well as their imagination, experiences through the co ordination of the learnt things with different situations. The other benefit was that the students could learn the topic of their own interest which might have helped for better learning. Thus the over all effect of CAI in comparison to traditional method was found to be more effective.

The modes of teaching through only CAI, CAI with repetition and CAI with discussion were also found to be better in comparison to traditional method of teaching English grammar. The reasons of that may be similar to the above mentioned ones as well as due to the scope of repetition and clarifying doubts through discussion.

In comparison to different modes of teaching the mode-CAI with discussion found to be most effective among three. It may be due to the scope of discussion which is present in this mode. It might have helped the students to have more clarity about the topics. The group CAI with repetition was not found more effective than only CAI, it shows that the repetition of CAI does not have any effect on the achievement of the students in comparison to only CAI. The student learning through CAI once or more than once, their learning through repetition of CAI has very less effect on their achievement.

The reactions of the students were found favorable. The reasons behind that may be the difference in teaching-learning process itself, the colour of the pictures,
background of the slides, relevance of the pictures with their lives, usability of the learnt topics in life through pictures and structures, animation effects to pictures, freedom of learning and clarity of explanation presented in the CAI. Even the students of this level like the animation, pictures which might have developed their liking for the developed CAI.

5.4.0 IMPLICATIONS OF THE PRESENT STUDY

"The illiterate of the future will not be the person who cannot read.
It will be the person who does not know how to learn and change
themselves according to the time."
-Alvin Toffler, Future Shock, 1999

In line with above words, it can be elicited easily that the teacher and teaching should be changed as per the context and with the passage of time. Presently if one notices the use of technology, then one may find the students much more advanced than the teachers in its use. The technology has shown its great effect on the mind of the students so the present study is an effort to make use of computer in teaching of English grammar and the effect of that on the learning of the students. It was just an attempt to find out an innovative way of teaching grammar and to check the effectiveness. The following are some of the suggested implications of the present study on the basis of the major findings.

- To increase the effectiveness of teaching of English grammar the teachers should make use of computer or other technology so that the students get interest in learning.
- Not only the topics which were taught through the developed CAI by the researcher but other topics also should be taught with the help of this kind of package.
- The teaching through this kind of CAI effects more senses of the students and they make use of the learnt concepts in their real life.
- CAI with repetition and discussion mode shows the innovative way of using CAI in different way and making teaching learning more fruitful and interesting.
• Using only CAI for teaching learning has showed positive result as well as views in past but it can be used with discussion for better understanding of the students.
• CAI proved to be reducing the burden of the student as well as the teachers by increasing the capacity of both of them.

5.5.0 SUGGESTIONS FOR THE FURTHER STUDY

Since the present study was delimited to few topics of English grammar, the students of Bright School and power point presentation only the researcher would like to suggest some more topics for the further research.

• The same CAI can be used with some other modes.
• Other topics of English grammar can also be taught with the help of CAI.
• CAI based on prose or poetry aspect can also be prepared to teach literary aspects in much more interesting way.
• Much more advanced package can be developed for teaching same or similar topics of English grammar for future research.
• The effectiveness of the same CAI can be tested by taking other variables like gender and the urban rural background.
• True experimental design can be considered if feasible for better generalization.
• CAI can be prepared using other software like flash, max for better clarity and animation.
• Similar study can be conducted for the student of other board like CBSE or ICSE.