CHAPTER VI

DISCUSSION & IMPLECATIONS

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6.0 INTRODUCTION

This Chapter presents the discussion of the findings of the study, implication of the findings and suggestions for further researches.

6.1 DISCUSSION

The first objective of the study is to develop a Computer-Assisted English Language Teaching Programme for Std.VIII Gujarati medium students. The researcher developed the Package by selecting four lessons from the English Textbook of VIII standard Gujarati medium (published by Gujarat Text Book Board,1992). The Package was developed by using BASICA the computer programming language. Content analysis and systematization of the materials were done at the beginning before developing the Package. The present study focused on students' achievement in Vocabulary, Grammar and Comprehension. It also focused on the influence of IQ, Motivation and Attitude of the students on their achievement in the three variables as mentioned above. While reviewing the literature the researcher did not come across any study which deals directly with the impact of IQ, Motivation

and Attitude on students' Achievement in the three variables in any Computer Assisted Learning. Many studies were reviewed which dealt with the effect of Computer-assisted instruction on students achievement in Vocabulary, Grammar, and Comprehension separately, others dealt with the effect of Computer-assisted instruction on Vocabulary and Comprehension but there was no study which deals with the three variables together and the impact of IQ, Motivation and Attitude on the students' achievement on the three variables as the present study. Therefore the study has its own significance.

The second objective of the study is to study the effectiveness of the Computer-Assisted English Language Teaching Programme on students' Achievement in Vocabulary, Grammar and Comprehension. Analysis of the data revealed that the Computer-Assisted English Language Teaching Programme was an effective individualized instructional technique for teaching English to standard VIII Gujarati medium students. It helped the students in the Experimental group to learn and achieve more than the Control group in Vocabulary and Grammar. Whereas, in Comprehension the package seemed to have no effect on the students' Achievement. The Experimental group achievement in Vocabulary may be attributed to the fact that the package has provided them with more freedom, which the

Control group might have not had. Students of the Experimental group learned at their own pace with little involvement of the teacher, whereas in the Control group, the students were under the teacher's control. The Experimental group students were provided with three chances before they could see the right answer on the screen, this also might have helped them in memorizing the words because the key to Vocabulary development is practice, the more often the word is practiced, the more likely it is to become part of a student's own personal Vocabulary. Each word was matched with a graph to help the students find out the meaning of the word, this also might had an impact on their achievement. This finding was supported by the findings reported by Avent (1994), Kang(1995), Kolich(1986) and James (1989). Avent (1994) found that at every ability level the mean score of the computer group was higher than that of the language lab group, and at every instance the mean score of the computer group was higher than that of the language lab group. The mean scores were significantly higher for computer taught items than for non-computer taught items. Kang (1995) strongly suggested that the proposed context-embedded approach to second language Vocabulary learning was most effective in promoting knowledge transfer, listening Comprehension, and long term recall Vocabulary definitions. Kolich (1986) found that after the analysis

of the post-test and delayed post-test scores the Experimental group achieved significantly higher Vocabulary scores than the Control group. James (1989) found that Computer-assisted instruction is accepted to primary grade students, is an effective tool for individualized drill and practice, and has the potential to be a useful adjunct to classroom reading instruction.

The Experimental group's achievement in Grammar can also be attributed to the nature of the presentation of the materials. It was revealed that examples and illustrations helped the students in memorizing the concepts, the exercise followed each concept helped the students in understanding the concept. While working with computer the students were not afraid of committing any mistakes because no one is going to scold them if they commit any. They were provided with two chances for answering before they can see the right answer on the screen. This kind of feedback are not provided in the classroom of seventy students. Here in the Package, the students learned the concepts step by step at their own pace without any involvement of the teacher. But in the Control group the teacher controled the presentation and may not had the time to provide individual attention to each students and some times feedback was not at all provided to the students. This finding was also supported by the findings reported by Williams (1980), and Elkins

(1986). Williams (1980) found that the Experimental groups achieved a higher performance score. Students using CAI materials learned as well as or better than the students taught in conventional classes. Elkins (1986) found that Computer-assisted practice significantly improved English Grammar and mechanics scores of the Experimental group. So we can say that individualization of instruction, feedback, way of presentation, illustration and examples and privacy all have played a role in the Experimental group students' achievement in Vocabulary and Grammar.

It was found that students' achievement in Comprehension was not upto the expectation through the Package. The reason for that may be attributed to the fact that, the Comprehension units in the package were presented to the students through a multiple-choice format to avoid many limitations of the computer language used for developing the Package. It helped the students to read and locate the correct answer easily. But in the Post-achievement test the students were asked to write the answer themselves. Therefore, it was difficult for them to locate the correct answer and write it in a proper sequence even though, they have achieved better in Vocabulary and Grammar. The students were provided with two chances before they could see the correct answer on

the screen. There was no significant difference between the Experimental group and the Control group in their achievement. So we can say that the high achievement in Vocabulary and Grammar did not guarantee that the students will be able to comprehend and write correct sentences. This result is supported by the findings reported by Kleinmann (1987), Harris (1994), Levy (1984), Bryg (1985), Adams (1987), and Sclafani (1994). Kleinmann (1987) found that both groups made significant gains in reading achievement. Reading achievement gains did not differ significantly when the control groups were compared with the CAI treatment groups. Significant gains in reading achievement were made but, no significant differences between control and treatment groups were found in the gains they achieved in any other aspects of achievement. Harris (1994) found that no significant difference favoring computer-assisted instruction over self-paced, individualized instruction for reading achievement in his study. Levy (1984) found that traditional reading method was more efficient than the prescriptive method and the computer-assisted method for increasing both the total reading and reading Vocabulary scores of fourth and fifth grade students. There was no difference in the efficiency of the traditional reading method and the computer-assisted method for increasing the reading Comprehension scores of fourth and fifth

grade pupils. Bryg (1985) found that no significant difference existed between the means of the Experimental and the Control groups on reading Comprehension. However, students in the Experimental group showed a significant gain between the administration of the Pre-test and Post-test. Adams (1987) found that the Experimental group students achieved at the same level on total reading as comparison group students. Experimental group students achieved at the same level on reading Comprehension as comparison group students. Sclafani (1994) found that the achievement was similar whether instruction was CAI or textbook. Therefore, we can say that both the groups have achieved the same in Comprehension even though a significant difference was found between the two groups when their Pre-test was taken as covaraite.

The third objective of the study is to study the effectiveness of the Computer-Assisted English Language Teaching Programme on the Experimental group students' Achievement in Vocabulary, Grammar, and Comprehension with respect to their IQ, Motivation, And Attitude. The analysis revealed that students' level of IQ was found to have an impact on students' Achievement in Vocabulary and Grammar. Whereas, in Comprehension the level of IQ did not exert any impact on the students' Achievement. This result indicates that students with High IQ have achieved more or learned more than students with Low IQ. This

means that the High IQ students used their reasoning ability in problem solving and could benefit from the Package more than the Low IQ students. Therefore, we can say that as far as Vocabulary and Grammar were concerned the Package seemed to be of more benefit for the High IQ students. In Comprehension both High IQ and Low IQ students seemed to have achieved the same. Therefore, the Package can be used by High IQ and Low IQ students alike as far as Comprehension units are concerned.

Regarding the Motivation of the students the analysis revealed that students' Motivation was found to have no impact on students' achievement in Vocabulary and Grammar. Whereas, students' achievement in Comprehension seemed to have been influenced by students' level of Motivation. This result indicates that the level of Motivation did not play any role in students' achievement in Vocabulary and Grammar. Therefore, the Package can be used by both High Motivation and Low Motivation students alike as far as Vocabulary and Grammar are concerned. In Comprehension it was found that the High Motivation students have achieved more than the Low Motivation students, which means that High Motivation students can use the Package more effectively than Low Motivation students as far as only the Comprehension units are concerned.

With regard to students' Attitude the analysis revealed that students' level of Attitude was found to have an impact on students' Achievement in Grammar only. Whereas, in Vocabulary and Comprehension the level of Attitude seemed to have no impact on students' Achievement. This finding is supported by the result reported by Schmidt (1986), and Park (1991). Schmidt (1986) found statistically that, using the gain scores for all students in the area of vocabulary, comprehension, total scores and attitude, no significance was found between treatment groups, grades or sex. Park (1991) found that self-paced individualized instruction was more effective over CAI for improving reading skills. Comparison of change in attitudes toward the computer revealed that no significant difference existed between the two groups. The attitudes of CAI students toward this method of instruction become more positive although it was not statistically significant.

The fourth objective of the study is to study the Attitude of the students towards the Computer-Assisted English Language Teaching Programme. The analysis revealed that the students have a favourable attitude towards the Package in general. This may be due to the fact that the Package allowed the students a lot of freedom to learn and experiment with the package with

little or no involvement of the teacher. The students themselves revealed that the Package was a new experience for them and it was the first time that they learned English through this new medium of instruction. This result is supported by the findings reported by Mathis et al. (1970), and Stevens (1991). Mathis et al. (1970) found that students were generally positive towards CAI but those that had experienced it were more positive than those who participated in the reading control group. Stevens (1991) found that students in the survey he made enjoyed using computers to study English and that they experienced little difficulty or confusion in doing so. They felt that they were improving their English by using the computers, and that their ability to use the computers improved their time. They thought that using computers was important to them, and their attitudes become increasingly positive the more they use the computers.

6.2 IMPLICATIONS OF THE FINDINGS

The findings of this study have implications for using the computer in teaching English language in schools where English is a second language. The findings show that when the computer is used to its full potentials it can create an atmosphere where the students can learn and interact with the computer without being afraid of the

teacher's presence. The students can learn at their own pace and interact with the computer privately without being afraid of committing any mistakes. The ability of the computer to respond immediately to the students' performance is one of its most useful characteristics. Presentation of words for meaning can take advantage of the dynamic qualities of the screen. The computer can support countless types of exercise to drill and test Vocabulary, and Grammar including matching procedures, identifications, multiple-choice formats, fill in the blanks and short answers. Computerised exercises can help the students become familiar with significant amounts of Vocabulary. Individualized instruction is a key factor in teaching and learning, the computer as a teaching aid can provide this kind of individualization very effectively. Computer-Assisted Instruction is important in teaching Vocabulary, Grammar and Comprehension because it provides effective individualized instruction. The computer can control, deliver, evaluate and inform the students of their achievement. The findings also have implications for the school to start and utilize their computer laboratory for teaching English and other languages instead of just using the computers to teach computer languages. It has also implication for the teachers. The teachers can prepare materials well in advance and ask the students to go through them, this will free the

teacher and let him concentrate on more useful activities instead of wasting his time correcting the students note books, because the computer can do all these in no time, the computer can check the students answers, inform the students of their mistakes, and grade them.

6.3 SUGGESTIONS FOR FURTHER RESEARCH

1. More software packages should be developed to teach English Language in school where English is a second language.

2. In developing software packages more attention should be paid to Comprehension. Students should be asked to write the answer themselves instead of giving them the answer in a multiple-choice format.

3. Software packages should cover the entire textbook of the class concerned.

4. Students' level of IQ, Motivation and Attitude should be taken into consideration while preparing or developing any software package for teaching English Language to students whose mother tongue is other than English. Students have different abilities, some of them learn fast and some need a lot of time to learn, so to provide the students with the time they require to learn a given task, the teacher should

know the students' ability well in advance before he develop the Package.

6.4 CONCLUSION

The findings of this study proved that when the computer is used to its full potentials it can help the students achieve more in learning Vocabulary, Grammar and Comprehension irrespective of their level of IQ, Motivation, and Attitude. It helps the students to learn better because it provides them with a lot of freedom and responsibility to learn at their own pace and to monitor their learning without any involvement of the teacher. When the students are left to learn by themselves they develop a positive attitude towards the method of instruction and this is what the researcher found in this study. The attitude of the students towards the Computer Assisted English Language Teaching Programme was positive.