



Effect of Computer Aided Instruction (CAI) on Language Skills in the Subject of Hindi at Class-VIII

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Abstract:

Educational systems around the world are increasing under pressure to use innovative methodologies and integrate new information and communication technologies (ICIS) in the teaching and learning process, to teach students the knowledge and skills they need in the 21st Century. Clements (2002) has shown that children working in pairs at the computer engaged more than when working on puzzles on the floor. Yelland (2002) explored the use of computers in the home to develop mathematical ideas and reported that there was considerable potential for computer games to support such learning. Similarly, working at computers has been found to create opportunities for the development of social skills (Lau, 2000). Studies have found that open-ended, child-directed software made a more significant difference in children's developmental gains than did 'drill and practice' software (Haugland, 1997). Via this study the researcher concluded that CAI is highly effective learning method in language teaching.

Keywords: CAI, Educational systems, Language, Skill, Technology

1. Introduction

With emerging new technologies, the teaching profession is evolving from an emphasis on teacher-centered to student-centered. Technology can improve student achievement. Computers have been used for language teaching ever since the 1960s. Computers make excellent teaching tools, especially in teaching languages in any aspect like as vocabulary, grammar, composition, pronunciation or other linguistic and pragmatic communicative skills. Certain types of educational software can facilitate reading comprehension and vocabulary development and increase students' understanding of mathematical and scientific concepts. The present study was conducted to examine the effectiveness of computer in teaching reading comprehension in English language. Reading is one of the important aspects of education. The important factor of meaningful and cognitive development of the students is reading and reading comprehension. Therefore it is necessary for one to live well and let other live well. The researcher prepared a computer Assisted Language Learning for teaching of reading comprehension of English language to assess its effectiveness as compared with conventional classroom teaching. Characteristics of these students are quite different from previous generations because of the social and technological conditions within which they are developing. There is an international recognition of the potential of computer technology to create new learning and environments (Cuban, 2003).

Prensky (2001) has been a notable writer on the phenomenon of the digital native. He argued that this generation, having grown up immersed in technology, has begun to think differently from other generations (Prensky, 2005). Their homes have computer technology in all facets of gadgetry—the remote control for the television, the programmable microwave, mobile telephone, computers and digital games. Prensky (2005) argues that digital natives are more connected than other generations through technologies such as mobile phones, email and chat lines. Communication is a much more

connected and global experience for this generation than has been possible in the past. Judge, Puckett and Cabuk (2004) have reported that it is increasingly important for early childhood educators to introduce and use computers in their settings, particularly for those children who do not have access in the home. There is considerable literature that documents the potential of ICTs to create innovative, engaging and substantive learning opportunities for young children. Researcher sought to find out how students used computers, the skills they were developing, and the links with home and formal learning environments. Researcher undertook this through a survey in which students reported their use of computers.

2. Objectives of the study

1. To construct CAI Programme on language skills in the subject of Hindi at Class-VIII.
2. To construct the Academic Achievement test for various skill subject of Hindi at Class-VIII.
3. To study the effect of CAI Programme and lecture method on Academic Achievement in subject of Hindi at Class-VIII.
4. To study the effect of CAI Programme and lecture method on Retention of Academic Achievement in subject of Hindi at Class-VIII.
5. To construct the opinionnair to know opinions regarding CAI programme of students of experimental group.

3. Variables of the study

The following table indicates the variables of this study.

Table 1 Variables

Sr.	Variable	Types of variable	Level	Narration of Level
1	Standard	Control	--	Class-VIII
2	Subject	Control	--	Hindi
3	Method	Independent	2	CAI treatment
4	Gender	Moderate	2	Male and Female
5	Educational Achievement Test	Dependent	--	—

4. Method

In the present study researcher had collected data from upper primary school students of class-VIII from the Mehsana city, Experimental research method was used to investigate the objectives.

4.1 Sample of the study

In this present study total 140 students for the objectives of the quality effectiveness of CAI Programme on language skills in the subject of Hindi at Class-VIII, 140 students were selected for the experimental design prepared by the investigator during the year of 2013-2014.

4.2 Experimental Design

In this present study total two group of the students from the upper primary school of class-VIII were selected among one of the group of considered as the Experimental group which was treated by the CAI programme at daily 35 minutes of teaching instruction up to 10 days, another group was considered as the Control group which was treated by the traditional lecture method on at daily 35 minutes of teaching instruction upto 10 days. Finally achievement according to the expert of suggestions and following the criteria of blue print were followed for the data collection by the post test after treatment to the both group of the experimentation.

5. Tools Used for the study

In this present research tools used for the study are given as follows.

- Educational Achievement test for Experimental Group and Control Group.

6. Data Analysis and Interpretation

Gender-wise and Habitat-wise Significance of the study are as follows.

Ho₁ *There will be no significant difference between mean score Traditional group and Experimental group of Male Students of Class-VIII on CAI Programme.*

Result: It is evident that the mean and S.D. mean score Traditional group of Male Students of Class-VIII are 36.32 and 18.16 while the mean and S.D. of mean score Experimental group of Male Students of Class-VIII are 45.35 and 18.4 on total score of on CAI Programme. The obtained t-value is 2.86 with 3.14 standard error of mean which is significant at 0.01 level of significance. Thus, mean score of male students of Class-VIII on Experimental group are significantly higher than the mean score on Traditional group on CAI Programme. So, **Ho₁** is rejected. Thus it can be said that the on effect of learning through CAI Programme on Experimental group were found significantly higher than Traditional group CAI Programme.

Ho₂ *There will be no significant difference between mean score Traditional group and Experimental group of Female Students of Class-VIII on CAI Programme.*

Result: It is evident that the mean and S.D. mean score Traditional group of Female Students of Class-VIII are 36.98 and 19.86 while the mean and S.D. of mean score Experimental group of Female Students of Class-VIII are 45.34 and 17.4 on total score of on CAI Programme. The obtained t-value is 2.83 with 2.95 standard error of mean which is significant at 0.01 level of significance. Thus, mean score of female students of Class-VIII on Experimental group are significantly higher than the mean score on Traditional group on CAI Programme. So, **Ho₂** is rejected. Thus it can be said that the on effect of learning through CAI Programme on Experimental group were found significantly higher than Traditional group CAI Programme.

Ho₃ *There will be no significant difference between mean score Traditional group and Experimental group of Rural Students of Class-VIII on CAI Programme.*

Result: It is evident that the mean and S.D. mean score Traditional group of Rural Students of Class-VIII are 35.45 and 18.19 while the mean and S.D. of mean score Experimental group of Rural Students of Class-VIII are 42.78 and 17.73 on total score of on CAI Programme. The obtained t-value is 2.15 with 3.39 standard error of mean which is significant at 0.05 level of significance. Thus, mean score of rural students of Class-VIII on Experimental group are significantly higher than the mean score on Traditional group on CAI Programme. So, **Ho₃** is rejected. Thus it can be said that the on effect of learning through CAI Programme on Experimental group were found significantly higher than Traditional group CAI Programme.

Ho₄ *There will be no significant difference between mean score Traditional group and Experimental group of Urban Students of Class-VIII on CAI Programme.*

Result: It is evident that the mean and S.D. mean score Traditional group of Urban Students of Class-VIII are 37.33 and 19.19 while the mean and S.D. of mean score Experimental group of Urban Students of Class-VIII are 43.41 and 16.73 on total score of on CAI Programme. The obtained t-value is 2.31 (2.31 > 1.96) with 2.62 standard error of mean which is significant at 0.05 level of significance. Thus, mean score of urban students of Class-VIII on Experimental group are significantly higher than the mean score on Traditional group on CAI Programme. So, **Ho₄** is rejected. Thus it can be said that the on effect of learning through CAI Programme on Experimental group were found significantly higher than Traditional group CAI Programme.

7. Conclusion

Effect of learning through CAI Programme on Experimental group were found significantly higher than Traditional group CAI Programme on the sample of the Male, Female, Rural and Habitat students of Class-VIII in selected topic of Gujarati.

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