

INFLUENCE OF GENDER AND PARENTAL INCOME TOWARDS EFFECTIVENESS OF CIA ON ACHIEVEMENT IN LEARNING ENGLISH EC IN PRIMARY SCHOOL STUDENTS

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Abstract

The present study was aimed to analyse the effectiveness on achievement in English through CAI software with regards to gender and parental income. A random sample of 42 students of class third standard was selected. Researchers used experimental method for this study. CAI software was used as a tool for this study. The findings of the study were that (i) the mean scores of the achievement in English in total in the post-test value is 97.22 which is higher than mean achievement Scores in total of pre-test value 24.34 among the primary students towards gender and parental income. This implies that the effectiveness of CAI software have an impact on the achievement in English with regard to the gender and parental income (ii) it is found that there is no significant difference in the mean achievement scores of pre-test with respect to gender and parents income. This implies that two categories are similar (iii) there is no significant difference in the mean achievement scores of post-test scores among the primary school students with respect to gender and parents income. This reveals that both categories are similar and (iv) there is no significant difference has been found in the gain scores of the mean achievements in English with respect to gender and parental income.

Introduction

The Association for Education Communications and Technology (1977) has defined Computer-Assisted Instruction (CAI) as a method of instruction in which the computer is used to instruct the student and where the computer contains the instruction which is designed to teach, guide, and test the student until a desired level of proficiency is attained. There has been a dramatic increase in the capabilities of computers, along with reduced cost, that has influenced an increase in the various forms of computer-delivered instruction (Brown, 2001). CAI has increasingly employed for Classroom Instruction which refers to self-paced learning and continuous level of assessment of the students through the computer in many different modes of instruction such as Tutorial mode, Drill and Practice mode, Simulation mode, Discovery mode and Gaming mode. It also helps to provide immediate feedback, enhancing active participation in the learning process. CAI technique will be highly suitable for teaching science subject as it has many features like audio, video, graphics, animation and visual effects. Hence investigators intended to find out Effectiveness of CAI on Achievement in English to Gender and Parental Income which has become more result-oriented in improving the teaching learning process.

Hamid Reza Badieli (2008) conducted a study on the "Computer Self Efficacy of Pre-Service Teachers". Research results may re-emphasize the role of the teacher education centers in preparing their pre-service teachers for applying technology. Hiralkumar M. Barot (2005) found that the reactions of the students towards the developed CAI in Sanskrit were found to be positive. In another study, Dunn (2002) found that at risk high school freshmen in the CAI treatment group scored significantly higher than the control group on a measure of reading comprehension. Braak, J. (2001) in his study revealed that CMC use could be explained by teaching a language technological innovations, perceived CMC attributes, and observed organizational constraints. Moreover, the findings suggested that technological innovativeness was the second strongest contribution to CMC use.

The studies conducted in India and abroad reveal that the utilization of different alternative instructional strategies in the classroom teaching such as instruction through electronic media and programmed learning materials either as an individualized instruction or as a supportive system is an effective method in the instructional process. CAI material more or less has not been utilized at the school level. A teacher generally addresses a whole class and does not have time for individual queries while a student with a computer can interact with the software. Educational vision of optimum utilization of media such as computer in instruction can be realized not merely through financial and material support only but adequate supportive inputs in the form of training are immediately required for integration of desired curricula.

Objectives

1. To study the effectiveness on Achievement in English through CAI Software with regard to Gender and Parental Income.
2. To find out the level of the Mean scores of Pre-test with respect to Gender and Parents Income.
3. To find out the level of the Mean scores of Post-test with respect to Gender and Parents Income.
4. To compare the Mean achievement of the gain scores of Pre and Post test with respect to Gender and Parents Income.

Hypotheses

The hypotheses framed for the study are mentioned below.

1. The level of the Effectiveness of Computer Assisted Instruction on Achievement in English among Primary School Students with regard to Gender and Parental Income high.
2. There is no significant difference on Mean Achievement scores of pre-test with respect to Gender and Parents Income.
3. There is no significant difference on Mean Achievement scores of post-test with respect to Gender and Parents Income.
4. There is a no significant difference on Gain Scores of the Mean Achievements in English through the treatment of CAI software among Primary school students with respect to Gender and Parents Income.

Methodology

Method

This study belongs to the Experimental Research Method.

Sample

The investigators had selected Dhanalakshmi Srinivasan Matriculation School from rural area of Permabalur for this present study. 42 students studying in the standard III were selected as the size of the sample.

Tools

The investigators themselves developed the tool Achievement in English. Standardized CAI Software on some selected English Language concepts were used as treatment. The tool consists of 40 items in multiple choice pattern comprising three units for the purpose of collecting data for the present study to find out the effectiveness of CAI towards the Gender and Parental Income on Achievement in English among the Primary School Students. The value of co-efficient of the reliability test value 0.83 is found to be highly reliable. The tool was administered to the 42 students.

Analysis of Data

Collected data through the Achievement test in English with treatment of CAI software is tabulated into a master table. The techniques are Mean, Standard deviation and 't' test.

Table - 1
Mean Scores of the Achievement in English in total among Primary Students with respect to Gender and Parental Income

Category		N	Pre-Test		Post-Test	
			Mean	SD	Mean	SD
Total		42	24.34	7.08	97.22	3.65
Gender	Boys	23	26.52	9.73	96.74	4.37
	Girls	19	23.55	4.43	97.89	2.94
Parental Income	Up to 5,000	17	22.65	5.76	96.18	4.30
	Above 5,000	25	26.90	8.70	98.00	3.29

It is seen from the table-1 that the total mean scores of post-test on the Effectiveness of CAI on Achievement of Science is 97.22. The Mean Achievement scores of Post-test is higher than Mean Achievement Scores of Pre-test among the Primary Students with respect to Gender and Parental Income. It reflects that Gender and Parental Income towards the effectiveness of Computer Assisted Instruction on Achievement in English among Primary School Students is high. Hence the hypothesis is accepted.

Table - 2
't' values in the Mean Achievement of English of the Pre-test scores with respect to Gender and Parental Income

Category		N	Pre-Test		t' Value
			Mean	SD	
Gender	Boys	23	26.52	9.73	1.23**
	Girls	19	23.55	4.43	
Parental Income	Upto 5,000	17	22.65	5.76	1.76**
	Above 5,000	25	26.90	8.70	

**Not Significant

Table - 2 indicates that 't' values 1.23 and 1.76 are lesser than table value 1.98 at 0.05 level. From the table it is understood that there is no difference in the Pre-Test scores among the Primary Students with respect to the Gender and Parental income. Hence the framed null hypothesis is accepted.

Table - 3
't' values in the Mean Achievement of English of the Post-test scores with respect to Gender and Parental Income

Category		N	Post-Test		t' Value
			Mean	SD	
Gender	Boys	23	96.74	4.37	0.98**
	Girls	19	97.89	2.94	
Parental Income	Upto 5,000	17	96.18	4.30	1.47**
	Above 5,000	25	98.00	3.29	

**Not Significant

On Observing the above table - 3, it is found that 't' values 0.98 and 1.47 are lesser than table value 1.98 at 0.05 level. It is understood from the results that there is no difference in the Post-Test scores among the Primary Students with respect to the Gender and Parental Income. Hence the framed null hypothesis is accepted.

Table - 4
Gain Scores of the Mean Achievements in English with respect to Gender and Parental Income

Category		N	Mean	SD	t' Value
Gender	Boys	23	70.22	10.38	1.57**
	Girls	19	74.34	5.19	
Parental Income	Upto 5,000	17	73.53	7.82	0.90**
	Above 5,000	25	71.10	9.12	

**Not Significant

From the table-4, it is seen that the 't' value 1.57 and 0.90 among the mean achievement of gain scores is not significant at 0.05 level. It is understood that there is no difference in the gain scores with respect to gender and Parental income. Hence the framed null hypothesis that there is a no significant difference on Gain Scores of the Mean Achievements in English through the treatment of CAI software among Primary school students with respect to Gender and Parents Income is accepted.

Findings

The findings of the study are stated below

1. The Mean Scores of the Achievement in English in Total in the Post-test value is 97.22 which is higher than Mean Achievement Scores in Total of Pre-test value 24.34 among the primary students towards Gender and Parental Income. This implies that the Effectiveness of CAI software have an impact on the achievement in English with regard to the gender and parental income.
2. It is found that there is no significant difference in the Mean Achievement Scores of Pre-test with respect to Gender and Parents Income. This implies that two categories are similar.
3. There is no significant difference in the Mean Achievement Scores of Post-test scores among the Primary Students with respect to Gender and Parents Income. This reveals that both categories are similar.
4. No significant difference has been found in the Gain Scores of the Mean Achievements in English with respect to Gender and Parental Income.

Discussion and Conclusion

From the above findings of this present study, it is found that the Mean Scores of the Achievement in English in Total of the Post-test is higher when compared with Mean Achievement Scores of Pre-test in Total among the primary students towards Gender and Parental Income. It shows that Computer Assisted Instruction has made significant effect on the Achievement in English among the Primary Students. Similar results were obtained in the studies conducted by Deena and Desai, (2004), Hiralkumar M. Barot (2005), Sing (2005), Thunmathi (2007) and Hamid Reza Badei (2008). In terms of the Gain Scores of the Mean Achievements in English with respect to Gender and Parental Income it was found that there was no significant difference. This significant Achievement in English may be due to the multi-sensory learning experience. Moreover it is proved that CAI package is effective in learning English among the Primary Students irrespective of Gender and Parental Income.

Educational Implications

As the study found that CAI software has made significant effect in enhancing the achievement of students in teach the subject 'English'. It is implied that all primary schools may try to teach the lessons through CAI software. It is a positive trend that majority of the institutions are having computers. Competition may be conducted among the teachers on the preparation of the Effective software and Awards/Incentives may be given at the State/National level.

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