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## THE EFFECT OF COMPUTER-AIDED LEARNING ON, ACADEMIC PERFORMANCE OF SECONDARY STUDENTS

**Preeti**

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### ABSTRACT

**T**his study examined effect of computer aided instruction (CAI) on academic performance as compared with the traditional method of instruction. This study was conducted in public secondary schools in Alwar, Rajasthan. The researcher has taken 100 students for this study. Two groups were prepared one group was studied from traditional method and another group was computer aided learning group. It was revealed from the results that CAI learners were showing high academic performance in comparison to traditional learners.

**KEYWORDS:** computer aided instruction (CAI) , traditional method, modern technologies .

### INTRODUCTION :

Due to the role of new and modern technologies in today's world, numerous different open doors can be made for the procedure of education. Teaching strategies and



instructional systems in the classrooms have been changing affected by learning hypotheses and mechanical progressions. Maddux, Johnson and Willis (1997) allot changes in instructional procedure to social changes. Innovation has changed the entire example of human life on the planet. The best commitment of digital assets is the advancement of PC and its utilization in all kinds of different backgrounds. The utilization of PC in showing learning process has ventured many phases of its advancement. A large group of research studies have been directed to investigate the adequacy of Computer Assisted Instruction in different fields of study and at various review levels.

PC supported guideline is the procedure by which composed and visual information is displayed in a coherent arrangement to a learner through a PC. The understudy learns by reading the content material exhibited or by watching the realistic data showed. Some of the projects give varying media presentation a choice to the understudy to select audio presentation notwithstanding the visual media. Every fragment of content is taken after by questions, for understudy's reaction. Input on reaction is demonstrated quickly (Locatis & Atkinson, 1984; Wang & Sleeman, 1993). CAI can be described as intuitive and individualized learning as it more often than not includes an exchange between one understudy and a computer programme and understudy can learn at his own particular pace and time period (Curtis and Howard, 1990).

The method of presentation of CAI has been changing with the improvements in equipment innovation

and programming advancement procedures. Learning hypotheses have likewise been a wellspring of progress in PC helped guideline. The utilization of PC for behaviorist hypothesis based modified guideline began in late 1960s. Early phases of PC innovation made conceivable just behavioral hypotheses based bore and practice programs. Subjective speculations and creation of PCs gave CAI the state of instructional exercises. More movement in PC innovation brought forth all the more conveying projects like reenactments. With the headway of innovation new extents of CAI have developed. Bucholtz (1999) adds new intending to CAI by utilizing this term for web based guideline using website pages, web release sheets and genuine sound, illustrations and hands-on applications.

Helgeson (1988) checked on studies deciding the adequacy of CAI in science classroom and science research centers and discovered confirmation in support of CAI, as lab exercises and recreations and blend of two methodologies yielded higher accomplishment than did routine direction. Discoveries of the reviews directed by Brophy (1999); Bayraktar (2000) and Carter (1999) likewise bolster adequacy of CAI in science.

### OBJECTIVES

#### Main objectives of this study were:

- 1.To compare the academic performance of CAI learners and traditional learners.
- 2.To compare academic performance of Male and Female CAI learners and traditional learners.

### HYPOTHESIS

- 1.There will be significant difference in academic performance of CAI learners and traditional learners.
- 2.There will be no significant difference in academic performance of male and female CAI learners and traditional learners.

### SAMPLE

The researcher has taken 100 students (50 CAI learners and 50 traditional learners) of Alwar district secondary school.

### TOOLS

#### In order to measure the variables, the following tools were applied:

To study the academic performance of CAI learners and traditional learners high school board exam result was taken as a tool of the study.

### ANALYSIS OF THE DATA

To analysis of the data Mean, Standard deviation, and 't' value were used.

**Table 1 :**  
**Comparison of academic performance of CAI learners and Traditional learners**

Groups	N	Mean	Standard deviation	't' value
CAI learners	50	65.42	7.72	2.60
Traditional learners	50	61.12	8.81	

It is reveals from table 1 that mean and standard deviation value of academic performance of CAI learners was 65.42 and 7.72 respectively and traditional learners were found 61.12 and 8.81 respectively. The mean value of both groups is showing that CAI learners are showing high academic performance in comparison to traditional learners. To test the significance difference the calculated 't' value of both groups was found 2.60 which is significant at 0.05 level of significance.

Hence Hypothesis 1 "There will be significant difference in academic performance of CAI learners and traditional learners" is accepted.

**Table 2 :**  
**Gender wise comparison of academic performance of CAI learners and Traditional learners**

Groups	Gender	N	Mean	Standard deviation	't' value
CAI learners	Male	25	64.72	7.90	0.637
	Female	25	66.12	7.64	
Traditional learners	Male	25	61.36	8.94	0.191
	Female	25	60.88	8.85	

It is revealed from table 2 that mean and standard deviation value of male and female CAI learners academic performance was found 64.72 and 7.90 respectively and traditional learners was found 66.12 and 7.64 respectively. Calculated 't' value of both groups was found 0.637 which is found not significant at both levels.

It is revealed from table 2 that mean and standard deviation value of male and female traditional learners academic performance was found 61.36 and 8.94 respectively and traditional learners was found 60.88 and 8.85 respectively. Calculated 't' value of both groups was found 0.191 which is found not significant at both levels.

Hence Hypothesis 2 "There will be no significant difference in academic performance of male and female CAI learners and traditional learners" is accepted.

## CONCLUSION

After analysis and interpretation of data it was found that CAI learners were showing high academic performance in comparison to traditional learners. It means CAI learners are very resourceful to make effective learning. They have minimum three resources which are books, classroom and computer aided resources. No significance difference was found in male and female students of both learning groups.

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