

# EFFECTIVENESS OF CAI PACKAGE ON TEACHING ZOOLOGY AT HIGHER SECONDARY LEVEL

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## **Abstract**

*In this context it is necessary to study the effectiveness of Computer Assistance Instruction (CAI) package on teaching zoology. In this study has adopted experimental method. The investigator selected 50 higher secondary school students by using random sampling technique. The adopted tool has used in the present study, CAI package and achievement test in zoology constructed, validated by the investigator were used a tools for present study. In this investigation mean standard deviation and t test are used. The findings of the study are there is significant difference between the achievements in zoology of the experimental group taught through CAI package and the control group taught through traditional method of teachings.*

## **Introduction**

In the present Education scenario, science and technology have influenced in the Indian educational system. It has greatly influenced the teaching and learning process. Computer Aided Instruction (CAI) is the use of a computer as an integral part of an instructional system, the learner generally engaging in two-way interaction with the computer via terminal. In order to define Biology, the meaning of science will have to be understood. Science is a systematic study of the facts discovery of the reason of a happening. Lamark and Treviranus are two scientists of 1802 AD, who given the home 'Biology' to the systematic study about the creatures/living things.

## **Need For the Study**

The information revolutions of the twenty first century which has been brought by advances in the computer technology it created on information society in which majority of labour force are expected to hold information related jobs. In these days the unpredicted growth of interactive power point presentation a prominent role in teaching biology in the field of education. In modern era the power point presentation a vital role in education. It is one of the supplementary techniques for teaching. CAI package has become a substitute tutor. Utilization of CAI package by the school teacher to enhance education is unique. So investigator decided to do a study related to this area. Hence, the investigator has selected the development of CAI package for teaching biology at higher secondary level.

## **Objectives**

1. To find there is any significant difference between control and experimental group students in their pre-test.
2. To find there is any significant difference between control and experimental group students in their post-test.

3. To find there is any significant difference between boys and girls in experimental group students in their pre-test.
4. To find there is any significant difference between boys and girls in experimental group students in their post-test.

### Hypotheses of the Study

1. There is no significant difference between control and experimental group students in their pre-test.
2. There is no significant difference between control and experimental group students in their post-test.
3. There is no significant difference between boys and girls in experimental group students in their pre-test.
4. There is no significant difference between boys and girls in experimental group students in their post-test.

### Method of the Study

The present study the investigator adopted experimental method with double group design.

### Sample

The investigator selected 50 higher secondary school students in two groups by using simple random sampling technique.

### Tools

The following tools has used in the present study

1. CAI package developed by the investigator.
2. Achivements test in zoology constructed and validated by the investigator.

### Statistical Techniques Used

Mean, Standard deviation and t test are used to analyze the data.

### Analysis and Interpretation of Data

**Table 1: Difference between control and experimental group in their Pre-Test**

Group	No. of students	Mean	S.D.	't' value	Remarks at 5% level
Control	25	56.0	5.291	0.233	NS
Experimental	25	56.4	5.866		

It is inferred from table 1 that calculated 't' value (0.233) is less than table value at 0.05 level of significance. There is no significant difference between the control group and experimental group in their pretest. Hence, the null hypothesis is accepted.

**Table 2: Difference between the control and experimental group in their Post-Test**

Group	No. of students	Mean	S.D.	't' value	Remarks at 5% level
Control	25	70.25	7.6	4.41	S
Experimental	25	80.1	8.2		

It is inferred from table 2 that the calculated 't' value (4.41) is higher than table value at 0.05 level of significance. There is a significant difference between the control group and experimental group in their pretest. Hence, the null hypothesis is rejected.

**Table 3: Difference between boys and girls in their pre-Test of experimental group**

Category	No. of Students	Mean	S.D.	't' value	Remarks at 5% level
Boys	17	56.25	6.408	0.22	NS
Girls	8	55.88	6.431		

With reference of the table 3, it is evident that the calculated 't' value (0.22) is less than table value at 0.05 level of significance. There is a significant difference between the boys and girls student in their pre-test of experimental group. Hence, the null hypothesis is accepted.

**Table 4: Difference between boys and girls in their post-test of experimental group**

Category	No. of students	Mean	S.D.	't' value	Remarks at 5% level
Boys	35	80.3	8.5	8.27	S
Girls	15	60.2	6.45		

With reference of the table 4, it is evident that the calculated 't' value (8.27) is less than the table value at 0.05 level of significance. There is no significant difference between the boys and girls student in their post-test of experimental group. Hence, the null hypothesis is rejected.

### Findings of the Study

There is no significant difference between control group and experimental group in their pre-test. There is a significant difference between control group and experimental group in their post-test. There is significant difference between boys and girls in their pre-test of experimental group. There is no significant difference between boys and girls in their post test of experimental group.

### Conclusion

As far zoology in concerned teacher have to gradually change their patterns of reasoning and advance to another level of understanding. Hence the primary task of CAI package in knowing zoology is to facilitate these on-going changes in our mental processes as related to concepts in zoology.

**References**

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