



Effectiveness of Interactive Multimedia Based Learning for Teaching Zoology at Higher Secondary Level

KEYWORDS

INTERACTIVE MULTIMEDIA, SELF LEARNING, ACADEMIC ACHIEVEMENT

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ABSTRACT *The present study investigated the effect of interactive multimedia based learning on students' achievement in zoology at higher secondary level. The sample of the study was 30 students of XI standard. Experimental group was taught using interactive multimedia based learning method and to a control group using traditional method. The result indicated that students who studied by interactive multimedia based learning has higher achievement than students in the control group.*

INTRODUCTION

Interactive multimedia has been one of the important areas of educational innovations in recent years. The problem of handling individual differences could be overcome by the application of innovative teaching methodology supported by the appropriate instructional technology. The effective use of interactive multimedia is one of the most important factors to improve the quality of instruction.

NEED OF THE STUDY

The main problem of using multimedia is lack of quality educational software and inability of teachers to adopt the use of computers in schools. The reasons include the cost of software production, the length of time needed to develop and test programs and of reward for such pioneering efforts. The situation is changing rapidly now. The volume and variety of educational software available is quite considerable and seems to be increasing steadily. This increase brings its own difficulties for the teachers and the students. The problem of rote memorizing the concepts without understanding can be solved by involving the students by interactive multimedia learning.

OBJECTIVES OF THE STUDY

1. To develop interactive multimedia based learning package for teaching zoology at higher secondary level
2. To compare the effectiveness of the developed interaction multimedia based learning over traditional teaching method.
3. To find out the gender difference in the achievement of students learning through interactive multimedia based learning method.

HYPOTHESES

1. There will be significant difference in achievement of students taught through Interactive Multimedia Based Learning Method and Traditional Teaching Method.
2. There will be significant difference in the achievement of boys and girls taught through Interactive Multimedia Based Learning Method.

METHODOLOGY

The investigator adopted experimental method for the present study. The experimental group was taught using Interactive Multimedia Based Learning Method and to a control group using Traditional Method.

The tools used for the Experimental study

- i. Interactive Multimedia Based Learning package
- ii. Achievement Test

SAMPLES USED FOR THE STUDY

The sample selected for the study consisted of 30 XI standard students of Karaikudi district. Random sampling technique was adopted in selecting the sample for the study.

RESEARCH FINDINGS AND DISCUSSION

The first objective was to study and compare the effectiveness of the developed Interactive Multimedia Based Learning Method with Traditional Method. For this mean, SD and t value was calculated which is exhibited in the table 1.1

Table 1.1
Showing the comparison of post test achievement scores on Interactive Multimedia based learning and Traditional method

Group	N	Mean	SD	t value	S
Experimental	15	19.3	2.87	5.06	S
Control	15	14.67	1.92		

Significant at 0.01 level

Statistically it is clear there is significant difference between experimental group (IMBL) and control group (TML) with regard to their post test achievement scores at 1 % level of significance. Shanthi (2003) also found that interactive multimedia based learning has a significant positive effect on students' academic achievement.

The second objective was to compare the achievement of boys and girls. The calculated statistical values are given in the table 1.2.

Table 1.2
Showing the gender wise comparison of post test achievement scores

Group	N	Mean	SD	t value	S
Boys	7	16.4	0.60	1.42	NS
Girls	8	16.8	0.44		

Significant at 0.01 level

It is very clear from the table 1.2 that there is no significant difference between the achievement of Boys and Girls taught through Interactive Multimedia Based Learning with regard to their post test achievement scores. It is also evident from the study conducted by Wharrad (2001) that there is no significant difference between boys and girls in relation to academic achievement.

RECOMMENDATION

- ❖ Interactive multimedia based learning package can be developed and used in all the schools, because it is a learner centered tool that will suit the needs of all the

students including under achievers and toppers.

- ❖ Interactive multimedia based learning can be used for students with learning disabilities.
- ❖ Special training can be arranged for teachers in preparation of Interactive Multimedia Based Learning Package in their respective subjects.

CONCLUSIONS OF THE STUDY

On the basis of analysis and interpretation of data it can be concluded that the students in the interactive multimedia based learning group gain significantly better achievement on academic outcomes.

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