

## Effectiveness of Multimedia approach in teaching of Arts at secondary stage

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### INTRODUCTION

Teaching is an art and a skill to be learnt. It requires the knowledge of the subject content, method techniques and teaching aids to be used for making teaching interesting and effective. The selection of teaching method and techniques depend upon the nature of the test, learning objectives on the one side and entering behavior on the other. Traditional teaching is also known as conventional teaching. Traditional teaching in art premier is one way teaching in which the teacher is more active and the students are merely passive listeners. Traditional teaching can be considered as sub-part of lecture method of teaching in which there is no use of teaching except chalkboard.

Technology has helped to improve the quality and pace of activity as well as productions in most aspects of Human Endeavour. Computer is one of the most important and powerful impact in the fibre of science and technology. Multimedia is a combination of several media to transport information in several forms from one point to another. Technology has enabled us to arrange that those points could be situated with in one room with in a city or country or located anywhere on the globe. The transport media could be of copper or fibre, radio or optical waves. The form of information could be text audio or video (still or moving) and the terminal could be fixed or mobile, projection screen or TV tube, notebook, computer or PC.

### Emergence of the Problem

Interactive multimedia provides a powerful new educational tool that can greatly enhance teaching and learning. Research and experience indicates that use of multimedia leads to enhanced learning on criteria such as acquisition of content, development of skills, efficiency of learning and satisfaction with instruction.

The trade in education at present does not demand the textbook learning alone. It aims at giving complete preparation to the pupils and hence, it is more important to see how the instructions are conveyed rather than what is conveyed. At this point, the usefulness of material and media and decided by the ways and means by which it is presented. Since, art is a rapidly growing subject its teaching demands continued reassessment and periodical review of the contents and the methods of teaching. So, the Art teachers should be acquainted with the use of variety of methods and procedures for teaching Art.

Art education is the area of learning that is based upon the visual, tangible arts—drawing, painting, sculpture, and design in jewelry, pottery, weaving, fabrics, etc. and design applied to more practical fields such as commercial graphics and home furnishings. Contemporary topics include photography, video, film, design, computer art etc.

Only with the multimedia approach there can be ebb and flow between the teacher and the taught. It is an atmosphere of this that children develop in the best way. The timely use of proper, aids, develops interest and motivates students. This break the monotony of teacher's talk, reduce verbalism, save time and give a better idea of the real things. Learning process is best organized and facilitated through the use of multimedia instead of a single of routine type of media or techniques.

### STATEMENT OF THE PROBLEM

EFFECTIVENESS OF MULTIMEDIA APPROACH IN TEACHING OF ARTS AT SECONDARY STAGE.

### DELIMITATION OF THE PROBLEM

1. The present study was delimited to Private school.
2. This study was delimited to the use of multimedia approach.
3. In this study boys and girls of IX standard were taken.

### OBJECTIVES OF THE STUDY

1. To compare the effect of multimedia approach and the conventional teaching in terms of pupils achievement in arts.
2. To compare the mean post test scores of experimental and control groups to see the effectiveness of multimedia

on the achievement in arts.

3. To compare the mean post test scores of boys and girls of experimental group.

## HYPOTHESIS

1. There will be no significant difference in the mean pre test scores of experimental and control groups.
2. There will be significant difference in the mean post test scores of experimental and control groups.
3. There will be no significant difference in the mean post test scores of boys and girls of experimental group.

## Method and Procedure

### Design

This study falls in the domain of experimental research. Experimental research can be conducted under the framework of experimental designs. For the purpose of present study the investigator selected parallel group design. In it two or more groups as nearly equivalent as possible, are employed at the same time. Two groups are equated by employing randomized group technique.

### SAMPLE

The technique of sampling was random and representative. A sample consisting of 100 students of 9th grade was selected. Out of 100 students, 50 students were boys and 50 were girls.

### Tools

Following tools were used :

1. Intelligence Test  
For equating the students on the basis of intelligence, Advanced Progressive Matrices Set-B by J.C. Raven was used.
2. Lesson plan based on Multimedia on two topics of arts were prepared and used by the investigator.

Achievement Test

### Statistical Analysis

1. Descriptive statistics such as Mean and S.D. were used.
2. t-ratios were employed.

### Result and Discussion

In order to test that, "There will be no significant difference in the mean pre-test scores of experimental and control groups", raw scores obtained from intelligence test, pre-test and post-test were tabulated and analyzed. 't' value was computed to study the significant difference between mean pre-test scores of experimental and controlled groups. The results so obtained have been entered in Table 1.

TABLE 1

SHOWING 'T' VALUE OF MEAN pre-TEST SCORES OF EXPERIMENTAL AND CONTROLLED GROUP IN ARTS

Groups	N	Mean	S.D.	t-ratio	Remarks
Experimental	50	15.84	3.87	.317	insignificant at .01 level
Controlled	50	14.32	4.85		

Table 1 reveals that mean pre-test scores of experimental and controlled groups are 15.84 and 14.32 respectively. The obtained 't' value ( $t=.317$ ) is insignificant at .01 level which shows that there is insignificant difference in achievement of students in Arts of experimental and controlled groups. The mean pre-test scores of experimental and controlled group are 15.84 and 14.32 respectively. It means the students taught through multimedia approach showed better performance than the students taught through controlled method.

Thus first hypothesis namely 'There will be no significant difference in the mean pre-test scores of experimental and control group' is accepted.

In order to test that, "There will be significant difference in the mean post-test scores of experimental and control groups", following analysis is done. The results so obtained have been entered in Table 2.

**TABLE 2**

**SHOWING 'T' VALUE OF MEAN POST-TEST SCORES OF EXPERIMENTAL AND CONTROLLED GROUP IN ARTS**

Groups	N	Mean	S.D.	t-ratio	Remarks
Experimental	50	24.5	3.55	3.53	Significant at .01 level
Controlled	50	14.2	4.91		

Table 2 reveals that mean post-test scores of experimental and controlled groups are 24.5 and 14.2 respectively. The obtained 't' value ( $t=3.53$ ) is significant at .01 level. From the above interpretation of results it was found that the mean post-test scores of experimental group were significantly higher, than that of controlled group and significant difference exists between the mean post test scores of experimental and controlled group. The mean post-test scores of experimental and controlled group are 24.5 and 14.2 respectively. It reveals that mean post-test scores are in favour of experimental group.

Thus hypothesis II namely 'There will be significant difference in the mean post-test scores of experimental and control group' is accepted and it is to be concluded that performance of students in mean post test scores of experimental group is with multimedia is higher than mean post test scores of controlled group post test scores of controlled group i.e. with conventional method.

In order to test that, "There will be no significant difference in the mean post-test scores of boys and girls of experimental group", the following analysis is done.

**TABLE 3**

**SHOWING 'T' VALUE OF MEAN POST-TEST SCORES OF EXPERIMENTAL GROUP**

Groups	N	Mean	S.D.	t-ratio	Remarks
Boys	25	25.84	3.47	0.56	Insignificant at .01 level
Girls	25	24.5	3.55		

Table 3 reveals that mean post-test scores of girls and boys are 24.5 and 25.84 respectively calculated 't' value ( $t=0.56$ ) is insignificant at .01 level which clearly shows that boys, and girls differ insignificantly in their mean post-test scores when taught through multimedia approach. It means that experimental group is found to be nearly equally superior for both girls as well boys for learning arts.

From the above interpretation of results, it was found that the mean post-test scores of experimental group were significantly higher, than that of controlled group and significant difference exists between the mean post-test scores of experimental and controlled group. It is also revealed that mean post-test scores were in favour of experimental group.

**Findings**

In the light of above mentioned interpretation and discussion the main conclusion of the study are given below :

- The performance of students in both the groups i.e. experimental and controlled groups do not differ in their pre achievement scores.
- The performance of students in mean post test scores of experimental group i.e. with Multimedia is higher than mean post test scores of controlled group i.e. with conventional method.
- The boys and girls slightly differ in their performance when taught with multimedia. It means experimental group is found to be nearly superior to both girls as well as boys for learning arts.
- The students of experimental group were looking well motivated and ready to learn each day of experimental duration of CAI treatments than students of controlled group.

## Conclusion

The study shows that multimedia approach plays an important role to improve the achievements of students. So a teacher should use multimedia approach in teaching in the classroom which can make her task more easy and students can achieve better.

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