



Construction and Tryout of Multimedia Package on Achievement in English Grammar of Students of Standard 11

ANJALI SOLANKI
Research Scholar,
GLS University, Ahmedabad.

DR. SONAL SEVAK
Guide,
GLS University, Ahmedabad.

1. Introduction

There has been a drastic change in the way teaching has progressed. We now have teaching with the help of Multimedia, a teaching machine and virtual classrooms. These changes are here to stay because of the availability of different types of Instructional media. The outlook of education has changed and the role of the teacher and the school has been redefined. Teachers are now facilitators using ICT based courseware.

In present study, the researcher had constructed computerized multimedia package on achievement in English Grammar of students of standard 11 of Ahmedabad city.

2. Objectives

The objectives of present study are as follows.

1. To construct computerized multimedia package in English Grammar for the students of standard 11.
2. To study the effect of constructed multimedia package on achievement in English Grammar of students of standard 11 of Ahmedabad city.
3. To study the effect of constructed multimedia package on achievement in English Grammar of students of standard 11 of Ahmedabad city in context of gender.

3. Hypotheses

- Ho₁** There is no significant difference between mean scores obtained in post-test of students of experimental group and controlled group.
- Ho₂** There is no significant difference between mean scores obtained in post-test of boys of experimental group and controlled group.
- Ho₃** There is no significant difference between mean scores obtained in post-test of girls of experimental group and controlled group.

4. Variables of the study

1. Independent variables

A. Group

- Experimental
- Controlled

B. Gender

- Boys
- Girls

C. Educational achievement

- High
- Low

2. Dependent variable
- Scores of post test

5. Research method

The researcher had used Equivalent group post-test experimental design.

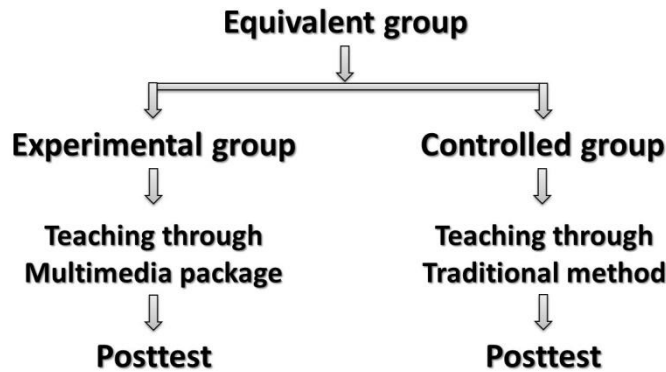


Figure 1

6. Multimedia package

The researcher has constructed a high quality multimedia package. In this software animated videos, notes and tests are included. The all applications are embedded in window based software. This software is constructed using Visual Studio Version 10.0. Visual studio needs some coding to embed all props of videos, notes and tests. For this the researcher has taken the help of its expert. The software has a main video of list of topics. On clicking the specific topic, the teacher or learner is directed to the window of that specific topic. For example, on clicking ‘Present Indefinite Tense’ under ‘Voice’ heading the teacher or learner is directed to the window of Present Indefinite Tense topic.



Figure 2: List of topics and some buttons of other sub applications

7. Procedure of data collection

The researcher had chosen Sahajanand Vidhyalaya to perform this study. As sample 100 students were chosen from this school. These students were divided in two different groups: Experimental group and controlled group. In each group 25 boys and 25 girls were selected. The experimental group was treated with multimedia package and controlled group was treated with traditional teaching method. After experimentation a test worth 50 marks was taken of both groups. The scores obtained by this test were classified, tabulated and used for data analysis.

8. Data analysis

Ho₁ There is no significant difference between mean scores obtained in post-test of students of experimental group and controlled group

Table 1: Mean, SD, SED and ‘t’-value of students of experimental group and controlled group of Sahjanand Vidhyalaya

Group	N	Mean	SD	SED	t	Significance
Exp	50	39.86	5.28	1.19	4.66	0.01
Cont	50	34.30	6.58			

df	0.05	0.01
98	1.98	2.63

From above table, it is certain that for df=98, table t values are 1.98 and 2.63 respectively. The calculated t value is 4.66. Therefore, calculated t value is more than table t value at both the levels and hypothesis is rejected. Moreover, mean score of students of experimental group is more than that of students of controlled group. Therefore, it is revealed that teaching through multimedia package is more effective than traditional teaching method.

Ho₂ There is no significant difference between mean scores obtained in post-test of boys of experimental group and controlled group.

Table 2: Mean, SD, SED and ‘t’-value of boys of experimental group and controlled group of Sahjanand Vidhyalaya

Boys	N	Mean	SD	SED	t	Significance
Exp	25	40.08	4.87	1.58	3.11	0.01
Cont	25	35.16	6.24			

df	0.05	0.01
48	2.01	2.68

From above table, it is certain that for df=48, table t values are 2.01 and 2.68 respectively. The calculated t value is 3.11. Therefore, calculated t value is more than table t value at both the levels and hypothesis is rejected. Moreover, mean score of boys of experimental group is more than that of boys of controlled group. Therefore, it is revealed that teaching through multimedia package is more effective than traditional teaching method.

Ho₃ There is no significant difference between mean scores obtained in post-test of girls of experimental group and controlled group.

Table 3: Mean, SD, SED and ‘t’-value of girls of experimental group and controlled group of Sahjanand Vidhyalaya

Girls	N	Mean	SD	SED	t	Significance
Exp	25	39.64	5.75	1.80	3.44	0.01
Cont	25	33.44	6.92			

df	0.05	0.01
48	2.01	2.68

From above table, it is certain that for df=48, table t values are 2.01 and 2.68 respectively. The calculated t value is 3.44. Therefore, calculated t value is more than table t value at both the levels and hypothesis is rejected. Moreover, mean score of girls of experimental group is more than that of girls of controlled group. Therefore, it is revealed that teaching through multimedia package is more effective than traditional teaching method.

9. Findings

1. From above analysis it is revealed that the computerized multimedia package is more effective than traditional teaching method on achievement in English Grammar of students of standard 11.
2. It is also revealed that the computerized multimedia package is more effective than traditional teaching method on achievement in English Grammar of boys of standard 11.

3. The computerized multimedia package is more effective than traditional teaching method on achievement in English Grammar of girls of standard 11.

10. Conclusion

Finally, it was revealed that multimedia package is more effective on achievement in English grammar of students of standard 11. In present study, the researcher had constructed computerized multimedia package in selected units of English grammar for the students of standard 11. The researcher had performed this study on the students of higher secondary schools of Ahmedabad city.

References

1. Best, J.W. & J.V., Kahn, (1989). Research in Education, New Delhi : Prentice-Hall of India Pvt. Ltd.
2. Borg, W. R. and Gall, M.R. (1987), Educational Research: An Introduction (5th Edition), New York : Longman.
3. Dale, E. (1971). Techniques of teaching vocabulary, California: Field Educational Publications.
4. Espich and Williams (1967). Developing Programmed Instructional Materials, Newyork: Fearon Publishers.
5. Jha, A.S. (2011). Research Methodology, New Delhi: A.P.H. Publishing Corporation.
6. Kerlinger, F. N. Foundation of Behaviours Research, (2nd Ed.), New Delhi: Surjeet Publication.
7. Shukla, S. S. (2011). Principles and Techniques of Teaching and Learning, Agra: Agrawal Publication.
8. Siddhu, K.S. (1985). Methodologyof Research in Education, New Delhi : Sterling Publishing Pvt. Ltd.
9. Smith and Moore (2015). Cognitive Psychology, Mind and Brain, Pearson Education India, New Delhi.
10. Sukhia,S.P. and P.V. Mehrotra, (1966). Elements of Educational Research, Bombay Allied Publication Pvt. Ltd.
11. Uchat,D.A. (2004). Research Methodology of Education and Social Science, Rajkot Saurashtra University.