

# Effectiveness of English Multimedia Assisted Instructional Package in Enhancing Achievement in English among Standard IX Students in Relation to their Interest in Learning

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# Abstract

According to today's pedagogical practices, the key to engagement of students and the effectiveness of the procedure is through ICT. This paper analyses the implications that multimedia assisted instructional package have in enhancing the achievement of Class IX students in learning. The paper envisages that the application of ICT in pedagogy can enhance the interest of students in English Learning.

**Keywords:** Multimedia Assisted Instructional Package, Achievement in English, Interest in learning

# 1. Introduction

English is considered to be one of the most significant languages in this world. It is typically been referred to as the 'universal medium of communication' and therefore the most frequently used in the educational setup as a second language for the medium of instruction. English is additionally referred to as an inter-language

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of the fashionable era and a medium of oral communication nowadays.

Multimedia is solely multiple varieties of media which comprises text, graphics, audio, animation, video, data. Multimedia is seen to be loosely involved with the creation, composition, presentation, recording, written material and, in general, manipulation, of artifacts from numerous media. Multimedia includes a free kind of usage and permits the employment of different techniques. This is often mirrored within the wealth of media manipulation, composition and transformational capabilities packaged in transmission authoring tools.

Most of the definitions of multimedia agree that it is a form or method of integrating digital content. Multimedia can also be viewed as a learning tool and a method of communication. It will stimulate over one sense at a time, and in doing thus, holds a lot of attention.

Specifically, the video as a transmission application has been viewed as a powerful narrative image that will benefit both teaching and learning in varied disciplines including engineering, management science, physical, medical and science education (Garrison, 2001; Marx & Frost, 1998; Mitchell, 2001; Palmer, 2007; Shepherd, 2003). Multimedia teaching integrates verbal material, like written and spoken text, and visual material, such as, photos, pictures, graphs and dynamic graphics (Mayer, 2001). The central feature of the current education system is the integration of the transmission technology in schoolroom learning. Researchers have investigated the potential impact of desegregation technology to create new learning environments for school pupils with learning disabilities (Maccini, Gagnon & Hughes, 2003; Woodward & Rieth, 1997).

The multimedia assisted teaching is a design that applies and selects teaching through media according to the characteristics of the teaching aim and target, organically combining with the traditional methods of teaching (i.e., chalk and talk) to participate in the entire teaching process, simultaneously, forming reasonable teaching processes and structures to achieve optimised teaching. The wide application of multimedia technology and its rapid Raju and Rao Instructional Package in Enhancing Achievement in English

development makes a great influence on the teaching and learning of the English language. Utilising the multimedia network to enhance the active involvement of the students improves class efficiency and cultivates their ability of using English comprehensively for language training through exploration, cooperation, and interaction.

Multimedia realises interaction, openness, and autonomy of English grammar learning. Modern teaching reflects the themes of our era, with its abundant information, and teaching material. Multimedia assisted English teaching displays content intuitively and actively to communicate to the students, a perceptual knowledge from a larger domain of information, and inspiring their thinking in order to deepen their understanding of content within a short time.

## 2. Benefits of multimedia

A major benefit that Multimedia Instructional Package provides to the learners is Individualised Instruction, which further enables them to:

- 1. experience a very good instructor who reduces intimidation and frustration caused during inability to learn
- 2. experience a teaching that can adapt its abilities and background and present information in different ways
- 3. become actively involved in learning and receiving immediate feedback
- 4. become objectively evaluated (tests are based on specific criteria) and have privacy (can evade embarrassment during evaluations)

## **2.1 Benefits of multimedia for the students**

Practical benefit that the students can receive includes:

- 1. Increased reasoning and retention (research reports increases up to 50 % commonly)
- 2. Increased success rates and decreased learning time (saves 40 to 50 % learning time)

- 3. Ensures student participation which is not possible in a traditional instructional setting
- 4. Students who are unsuccessful with the currently available methods have an alternate method to learn skills
- 5. Facilitates greater interaction through questioning, expression of thoughts, group learning, discussions, sharing experiences, summarisation, and so on
- 6. Promotes joy of learning and minimal peer competition
- 7. Develops higher motivation and positive attitudes towards learning which are very important for effective learning

#### 2.2 Benefits of multimedia for the instructor

Benefits of multimedia that assisted teachers, supervisors and administrators can receive include:

- 1. replacing learning activities with simulations, animations and games when traditional teaching is not efficient
- 2. time saving through reduced teaching, marking and preparation time
- 3. multimedia instructional package can be used to teach mundane or routine topics
- 4. helps in the learning a new set of skills which energises and refreshes instructors

## 2.3 Benefits of multimedia for the educational administrators

The major benefit of Multimedia Assisted Teaching is cost saving. The time when instructors are away from their job, this can be fruitfully employed to induce learning. Other benefits include:

Preserving expertise: this can be important when certain experts do not remain as employees.

Making expertise available: this can be a factor if the instructor or expert has limited time available to promote training.

Making instruction consistent: this can be important when reliable and high quality instruction cannot be guaranteed. Raju and Rao Instructional Package in Enhancing Achievement in English

'Training internal multimedia experts': these skills can be used for future projects.

Hence, looking into the beneficial factors, the researcher has felt an urge to develop a Multimedia Package for developing critical thinking skills.

There are a number of methods of teaching English language to students who are learning the language in the school classroom or language learning Centre, each with their own unique pros and cons. There are many difficulties and depending on the teaching situation, setting, and resources available, any one of these English teaching methods could be right for the teaching and learning of students.

## 3. Need for the study

Around the globe, the educational system is under increased pressure to utilise the new information and multimedia technologies to teach students the best way they need in the current times. The simplicity and power of multimedia enriches teacher's creativity and leads to multi-sensory student learning. Multimedia Assisted Teaching is capable of sustaining the interest of the learners, through visuals, and audio inputs. It also brings in the elements of the outer world into the classroom. It can help learners in understanding the complex concepts in a very simple way. Today, more emphasis is laid upon experience rather than rote learning.

In order to improve and develop English language, various aspects of the English language are integrating multimedia content in the teaching and learning process. Multimedia Assisted Teaching (MAT) provides the students a chance to interact with diverse content to make learning easier. Few studies opine that there has been a steady increase in learning English language as a foreign language among students at different levels.

#### 3.1 Statement of the problem

The effectiveness of English Multimedia Assisted Instructional package in enhancing the achievement of standard IX students in English with relation to their interest in learning.

#### 3.2 Scope of the Study

The scope of the study is restricted to selected topics of English grammar of class IX students. The experiment was conducted on 60 students of class IX, divided into two groups i.e., Experimental group and Control group by the adoption of a licensed and approved tool developed by apple.inc namely; Learn English Grammar, Writing, Spelling and Vocabulary – a simple and easy package. Tools used in the study were an interest inventory of students by the researcher to measure the interest of the class IX students in learning English. The researcher also conducted a Pretest and a Post-test to know the interest levels of students and effectiveness of learning English grammar by using Multimedia assistance in the classroom.

#### 4. Objectives of the study

- 1. To develop/prepare a Multimedia Assisted Teaching (MAT) package to know the interest in learning English grammar among class IX students
- 2. To compare the effectiveness of MAT and conventional method of teaching to know the interest in English grammar learning among class IX students
- 3. To study the level of interest in English among class IX students of Pre-test Control group and Pre-test Experimental group
- 4. To find out the level of interest in English among class IX students of Control and Experimental group with respect to gender
- 5. To find out the level of interest in English among class IX students of Control and Experimental group with respect to Socio-Economic Status (SES)
- 6. To find out the interest level of class IX students of Control group in both Pre-test and Post-test
- 7. To evaluate the Multimedia Assisted Teaching (MAT) on class IX students of Experimental group with respect to gender

- 8. To evaluate the Multimedia Assisted Teaching (MAT) on class IX students of experimental group with respect to SES
- 9. To compare the levels of interest in English grammar learning in both the Experimental group and the Control group of students of class IX with respect to gender
- 10. To compare the levels of interest in English grammar learning in Experimental group and Control group of students of class IX with respect to SES
- 11. To compare Experimental group and Control group of class IX students with respect to their interest in learning English grammar
- 12. To investigate whether class IX students of experimental group retained the interest made by English grammar through multimedia assisted teaching (MAT).

#### 4.1 Hypotheses of the study

- 1. There is no significant difference between Pre-test scores of Control Group and Experimental Group with respect to learning English grammar.
- 2. There is no significant difference between the Pre-test scores of interest in learning English grammar among both the Control and Experimental groups.
- 3. There is no significant difference between Pre-test and Postscores of Experimental groups in learning English grammar by using MAT.
- 4. There is no significant difference between Pre-test and Posttest scores of Control group in learning English grammar by using the traditional method.
- 5. There is no significant difference between Pre-test and Posttest scores of the Experimental group in their interest towards learning English grammar by using MAT.
- 6. There is no significant difference between Pre-test and Posttest scores of Control group in their interest towards learning English grammar by the traditional method.

- 7. There is no significant difference between the scores of Posttest in learning English grammar through MAT by male and female students of Experimental group.
- 8. There is no significant difference in post test scores of experimental group among students belonging to low, average, and high SES.
- 9. There is a significant difference in Post-test scores of Experimental group among students belonging to low, average, and high SES.
- 10. There is no main and interaction effect between gender and levels of SES on Post-test scores of Experimental group in learning English grammar using MAT.

#### 5. Research design

The study was experimental in nature. A Post-test parallel group was followed in the present study. This design was found to be the most appropriate after the review of literature of the experimental design was undertaken.

Pre-test is to check whether the groups were different before the manipulation starts. Post-test is for the measurement of effects. Since there is often a measurement effect, a Control group, which is the group not receiving the same manipulation is a need to see how big this effect is.

#### **5.1 Formation of groups**

The researcher administered the Interest Inventory designed by Dr. Linda Karges -Bone, the Socio Economic Status (SES) scale by Dr. M. R. Lakshiminarayana to segregate the groups. Two groups namely the Control group and the Experimental group are formulated on the basis of interest test scores. SES and gender were also considered while making the groups.

#### **5.2 Selection of the sample**

Stratified random sampling technique was undertaken by the researcher while choosing two homogeneous groups of students from a state board school in suburban Bangalore after controlling the demographic and moderate variables. Sixty students of class IX were selected as a sample for the study. One group was considered as the Control group and the other as the Experimental group by using random sampling and the lottery method. Based on the treatment, the data was collected.

## 5.3 Variables of the study

An attentive review of literature was made to identify the relevant variables suitably for the present study. Some selected experimental variables are described below, in order to add precision and avoid ambiguity in the study. It is either a result of some force or is itself the force that causes a change in another variable. Based on a study conducted in the area of effectiveness of Multimedia Assisted Teaching, the following variables were selected for the study keeping the objectives in mind:

The variables of the study are classified into independent, dependent, moderate and demographic variables.

- 1. Independent Variable: Multimedia Assisted Teaching (MAT)
- 2. Dependent Variable: Achievement in English Interest
- 3. Moderate Variable: Interest
- 4. Control Variables: Socio Economic Status (SES) and Gender

## 5.4 Constructs of the study

Effectiveness: effectiveness of MAT in the present study refers to the positive impact that its usage will make on the class IX students' achievement in English Grammar.

## 5.5 Tools of the study

The researcher used the standardised tools which are readily available for this study. Multimedia Assisted Teaching (MAT) model: learn English Grammar, Writing, Spelling and vocabulary – WAGmob.

The purpose of the current study is to know the interest of the students of class IX in learning English language. The investigator adapted the intervention module from apple.inc in order to teach the students effectively and to know the interest of students in learning English language. The intervention consisted of 20 chapters to learn English grammar and 20 chapters for the review and test added to various components of English grammar. These 40 chapters were administered for a period of eight weeks and directly aimed at effectiveness of multimedia package in learning English language grammar with interest.

## 6. Collection of data

The researcher administered the tools among class IX students of Christ, the King school, Ramamurthy Nagar, Doorvani Nagar post, Bangalore-36 and two homogeneous groups were created by using the stratified random sampling and the lottery method. Tools used in the study were the perceived interest inventory of students by the researcher to measure the interest of the class IX students in learning English. The researcher also conducted a Pre-test and Posttest to know the interest levels of students and the effectiveness of learning English grammar by using Multimedia assistance in the classroom.

## 6.1 Data analysis

The collected data was analysed, classified, and tabulated by using the Microsoft Excel Software. Then the statistical analysis was done with the SPSS latest software version. As per the objectives of the study, a detailed data analysis was done. The hypotheses formulated in the study were tested by using various statistical tools in SPSS. The data analysed are presented under two sections.

A T-Test is done to find out if there is any significant difference between Pre-test and Post-scores of Experimental and Control group in learning English grammar before or after using the intervention (MAT) and the interest of the student in learning English grammar. ANOVA is done on the scores of overall students based on their multiple comparisons of SES and Gender.

## 7. Findings and conclusions

The results of the above experimental study are presented below.

- 1. The students of Control Group and the students of Experimental group did not significantly differ in the Pretest scores with respect to learning English grammar.
- 2. The students of Control Group and the students of Experimental group did not significantly differ in the Protest scores with respect to their interest in learning English grammar.
- 3. The students of Experimental group have shown a significant difference between the interest scores of Pre-test and Post-test in learning English grammar after using the intervention MAT.
- 4. The students of Experimental group have shown a significant difference between the scores of Pre-test and Post-test in learning English grammar after using the intervention MAT.
- 5. The students of Control group did not significantly differ in the Pre-test and Post-test scores with respect to learning English grammar by using the traditional method.
- 6. The Pre-test scores of Control group in interest towards learning English grammar by the traditional method significantly did not differ with their Post-test scores.
- 7. The male and female students of the Experimental group did not significantly differ in the Post-test scores with respect to learning English grammar by using MAT.
- 8. The students belonging to low, average, and high SES of the Experimental group did not significantly differ in the Posttest scores with respect to learning English grammar.
- 9. The gender and levels of SES on Post-test scores of Experimental group did not have main and interaction effect in learning English grammar using MAT.

## 8. Suggestions for further research

On the basis of the present study, following suggestions have been made:

- 1. This is a study to find the impact of the multimedia assisted teaching (MAT) model of teaching English grammar effectively on the interest of the students.
- 2. This study can be extended to larger samples. The effect of the multimedia assisted teaching (MAT) Model of teaching English grammar can be studied on students of class VII and onwards.
- 3. A long-term project during the complete academic year may be planned on the same lines and design to study the effects of the multimedia assisted teaching (MAT) Model on teaching English grammar.
- 4. The same study may be carried over by selecting other variables like attitude, attention, learning environment and stress.
- 5. Gender is considered as demographic variable and SES alone was considered as a moderate variable. Other variables such as locality, learning environment, mental health and so on can be taken as moderate variables and the interaction effect can be seen.
- 6. A study may be conducted to find out the influence of the Multimedia Assisted Teaching (MAT) model of teaching on the development of interest towards learning English grammar.

The researcher concludes with a profound hope that the findings of the study can facilitate this system of education especially classroom instruction in correcting a number of drawbacks of the system raised by some documents and commissions.

## 9. Conclusion

- 1. The study is limited to selected topics of English class IX students.
- 2. The study is confined to English grammar teaching exclusively.
- 3. The study is confined to Experimental group students of class IX of a particular school in Bangalore.

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- 4. The study is confined only to Multimedia Assisted Teaching in the classroom. MAT is followed in the present study.
- 5. Expert validation implies the suggestions obtained from field experts and pedagogical experts and not multimedia designers.

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