

# The Effect of Multimedia Strategies on EFL Learners' Achievement

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**Abstract:** This study is intended to investigate the effect of multimedia strategies on EFL learners' achievement. The study sample consisted of 50 fourth level female students who are studying English as a foreign language, in Saudi Arabia, Shaqra University, College of Arts and Science at Shaqra, English Language Department for the academic year 2018-2019. Three tools used for data collection included pre-post oral tests, pre-post written tests, and interviews for college teachers. The pre-oral and written tests were conducted to assess and determine the students' level of performance while the post-oral and written tests were carried out to validate the progress achieved by the students after they were taught with multimedia. The data of the study were analyzed using the statistical package for the social sciences (SPSS). The main findings of the study revealed that teaching through multimedia has a positive effect on the students' achievement and it also plays an essential role in the development of teaching and learning process. Moreover, it helps EFL learners to cope with their different learning strategies. Finally, there are some recommendations for English teachers and learners of English language.

**Keywords:** multimedia, EFL learners, major English, strategies achievement

## 1. Introduction

Multimedia application is an effective teaching technique, so the ability to communicate through multimedia in both learning and teaching significantly impact on academic achievement and future success. So the purpose of this study is to illustrate how the use of multimedia is essential in promoting the students' ability and how it helps them to communicate in a better way. The study investigates the difficulties that face the students in learning English in the company of technology. Therefore, the students need to be taught how to deal with multimedia to make progress and achieve results. In this study, the researcher attempts to explore the effect of multimedia strategies on EFL learners' achievement.

### 1.1 Objective of the Study

This study attempts to:  
Indicate the importance of utilizing multimedia as a rich resource in improving the learner's productive expression.

### 1.2 Question of the Study

To what extent does multimedia help learners to cope with their different learning strategies?

### 1.3 Hypothesis of the Study

Multimedia helps EFL learners to cope with their different learning strategies.

## 2. Literature Review

### 2.1 The Importance of Multimedia in Learning and Teaching

Multimedia refers to several media sources such as video, graphics, animation, audio, and texts. Schnots and Lowe (2003) defined the term multimedia as:

*" multimedia is the combination of multiple technical resources for the purpose of presenting information represented in multiple formats via multiple sensory modalities."*

With the use of multimedia, students are able to better comprehend what they study at colleges, therefore learning becomes more effective for them. The study involves the use of four basic types of multimedia material such as text, video, animation, and pictures. Multimedia with the use of pictures and animation attracts the attention of the students and increases their ability to comprehend information which makes student's interactions effective during the class and enables them to learn in a better way.

Multimedia is also interactive; it enables both the student and the teacher to control the content flow of information (Vaughan, 1998). A major part of using multimedia instruction involves engaging students in sense-making activities, such as conversations and chats about external representations that use concepts, symbols, models, and relationships. Thus, multimedia has become an essential part of education in the world.

According to (Mayer, 2005a, 2008a, 2008b; Mayer & Wittrock 2006; Wittrock, 1989). There are three processes essential for active learning are selecting relevant material, organizing selected material, and integrated selected material with existing knowledge. The process of selecting relevant material occurs when the learner pays attention to

appropriate words and images in the presented material. This process involves bringing material from outside into the working- memory components of the cognitive system. Organizing selected material involves building structural relations among the elements. This process takes place within the working- memory components of the cognitive system. Integrating selected material with existing knowledge involves building connections between incoming material and relevant portions of prior knowledge. This process involves activating knowledge in long term memory and bringing it into working memory. Learners must therefore pay attention to certain words and images, arrange them into a verbal chain, and relate the steps to prior knowledge. These processes are summarized in the following table:

**Table 2.1:** Three Processes of Active Learning

Name	Description	Example
Selecting	Learner pays attention to relevant words and pictures in multimedia message to create a word base and image base.	In viewing a narrated animation or lightning formation, the learner pays attention to words and pictures describing each of the main steps.
Organizing	The learner builds internal connections among selected words in order to create a coherent verbal model and among pictures to create a coherent pictorial model	A learner organizes the steps into a cause-and-effect chain for the words and the pictures.
Integrating	The learner builds external connections between the verbal and pictorial models and with prior knowledge.	The learner makes connections between corresponding steps in the verbal chain and the pictorial chain and justifies the steps on the bases of his or her knowledge.

Source Mayer (2000: p 71)

According to Akele (2013:100), "Through the use of modern technology, teaching and learning processes are easier, efficient, real, applicable to practical situations, relevant to life, retentive, and simplified, but cannot replace the role played by teachers." Njmanze (2010) "opines that technological innovations have gone hand in hand with the growth of language teaching especially, English. With the aid of technological advancement, resounding improvement has been recorded in the manner in which teachers learn, communicate, and discharge their duties." According to Al Mukhallafi (2014: 5), "An interest in integrating new technology in the Saudi education system has stirred a desire to move from traditional teacher-centered methods to participatory classrooms."

Al Mukhallafi argues that "Computer-assisted language learning aims to develop in the students the different language skills of the students such as reading, writing, speaking, and listening. It also seeks to develop knowledge of culture as represented in literature. Besides learning the English language, students can learn about the cultures of others, which is knowledge necessary for mastery of the language. Students cannot master English without learning the cultures of the native speakers of English. Language

cannot be studied in isolation from culture. However, in a globalized world, ICT provides an opportunity for the students to access English through music, movies, YouTube, TV shows, and advertisements. Ivers and Barron (2004) summarized the importance of multimedia as follows:

Multimedia projects encourage students to work in groups, express their knowledge in multiple ways, solve problems, revise their work, and construct their knowledge. Students have the opportunity to learn and apply real-world skills. They learn the value of teamwork; the impact and the importance of different media, including design issues, media appropriate and validity, and copyright laws; the challenges of communicating to different audiences; the importance of research, planning, and organization skills; the significance of presentation and speaking skills; and how to accept and provide constructive feedback.

## 2.2 The Use of Multimedia in the Classroom:

Harris (1993) said that: "Multimedia is the combination of several media sources such as video, graphics, animations, and text, accessed by a computer and attached peripherals driven by special programs. With the use of multimedia in the ELT classroom, students are more interested in the learning process. Also, they may learn more language skills and increase their knowledge in fluency and good pronunciation through video, graphics, texts, animations as well as computer interaction." So the use of multimedia in the classroom has become one of the basic skills that an individual must process today.

According to (Acha, 2009: 29).The application of multimedia technology in English teaching has the following beneficial purposes:

- 1) To cultivate students' interest in the study
- 2) To promote students' communication capacity
- 3) To widen students' knowledge and to provide an insightful understanding of Western culture
- 4) To improve the effectiveness of teaching
- 5) To improve the interaction between teachers and students
- 6) To create a context for language teaching and to provide flexibility in the course context.

## 3. Methodology of the Study

The researcher used the descriptive-analytical method in order to process the data of the study and to achieve its purpose in the form of one group pre-tests and post-tests design with quantitative data analysis. The students' productive expression hypotheses were tested by pre-test and post-test for one group, and this includes watching videos, animations, images, texts, and film activities through multimedia. The students were asked to discuss the topics orally and then to write down what they were discussing, and this enabled the researcher to measure their abilities in productive expression after completing multimedia productive activities.

### 3.1 Validity and Reliability

To validate the oral and written tests, the researcher submitted them to a committee of English experts. They

were requested to evaluate the tests in terms of clarity, instruction, difficulty, correctness, and suitability for the students' level. All members of the committee indicated that the test guidelines for oral and written expression were clear and appropriate. However, they suggested some modifications and commented on the test topics. The researcher made all necessary corrections. Finally, they indicated that the tests appeared to be a valid measure for oral and written expression of EFL learners.

A pilot test was used to determine the reliability of oral and written tests. To measure the reliability of the tools used in the study, the researcher used (SPSS) program to analyze the data. College teachers were interviewed according to their vast experience to answer the questions that concern the effect of multimedia strategies on the students' achievement. Also, the researcher computed Cronbach's Alpha to measure the reliability of oral and written tests; the result obtained is (0.82) which, means that the tests were reliable.

### 3.2 Analysis and Discussion of the Results

Two tests (pre-oral and written tests and post- oral and written tests) were submitted to the students. T-test and mean scores were used to test whether there are significant differences between pre-test and post-test scores.

### 3.3 Results of the Study

$H_0$ : Multimedia does not help Saudi EFL learners to cope with their different learning strategies.

$H_1$ : Multimedia helps Saudi EFL learners to cope with their different learning strategies.

### Comparison of students' performance on pre- tests and post-tests

#### Paired Samples T test

Test	Mean	N	Std. Deviation	Df	sig
Pair Pre -tests	34.2600	50	7.43629	49	.000
Post- tests	47.8400	50	8.08718		

The above table shows that the P-value of T-test is (0.00) less than the level of significance (0.05). That is to say that the null hypothesis is rejected, and the alternative hypothesis is accepted and confirmed. Multimedia helps Saudi EFL learners to cope with their different learning strategies.

The hypothesis states that the use of multimedia helps EFL learners to cope with their different learning strategies, is accepted and confirmed based on the results of the students' performance on the pre-oral and written tests as a comparison with the results of the post-oral and written tests. As shown in the above table, the P-value of T-test is (0.00), less than the level of significance (0.05), which means the hypothesis is accepted and confirmed. The table also shows the mean and standard deviation. According to interview results, most teachers (90%) agree that the use of multimedia helps EFL learners to cope with their different learning strategies because multimedia is a component of active learning strategies such as group discussions or case studies.

## 4. Findings

After the statistical analysis of data, the main finding was that teaching through multimedia has a positive effect on the students' achievement. Therefore, the findings of the study are the following:

- 1) The use of multimedia enriches the students' vocabulary, mainly the selection of words. So they control the features of the language.
- 2) Multimedia assists in promoting the correct aspect of oral description to the learners and provides them with all the required information included with additional details of the topic.
- 3) Teaching through multimedia helps EFL learners to cope with their different learning strategies in productive expression.
- 4) Teachers' interview results emphasized the essential role that multimedia plays in promoting the students' achievement.

## 5. Recommendations

Based on the findings of the study, the following recommendations are suggested:

- 1) Teachers of English language are recommended to expand the use of multimedia in classes for better performance in oral and written expressions.
- 2) A workshop should be done for teachers on the importance of multimedia in the classroom to improve and change their teaching strategies.
- 3) Multimedia should apply for effective teaching of English, and the written expression should give more consideration.

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