

Does Interactive Multimedia Strategy Improve Listening Skills better than Vocabulary Skills?

Dr. Rashed Alghamdy

College of Education, Al- Baha University, Saudi Arabia

E-mail: Rz000@hotmail.com

Received: June 28, 2019 Accepted: July 18, 2019 Published: July 22, 2019

doi:10.5296/ijele.v7i2.15124 URL: <https://doi.org/10.5296/ijele.v7i2.15124>

Abstract

This study examines the impact of interactive multimedia in enhancing EFL students' English skills ability in learning English as a foreign language context. To identify the impact of interactive multimedia strategy on the achievements of EFL learners, a quasi-experimental design study was applied for one month at an elementary school in Saudi Arabia. In particular, this study purposes to investigate whether the EFL learners in the experimental group would improve their listening skills better than their vocabulary skills when learning them through interactive multimedia strategy in comparison to their peers in the traditional learning method. The participants in this study were 40 male students, aged 11-13 years, level six at an elementary government school in Al-Baha City.

The results highlighted that there are statistically significant differences between the mean scores of the EFL learners who were taught listening skills and vocabulary skills via the interactive multimedia strategy and those who were taught the same skills by using the traditional learning (the control group) in the post-test. Furthermore, the results indicated that the EFL learners in the experimental group have improved their listening skills better than their vocabulary skills when learning them through interactive multimedia strategy. However, the findings revealed that are not statistically significant differences between the EFL learners in the experimental classes and the students in the control groups in their English listening skills and vocabulary skills test score at the pre-test.

Keywords: Applied Linguistics, Teaching English as a Foreign Language, Interactive Multimedia, Saudi Arabia

1. Introduction

Interactive multimedia is a term which obtained popularity at the last phase of the 20th century. Interactive media is defined by as the integration of the digital media and is inclusive of the interrelations of graphics, electronic text, sound and moving images into a digitally structured computerized environment which allows individuals to interact with the data for reasonable purposes (England & Finney, 2011). There are various types of interactive multimedia which may be implemented in teaching within education. Making use of interactive multimedia learning resources, students can become motivated to learn since they can listen to the audio files, watch the video or look simultaneously at animation, graphics and text (Ampa, 2015). Contemporary technology like interactive whiteboards and computers provide numerous opportunities for teachers to obtain new possibilities which heighten every year. This however does not mean that they are not exploited fully in the learning languages which could be due to many reasons such as inadequate school facilities or teachers' literacy levels of brand new technologies (Ambarini, Setyaji & Zahraini, 2018). The use of multimedia visuals such as video-based activities or slide presentations became demoted to special occasions or not even implemented in practice of English in the classroom (Ramírez, 2012). The utilization of visual, aside from the ones included within textbooks, is not a fundamental part of the everyday lesson teachers implemented in early childhood learning.

There a number of benefits obtained from using media in the process of learning. They include, first, learning becomes more interesting thereby increasing the motivation to learn among the students. Second, learning materials become understood easily thus allowing students to control and achieve their learning objectives. Third, the teaching techniques become more variative following verbal communication and explanations by the teacher (Ambarini, Setyaji & Zahraini, 2018). Notably, it is very significant to make use of interactive media which is combined with the traditional ways to come up with an exciting, and fun environment for learning. English as well as Mathematics can be combined with ICT for students' learning in order to enhance self-learning among them (Ambarini, Setyaji & Zahraini, 2018).

The education process is no longer confined to the traditional banking education system where the students are viewed as mere participants. Technology advancement offers students a chance to learn and explore different media (Christine Joyce & Mark Joel DJ, 2011). In particular the access to a computer by children is becoming more important both at home and at school (Ricci, 2002). Media involves several devices such as, digital video cameras, audio components, games and computer-based programs. These kind of devices assist both the teachers and their students to actively achieve the learning goals set out in a classroom. Introducing such media acts as an incentive for active participation and learning of students within the English classroom setting (Joyce & Joel, 2011).

2. Literature Review

There are unclear beginnings of the history behind usage of interactive multimedia within an education setting. However, as early as the sixties, there were considerable efforts present of

including this kind of media in the education system. Different individuals made varying contributions. Berkley came up with 163 high school physics lessons at the WQED which is a Pittsburgh's PBS station which was broadcasted in the areas public schools. Each lesson took thirty minutes and was filmed so as to become distributed in public television stations. Frank Rosenblatt came up with an invention called the perceptron in 1957 at Laboratory in Cornell Aeronautical having the intention to understand human cognition and memory (Rosenblatt, 1958). Of equal importance was Rath, Anderson and Brainerd work in the early 1960's where they reported a project by using an IBM 650 to teach binary arithmetic in the Chicago University which later on performed a series of courses made available through television. In the mid-1960s a professor from Stanford research institute, Douglas Engelbart, published his seminal paper with the topic *Augmenting Human Intellect: a conceptual framework* where he proposed making use of computers to supplement training.

Previous research which looked into the influence of interactivity in remembering information and comprehension showed that when sound, video oral text and music are combined in the multimedia story book, pupils at risk seem like they profit much more from this kind of repeated story experiences as is illustrated by the more complete retellings (Verhallen, Bus, & de Jong, 2006). Neumans (2006), offers a theory of synergy in multimedia which supports the above finding where additional non-verbal features such as music, video and sound seem to work additively when children are making conclusions regarding the structure of a story and while abstracting the story line. According to Smith (2000), in order to prepare interactive multimedia, it is of essence to have skills and knowledge especially in working with the computer.

Multimedia involves the utilization of computers to combine and create graphics, text, video and audio which allows users to create, interact and communicate (Hofstetter, 2001). Interactive multimedia refers to the interplay between the media or program and the user. The utilization of media in education is important to create a fun and exciting environment while practicing in the classroom. The media is as well considered as one of the most essential components of teaching technology in supporting the learning and teaching process (Anwariningsih & Ernawati, 2013). Consequently media has a role to unite the oral and symbols in order to convey information and root the understanding of the contents or the actual meaning in the process of teaching which aims to provide playful activities essentially designed for young students in early childhood learning. Media offers individuals held when they need to exchange ideas and information on certain issues and in particular occasions. Information exchange can be done by making use of different methods and channels of interactive media such as visual information like games and short movies, written methods of communication like comments, blogs and chat rooms, audio, graphical information like pictures and photos among others (Kuprienė & Žegunienė, 2017).

Moreover, media is material, human-based or events which lead the conditions and situation of enabling students to obtain skills, knowledge or attitude. In the place where the media carries information or messages which contains teaching objectives or instructional aim the media is known as a media of learning. Education media is an instrument in the learning process which can be implemented both in and out of the class to help and support learning

experience of students and increase learning results (Lonka, 2015). The use of media via a systematic design can assist educators to teach memorable material adequately with playful activities (Anwariningsih & Ernawati, 2013). Additionally, making use of concrete visuals can attract the interest of students so as to describe the material presented and offer concrete experiences so as to make the education process run in exciting and fun ways. The implementation and use of visuals from interactive media within the classroom has as well been known to inspire the knowledge and learning process.

3. Significance of the Study

The importance of this study is to identify the manner in which interactive multimedia enhance and provide more interactive lessons, while increasing the outcomes of EFL students in English. In this study, the researcher investigates whether the EFL learners in the experimental group would improve their listening skills better than their vocabulary skills when learning them through interactive multimedia strategy. In this light, the learning interactive multimedia method can be the solution, as learners have the opportunity to access different media, such as electronic text, graphics, moving images, audio material, video clips, and sound that can aid them in learning English more easily and more enjoyable.

4. Methods

4.1 Research Questions

1. What is the impact of interactive multimedia on the EFL learners' outcomes in learning listening Skills?
2. What is the impact of interactive multimedia on the EFL learners' outcomes in learning vocabulary skills?
3. Does interactive multimedia strategy improve listening skills better than vocabulary skills?

4.2 Participants

In this study, a total of 40 male pupils within the age bracket of 11-13 years, and at level six at Al-Baha city's elementary government school participated. Additionally, the classes were randomly assigned to one of the two conditions. In this study, while one class was randomly selected to form the experimental group, another was randomly selected to form the control group. The experimental group (interactive multimedia) consisted of 21 pupils while the control group (traditional learning) was made up of 19 students. In this study, the researcher only used quantitative technique to collect data. The tools utilized to collect data were only pre-test and post-test English achievement test .

4.3 English Listening and Vocabulary Skills Test

The test was used as both a pre-test and a post-test to investigate the effect of the interactive multimedia method on students' English language achievements, particularly in learning

listening skills and vocabulary. The test is comprised of two parts: the first to assess listening skills, whereas the second part is to evaluate vocabulary skills. There were four questions and each question has 6 points, with total of 24 points. At the beginning of the test, the participants were asked to listen and match the pictures. Second, the students were asked to listen and check the right column. Third, the students were asked to listen and fill in the blanks with the correct word. Finally, the students were asked to listen and write the correct vocabulary. The time allocated for this part was 25 minutes. There was one mark for each correct answer in the exam. The participants' previous achievements in listening skills and vocabulary were evaluated by the pre-test distributed to both conditions (experimental and control) before the study began. The purpose of the pre-test was to assess the students' background knowledge of listening skills and vocabulary. The same pre-test was presented at the end of the study as a post-test, to evaluate the participants' achievements on the English listening skills and vocabulary. The high Alpha-Cronbach score of 8.5 of the test indicated that the test was reliable. The purpose of the post-test was to assess the impact of both the traditional learning method and interactive multimedia method on EFL students' achievements.

4.4 Procedures

In this study, Two English teachers participated. These English teachers were professionals with bachelor degrees in teaching English and similar experience when it comes to teaching English. The researcher, in this study, organized two separate workshops, with one of the workshops designed for the teacher of the experimental group who is experienced in the use of Interactive Multimedia learning techniques, and the other workshop tailored for a teacher of the control group having students learning through traditional approaches, and did not receive training on the use of Interactive Multimedia techniques. For both the groups (experimental and control groups), the textbook used was the one assigned by the Ministry of Education. Both the groups employed a wide array of learning activities such as listening to audios, watching videos, viewing the texts or animations as well as graphics singly or simultaneously. The teacher of the experimental group and the one for control group was assigned one class each, where they taught the same content to all classes for one month. This study was conducted for 1 month at the beginning of semester two of 2018. In investigating the effect of Interactive Multimedia learning on EFL learners, the researcher used English achievement test as both a pre-test and post-test evaluation techniques. At the end of the study, the same pre-test was presented to the participants in order to evaluate the achievement of the participants on listening skills and mastery of vocabulary.

5. Results and Discussions

5.1 Findings of The English Vocabulary and Listening Skills Test

In both the experimental and control group, 40 students participated. These students were drawn from two classes at a government elementary school because they have experience either the experimental condition or the control condition. In order to find out if variances existed when it comes to the scores of EFL students in both conditions, a variance analysis was conducted. Table 1 shows the means and standard deviation of English achievement

pre-test and post-test scores

Table 1. Means and standard deviation in the total of pre-test and total of post-test scores For the Experimental and Control conditions.

		N	M	SD
Pre-test total scores	control	19	15.68	3.513
	experimental	21	14.95	2.655
	Total		15.30	3.073
	40			
Post-test total scores	control	19	17.370	3.004
	experimental	21	21.00	2.950
	Total	40	19.28	3.464

In order to determine if there were differences between both the pre-test and post-test total score results, one-way ANOVAs were conducted. As can be seen in Table 2, there were no significant differences between the experimental and control conditions at Time 1 but there were significant differences at Time 2.

Table 2. Tests of between-subject effects for pre-test and post-test total scores

ANOVA		SS	df	MS	F	Sig.
Pre-test total scores	Between Groups	5.342	1	5.342	.599	.459
	Within Groups	363.058	38	9.554		
	Total	368.400	39			
Post-test total scores	Between Groups	131.554	1	131.554	14.860	.000
	Within Groups	336.421	38	8.853		
	Total	476.975	39			

To determine if there were differences between the conditions on the listening task questions and the vocabulary task test at Time 2, one-way ANOVAs were conducted. Table 3 below presents the means and standard deviations of the students' scores on the listening task and the vocabulary task separately at Times 2.

Table 3. Student Mean Score and Standard Deviations on the Listening task Test and the vocabulary task Test at Post-Test

Condition	N	M	SD
-----------	---	---	----

Condition	<i>N</i>	<i>M</i>	<i>SD</i>
Listening task			
(1) Experimental	21	13.825	2.052
(2) Control	19	11.000	3.543
Vocabulary task	21		
(1) Experimental		7.714	2.556
(2) Control	19	8.210	2.393

Note. Maximum score for the Listening task = 12; maximum score for the *vocabulary* task = 12.

To determine if there were differences between the conditions on the listening task questions and the vocabulary task test at Time 2, one-way ANOVAs were conducted. As can be seen in Table 4, there were significant differences in listening task questions in favour of the experimental condition. However, there were no significant differences in the vocabulary task questions between the experimental and control conditions. The results are shown in Table 4 as follows.

Table 4 . Tests of between Subject Effects for Two Different Scores

DV	Type III SS	df1	df2	MS	<i>F</i>	Sig.
Listening task	52.114	1	38	52.114	6.382	.010
Vocabulary task	2.456	1	38	2.456	.400	.531

As indicated in Table 4.4, the condition predicted significantly larger differences in scores for listening task questions responses, $p = .010$ ($p < .05$). In contrast, there were no significant differences in scores with the vocabulary task, $p = .531$ ($p > .05$).

5.2 Discussion

The results highlighted that there are statistically significant differences between the mean scores of the EFL learners who were taught listening skills and vocabulary skills via the interactive multimedia strategy and those who were taught the same skills by using the traditional learning (the control group) in the post-test. Furthermore, the results indicated that the EFL learners in the experimental group have improved their listening skills better than their vocabulary skills when learning them through interactive multimedia strategy

The findings indicated that there are statistically significant differences, $p = .010$ ($p < .05$) between the mean scores of listening task questions responses. In contrast, there were no significant differences in scores with the vocabulary task, $p = .531$ ($p > .05$). The result is in

line with other findings. Like Ampa (2015), it was concluded that the interactive multimedia learning materials using program were effective in teaching “English listening skills.” Another study has done by Joyce and Joel (2011) showed that among students who had the story-telling activity, the ones under the condition of audio only remembered the story poorly, including the story facts and ability to make inferences. The exchange of information can be done by using different channels and methods of interactive media such as written method of communication (blogs, comment, and chat rooms), visual information (short movies, games), graphical information (photos, pictures), audio (music files), etc (Kuprienė & Žegunienė, 2017).

These findings highlight the fact that the students had the same background knowledge of the items before the implementing of interactive multimedia, confirming that any gain in the EFL learners’ achievements could be attributed to the interactive multimedia. This research found that interactive multimedia strategy has a strong effect on EFL learners’ outcomes. Learning media is an instrument in the learning process that can be implemented both inside and outside class to support and help students’ learning experience and improve learning outcomes (Lonka, 2015). The introduction of such media encourages active learning and participation of pupils in the learning process. Active learning approach gives people control over their own learning (Bell & Kozłowski, 2008). Active learning let pupils make crucial learning decisions, such as selecting, judging, and appreciating learning materials in comparison with passive learning wherein pupils are mere expectations of what the teachers will present in the learning process (Joyce & Joel, 2011).

6. Conclusion

To sum, a quasi-experimental design study was applied for 4 weeks at an elementary school in Saudi Arabia to examine the effect of Interactive multimedia strategy on the outcomes of EFL learners. In particular, this study purposes to investigate whether the EFL learners in the experimental group would improve their listening skills better than their vocabulary skills when learning them through interactive multimedia strategy in comparison to their peers using the traditional method.

The participants in this study were 40 male students, aged 12-15 years, level six at an elementary government school in Al-Baha City. The results highlighted that there are statistically significant differences between the mean scores of the EFL learners who were taught listening skills and vocabulary skills via the interactive multimedia strategy and those who were taught the same skills by using the traditional learning (the control group) in the post-test. Furthermore, the results indicated that the EFL learners in the experimental group have improved their listening skills better than their vocabulary skills when learning them through interactive multimedia strategy.

References

Ambarini, R, Setyaji, A., & Zahraini, D. (2018). Interactive Media in English for Math at Kindergarten: Supporting Learning, Language and Literacy with ICT. *Arab World English*

Journal (AWEJ) Special Issue on CALL Number 4. July 2018.
<https://doi.org/10.24093/awej/call4.18>

Ampa, A. T. (2015). The Implementation of Interactive Multimedia Learning Materials in Teaching Listening Skills. *English Language Teaching*; Vol. 8, No. 12; 2015.

Anwariningsih, H., S., & Ernawati, S. (2013). Development of Interactive Media for ICT Learning at Elementary School Based on Student Self Learning. *Journal of Education and Learning*, 7(2), 121-128.

England, E., & Finney E. (2002/2011). *Interactive media – what's that? who's involved? ATSF White Paper—Interactive Media UK*. Downloaded from: http://www.atsf.co.uk/atsf/interactive_media.pdf

Hofstetter, F. T. (2001). *Multimedia Literacy*. Third Edition. McGraw-Hill International Edition, New York.

Joel, M; Joyce, C. (2011). The Effect of Interactive Media on Elementary School Childrens' Story Memory. Volume 6 Issue 1. *The International Journal of Research and Review*.

Kuprienė, L., & Žegunienė, V. (2017). Integration Of Interactive Media Into Foreign Language Learning To Support Efficiency Of Study Process. *SOCIETY. INTEGRATION. EDUCATION Proceedings of the International Scientifics*.

Lonka, K. (2015). *Innovative Schools: Teaching & Learning in the Digital Era*. European Parliament. European Union. Retrieved from <http://www.europarl.europa.eu/studies>

Ramírez, G. M. (2012). *Usage of Multimedia Visual Aids in the English Language Classroom: A Case Study at Margarita Salas Secondary School (Majadahonda)*. Universitas Complutensis Matritensis.

Smith, S. (1999). What Are Interactive Learning Materials? Retrieved from http://www.ehow.com/info_7947754_interactive-learning-materials.htm



Wilkisch, S. M., et.al. (2006). *Impact of interactive school-based media literacy lessons for reducing internalization of media ideals in young adolescent girls and boys*. Downloaded from <http://onlinelibrary.wiley.com/doi/10.1002/eat.20237>



Dr. Rashed Zannan Alghamdy, is an Assistant professor at Al-Baha University in Education college , Saudi Arabia. His research focuses on Applied Linguistic, Teaching English as Foreign Language, Mobile language learning, Verbal Interaction, discourse analysis, learning process.



Email: rz000@hotmail.com



Appendix

2 Listen and tick (✓). 


1.  a b  a b

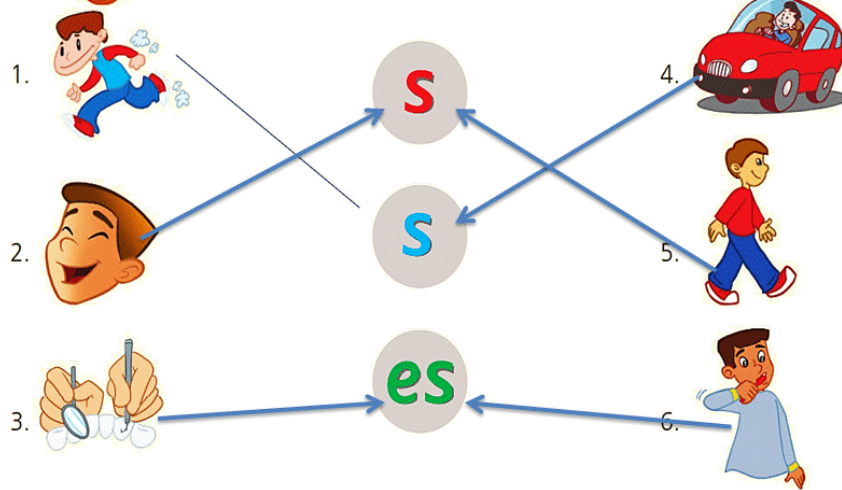
2.  a b  a b



3.  a b  a b



4.  a b  a b



شبكة فاهم التعليمية www.ifahem.com



3 Listen and match. 







1.  

2.  


3.  

4.  

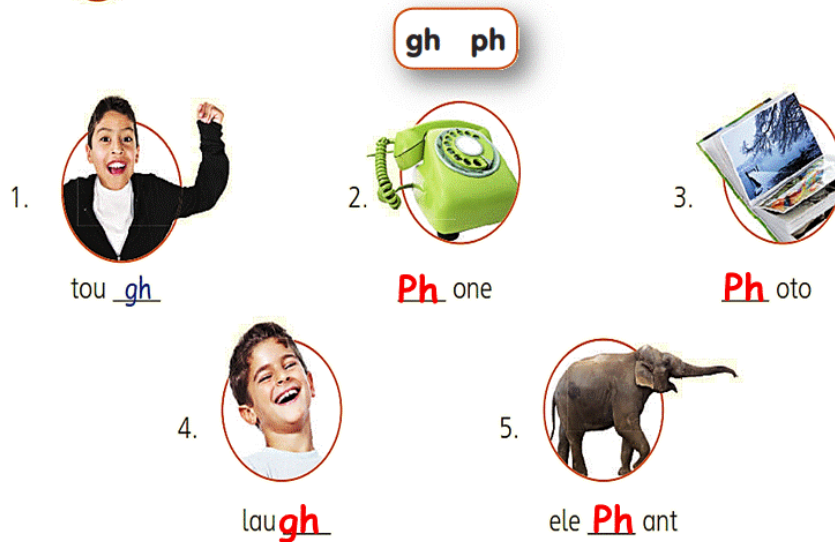
5.  


6.  


www.ifahem.com شبكة فاهم التعليمية


3 Listen, say and write the missing letters. 


gh ph




1.  tou gh

2.  **Ph** one

3.  **Ph** oto

4.  lau **gh**

5.  ele **Ph** ant

www.ifahem.com شبكة فاهم التعليمية

Copyright Disclaimer

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).