



Effect of Multimedia Visual Aids on Speaking Skill & Autonomy of EFL Learners

Ali Hossein Nakhaee^{1*}, Aliye Jafari²

¹Department of English Language, Ke.C., Islamic Azad University, Kerman, Iran

alihosseinnakhai@gmail.com

²Department of English Language, Ke.C., Islamic Azad University, Kerman, Iran

aliye.jafari2113@gmail.com

Citation

Nakhaee, A. H., Jafari, A. (2024). Effect of Multimedia Visual Aids on Speaking Skill & Autonomy of EFL Learners. *International Journal of Language and Translation Research*, 4(3), pp.87-97.

Available online

Keywords:

Multi-media visual aids, Autonomy, speaking skill

Abstract

This study aimed to investigate the effect of using multimedia visual aids on the learners' speaking skill and their autonomy. Since it was an experimental method of research, two groups of learners in a language institute were chosen to participate in the experiment. The population of the study was made up of 48 pre-intermediate EFL learners in a language institute in Bardsir, Kerman. To homogenize the study subjects and to select an appropriate sample, Oxford Placement Test was run and only those subjects whose score fell one standard deviation above and below the mean were selected for the study. As a result, 12 subjects were excluded. The other 36 subjects were randomly classified into two groups, each 18 female students, aged 15 to 18. They constituted the experimental and control group for the study. Three instruments were used to collect the data: Oxford Placement Test to homogenize the study subjects, and speaking test to identify the initial speaking ability of the participants and the third instrument was using a questionnaire that estimated the participants' autonomy developed by Zhang and Li (2004). It was finally proved that the use of multi-media visual aids could positively impact both the speaking ability as well as the learners' autonomy. In fact, the learners who worked on their language using some devices that offered authentic language within a context that was different from their classrooms and used other sources rather than their teacher could improve more and feel more independent. This would give them some sort of independence in learning. They improved their autonomy that is required to develop their language skills based on the new approaches and methods.

این مطالعه با هدف بررسی تأثیر استفاده از ابزارهای دیداری چندرسانه‌ای بر مهارت گفتاری زبان‌آموزان و استقلال آنها انجام شد. از آنجایی که این مطالعه یک روش تجربی بود، دو گروه از زبان‌آموزان در یک موسسه زبان برای شرکت در این آزمایش انتخاب شدند. جمعیت مورد مطالعه شامل ۴۸ زبان‌آموز EFL سطح پیش‌متوسط در یک موسسه زبان در بردسیر کرمان بود. برای همگن‌سازی آزمودنی‌های مطالعه و انتخاب نمونه مناسب، آزمون تعیین سطح آکسفورد اجرا شد و فقط آزمودنی‌هایی که نمره آنها یک انحراف معیار بالاتر و پایین‌تر از میانگین بود، برای مطالعه انتخاب شدند. در نتیجه، ۱۲ آزمودنی حذف شدند. ۳۶ آزمودنی دیگر به طور تصادفی به دو گروه ۱۸ نفره از دانش‌آموزان دختر ۱۵ تا ۱۸ ساله طبقه‌بندی شدند. آنها گروه آزمایش و کنترل را برای مطالعه تشکیل دادند. برای جمع‌آوری داده‌ها از سه ابزار استفاده شد: آزمون تعیین سطح آکسفورد برای همگن‌سازی آزمودنی‌های مطالعه و آزمون گفتاری برای شناسایی توانایی اولیه گفتاری شرکت‌کنندگان و ابزار سوم استفاده از پرسشنامه‌ای بود که استقلال شرکت‌کنندگان را که توسط ژانگ و لی (۲۰۰۴) توسعه داده شده بود، تخمین می‌زد. در نهایت ثابت شد که استفاده از ابزارهای بصری چندرسانه‌ای می‌تواند هم بر توانایی صحبت کردن و هم بر استقلال زبان‌آموزان تأثیر مثبت بگذارد. در واقع، زبان‌آموزانی که با استفاده از دستگاه‌هایی که زبان معتبری را در بستری متفاوت از کلاس‌های درس ارائه می‌دادند و از منابع دیگری به جای معلم خود استفاده می‌کردند، روی زبان خود کار کردند، توانستند پیشرفت بیشتری داشته باشند و احساس استقلال بیشتری کنند. این امر به آنها نوعی استقلال در یادگیری می‌دهد. آنها استقلال خود را که برای توسعه مهارت‌های زبانی خود بر اساس رویکردها و روش‌های جدید لازم است، بهبود بخشیدند.

¹ Corresponding Author's Email:
alihosseinnakhai@gmail.com

Introduction

Even though English has been learnt by Iranian EFL learners since they were in secondary level as a compulsory subject, it is still common to see students to be passive in the class interaction due to unable to speak English (Rahimpour, 2008; Tavakoli, & Foster, 2008). One cause for them to be passive is that the learners are highly dependent on their teacher and that their classes are teacher-centered. The other reason is that the learners are exposed to teaching methods that do not address their needs (Rahimpour, 2008). Noom-Ura (2013) discussed that apart from mother tongue interference, five other reasons for foreign language learners to hinder them to speak English fluently are “lack of opportunity to use English in daily lives, unchallenging English lesson, being passive learners, being too shy to speak English with classmates, being poorly-motivated and lack of responsibility for their own learning”.

Traditional teaching methods to teach English in schools are grammar- based and they focus on structure more than other skills and sub-skills; this is not enough to the learning process of English since the other two macro-skills which are listening and speaking are important as well (Rahimpour, 2008). Most of the time, when learning a language, speaking is not emphasized as it should be; for this reason, students are afraid to make mistakes in their oral presentations, or the simple fact to provide an opinion in front of the whole class, they have many difficulties when trying to speak in English. This problem is presented in all ages, and it is because they do not feel confident about themselves speaking in another language. If this problem was taken into account from the beginning of their learning process, when they were in an advanced level, they were more confident when speaking and they were more participative in the classroom.

The present study aimed at to investigating the effect of using multi-media devices such as photos, slides, and videos on the speaking and autonomy of the EFL learners. The following chapters will discuss the literature of the study and the methodology. The study achievements can be outstanding since they will help teachers, learners, textbook designers, test makers and finally practitioners who are concerned with teaching methods. The learners will benefit from this study since it will help them to learn speaking in a practical manner using technology. The required context is provided for them to learn more naturally. The second group who will benefit from the study achievements are teachers who can become familiar with teaching methods that are up-to-date and motivating. In fact, the use of multimedia can help teachers to be establish almost real context for teaching speaking to the learners. Finally, language institutes and organizations can use the achievements to use the methods that are demanding for both teachers and learners.

Based on the objectives of the study, the following two research questions were addressed in the present study:

RQ1. What is the impact of using multi-media visual aids on the speaking skill of the learners?

RQ2. What is the impact of using multi-media visual aids on the EFL learners’ autonomy?

Literature Review

Thanks to the projectors and multimedia classrooms that have been integrated in high school nowadays, teachers can use different resources to support their explanations, correct exercises or play games. In order to make these presentations effective, teachers must be careful with the visual material and strategies they include in them. Several things must be taken into account, such as the way in which pictures, graphics and visual organizers affect the learners, what is the best way to use them and what are their benefits.

Carney and Levin (2002) reported that pictures improved the reading-to-learn process, but they also pointed out that these pictures must be well-selected or well-constructed ones. The beneficial effects of the visuals and the reasons why pictures facilitate comprehension and learning are explained by Levin and Mayer. They proposed some principles called the seven “C”. According to their words pictures make the text more: concentrated, compact/concise, coherent, comprehensible, correspondent and codable.

Other authors have also numbered some reasons for the benefits of the pictures, such as Brinton (2000). This author highlighted that pictures help increasing motivation, focusing attention, depth of processing clarification of text content, dual-coding theory, decreasing interference decay, process support for the type of information and serve as mental models (as cited in Carney and Levin 2002). Research by Herron, Hanley and Cole (1995) indicates that listening comprehension is significantly facilitated by visual support in the form of descriptive pictures and visual organizers thanks to the richness of the context provided (as cited in Canning-Wilson 2000).

Graphic images also help students to create relations amongst the words, bringing out more detailed, knowledgeable, responsive, awareness to the object, situation or text being communicated” (Canning-Wilson 2001, p.56). Canning also points that the picture can help the student to work with more abstract thoughts and organizing skills through the use of logical structure. Vekiri states that in order to help the working memory process the information, the graphical representations are effective because their processing require fewer cognitive transformations (as cited in Clark and Lyons 2004).

It is important to point that in order to improve memory for lesson content, visuals should be aligned with goals of the instruction. Clark and Lyons (2004) assert that this improvement is the result of dual-encoding. These authors agree with Carney and Levin’s idea of the principle of conciseness that visuals provide in comparison with the texts: „If the visuals used depict relationships, they can help building cause-and-effect mental models which support deeper learning” (Clark and Lyons, 2004, p.2).

Method

The population of the study was made up of 48 pre-intermediate EFL learners in a language institute in Bardsir, Kerman. To homogenize the study subjects to select an appropriate sample, Oxford Placement Test was administered and only those subjects whose score fell one standard deviation above and below the mean were selected for the study. As a result, 12 subjects were

excluded. The other 36 subjects were randomly classified into two groups, each group included 18 female students, aged 15 to 18. They constituted the experimental and control group for the study.

Three instruments were used to collect the data. Primarily and as the first step to measure the knowledge of the learners, Oxford Placement Test was administered to homogenize the study subjects. This test contains 100 items on grammar, vocabulary, and reading comprehension in the form of multiple-choice tests and limited completion tests.

To identify the initial speaking ability of the participants in the study, a pre speaking test was taken. To undertake this step, the same procedure as PET Examinations were used. The oral tests contained the following parts:

Part 1: personal information

Part 2: simulated situation

-If your teacher asked you for ideas to improve your school, what would you do? Look at the pictures and give your ideas.

Part 3: responding to visual stimulus

-Look at this photo and talk about it. What do you understand from it?

Part 4: general conversation based on the photographs

-Talk to each other about where and when you go shopping/ hiking/ ... to your friend.

-Talk about what you like about shopping and what you don't like doing.

In this study holistic scoring procedures was recommended to be used to rate overall speaking. Although the method suffers from some pitfalls, if applied correctly and cautiously, it can prove valid and reliable indication of the scoring procedure. Therefore, to score the speaking ability of the subjects both for the pre and posttest, three experienced scorers were used to put their judgments on the oral production of the subjects using analytic method. The mean score of the given marks by the three scorers establishes the final mark. For observation of the given scores by three scorers, refer to the appendix.

The third instrument was using a questionnaire that estimated the participants' autonomy. A Learner Autonomy Questionnaire developed by Zhang and Li (2004) was used to see how autonomous the participants were in learning English as a foreign language after they were exposed to the use of multi-media. The questionnaire was used two times with the learners in the EG, once before the experiment began and the other after the experiment of blending came to an end. The teacher helped the learners of the EG to comprehend the questionnaire by translating any items that were hard for them to understand.

The researcher applied t-test as a parameter to discover any difference between the performances of the two groups from pre to posttest so as to make clear if any of the groups had outperformed the other. The other parameter, reliability of the test, was also estimated. Besides, frequencies and χ^2 were used to analyze questionnaire data. SPSS software version 23 was used to analyze the data.

Results

To discuss the first research question, the data in tables 1 to 6 are useful. Table 1 below presents the basic information about the means and standard deviation of the three raters on the pretest for the CG. As it can be seen, the mean score given by the first rater is 12.52 and the mean given by the next rater to the same group is 12.29, and finally the mean given by the third rater is 12.41, and the last row shows the total mean score of the three raters which is 12.40. The total mean shows the mean of the control group on the pretest.

Table 1

Pretest data for control group

	N	Mean	Std. Deviation
Pretest for control group: scorer 1	18	12.5294	2.03463
Pretest for control group: scorer 2	18	12.2941	2.28486
Pretest for control group: scorer 3	18	12.4118	2.00184
Total mean		12.40	

Besides, table 2 below presents the statistical information about the means and standard deviation of the three raters on the pretest for the EG. As it can be seen, the mean score given by the first rater is 12.86 and the mean given by the next rater to the same group is 13.90, and finally the mean given by the third rater is 14.02. The last row shows the total mean score of the three raters which is 13.59. The total mean shows the mean of the experimental group on the pretest. The difference between the means and the raise in the mean can reveal the progress of the learners in the EG in their speaking ability. In fact, by comparing the pre and post speaking scores for the EG, it can be concluded that the use of multi-media aids had positive impact on the speaking skill of these learners.

Table 2

Pretest data for experimental group

	N	Mean	Std. Deviation
Pretest for experimental group: scorer 1	18	12.8611	1.32627
Pretest for experimental group: scorer 2	18	13.9028	1.38037
Pretest for experimental group: scorer 3	18	14.0278	1.57622
Total mean		13.59	

Table 3. demonstrates the information about the posttest for CG. As the table reveals, the mean score given by the first scorer is 14.32 and it changes to 14.86 for the second scorer and finally it remains almost unchanged by the third scorer: 14.95. On the other hand, the total mean score for post CG is estimated to be 14.71. The low standard deviations reveal the close homogeneity of the scorers, and the marks granted by them.

Table 3*Posttest data for control group*

	N	Mean	Std.Deviation
Posttest for control group: scorer 1	18	14.3235	1.29833
Posttest for control group: scorer 2	18	14.8676	.81066
Posttest for control group: scorer 3	18	14.9559	1.06520
Total mean		14.71	

Table 4 displays the data of the posttest for EG. As we can see, the mean score given by the first scorer is 16.2 and it changes to 15.93 for the second scorer and finally the third scorer provides a scorer of 16.55. On the other hand, the total mean score for post EG is estimated to be 16.22. the low standard deviations reveal that the three scores provided scores that were homogenous.

Table 4*Posttest data for experimental group*

	N	Mean	Std.Deviation
Posttest for experimental group: scorer 1	18	16.2083	1.66771
Posttest for experimental group: scorer 2	18	15.9306	.98446
Posttest for experimental group: scorer 3	18	16.5556	1.17434
Total mean		16.22	

Based on the data in table 5, the t value test is -6.42. the p value was estimated to be .000<.05. It mean with a hundred percent of certainty we can claim that there is meaningful relationship between the pre and posttest for the CG.

Table 5*Paired Samples Test for pre and posttest CG*

Pair	Pre and posttest CG	Paired Differences			T	df	Sig. (2-tailed)
		95% Confidence Interval of the Difference	Upper	Lower			
1		-1.56561			-6.422	17	.000

On the other hand, table 6 also offers the data of t test for the pre and posttest of EG. As it can be seen, there meaningful relationship between the two tests: sig=.000<.05. The data indicates that the use of visual devices had impact on the speaking development of the EG who were exposed to visual aids.

Table 6*Paired Samples Test for pre and posttest EG*

		Paired Differences	T	df	Sig. (2-tailed)
		95% Confidence Interval of the Difference Upper			
Pair 1	Pre and posttest EG	-1.96512	-7.163	17	.000

Table 7 is a presentation of interrater data belonging to pretest of CG. The same as the scores for CG, here also the scores display acceptable correlation between different scorers. In fact, the pretest correlation for the first and second scorer is .879 and it is .680 for the first scorer and the third. In the same way, there can be observed high correlation between the first, second and third scorer when the relevant significance is .000 that is the perfect correlation between and among CG pretest. Sig=.000(.05).

Table 7*Reliability data for pretest of CG*

		N	Correlation	Sig.
Pair 1	Pretest for control group: scorer 1 & 2	18	.879	.000
Pair 2	Pretest for control group: scorer 1 & 3	18	.680	.003
Pair 3	Pretest for control group: scorer 2 & 3	18	.819	.000

Table 8 below is a presentation of data belonging to pretest of EG. The same as the scores for CG, here also the scores display some sort of correlation between different scorers. In fact, the pretest correlation for the first and second scorer is .482 which is not high enough. For the first scorer and the third it is .217. In the same way, the correlation between the second and third scorer is estimated to be .224 which is low enough. On the other hand, when the relevant significance is .043 and is higher than .05, we can assume that the relationship is not high enough. This is almost the same with other scorers.

Table 8*Reliability data for pretest of EG*

		N	Correlation	Sig.
Pair 1	Pretest for experimental group: scorer 1 & 2	18	.482	.043
Pair 2	Pretest for experimental group: scorer 1 & 3	18	.217	.388
Pair 3	Pretest for experimental group: scorer 2 & 3	18	.224	.371

Table 9 is a presentation of correlational data belonging to posttest of CG. The scores display low correlation between different scorers. In fact, the posttest correlation for the first and

second scorer is .414 and it is .186 for the first scorer and the third. In the same way, there can be observed small correlation between the first, second and third scorer when the relevant significance is .098 that is the relationship between the posttest scores suffer from lack of correlation. $\text{Sig}=.098>.05$.

Table 9

Reliability data for posttest of CG

		N	Correlation	Sig.
Pair 1	Posttest for control group: scorer 1 & 2	18	.414	.098
Pair 2	Posttest for control group: scorer 1 & 3	18	.186	.475
Pair 3	Posttest for control group: scorer 2 & 3	18	.463	.061

Table 10 is a presentation of data belonging to posttest of EG. The table presents the scores that reveal some sort of correlation between different scorers. In fact, the posttest correlation for the first and second scorer is .251 which is not high enough. For the first scorer and the third it is .474. In the same way, the correlation between the second and third scorer is estimated to be .086 which is low enough. On the other hand, the relevant significance is .315 and is higher than .05, we can assume that the relationship is not high enough. We can observe the same kind of relationship between the other two scorers. In other words, there is no significant relationship between the scorers which are offered by the three independent scorers for the posttest for the EG. The data is almost similar to the data given to the post CG test.

Table 10

Reliability data for posttest of EG

		N	Correlation	Sig.
Pair 1	Posttest for experimental group: scorer 1 & 2	18	.251	.315
Pair 2	Posttest for experimental group: scorer 1 & 3	18	.474	.047
Pair 3	Posttest for experimental group: scorer 2 & 3	18	.086	.734

Question Two: Learners' Autonomy

The autonomy questionnaire was used to estimate the effect of using multi-media visual aids on the autonomy of the learners in the EG. It was an 11-item questionnaire using five-point Likert scale.

Table 11

Descriptive data on pre and post data on autonomy (EG)

	Mean	Std. Deviation	N
Pretest data	103.38	12.3241	18
Posttest data	133.287	14.2901	18

As the data shows, the mean for the pretest was estimated to be 103.38 and this changed to 133.28. The increase of the mean shows the growth of the autonomy among the learners of the

EG. As a result, it can be said that the use of multi- media devices led to the autonomy development of the EFL learners among the EG.

Table 12

Paired Sample T test for the EG

		Paired Differences		T	df	Sig. (2-tailed)
		95% Confidence Interval of the Difference Upper				
Pair 1	POSTEG PREEG	-	-1.03476	-5.780	17	.000

The paired sample t test shows that with a hundred certainly it can be claimed that there is meaningful relationship between the pre and post use of the questionnaire for the EG. In other words, the responses to the autonomy questionnaire were significant before they received the treatment and after they received the treatment.

Conclusion

Based on the achieved results, it can be claimed here that the use of multi- media visual devices had positive impact on two aspects of the EFL learners' behavior: their speaking skill and their autonomy. The main goal of the study was to investigate the relationship between the use of multi-media visual aids and the speaking proficiency of the EFL learners and their autonomy. In fact, the study meant to investigate if any kind of relationship could be observed between the EFL learners' autonomy and their use of multi-media visual aids and the EFL learners' speaking. To this goal, the autonomy questionnaire was used and then the responses were analyzed to know the effect of the teaching procedures on both speaking and autonomy. It was finally proved that the use of multi-media visual aids could positively impact both the speaking ability as well as the learners' autonomy. In fact, the learners who worked on their language using some devices that offered authentic language within a context that was different from their classrooms and used other sources rather than their teacher could improve more and feel more independent. This would give them some sort of independence in learning. They improved their autonomy that is required to develop their language skills based on the new approaches and methods (Holec, 2007, 1985; Dam, 1995; Deci & Ryan, 2008). Besides, more efforts were put on developing the speaking skills since they used extra and additional sources of data and information that were accessible as a result of using multi-media aids. The other advantage of the study was that it provided the required background for the learners to use technology and its principles in the language class. The use of technology included using all types visual aids in terms of pictures, photos, slides, videos and other visual devices.

The achievements of this study are in line with similar studies with minor differences. For instance, Lazaretto (2001), as an instance investigated the impact of language anxiety and language proficiency on autonomy and found that university students' autonomy is directly related to their language proficiency but surprisingly higher proficient learners showed to be less communicative than lower proficient ones outside the classroom.

This study together with other studies supported the use of multi-media in the speaking class. In effect, using multimedia audio-visual aids stimulates thinking and improves learning environment in a classroom (Mathew and Alidmat, 2013). Gilakjani (2012) conducted a study to understand the impact of multimedia tools on the teaching process and expressed that it is easy for English instructors to incorporate multimedia into their teaching and there are different multimedia tools such as visual, auditory in which students take information for their better learning. Kausar (2013) presented on importance of audio-visual aids for learning English and declared that the students are facing many problems in learning English language and feel it is difficult to learn English language without the use of any audio or visual aids. The study endorses that audio visual aids should be used in an English language classroom to facilitate maximum learning.

Anil (2015) emphasized that visual aids used to develop the thinking skills of students. Pronunciation, accent, vocabulary, reading, writing, listening and speaking skills can be taught using multimedia. Students' creative, analytical and productive skills can be improved by showing colorful pictures, inspiring speeches by great people. These methods help students to improve their communicative skills in English language.

Regarding the usage of multimedia related aids in language teaching classrooms such as combinations of pictures, sound and text are obvious. English language teachers and learners have to maximize the benefit of using multimedia in English as far as possible.

References

- Anil, B. (2015) 'Use of Technology in English Teaching Classroom – A Study', *American International Journal of Research in Humanities, Arts and Social Sciences*, vol. 15, pp. 316-318, Available: ISSN: 2328-3734.
- Brinton, D.M. (2001) 'The use of Media in Language Teaching', in Celce-Murcia, M. (ed.) *Teaching English as a second or foreign language* (3rd ed., pp.459-475). Boston: Heinle and Heinle.
- Canning-Wilson, C. (2000) 'Practical Aspects of using Video in the Foreign Language Classroom' *The internet TESL Journal*, <http://itestlj.org/articles/canning-video.html>, retrieved from
- Canning-Wilson, C. (2001) 'Visuals and Language Learning: Is there a connection?' *The Weekly Column*, article 48, February, retrieved from <http://www.eltnewsletter.com/back/Feb2001/art482001.html>

- Carney, R.N and Levin, J.R. (2002) 'Pictorial Illustrations still Improve students' Learning from Text' *Educational Psychology Review*, 14 (1), March
- Clark, R.C and Lyons, C. (2004) *Graphics for Learning: Proven Guidelines for Planning, Designing, and Evaluation visuals in Training Materials*, San Francisco, CA: Pfeiffer.
- Gilakjani, , (2012) 'A Study on the Impact of Using Multimedia to Improve the Quality of English Language Teaching', *Journal of Language Teaching and Research*, 3 (6), 1208-1215, Available: ISSN 1798-4769.
- Holec, H. (1985). On autonomy: some elementary concepts. In: P. Riley (ed.) *Discourse and Jin*, K. S. (2004). Coping with Cultural Obstacles to speaking English in the Korean Secondary School Content. *Asian EFL Journal* 6/3. No.2.
- Kausar, G. (2013) 'Students' Perspective of the Use of Audio-visual Aids in Pakistan', *International Proceedings of Economics Development and Research*, 68 (3), 11-13.
- Mathew, N.G. and Alidmat, A.O.H. (2013) 'A Study on the Usefulness of Audio-Visual Aids in EFL Classroom: Implications for Effective Instruction', *International Journal of Higher Education*, 2(2), 86-91.
- Lazaraton, A. (2001). Teaching Oral Skills. *Teaching English as a Second or Foreign Language*. Ed. Celce-Murica. Heinle and Heinle Publishers: USA.
- Noom-Ura, S. (2013). English-teaching problems in Thailand and Thai teachers' professional development needs. *English Language Teaching*, 6(11), 139.
- Rahimpour, M. (2008). Implementation of task-based approaches to language teaching. *Pazhuhesh-e- Zabanha-ye Khareji Journal*, 45-61.
- Rahimpour, M., & Mehrang, F. (2010). Investigating Effects of Task Structure on EFL Learner's Oral Performance. *English Language Teaching*. 3(4), 10-22.
- Zhang, L.X. & Li X.X. (2004). A comparative study on learner autonomy between Chinese students and west European students. *Foreign Language World*, 4, 15-23.