

The Effect of PowerPoint Presentation on Grammar and Vocabulary Learning of Iranian Pre-University EFL Learners

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ABSTRACT

The current study was an attempt to examine the effect of PowerPoint presentations on grammar and vocabulary learning of Iranian pre-university EFL learners. To meet the objectives of the present study, a mixed method research strategy was adopted. A multiple-choice test of grammar and vocabulary, the reliability of which was 0.79, was administered to a group of EFL students from which 54 students were selected and randomly divided into two groups of 27 (a control group and an experimental group) as pretest – posttest design was used. Then, their pre and post test scores were compared using a paired-sample t -test. At the end of this period, the experimental participants were interviewed as to their idea of the impact of PowerPoint presentation on learning grammar and vocabulary. The findings of the study indicated that PowerPoint presentations can prove successful in enhancing the learners' grammar and vocabulary knowledge. It was also found that the learners have a positive attitude towards the use of PowerPoint presentation. Results can have pedagogical implications for language teachers to use this technology as a useful way of teaching vocabulary and grammar.

Keywords: Computer Assisted Language Learning (CALL), grammar teaching, PowerPoint, vocabulary teaching.

INTRODUCTION

The use of technology in learning English as a foreign language has recently been the focus of attention and one of the areas of interest has been the use of PowerPoint presentation for both teachers and learners. According to Radanov (2008), "PowerPoint may be a form of presentation software that allows one to indicate colored text and pictures with easy animation and sound" (p.48) that helps teachers to vary their teaching ways and break the routine (Ahmed, 2005). Regarding learners, PowerPoint may be a fun and motivational tool that presents knowledge in an interactive method. In addition to the different multi-media applications, PowerPoint offers will be attractive to various learning styles (e.g. visual, sense modality and kinesthetic learners) (Ahmed, 2005). Moreover, Steele & Johnson (2007) note that using PowerPoint huge screen permits all learners (at the front and back of the class) to check what is being introduced. They argue that, when used appropriately, it will enhance the teacher's instruction and learners' motivation. In general, the students have a positive attitude towards PowerPoint presentations, (Nouri & Shahid 2005). A review of many studies in the field of computer assisted language learning shows that it has many benefits such as saving learning time (Kulik and Kulik, 1991), better performance in general (Klassen and Milton (1999), and enjoyable experience along with improvement in proficiency (Van Aacken

(1996). More specifically, PowerPoint presentations have proved to be effective in clarifying complex materials (Gaskins, 1984), better attention and retention (Roblyer, 2003).

RESEARCH QUESTIONS

This study intends to investigate whether the increased use of PowerPoint presentation technology at school affects the development of grammar and vocabulary. Therefore, it seeks to answer the following research questions:

1. Do PowerPoint presentations significantly improve Iranian pre-university EFL learners' grammar knowledge?
2. Do PowerPoint presentations significantly improve Iranian pre-university EFL learners' vocabulary knowledge?
3. What do the learners' think of the effectiveness of PowerPoint presentations in learning grammar and vocabulary?

METHODOLOGY

Participants and Setting

Fifty four female students were randomly selected from Shahed high school in Ghabad, Iran in 2013-2014. They were randomly divided into two groups of 27 participants; the subjects' age ranged from 17 to 18. Due to gender segregation in schools, the participants in this project were only female and their first language was Persian. All of the participants were non-native speakers of English and received English as a course of study at school. The population of the study was fourth grade beginner language learners of Shahed high schools in Gonabad, Iran. They were divided into two groups of experimental and control in order to examine the effect of PowerPoint presentations on their grammar and vocabulary knowledge. Both groups shared the same linguistic and cultural background with Farsi as their first language. For qualitative data collection, six students from experimental group were interviewed.

Design

A mixed method design was used according to the purpose of this study and to answer the research questions. For collecting quantitative data, an experimental design was used in which the experimental group was taught by using PowerPoint presentations while the other group (control group) was taught using a traditional method of instruction in classroom setting. For qualitative data collection, a survey design through interviews was used.

Instruments

Grammar and Vocabulary Test

The test contained 40 multiple-choice items: 20 vocabulary items and 20 grammar items used for both pre and post tests. The assigned time for the test was 30 minutes.

Interview

Semi-structured interviews with six participants of experimental group were carried out to check their perceptions of this technology for language instructions and its effectiveness in the class for learning grammar and vocabulary.

Data Collection Procedure

At the beginning of the treatment, both groups took pretests to establish initial differences or similarities in their knowledge of English vocabulary and grammar. Then, the experimental group was exposed to PowerPoint slides and PowerPoint presentations regularly during one semester of their course of study and the control group received traditional grammar ways utilizing white board and text book. Finally, a posttest was given to the students of two groups to find out their vocabulary and grammar ability at the end of the treatment.

For qualitative data collection, each interview lasted about thirty minutes and they involved a list of open-ended questions addressing the various issues related to the application of PowerPoint in teaching grammar and vocabulary. Also, the participants were free to speak their minds and add any relevant information. The language of communication during the proposed interviews was a matter of consideration for the researcher. The interviewees were informed that either Farsi or English or a combination of both would be used in the interviews depending on their personal choice. It turned out that in most cases only Farsi or a combination of Farsi and English were preferred by the interviewees.

Data Analysis Procedure

For quantitative data analysis, the researchers compared the gained scores of the two groups on pre-test and post-test by using SPSS version 19. Both descriptive (means and standard deviation) and inferential (T-test) analyses were conducted to determine the possible significant difference between the two group levels of accomplishment. The collected qualitative data were transcribed, coded, classified, and reported with examples.

RESULTS

Quantitative Findings

To compare both group's performance on the pre-test, the researchers conducted a t-test as shown in table 1.

Table1: Pre-test results

<i>Groups</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>MD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Control	27	4.81	1.27	-0.74	-3.058	26	0.342
Experimental	27	4.95	1.25				

As table 1 reveals, there is no significant difference between the two groups regarding the results of the grammar and vocabulary test before the treatment. Table 2 shows the post test results

Table 2: Post-test results

<i>Group</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>MD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Control	27	5.03	1.65	-1.44	-5.37	26	0.000
Experimental	27	6.48	0.93				

As table 2 shows, after sixteen sessions of treatment, participants of experimental group ($M = 6.48$, $SD = 0.93$) significantly outperformed [$t(26) = -5.37$, $p = 0.00$ (two tailed)] the control group ($M = 5.03$, $SD = 1.65$). Therefore, it can be concluded that using PowerPoint presentation for pre-university EFL learners' grammar and vocabulary has been more effective than the traditional method.

Qualitative Findings

After the post test, for qualitative survey, semi-structured interviews were conducted with six students from the experimental group to get more specific information about the details of using PowerPoint presentation in teaching vocabulary and grammar. The participants were interviewed individually and the questions were the same for all the interviewees, mainly about what kind of effects PowerPoints brought for them and the related advantages or disadvantages. Most students who answered the interview questions found the PowerPoint presentations effective and indicated that they had achieved a clear understanding of the grammar and vocabulary. Most of the students mentioned that the feature that helped them most was the addition of examples followed by the clarity of explanations and the visual effects. The results show that the majority of learners prefer PowerPoint presentations over the traditional methods of lecture delivery and likely have positive attitudes towards the use of PowerPoint presentation in English language classroom instruction.

It was also revealed that some learners who were previously reluctant to learn grammar and vocabulary because of the boring nature of the traditional approaches to teaching them, became interested in learning grammar and vocabulary because of the interesting and meaningful ways of presentations. A conclusion can therefore be made that students are well motivated to learn English grammar and vocabulary as a result of using this technology. Some of the advantages of PowerPoint presentations mentioned by the interviewees were as follows:

1. Increasing the speed of learning grammar and vocabulary knowledge. Some participants confirmed that using PowerPoints made them learn the vocabulary and grammar faster and better;
2. Improving the quality of learning grammar and vocabulary in terms of retention and internalization through multimodal presentations;
3. Increasing confidence and getting better marks in examination;
4. Making learners interested in English;
5. Motivating learners to learn more;
6. Being effective and interactive.

DISCUSSION

According to the post-test results, the students who were exposed to PowerPoint presentations were more successful than those in traditional lectures after the instruction. The present study results concur with findings in an early study by Gaskins (1984, as cited in Omen, 2012) that multimodal teaching enhances the quality of presentation and simplifies the difficult material. Similarly, Kaptan and Korkmaz (2002) and Tao (2001) reported that the teaching methods including presentation of graphics have a positive effect on students'

achievement at every teaching level. The results are also in agreement with findings by Nabah et al. (2009) who believe that software products such as PowerPoints provide interactive learning environments to meet their cognitive needs and some of their features such as brightness, liveliness, and clarity will lead to the learners' better performance. Moreover, according to Mayer's (2001) cognitive theory of multimedia learning, the activation of audio and visual memories helps a better integration of the newly learnt materials to the prior knowledge.

The results also revealed that the learners had a positive attitude towards PowerPoint presentations and preferred them over traditional methods of lecture delivery. As stated by Oomen (2012), it is because of the multi-media nature of PowerPoint presentations in which visual, auditory and kinesthetic modalities account for the learners' diverse learning styles. Furthermore, PowerPoint is considered as a motivating tool which stimulates students' thinking. The learners believe that these presentations used the class-time efficiently and made use of learning materials effectively.

CONCLUSION

The results in this study revealed some cognitive and affective benefits of PowerPoint presentation. The cognitive benefits were clear understanding as a consequence of highlighting keywords in the presentation, and displaying pictures and diagrams. The affective benefits were interest, motivation, and positive attitude towards learning. These findings have some pedagogical implications for teachers and learners. Teachers should pay more attention to how learners like to learn and due to the individual differences in cognitive styles, different modalities such as text, audio, and video must be provided. Educational technology provides many resources in this regard for English language classrooms and teachers should not ignore educational technology. Students can also use technology for having a variety of activities catering for their specific cognitive style and for more motivation.

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