The Effects of PowerPoint Application on Teaching WritingSkills to University EFL Students

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Abstract:

The use of PowerPoint presentationshas recently emerged into the language teaching arena. This event has required a set of research action in order to investigate the effect of this innovative technologyon students' academic achievement. This paper examines whether the use of this computer application in a formal-letter-writing coursehas an effect on students' achievement. In order to examine the extent to which this application affects the writing skills of the EFL learners, sixty students from the University of Medical Sciences and Technology, Sudan, in the academic year 2013/14,were randomly assigned into two groups: the experimental group and the control group. Each of the two groups received 10-hour instruction and each session lasted an hour. The control group received traditional instruction while the experimental group received instruction through PowerPoint slides using the same instructional materials during the ten sessions. Comparing the performance of the two groups in mastering the components of formal letters, it was obvious that the students in the experimental group performed better than their counterparts in the control group. Also results indicated that the preparation and presentation of the PowerPoint slides had a significant effect on students' writing achievement and the appropriate use of letter components.

Keywords:PowerPoint, slide presentation, EFL learning environment, writing skills, teaching.

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المستخلص

لقد ظهر استخدام العروض التقديمية في الآونة الأخيرة في مجال تدريس اللغة. وقد تطلب هذا الحدث ضرورة إجراء عدة بحوث من أجل معرفة تأثير هذه التقنية الحديثة على التحصيل الأكاديمي للطلاب. وتبحث هذه الورقة ما إن كان لاستخدام هذا التطبيق الحاسوبي في كتابة المراسلات تأثير على تحصيل الطلبة. ولأجل دراسة مدى تأثير هذا التطبيق على الدارسين، تم إختيار عينة عشوائية من ستين طالبا من جامعة العلوم الطبية والتكنولوجيا، السودان للعام الدراسي 2013/2014، وتم توزيع هؤلاء الدارسين إلى مجموعتين: إحداهما تجريبية، والأخرى ضابطة وتلقت كلا المجموعتين 10 ساعات تدريسية واستغرقت كل محاضرة ساعة. كما تلقت المجموعة الضابطة تدريسا بالطريقة التقليدية بينما تلقت المجموعة التجريبية تدريسا باستخدام العروض التقديمية. كما تم استخدام ذات المواد التدريسية خلال العشر محاضرات. وبمقارنة أداء المجموعتين من حيث معرفة أجزاء المراسلات الرسمية، كان من الواضح أن أداء طلاب المجموعة التجريبية أفضل من نظرائهم في المجموعة الضابطة. كما أشارت النتائج إلى أن إعداد وتقديم العروض التقديمية كان لهما أثر كبير على أداء الطلاب الكتابي واستخدام أجزاء الرسائل الرسمية.

Introduction

Rajabi(2012:1136) stated that the Power Point world makes large contribution in the use of computer for educational purposes if this application is integrated with images, movement and sound. This paper aims to explore the effect of PowerPoint slides on university EFL students' achievement in writing formal letters. It also attempts to provide university EFL teachers with new strategies to use PowerPoint presentations effectively in the English classroom. These strategies will help teachers to become more self-aware of the appropriate use of the software under investigation.

Naba'h1(2009:431) stated that the effect of computer-based instruction on the achievement of language students has presented a powerful technological and teaching tool that has occupied all educational aspects. Nouri and Shahid(2005:45)noted that little research has been conducted with regard to the integration of technology into language-teaching that is why researchers are required to examine whether technology-related innovations improve English language learning.

A study was conducted by Butler and Mautz (1996:271)in which they found an interaction between the effects of the multimedia presentation and the student's preferred class representation style. A further study that has examined the effect of PowerPoint presentations on students' learning and attitudes was carried out by Nouri and Shahid (2005) in which the two researchers found out that PowerPoint presentations improved short-term or long-term memory. The results of Nouri'sand Shahid's study showed statistically significant differences in the performance of the two groups of students who participated in the study. The students in the PowerPoint section performed better than their counterparts in the traditional group. Despite these statistical results, though, Nouri and Shahidconcluded that there could not be ultimate

evidence that the existence of a PowerPoint presentation in the classroom affects their performance.

While some of these previous studies focused on the effect of multimedia, which comprises PowerPoint, this study elaborates more on the effect of using PowerPoint presentations on the EFL students in a writing course for business purposes at the University of Medical Sciences and Technology. The study investigates the tactics that university teachers can implement to design and use PowerPoint presentations in order to make language-teaching fun and success.

1.2 Statement of the Problem

Precisely stated, this study investigates the effect that the use of PowerPoint slides may have on the writing achievement of university students in a formal-letter-writing course.

1.3 Objectives of the Study

This study primarily aims to find outthe extent to which PowerPoint presentations affect students' understanding of the components of the formal letters. It also considers the strategies that teachers can implement when using PowerPoint presentations to teach letter writing skills to university EFL students. The outcomes will also help curricular designers to make serious consideration to use this computer application in the development of EFL programs. In addition, EFL teachers at university may seriously solve the dilemma of whether to retain their traditional teaching strategies or modernize them by integrating technology-based aides and tools into their English classrooms.

1.4 Questions of the Study

The main question of this paper can be stated as: To what extent can the use of PowerPoint presentations affect university EFL students' achievement in writing?

1.5 Hypothesis of the Study

This paper hypothesizes that the use PowerPoint presentations largely affectsuniversity EFL students' achievement in writing.

1.6 Significance of the Study

Some ways in which this study can benefit English language teaching in universities involve: implementation of PPT-slides in language teaching, which will help EFL teachers to make use of their time and effort in and outside the classroom. BothEFL students and teachers in universities will have ample time to engage in interactive tutorials that are accessible not only in the classroom but also at home either online or off line.

2. Literature Review

Lowe (2008:34) argued that PowerPoint presentations provide English language learners with interactive and multi-sensory learning experience that combines texts, graphics, images, audio and video. An advantage that students can take from this is that,when pictures and text are presented together, information retention by the learners is highly improved.

The use of PowerPoint application also involves an important issue related to students' motivation in the presence of this technology in the English classroom. PowerPoint presentations foster the students' interest to work independently and at the same time collaboratively with the other students. Showing additional advantages of using PowerPoint presentations related to motivation, Nouri (2005:55) stated that PowerPoint presentations may improve student opinion toward both the instruction and class presentation. It is certain that, when students' views are positive, a great deal of genuine learning by basic language-learning skills occurs.Schcolnik and Kol (1999:4) stated that PowerPoint presentations give students more confidence to use the language. As students look at the slides, they use them as aids

to help them remember and organize what they attempt to write or say.

Compared to traditional classrooms, EFL teachers and/or students interact with the computer that displays the pre-designed presentations. This spares a lot of the instructional time having to write the content on the board, hand on the sheet, or open the desired pages as in the traditional classroom. A huge amount of lesson content can be presented within a short time limit. Students may also take advantage in working both collaboratively with each other and independently with a minimum intervention from the teacher.

Harrison (1999:65) elaborated on the extent to which PowerPoint presentations can help enhance English language instruction as being obviously large. It can help teachers to design and process the content of a lesson or lecture easily and within a fraction of time. PowerPoint media could be thought of as a facilitator, and an aid fornote-taking,as well as a motive to boost students' engagement through the integration of texts with graphics, animation, and images. Thus, as this studycompares the effects of PowerPoint presentations as an instructional delivery media on learning, it can be classified as a media comparison study according to the classification brought forth by Thompson et al. (1992:39). This classification includes(1) evaluation research, (2) media comparison studies, (3) intra-medium studies, (4) aptitude-treatment interaction studies, and (5) alternative research designs. The significance of conducting evaluation research on media comparison studies is obvious in developing and implementing theories that may help teachers to deal appropriately with innovative pedagogical technology. The main objective of such studies is to determine if a specific medium has a greater effect on learning compared to another medium.

Whether the multi-sensory presentations help students to learn fast and retain information, Reynolds and Baker (1987:35) found that presenting materials on a computer increased students' attention and learning, which entails that the more learners attend to a learning content, the more their attention increased. They further argued that the graphics involved in PowerPoint presentations stimulate the learners'"imagery systems", which may not happen with traditional instructions because images and graphics are rarely used in traditional classrooms and if used, they would take a lot of time for the EFL teacher to prepare on posters or any other teaching aid. Thus PowerPoint presentations help students understand and improve their memory. It is also expected that students who receiveinstruction through this application will perform better than their counterparts in traditional classrooms. In addition to the ease in interface, students also take the advantage of connecting the images in the PowerPoint presentations with the verbal instruction the teacher provides.Reynolds and Baker further noted that presentation could be ineffective if the slide contains too much textual contentor many colors or unreadable fonts, pictures, or moving animations. The implication for the classroom teacher is to professionally develop the slides or carefully select from the existing ones putting these considerations into mind.

Showing the need to create an innovative approach to utilizing technology in the classroom, Sidman (2007:448) addressed students' learning styles through skeletal PowerPoint slides. The investigation revealed that the use of the PowerPoint slides in teaching showed significantly higher exam scores.

Showing the disadvantages associated with PowerPoint application, Priya(2012:1) stated that PowerPoint could be mostly taken as a "supplement to regular oral lectures". For Priya, this causes the instruction to break down into layers which rarely

occurs in regular lectures that help students with the note-taking process. Referring to drawbacks associated with the teachers' use of PowerPoint slides in teaching English as teachers develop in age, Priya(2012:2)stated that older teachers become reluctant to switch to newer technology and prefer to be "old school" and that some teachers deliver the lectures either too fast or too slow which can also affect the students' understanding. Bilqis (2001:2)warned that conclusions made about the effect of using PowerPoint in teaching may have been affected by the way PowerPoint slides were constructed and organized i.e. the way in which the multisensory is integrated to develop language learning.

As for the drawbacks related to students' use of PowerPoint, Priyastated that students who were making presentations wasted time by minor things that distracted them from learning such as seeing who created a better looking presentation. A further drawback he mentioned was that the presentation might not provide for the students' needs.Shyamlee1and Solanki (2012:154) advocated for a careful balance between the technology-based teaching and the traditional teaching. This entails that none of these varying teaching styles should be overemphasized at the expense of the other.

2.1 Previous Studies
Results of some previous studies show that the effect of PowerPoint presentations on students' achievement might depend on factors such as the tutorials and tasks which the students are involved in, and the teaching style whether it is traditional or technology-based. As for this study, a pattern of preference by university EFL learners appeared with regard to the use of PowerPoint presentations. For example, when learning the difficult and challenging components of formal letters, students preferred to do more tasks with sample letters and emails in the

PowerPoint group than did the students in the traditional group. It was also noticed that, the experimental group finished the tutorials and tasks earlier than the students in the control group. One reason for this was that the experimental group relied on pre-designed slides that lifted the burden of handing on the sheets or checking the right pages in the textbook which commonly happens in classesimple menting traditional teaching styles. This intervention also saved a proportionately significant time from the study period for the experimental group. The study question of this study is: To what extent can PowerPoint presentations affect university EFL students' understanding of the components of the formal letters? For the purpose of investigating the study question, the following hypothesis is formulated:

The use of PowerPoint presentations has a positive effect on university EFL students' understanding of the components of the formal letters.

3. Methodology of the Study

The participants of this study were Sudanese in the second undergraduate levelat the University of Medical Sciences and Technology and studying English as a second language for business purposes. The test, whichlasted an hour, asked students to exhibit their knowledge of the components of the business letters. The participants' gender was not taken into consideration when the study was applied.

As for the students in the control group, they received traditional instruction without PowerPoint but the content matched that of the experimental group and within the same time limit i.e. 10 hours. The traditional teaching style involved a textbook and a board/flip chart to write notes on. Unlike the experimental group which took advantage of the pre-designed presentations and easy interface with the computer and the Internet to carry out the various tasks.

The role of EFL teachers is also critical in the presence of technology. The EFL teacher should ensure that he/she is not highly relying on the slides in the instructional process. The slides are just teaching aids that are planned to foster interest and ease the pedagogical requirements of writing the content and moving from a section to another. When interactive presentations are used, however, the teachers' role is minimized to a facilitator as most of the instructions are involved in the presentation slides. The teachers' awareness of slide development skills is also important.

3.1 Study Design

Bachman (1990:59) stated that the use of achievement tests can be a reliable source of feedback on two different learning or teaching processes. Accordingly, a test was needed to investigate the statistical differences between two groups of language learners. To accomplish this, a homogeneous group of EFL students were divided into two sub-groups: the control and the experimental groups. The same instructor taught both sections of these students. This raises the possibility of the research data to be highly reliable even though the students in this study may have individual differences.

An achievement test was used as an instrument to measure the impact of using PowerPoint presentations on these sample EFL learners. This test consisted of formal letters that are common in the business arena, whether they are for application purposes, asking for or giving information, or other types of business letters. The essential components of formal letters constituted the issues to be considered in the overall scores students could achieve regarding the style and order of the letter components such as the date, recipient's and sender's addresses, opening/salutation, closing, signature, attachments, compliments. Cohesive devises that ensure the link of the ideas in formal letters

were also considered in the development of the test. The points of the overall score were distributed according to the accuracy of the students' responses to the test items. The test involved 20 points and was carefully reviewed for any necessary modifications before the actual administration which was conducted once for both the experimental and the control groups. The scoring was either correct (5 point) or incorrect/blank (0 point).

There was one dependent variable in this study i.e.frequency of the accurate answer. The statistical analysis used the (T-test) to analyze the test scores and to determine the statistical significance of the statistical differences between the experimental and control groups.

3.2 Study Samples

To conduct this study, sixty students from the University of Medical Sciences and Technology, Sudan, were randomly assigned into two groups: the experimental group and the control group. Each of the two groups received 10-hour instruction and each session lasted an hour. During the experiment, the control group received traditional instruction while the experimental group received technology-based instruction through PowerPoint slides using the same instructional materials during the ten sessions.At the end, both groups took an hour test involving the same number and content of items.

3.4 Validity and Reliability of the Instrument

Wells and Wollack (2003:2) stated that test reliability involves the extent to which the test is carefully developed and administered to the test-takers. They further added that no test could be entirely consistentas there may be other factors such as the external conditions surrounding the test-takers and the administration of the test itself. To ensure reliability in terms of the administration of the test, the two groups were tested on the same content with the same test items and test duration even

though the test administered to the experimental group was an hour later. Concerned with providing accurate and reliable results, Wells and Wollack (2003:2) advocated for avoiding "test-specific" and "scoring-specific" errors in the development and administration of the test. Bachman (1990:57) referred to the significance of "content validity" and "content relevance" of the test to ensure its reliability. Test-specific factors such as the set of questions selected for the test, ambiguity of the items, and poor directions have all been avoided. Additionally, scoring-specific factors such as "non-uniform scoring" guidelines, carelessness, and counting or computational errors have also been avoided.

4. Results and Discussions

The results of the experiment focus on answering a vital question: To what extent does the usage of PowerPoint presentations for teaching writing to EFL university students affect students' understanding of the components of formal letters? To answer this question, a number of statistical elements were computed: the mean, standard deviation (SD) and standard error of the mean (SEM). The mean is simply equal to the sum of all the scores divided by the total number of the scores i.e. 2310/30 for the control group and 2430/30 for the experimental group. Accordingly, the mean of the control group was 77 while that of the experimental group was 81. To calculate the Standard deviation of each score from the average, first, the deviations of each score from the mean is calculated. Then the results of each are squared. The variance is the mean of these values. The standard deviation of the scores is the square root of the variance. Mathematically, the SD is calculated using the following formula:

$$s = \sqrt{\frac{\sum (X - \overline{X})^2}{n-1}}$$

s = sample SD; X - individual value; X̄ - sample mean; n = sample size.

The standard error of the mean is estimated by the standard deviation of the observations divided by the square root of the sample size.

The popular spreadsheet software: Microsoft Excel® was used to calculate these elements so as to find out if there were differences of statistical significance between the scores of the two groups.

Table (1): T-Test Comparing the Results of the Two Groups

Group	No. of Students	Mean	Std. Deviation	Std. Error Mean
Experimental	30	81	9.381	2.0976
Control	30	77	9.798	2.1909

Looking at the statistical differences between the experimental and the control group as in Table (1)above, it is obvious that the mean of the scores of experimental group (81) is higher than that of the control group (77). With the standard deviation of the experimental group (9.381) being lower than that of the control group (9.798), it is clear that there is a narrower variance in the responses of the experimental group.

The standard error of the mean is intended to show how far the sample mean of the scores is likely to be from the population mean. The standard error of the mean for the experimental group (2.0976) is lower than that of the control group (2.1909). This entails that the scores of the experimental group are not as far from the overall population mean as the scores of the control group are. The results clearly display that the use of PowerPoint presentations to teach letter writing skills had positive effects on university EFL students' achievement even though both groups showed an understanding of the components of formal letters with the experimental group exhibiting a better understanding of

the content which is obvious in the scores of this group. These results clearly illustrate the strongest evidence found in the experiment, and support the original hypothesis: The use of PowerPoint presentations to teach the components of formal letters has a positive effect on university EFL students' understanding. Results also show that students in the PowerPoint section reported higher understandability of the content of formal letters.

Likewise, Mahmoudzade (2014)aimed to investigate the effect of using PowerPoint presentations on Iranian EFL learners' knowledge of abstract vocabulary .Mahmoudzade employed experimental research that resulted into higher scores in a vocabulary test by the learners in the experimental groups and made the conclusion that the use of PowerPoint presentations had a greater effect on intermediate learners' vocabulary knowledge.

Lari (2014) also conducted a research on the impact of using PowerPoint presentations on students' learning and motivation in secondary schools. The researcher split two groups of fifty-six female students of a secondary school into experimental and control groups. The T-test showed that there was a significant difference between the means of the two groups. It concluded that teaching practices based on PowerPoint application had a significant positive effect on the learners' scores. Congruent with the findings of this study, the analyses showed that the experimental group learners performed better than the control group. Regardless of conclusion made about the use of PowerPoint application to teach English, there is no ultimate evidence that the use of PowerPoint presentations affects students' performance, though. That is why further future research is suggested for more elaboration into the use of this computer application in teaching English to university students.

These results are in agreement with the conclusion made Bilqis M (2013) who studied the effect of Microsoft PowerPoint on speaking achievement of Indonesian Students' with learning disabilities at Jember University. The researcher concluded that PowerPoint could improve the performance of the disabledstudents just as it enhances the performance of the normal students. Another research finding made by a study on the effect of Microsoft PowerPoint presentation was reported by Schcolnik and Kol (1999) who mentioned that Microsoft Power Point presentations made the subjects of the study feel motivated to work with the learning materials and therefore tried to engage more in similar presentations. They also concluded that the use of Microsoft PowerPoint reduced the "tension and felling of insecurity" while they were speaking in English as the slides helped them as a speaking aid. It was also reported that the PowerPoint slides helped them to remember the lesson content as they attempt to state their ideas.Biqis (2013:3) found out that PowerPoint presentations are a very useful aid for both teachers and students when prepared and used appropriately and correctly.

The emphasis of all EFL presentations should be on fostering students' interest in the learning process and helping them to work collaboratively. The design of the slides should be highly focused on the students' needs and the course objectives. With these in mind, the university EFL teacher can avoid all the drawbacks of this instructional computer application. Additionally, teachers should not highly rely on the PowerPoint slides to the extent that their roles in the classroom are taken by these teaching aids. In other words, the pedagogical techniques used in PowerPoint-based environments should be carefully considered to make the most out of integrating this software into language teaching.

5. Conclusion

This study attempted to investigate the effects of Power Point presentations on EFL students' understanding of the components of formal letters. In summary, the results suggest that educational technology such as PowerPoint improves students' performance in EFL classes, which also entails that the use of PowerPoint presentations may have a positive affect not only on students' learning but also their interest in the use of this innovative teaching technology. In the process of the experiment, the students receiving the intervention enjoyed the PowerPoint-based instructions very much. This was obvious in the scores they achieved for the exam devised for this study. It is noteworthy that these results are consistent with the results of other studies that investigated the effect of PowerPoint presentations on teaching English as a foreign language.

The study also recommends that university EFL teachers should integrate Microsoft PowerPoint Presentations in teaching other language-learning skills, too.

REFERENCES:

Bachman, L. (1990). Fundamental considerations in language testing. Oxford: Oxford University Press.

Bilqis M. (2013). The effect of Microsoft PowerPoint on Students' speaking Achievement at Jember University, Indonesia.

Harrison, A. (1999). Power Up! Stimulating your Students with PowerPoint. Learning and Leading   With Technology (Vol. 26, No. 4) 6-9.

Rajabi (2012). Enhancing Students' Use of Cohesive Devices: Impacts of PowerPoint Presentations on EFLAcademic Writing. Journal of Language Teaching and Research, Vol. 3.

Lari, F. (2014).The Impact of Using PowerPoint Presentations on Students' Learning and Motivation in Secondary Schools.Procedia - Social and Behavioral Sciences. Volume 98, 6 May 2014, Pages 1672–1677.

Lowe, R. (2008). Learning with Animations. Cambridge University Press, New Yourk.

Mahmoudzade, S. (2014).The Effect of Using PowerPoint on Iranian EFL Learners' Knowledge of Abstract Vocabulary.Procedia - Social and Behavioral Sciences   98 (2014) 1077 – 1084.

Naba'h, A. etal. (2009). The Effect of Computer Assisted Language Learning in Teaching English Grammar on the Achievement of Secondary Students in Jordan. The International Arab Journal of Information Technology, Vol. 6, No. 4.

Nouri H. and Shahid, A. (2005).The Effect of PowerPoint Presentations on Students Learning and Attitudes. Global Perspectives on Accounting Education Volume 2, 2005, 53-73.

Priya, M. (2012).PowerPoint Use in Teaching. Illinois Institute of Technology Chicago

Reynolds, R.E. and D. R. Baker.(1987). The Utility of Graphical Representations in Text: Some Theoretical and Empirical Issues. Journal of Research in Science Teaching (Vol. 24, No. 2) 161-73

Schcolnik, M. and Kol, S.(1999).sing Presentation Software to Enhance Language Learning. The Internet TESL Journal, Vol. V, No. 3, March 1999. Tel Aviv University.

Shyamlee1, S. et al (2012). Use of Technology in English Language Teaching and Learning": An Analysis.IACSIT Press, Singapore.

Sidman, C. (2007). Addressing Students' Learning Styles through Skeletal PowerPoint Slides. MERLOT Journal of Online Learning and Teaching , Vol. 3, No.4.

Thompson, A.**Simonson**, M. and**Hargrave,**C. (1992). Educational Technology: A Review of Research. (Washington, D.C.: Association for Educational Communications and Technology).

Wells, C. and **Wollack J.** (2003).An Instructor's Guide to Understanding Test Reliability.University of Wisconsin.