International Journal of Research in Education and Social Science
Volume 1, Issue 3 (September 2016)
ISSN: 2414-8792 (Print), 2415-2528 (Online)
Available at: www.ijress.com

The Use of Student-Produced Educational Podcasts in Foreign Language Vocabulary Teaching

*Derya Çölkesen [1] & *Gülay Bedir [2]*

1. Gaziosmanpaşa University, Faculty of Education, Department of Educational Sciences, 60000, Tokat, Turkey.

2. Kahramanmaraş Sütçü Imam University, Faculty of Education, Department of Educational Sciences, 46100, Kahramanmaraş, Turkey.

***Corresponding Author:** gbedir@ksu.edu.tr*

Abstract

The aim of this study is to examine the effectiveness of use of student-produced educational podcasts in foreign language vocabulary teaching. With this purpose in mind, an empirical study was carried out in a tourism and hospitality management college in a state university. The study with experimental and control groups was conducted with students who study English as a foreign language at pre-intermediate level. A pre-test was carried out before the application and a post-test was carried out just after the application. A permanence test was applied four weeks later. Obtained data was analyzed using SPSS package program. As a result of the analyses that were carried out by comparing the pre-test, post-test and permanence test scores of the experimental and control groups, it was determined that the use of student-produced educational podcasts is not effective in foreign language vocabulary teaching.

Keywords: *Foreign language education, foreign language vocabulary teaching, educational podcasts, student-produced podcasts.*

1. Introduction

Today technological development is moving at light speed thus and so communication has also accelerated at a similar rate. Communication's getting very easy with the use of technological tools has converted the world into a global village. Reaching from one end of the world to the other and getting in touch with the people there has differentiated at a level that was unpredictable a century ago. Contacting with people from different climates and countries has increased so that the need to learn a foreign language has come to light more than ever.

Technology's showing itself in all fields of life has made parallel changes compulsory in education too. Classical teaching methods fail to satisfy students who spend most of their day using technological tools. While there are a good many factors distracting students' attention from the course, tools that might keep students attention inside the classroom and play a supportive role outside the classroom are much-needed. Podcasts can be a technological solution to the problem posed by technology.

2. Literature Review

McGarr (2009) defines podcasts applications as "the distribution of audio or video files to the participants electronically, via the Internet or automatically" in their study on the use of podcast

application versus traditional lecturing in higher education. McGarr suggests that one can benefit from these resources on the move thanks to portable devices such as MP3 players as well as they can access these data files from the desktop. The word "podcast" was formed from the combination of words iPod (portable audio device from Apple) and broadcast (Ashraf, Noroozi, & Salami, 2011). There are different types of podcast based on their intended usage. For instance, McGarr (2009) states that there are three types of podcasts: revision of previous courses, study guides and summaries that help students deepen their comprehension and student-produced podcasts.

Scutter, Stupans, Sawyer and King (2010) carried out a study to demonstrate how the students at medical radiation program use podcasts. In this study, they made the academic staff save their entire courses and publish them on the website of the course. As a result of the questionnaires that were replied by the students, instead of publishing the entire course records, it is suggested that only key points should be included within the podcasts. Tam (2012) investigated the ideas of music and visual arts students on podcast applications and stated that they evaluated podcasts as a useful method that can support face to face lectures but they suggested that podcasts should be more related with what is taught during the course. Zanten, Somogyi and Curro (2012) conducted a study on the use of podcasts for marketing course in an Australian university. They investigated campus and distance education students' podcast download rate and their evaluations about the course and dealt with the podcasts covering the entire course and summary podcasts. Based on the results of the study, they argued that the type of podcast should be determined considering pedagogy, goals and preferences. For example, Kemp, Mellor, Kooter and Oosthoek (2012) used student-produced podcasts as an assessment tool for geomorphology course. On the other hand, in Ottawa University which offers education in two different medium of instruction (English and French) they utilized podcasts effectively in order to support students who were not French in the academic French listening course (Weinberg, Knoerr, & Vandergrift, 2011).

Kazlauskas and Robinson (2012) did a study on the benefits of podcasts on undergraduate students at business and nursing departments. They suggested that although each department has a quite different student profile in terms of gender, age and language background; time which students allocate for studying including listening to podcasts was quite similar. Thereupon a study was carried out on those who listened to and those who did not listen to podcasts. The difference between the groups in terms of their demographics and access to computer and the Internet at home was not statistically significant. The time they allocated for course preparation, homework and revision was very similar. Those who did not listen to podcasts spent more time on studying via textbooks. Further, it was argued that majority of those who listened to the podcasts listened to them quite rarely and they considered podcasts as insurance for the times they missed the face to face classes. Thus contrary to the previous studies, it was concluded that podcasts are not suitable for everyone.

Forbes (2011) carried out a pilot study on the effectiveness of student-produced podcasts in teacher education. Participants, most of whom were pre-service primary school teachers, were asked to record podcasts during Information and Communication Technologies Course, to share these podcasts online with their partners and to rearrange them in light of formative feedback provided by their partners. Thus it was aimed to train future teachers as podcast producers instead of users of ready-made podcasts. As a result of the study, it was deduced that student-produced podcasts do not only contribute the information transmission but also help to obtain various learning outcomes.

Ashraf, Noroozi and Salami (2011) conducted a study with experimental and control groups. While they wanted those in the control group to listen to radio programs in English, they asked participants in the experimental group to download and listen to podcasts in English. Through the data they obtained from the listening test administered twice as pre-test and post-test, they concluded that participants in the experimental group were more successful than the ones in the control group. As a result of qualitative data obtained from the interviews with some of the participants and their reflections, it was claimed that podcasts applications were approved by most of them and they might enhance the listening ability.

A study was carried out in Faculty of Social Policy at Lithuania Mykolas Romeris University with students from different areas of specialization and taking English for Specific Purposes Course on their perceptions of listening to podcasts (Kavaliauskiene & Anusiene, 2009). In this study, participants' self-evaluation data on their podcast application performance and ideas on their experience in online and in-class listening activities were analyzed via a questionnaire. As a result it was put forward that thanks to podcasts' feature making it possible to listen at one's own pace and at appropriate time, they accelerate the development of listening ability, encourage language learning by increasing individual awareness, contribute to prefect listening ability outside classroom away from the eye of teacher and peers and support their development by having them make self-evaluation of their success.

3. Materials and Methods

In order to investigate the effectiveness of the use of student-produced podcast in foreign language vocabulary teaching, an empirical study with experimental and control groups was conducted in a tourism and hospitality management college in a state university. Participants from both experimental and control groups who study English as a foreign language at pre-intermediate level were given a pre-test before the application. To test the equivalence of pre-test scores of participants from both experimental and control groups Independent Samples *t*-Test was used and before that to test normality which one of the assumptions of this analysis Shapiro-Wilk Test was administered.

During the application besides in-class vocabulary activities, participants in the experimental group were asked to record audio files/podcasts including the pronunciation and Turkish equivalent of the target words and optionally sample sentences individually or with partners with whom they wanted to work. Student-produced podcasts were shared on a social networking site

through a closed group page to which only the participants of the experimental group could access. In this way, participants were able to listen to the podcasts of both themselves and other peers in the experimental group. On the other hand, participants in the control group were not given any vocabulary activities. They were expected to learn the target words only through the in-class activities. Just after the application all the participants in experimental and control groups were given a post-test and a permanence test was applied four weeks later.

In order to test the significance of the difference between pre-test and post-test scores of participants in experimental and control groups, firstly Dependent Samples *t*-Test was applied for each group separately. Then to determine whether the difference between the post-test scores of participants in experimental and control groups was significant, Independent Samples *t*-Test was applied. In the same way, to test the significance of the difference between post-test and permanence test scores of participants in experimental and control groups Dependent Samples *t*-Test was applied and to test whether the difference between the permanence test scores of participants in experimental and control groups was significant, Independent Samples *t*-Test was applied.

4. Results and Analysis

Before applying Independent Samples *t*-Test to examine the equivalence of pre-test scores of participants in experimental and control groups Shapiro-Wilk Test was done to check normality assumption. Since the obtained values (Shapiro-Wilk: .44 for experimental group and Shapiro-Wilk: .24 for control group) was higher than .05 significance level, it was concluded that the results has normal distribution (Büyüköztürk, 2012). Therefore, in order to determine if the difference between pre-test scores of the two groups significant, Independent Samples *t*-Test was applied.

The results of the Independent Samples *t*-Test revealed that there was not a statistically significant difference between the pre-test scores of the participants in the experimental group (*M*=50.54, *SD*=11.66) and control group (*M*=48.39, *SD*=11.65), *t* (90)=.89, *p*<.05, two tailed, (*MD*=2.15, *SED*=2.43), %95 *CI* [-2.68, 6.98] and Cohen *d* =.18, indicating small effect size. See Table 1.

Table 1. Independent Samples t-Test

Pre-test	N	Mean	SD	df	t	p
Experimental	46	50.54	11.66	90	.89	.378
Control	46	48.39	11.65			

* p< .05

In order to test the significance of the difference between the pre-test and post-test scores of participants in the experimental group, Dependent Samples *t*-Test was done. According to the result of Dependent Samples *t*-Test, the post-test scores of the participants (*M*=62.22, *SD*=15.04) were significantly higher than their pre-test scores (*M=50.54*, *SD*=11.66), *t*(45)= -5.51, *p*<.05, *d*= .87 indicating large effect size. % 95 Confidence interval of the difference was between -15.93 and -7.41. See Table 2.

Table 2. Dependent Samples t-Test

Experimental	N	Mean	SD	df	t	p
Pre-test	46	50.54	11.66	45	5.51	.000*
Post-test	46	62.22	15.04			

* p< .05

To test the significance of the difference between the pre-test and post-test scores of participants in the control group, another Dependent Samples *t*-Test was applied. The results of the test revealed that the post-test scores (*M=62.35, SD*=13.09) were statistically significantly higher than the pre-test scores (*M*=48.39, *SD*=11.65), *t*(45)= 6.51, *p*<.05, *d*= 1.13, indicating large effect size. % 95 Confidence interval of the difference was between -18.27 and -9.64. See Table 3.

Table 3. Dependent Samples t-Test

Control	N	Mean	SD	df	t	p
Pre-test	46	48.39	11.65	45	6.51	.000*
Post-test	46	62.35	13.09			

* p< .05

Independent Samples *t*-Test was applied to determine whether the difference between the post-test scores of the participants in the experimental and control groups was significant. The results showed that there was not a statistically significant difference between the post-test scores of the participants in the experimental group (*M*=62.22, *SD*=15.04) and control group (*M*=62.34, *SD*=13.09), *t* (90)=.04, *p*<.05, two tailed, (*MD*=.12, *SED*=2.94), %95 *CI* [-5.97, 5.71] and Cohen *d* =.01, indicating small effect size. See Table 4.

Table 4. Independent Samples t-Test

Post-test	N	Mean	SD	df	t	p
Experimental	46	62.22	15.04	90	.04	.965
Control	46	62.34	13.09			

* p< .05

In order to test the significance of the difference between the post-test and permanence test of the participants in the experimental group, Dependent Samples *t*-Test was carried out. According to the results, post-test scores (*M*=62.22, *SD*=15.04) were statistically higher than permanence test scores (*M*=52.23, *SD*=15.38) at a significant level, *t*(45)= 4.52, *p*<.05, *d*= .66, indicating medium effect size and % 95 Confidence interval of the difference was between 5.53 and 14.42. See Table 5.

Table 5. Dependent Samples t-Test

Experimental	N	Mean	SD	df	t	p
Post-test	46	62.22	15.04	45	4.52	.000*
Permanence test	46	52.23	15.38			

* p< .05

In order to test the significance of the difference between the post-test and permanence test of the participants in the control group, another Dependent Samples *t*-Test was conducted. According to the results, post-test scores (*M*=62.35, *SD*=13.09) were also statistically higher than

permanence test scores (*M*=53.98, *SD*=13.38) at a significant level, *t*(45)= 4.01, *p*<.05, *d*= .63, indicating medium effect size and % 95 Confidence interval of the difference was between 4.16 and 12.57. See Table 6.

Table 6. Dependent Samples t-Test

Control	N	Mean	SD	df	t	p
Post-test	46	62.22	15.04	45	4.52	.000*
Permanence test	46	52.23	15.38			

* p< .05

To determine whether the difference between the permanence test scores of the participants in the experimental and control groups was significant or not, Independent Samples *t*-Test was done. According to the results it was concluded that there was not a statistically significant difference between the permanence test scores of the participants in the experimental (*M*=52.24, *SD*=15.38) and control (*M*=53.98, *SD*=13.38) groups, *t* (90)=.58, *p*<.05, two tailed, (*MD*=1.74, *SED*=3.00), %95 *CI* [-5.97, 5.71] and Cohen *d* =.08, indicating small effect size. See Table 7.

Table 7. Independent Samples t-Test

Permanence test	N	Mean	SD	df	t	p
Experimental	46	52.24	15.38	90	.58	.564
Control	46	53.98	13.38			

* p< .05

5. Conclusion and Discussion

As a result of the analysis done to reveal whether there was a difference between the pre-test scores of the participants in the experimental and control groups, it was found out that there was not any significant difference between the two groups. Therefore, the post-test and permanence test scores of these two groups were comparatively evaluated.

According to the results of the Dependent Samples *t*-Test that was conducted separately for experimental and control groups to compare their pre-test and post-test scores, it was determined that the scores of the participants in the experimental group after the podcast application were significantly higher than their scores before the application. However the post-test scores of the participants in the control group were similarly higher than their pre-test scores. Also, the results of the Independent Samples *t*-Test done to compare the post-test scores of both experimental and control groups showed that there was not a statistically significant difference between the two groups.

On the other hand, the results of the Dependent Samples *t*-Test that was carried out separately for both experimental and control groups to compare their post-test and permanence test scores, it was seen that permanence test scores of the participants from not only experimental group but also control group were significantly lower than their post-test scores. Also, the results of the Independent Samples *t*-Test conducted to compare the permanence test scores of these two groups revealed that there was not a statistically significant difference between the two groups.

In the light of the findings, it is possible to state that the use of student-produced educational podcasts is not effective in foreign language vocabulary teaching. Although in some of studies carried out on the effectiveness of educational podcast it was concluded that podcast applications are effective (Ashraf et al., 2011; Hur & Suh, 2012; Kavaliauskiene & Anusiene, 2009; Kemp et al., 2012; Tam, 2012; Weinberg, Knoerr, & Vandergrift, 2011), similar results were not obtained in the present study. This is due to the fact that podcasts in most of those studies were prepared by either teachers or lecturers; however in this present study the effectiveness of student-produced podcasts was investigated. Zanten et al. (2012) indicated that the type of podcast should be selected in accordance with the educational goals. Therefore as a result of the study, the effectiveness of the use of teacher-produced podcasts in foreign language vocabulary teaching instead of student-produced podcasts might be suggested as a research topic to investigate.

6. Limitations of the Study

The podcast application in the present study was carried out on the learning unit that had been chosen by the researcher.

7. References

Ashraf, H., Noroozi, S., & Salami, M. (2011). E-listening: The Promotion of EFL Listening Skill via Educational Podcasts. 6th International Conference on e-Learning (s. 10-16). Canada: University of British Columbia Okanagan.

Büyüköztürk, Ş. (2012). *Sosyal bilimler için veri analizi el kitabı istatistik araştırma deseni spss uygulamaları ve yorum.* Ankara: Pegem Akademi.

Forbes, D. (2011). Beyond Lecture Capture: Student-generated Podcasts in Teacher Education. Waikato Journal of Education, 51-63.

Kavaliauskiene, G., & Anusiene, L. (2009). English for Specific Purposes: Podcasts for Listening Skills. Santalka Filologija Edukologija, 28-37.

Kazlauskas, A., & Robinson, K. (2012). Podcasts Are Not For Everyone. British Journal of Educational Technology, 321-330.

Kemp, J., Mellor, A., Kooter, R., & Oosthoek, J. W. (2012). Student-Produced Podcasts as an Assessment Tool: An Example from Geomorphology. Journal of Geography in Higher Education, 117-130.

McGarr, O. (2009). A Review of Podcasting in Higher Education: Its Influence on the Traditional Lecture. Australasian Journal of Educational Technology, 309-321.

Scutter, S., Stupans, I., Sawyer, T., & King, S. (2010). How Do Students Use Podcasts To Support Learning? Australasian Journal of Educational Technology, 180-191.

Tam, C. O. (2012). The effectiveness of educational podcasts for teaching music and visual arts in higher education. Research in Learning Technology.

Weinberg, A., Knoerr, H., & Vandergrift, L. (2011). Creating Podcasts for Academic Listening in French: Student Perceptions of Enjoyment and Usefulness. CALICO Journal, 588-605.

Zanten, R. V., Somogyi, S., & Curro, G. (2012). Purpose and preference in educational podcasting. British Journal of Educational Technology, 130-138.