

Use of Podcasts in Effective Teaching of Vocabulary: Learners' Attitudes, Motivations and Limitations

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Abstract—Whether e-learning in the form of podcasting helps learners with their attitudes and motivations toward learning English vocabulary is investigated in this article. It also gives voice to them and investigates whether they address limitations in podcasts' access on the net. In our study, a group of 30 university students who were not very familiar with English vocabularies and were estimated as intermediate level English students received some video podcasts through e-mail. After a week a five-point Likert scale questionnaire also was sent to each or was given to them in paper, asking them some questions about their experience. The data were analyzed using SPSS. The findings suggested that learners had very positive attitude toward podcasts and had very high motivation to continue learning English vocabularies with the help of podcasts. Learners also pointed to difficult access, low internet speed and filtering as the limitations.

Index Terms—e-learning, podcasting, limitation, video podcast

I. INTRODUCTION

The advent of computer networks, and later the Internet, paved the way for the delivery of e-learning. E-Learning promised to allow learners to study at their own time and pace, with a reduction in or elimination of on-campus attendance requirements. Lee & Chan (2007) state that learners can be helped to make efficient use of their time, by harnessing the idle moments in their day waiting or travelling on public transport, so they can undertake learning in conjunction with other tasks. Many of people are 'continuously connected' by mobile phones, laptops and hand-held devices.

Podcasts can be transferred to a variety of electronic portable devices such as laptops, and then can be watched or listened to at any time or any place (Evans, 2008).

The term 'podcast' is the combination of the popular brand name of ('iPode') and 'broadcast' (Evans, 2007). It is now a general term which refers to audio or video recordings posted online or downloaded to computer or mobile (Kennedy, Hart & Kellems, 2011). Video podcasts refer to podcasts that contain visual information either in the form of still images, animation, or video (Dupugne, Millette & Grinfeder, 2009).

Since modern learners have to take advantage of their unexpected free time (Evans, 2008) the use of podcasts to disseminate instructional materials online has elicited considerable interest among colleges and universities (Dupugne, Millette, & Grinfeder, 2009). Internet has brought new ways for teachers to connect their learners. Therefore, e-learning is being included in teaching programs by institutions because e-learning allows learners to choose (with some limits) how, where, and when to study (Evans & Fan, 2002).

Positive attitudes toward and higher motivations for using podcasts can lead to students' better learning (Oliver, 2005; Fernandez, et al 2009; Heilesen, 2010; Bolliger, et al., 2010; Walls, et al., 2010). But, there are some studies that show no benefit of using podcasts to students (Weatherly, Grabe & Arthur, 2002). More investigations are needed to establish podcasting as an effective learning tool (Evans, 2008).

Despite institutional enthusiasm, relatively little formal research has examined how students respond to this instructional technology. To the best of the researchers' knowledge no studies until now have tested the effect of using podcasts on learning English vocabulary and on the probable generated learners' motivations.

Iran with the population of 72 million has had a great progress in access to information and communications Technology. But insufficient research has been done on technology users' needs, their problems in using technological tools, their perceptions and attitudes toward new developmental technologies, their learning preferences, and the type of tools they use more frequently (Rahimi & Asadollahi, 2011).

II. REVIEW OF LITERATURE

Distance education has progressed and evolved from pencil-and-paper correspondence courses to the use of analogue audio-based and video-based educational technologies (Keegan, 2002). Podcasts can be downloaded to laptops and handheld computers, tablet PCs, digital cameras, mobile phones and personal digital assistants as portable electronic devices. Therefore, the appropriate size and the suitable storage capacities of these electronic devices help e-learning to happen in special forms (Lee & Chan, 2007).

For the first time, some students who were in their first year at Duke University in the United States were given some iPods. Then their use and satisfactions were assessed via surveys and focus groups (Duke University, Office of Information Technology, 2005). The findings suggested that the students expressed considerable enthusiasm and pointed to their fine perceptions and their positive learning results. Scholars mention that when students' enjoy their learning, they can have positive learning outcomes. Then they might engage in that learning activity again and again.

For diverse educational subjects Salmon and Edirisingha (2008) explained a lot of pedagogical applications for podcasting. They gave importance to podcasting as what brings to the learners motivation, speed and good engagement. Moreover, some other scholars also suggested the beneficial effect of podcasting on learner's learning because of the students' higher motivation and their positive attitudes toward learning through podcasts (Oliver, 2005; Fernandez, et al., 2009; Dupagne, et al., 2009; Heilesen, 2010; Bolliger, et al., 2010; Walls, et al., 2010). With regard to podcasting as an educational tool, Heilesen (2010) in a study came into conclusion that students generally show very good attitudes towards podcasting and "reports of rejection of podcasting are rare" (p.3). Fernandez, et al. (2009) in another study made judgments about the feelings, understanding, and the reactions of some participants who used podcasts during one semester. According to their findings, they stated that podcasting was not a substitute for traditional learning system in the participants' opinions; it just increased the participants' motivation.

Bolliger, et al. (2010) did a research in online environment in order to understand the students' level of motivation when they applied podcasts as their learning tool. They reported in general that the participants liked to use podcasts: although, prior experience of some participants and their gender made some minor differences. Walls, et al. (2010) also evaluated students' access, familiarity, experience, and attitude to use podcasts by conducting a survey. They stated that students are not as motivated or as eager to use educational podcasts as educators think they are. In their study Rahimi and Asadollahi (2011) did a research on one hundred and twenty Iranian university students' access, familiarity, and experience towards using the technology of podcasting. The results revealed that many of the students owned a portable device and were very familiar with podcasts but only a small number of them had never downloaded or used any podcasts. They considered podcast as a suitable educational tool in university courses, although they rarely had had classes in which podcasts had been effectively used.

Although the studies above confirm the positive attitudes toward using podcasts, some others have revealed no effect on students' learning or attitude after using podcasts (Weatherly, Grabe & Arthur, 2002; Daniel & Woody, 2010).

In recent years, the use of podcasts to disseminate instructional materials online has elicited considerable interest among colleges and universities (Dupagne, et al., 2009). An example is Lee & Chan (2007)'s study in which distance learners, who were studying an information technology subject, were given some podcasts for performing additional listening activities. At the end of the semester the results of the survey which was done on the effectiveness of the podcasts in helping the students get their subject matter better, revealed that the learners had very positive feelings about their experience. Huntsberger and Stavitsky (2007) created a series of audio podcasts to review materials in a large mass media and society class. Students were overwhelmingly satisfied with the podcast content, length, and style. Of 209 surveyed students about 80% said they found podcasting very helpful but 13% reported technical difficulties when downloading and listening to the podcasts. Evans (2008) conducted a survey in which about two hundred undergraduate students obtained some podcasts which were designed to be applied as study guides. According to the results of the survey, the students were much more satisfied with studying and reviewing their subject matter by podcasts than by reviewing their course notes. Another survey study on the effectiveness of podcasts was done by Fernandez et al. (2009). The participants of the study said that the podcasts were supplementary for learning their course subjects but they were not a substitute for classroom teaching procedures. Fernandez et al., (2009) also stated that their participants via the frequent application of podcasts experienced the feeling of close connection to their teachers. In line with the studies on podcasts' effectiveness, McKinney et al. (2009) did an experimental research in which the control group of the students was given PowerPoint slides of their class lecture and the experimental group received the podcast of that lecture material and the PowerPoint slides. When both groups were assessed, the experimental group which had received the podcast did better than the other group on the test.

Despite obvious institutional enthusiasm, relatively little formal research has examined how students respond to this instructional technology and, perhaps more important, whether podcast use has beneficial effects on overall student learning and performance (Dupagne, et al., 2009).

III. RESEARCH QUESTIONS

Based on the theoretical and empirical rationales which were explained in detail, the following research questions were investigated:

1. Is using podcasts effective in learning English vocabularies?
2. Does podcast use, motivate learners to learn more English vocabularies?

3. Does podcast use, make learners interested in learning new English vocabularies?
4. What are the probable limitations in using podcasts?

IV. METHOD

A. Participants

The participants were thirty students from university of Isfahan. Their majors were not English. Their knowledge of the language was limited to their majors' specialized vocabularies and they were not familiar with English language daily vocabularies as they were asked about, before being given the podcasts. They were all female and their age ranged from 22 to 27. In fact a much larger number of the university students accessed the provided podcasts of this research, but did not fill out the questionnaires.

B. Materials

1. Questionnaire:

Regarding the research questions, a seventeen item questionnaire was designed (see Appendix A). The items were categorized under three major sub-scales: students' access, motivation, and attitude. The questionnaire was reviewed by our professor so the content validity was confirmed by the expert's judgment. The students' ideas and feelings of podcasting use were evaluated through asking them about the experiences they had with podcasting. The reliability of the questionnaire was calculated using SPSS with cronbach α value (significance) of 0.721.

2. Podcasts:

Four Video podcasts on kitchen appliances, sport tools, weather and shapes were sent to volunteers. They were found and downloaded on the net by the researchers. They were free to download and had been provided for learning new English vocabularies.

C. Procedure:

Some students with majors other than English from university of Isfahan were asked about their knowledge of English vocabulary and whether they liked to learn new vocabularies by video podcasts. Since dormitory students had access to high speed internet in their rooms, it was preferred to collect the data in the dormitory of the university. At the beginning, the students were asked about their knowledge of English. Candidates, who were found to have limited knowledge in daily English use and only did have knowledge of their majors' specialized vocabularies, were given through flash memories or were sent the video podcasts through e-mail. In order to watch and use the podcasts students had to connect to internet. They watched four Video podcasts on kitchen appliances, sport tools, weather and shapes. After a week a 5 point Likert scaled questionnaire was sent to the candidates through e-mail or was given directly to them in paper. Twenty candidates answered the questionnaires and sent them back.

The questionnaire was designed according to the research questions. For validating and having expert's judgment, the questionnaire was sent to our applied linguistics professor at University of Isfahan.

For reliability the answer of the questions was categorized according to three categories: attitude, motivation and limitation. The statistical analysis were performed with an α value (significance of 0.721. The data was analysed using SPSS.

V. RESULTS

The obtained results from the questionnaires are illustrated in tables below:

TABLE 5.1
THE RESULTS

subjects	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
questions																				
1	4	5	4	4	5	5	4	4	4	5	4	4	5	4	4	4	5	4	5	5
2	4	4	4	4	4	4	5	4	5	4	4	4	4	4	4	4	5	4	5	4
3	4	3	3	4	1	3	4	5	3	1	4	3	3	2	3	3	3	2	4	3
4	2	3	4	3	1	2	3	2	2	2	1	4	2	1	4	4	2	2	2	2
5	1	3	1	2	1	1	2	2	4	1	1	3	1	1	2	2	3	4	1	1
6	4	5	4	5	3	5	4	3	4	4	4	2	3	4	4	4	3	4	5	4
7	4	5	4	4	4	5	5	5	5	4	4	5	5	4	4	4	5	4	5	5
8	4	5	5	5	2	5	5	3	4	3	4	5	5	5	4	4	4	4	5	5
9	1	2	2	1	1	1	2	1	1	2	2	2	1	1	2	2	1	2	1	1
10	1	1	3	4	1	3	1	2	4	1	1	1	1	1	2	2	2	2	1	2
11	4	3	4	4	3	5	4	3	4	4	4	5	5	4	4	4	5	4	5	4
12	4	4	4	5	5	5	5	5	5	4	4	5	5	5	5	5	5	4	5	5
13	4	4	5	4	4	5	5	4	4	4	4	5	5	4	5	5	5	4	5	3
14	4	4	3	2	4	3	5	4	4	2	2	1	4	2	2	2	4	2	4	4
15	2	3	1	2	5	3	3	2	2	4	1	2	1	2	2	2	2	3	2	1
16	4	5	5	5	4	4	5	5	5	5	5	5	5	5	4	4	5	4	5	5

TABLE 5.1
THE RESULTS

subject question	21	22	23	24	25	26	27	28	29	30
1	4	4	4	5	4	4	4	5	4	4
2	4	3	4	5	4	4	5	5	4	4
3	1	3	4	4	4	3	4	3	4	2
4	4	3	2	1	4	2	2	2	2	1
5	4	4	2	4	4	3	4	4	2	1
6	1	4	2	4	2	4	2	2	3	4
7	1	4	5	3	2	4	4	4	5	4
8	1	5	5	1	2	5	5	5	5	4
9	4	5	4	3	1	1	2	2	2	1
10	4	5	4	2	1	1	1	2	1	2
11	4	1	4	2	1	4	4	5	5	4
12	4	1	1	4	1	4	4	4	5	4
13	4	3	3	5	4	5	4	4	5	3
14	2	3	3	5	4	2	2	4	4	2
15	2	2	4	4	3	2	2	2	1	1
16	4	2	4	4	3	4	5	5	5	4

TABLE 5.2
QUESTION 17 RESULTS

subjects	Question 17
1	Podcasts are good substitutes for books in English institutes. But the problem is that the institutes can't afford it.
2	Podcasts generally are attractive and amusing. Images remain in mind.
3	Being short, podcasts motivate learners a lot.
4	I absolutely agree with short educational images. But the need to have laptops or professional cell phones limits the use of podcasts.
5	Podcasts help learning not to be boring. They improve the quality of learning. The limitation is related to internet speed in our country.
6	They are very helpful in learning new vocabularies.
7	They are helpful and more attractive than English books.
8	Access to podcasts is a limitation. But they are attractive and helpful.
9	Using podcasts make the vocabularies stay in long-term memory.
10	Podcasts are attractive, motivating, amusing and effective. But access to them is difficult.
11	They are very applicable. They make learning happen fast. But access to them is a limitation.
12	Spelling is necessary in podcasts.
13	Podcasts have to include all subjects not just vocabulary learning.
14	They are useful and attractive but low internet speed and not having access to laptops and professional cell phones are the limitations.
15	Podcasts are helpful and I don't see any limitations.
16	Podcasts are not boring. They are effective. I don't see any limitations.
17	The access is difficult.
18	Access to high speed internet everywhere is a limitation.
19	Low internet speed and the need to have laptops or professional cell phones is a limitation.
20	Filtering is a problem for downloading podcasts.
21	Use of podcasts is not applicable. I do not have the electronic equipments.
22	Simple podcasts are good for elementary levels.
23	Video podcasts are more effective than audio podcasts.
24	I didn't know anything about podcast before this experience.
25	I can be relax and just watch them as if I'm watching a cartoon.
26	I really enjoy the podcasts.
27	Of course I inform my friends to see these podcasts.
28	I was already familiar with podcasting.
29	I tried to download those podcasts 3 times but it was not possible because of the low internet speed.
30	It is a kind of unconscious learning.

The results showed that all the 30 students agreed with the usefulness, effectiveness and attractiveness of the given podcasts. Except 5, all were not aware of podcasts as educational tools. Out of 30 students, only 8 of them did believe that using podcasts was possible everywhere and every time. Others had pointed to different problems they might have for downloading and having access to podcasts including: low internet speed, not being able to afford professional cell phones or laptops and filtering.

20 learners out of thirty found the working with podcasts easy and all decided that, the podcasts had helped them learn new English vocabularies to a great extent, although 7 of the learners were already familiar with about fifty percent of the vocabularies provided in the podcasts. 26 students said they were motivated to learn English through podcasts again in future and 21 liked to suggest their friends watching the given podcasts. Being short, 27 learners found the podcasts more effective and applicable.

VI. DISCUSSION:

The aim of this study was to know whether the use of podcast was effective in teaching new English vocabularies. And to check learners' attitudes toward podcasts, their motivations and the limitations they would probably confront.

The findings suggested that the sample did not have an unlimited access to podcasts for some justifications such as low internet speed, filtering and not owning professional cell phones, laptops or other portable devices. Results also showed that students' use and awareness of podcasts for educational purposes were very limited.

In regard to attitudes, the students' feedback suggested that they had positive attitudes towards using podcasts for learning English vocabularies. They judged the podcasts as attractive, amusing and helpful. Some pointed to better and faster learning. Since the podcasts were short and interesting, learners were motivated to learn English through podcasts in future too.

In regard to the effectiveness most of the learners judged the podcasts as effective and engaging. They all were satisfied with their learning through podcasts. This result is consistent with those of Baird and Fisher (2006) and Edirisingha and Salmon (2007). The participants in these studies reported that the podcasts were successful in attracting and keeping their attention and interest.

Taken together, the results of this study provide good evidence to suggest that the students thought that podcasts were effective and were capable of enhancing their vocabulary learning.

APPENDIX A

1= strongly disagree

2=disagree

3= no idea

4= agree

5=strongly agree

1. The given podcasts are useful in learning new English vocabularies

1 2 3 4 5

2. The given podcasts are attractive and amusing.

1 2 3 4 5

3. Using podcasts is simple and it is possible everywhere and every time.

1 2 3 4 5

4. I usually have access to high speed internet

1 2 3 4 5

5. Access to podcasts is easy in our country

1 2 3 4 5

6. Working with podcasts is generally easy

1 2 3 4 5

7. The given podcasts helped me a lot in learning new English vocabularies.

1 2 3 4 5

8. Being short, podcasts are attractive and applicable.

1 2 3 4 5

9. Using podcasts is waste of time.

1 2 3 4 5

10. Before watching the podcasts related to this research, I had knowledge about podcasts.

1 2 3 4 5

11. I am motivated to use podcasts for learning new English vocabularies in future.

1 2 3 4 5

12. Podcasts are effective in learning new English vocabularies.

1 2 3 4 5

13. I will suggest my friends to use these given podcasts.

1 2 3 4 5

14. I knew less than 50% of the vocabularies before watching podcasts.

1 2 3 4 5

15. I prefer books more than podcasts in learning new English vocabularies.

1 2 3 4 5

16. I have watched all the given podcasts for this research.

1 2 3 4 5

17. Generally, what is your idea about podcasts? Briefly write about advantages and limitations of using podcasts.

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