The Impact of Using Podcasts on Iranian Autonomous /Non-Autonomous EFL Learners’ Listening Comprehension Ability at Pre-Intermediate Level

Maryam Sayadi¹, Davood Mashhadi Heidar¹*

Abstract
The aim of the current study was to investigate whether Podcasts would have an effect on Iranian autonomous and non-autonomous EFL learners’ listening comprehension ability at pre-intermediate level. For this purpose, 60 Iranian pre-intermediate EFL learners at some Iranian institutes participated in the experiment of the study. Then they were divided into two groups based on an Oxford Placement Test (OPT) and an autonomy questionnaire. The participants of each group were assigned randomly into two experimental groups (N=15) and two control groups (N=15). A pre-test was administered to the four groups of the study and then, the experimental groups received 5 sessions of teaching podcast. After the treatment, a posttest of L2 listening comprehension was administered to all groups of the study and finally the data were analyzed via a series of paired sample t-tests to see whether there is progress between the pretest and posttest scores of the groups, and a Two-way ANOVA was used to see the differences between posttests. The results revealed that Iranian autonomous and non-autonomous EFL learners’ listening comprehension ability got better after the treatment.

Keywords: ability, autonomy, EFL learners, listening, podcast
1. Introduction

In recent years, language learning process is not limited to the books; rather computer technology is used to improve the quality of education and learning foreign language. In Computer Assisted Language Learning (CALL), teachers can challenge the traditional teaching and learning methods (Hasan & Hoon, 2013) by incorporating computer technology into language teaching process. One of the tools of CALL, which was not originally designed but can be used for language learning, is podcast (McBride, 2009). Podcasting has huge potential in improving learners’ listening and speaking skills (SZE, 2006).

Podcasts are usually in the form of audio or video files, and they have significant role to improve learners listening skills. According to Bolliger, Suparakorn, and Boggs (2010), podcasts are recoded audio files that can be integrated in educational and training settings in order to deliver personalized content to learners in a specific course during a given semester. They further added that these audio files are made available online so that students may download and listen to them in order to review instructional materials (e.g., lectures) outside of class at a time and place convenient to them.

Listening is the ability to accurately receive and interpret messages in the communication process and it has a great impact on learning and comprehension of foreign language. Listening is a psychological phenomenon, which takes place on a cognitive level inside people’s heads, and a social phenomenon, which develops interactivity between people and the environment surrounding them. It considers listening as a complex process, which needs to be understood in order to teach it, and subsequently evaluate it before integrating it with phonological aspects and with the skill of speaking (McLaren, Madrid, & Bueno, 2005).

According to Brito (2015), as a comprehension skill, listening provides people with the greatest amount of input during the process of language acquisition and development (Hunsaker as cited in Gur, Dilci, Coskun, & Delican, 2013). Osada (2004) explains that listening is in fact vital for the language learning but at the same time a complex process. The Council of Chief State officer (CCSSO, U.S., 2009) defines listening in terms of the ability to understand the language of the teacher used in instruction, comprehend the important details, abstract pertinent information, and to keep abreast with the training modules through which teachers provide information.

According to Pourhosein Gilakjani and Sabouri (2016), listening is one of the most important skills in English language learning. When students listen to English language, they face a lot of listening difficulties. Students have critical difficulties in listening comprehension because universities and schools pay more attention to writing, reading, and vocabulary. Listening is not an important part of many course books and most teachers do not pay attention to this important skill in their classes. According to Kovitsch (2001), the importance of listening goes beyond our ability to recall information. The University of Minnesota reports that in the business world, 60% of misunderstandings can be traced poor listening and only 1% to poor reading.

1.1 Statement of the Problem

According to the Gowhary, Pourhalashi, Jamalinesari, and Azizzifar (2014), despite the importance of listening practice in language instruction, in many countries, English language classes still emphasize only the skills of reading and writing and listening has been overlooked to the large extent. They believe that this problem is especially a commonplace case of an English-as-a-foreign-language (EFL) situation where the English is taught as a subject at school and used only inside not outside the classroom.

They added that EFL students are studying English in their home countries where English is not their spoken language, so these students have very few opportunities to hear real language, therefore they aren’t accustomed to hearing the language as it is produced by native speakers for native speakers. They argued that students from the countries in which English is taught as a foreign language frequently have serious difficulty in understanding English spoken to them when they come into contact with native speakers of the language.

According to the Ghasemboland and Nafissi (2012), listening is a vital skill in the language acquisition process. Listening comprehension is a complex cognitive process that, although in terms of the mother tongue seems easily acquired, needs a great deal of effort in a second and specifically foreign language learning process. Besides, being in constant exposure to television, radio, and satellite broadcasts has increased the necessity to be prepared to receive and process information gained through the aural channel more than before.
1.2 The Research Question

Based on the problem stated and the background presented, the current study aimed to find answer to the following question:

Does using podcast have any effect on Iranian pre–intermediate EFL learners’ listening comprehension ability?

1.3 The Hypothesis of the Study

Accordingly, the null hypothesis of the study is as follows:

H0: Using podcast does not have any effect on Iranian EFL learners’ listening comprehension ability.

2. Review of the Literature

According to Selamat and Sidhu (2013), with the popularity of Communicative Language Teaching (CLT) methodology, listening began to gain importance as the CLT method emphasized the need to teach listening for effective oral communication. With the rapid development of computer and media aided methodology, more experts are beginning to view listening as an important language skill to be developed. However, Mendelsohn (2002) argues that university students’ listening skills are not developed enough to enable them to effectively extract content information from lectures. Although listening has been taught in many language programs, experts still believe that much research need to be done to enable a more effective classroom teaching of the skill (Goh, 2000; Vandergrift, 2004).

According to Bozorgian (2012), listening comprehension is the primary channel of learning a language. Yet of the four dominant macro-skills (listening, speaking, reading, and writing), it is often difficult and inaccessible for second and foreign language learners due to its implicit process. The secondary skill, speaking, proceeds listening cognitively. Aural/oral skills precede the graphic skills, such as reading and writing, as they form the circle of language learning process. However, despite the significant relationship with other language skills, listening comprehension is treated lightly in the applied linguistics research. Half of our daily conversation and three quarters of classroom interaction are virtually devoted to listening comprehension.

Hamouda (2013) said that listening skill is very important in acquiring understandable input. Learning does not occur if there will not be any input. PourhoseinGilakjani and Mohammadreza Ahmadi (2011) expressed that listening has an important role in the communication process. According to PourhoseinGilakjani and Seyyedeh Masoumeh Ahmadi (2011), out of the four main areas of communication skills called listening, speaking, reading, and writing, listening is the most important of all. Steinberg (2007) and Azmi Bingol, Celik, Yidliz, and Tugrul Mart (2014) defined listening comprehension as one’s ability to recognize another through sense, aural organs and allocate a meaning to the message to understand it.

PourhoseinGilakjani and Sabouri (2016) added EFL learners have crucial problems in listening comprehension because universities pay attention to grammar, reading, and vocabulary. Listening and speaking skills are not significant parts of many books and teachers do not consider these skills in their classes (Hamouda 2013). Ducate and LomickaIn (2009) stated that in recent years, Internet audio has greatly increased in popularity (McCarty, 2005). One recent example of Internet audio, a podcast, is an audio file that anyone can create using a computer, microphone, and a software program. Once posted to the web, podcasts can be accessed, downloaded, and played to a computer or MP3 player. The popularity of podcasts can be linked to their simplicity in creating, editing, publishing, and listening to them.

According to Hasan and Hoon (2013), podcasting is one of the powerful, emergent technological media that has been used in education for many years. Language learning has been recognized as one of the fields about to get help from the rapid development in podcasting. Research studies on podcasting have already acknowledged its potentiality and have documented many evidences that podcasts can greatly help develop learners’ language skills, especially in developing learners’ speaking and listening skills (Ashton-Hay & Brookes, 2011; O’Bryan & Hegelheimer, 2007).

3. Methodology

3.1 The Design of the Study

The present study followed a quasi-experimental design. The rationale behind using such a design lied in the fact that there are only four samples of subjects throughout one institute, and the study was supposed to be conducted in one
institute. This design provides two control and two experimental groups. This design is pretest, post-test equivalent group design. First, there was a subject level selection through administering an OPT test out of 20 with the criteria (0-11, 12-16, 17-20) to show the acceptable proficiency level of the participants of the study. Second, the autonomy test was conducted to divide them into autonomous and non-autonomous groups. The participants were assigned randomly into two experimental groups (N=15) and two control groups (N=15). A pre-test was administered to both groups of the study and then, the experimental groups were received 5 sessions of teaching podcast. Next, a post-test of L2 listening comprehension was administered to both groups of the study and finally the data were analyzed.

3.2 Participants

In this study, 60 participants underwent experiment. They were pre-intermediate level students studying in an Iranian English Institute. Then, an autonomy test was used to divide them into autonomous and non-autonomous groups (30 students in each). After that, both autonomous and non-autonomous groups were divided into two homogenous groups: the experimental and the control group.

3.3 Instruments

3.3.1 Oxford Placement Test (OPT)

The proficiency test of OPT was employed to select 60 homogeneous students. The test contained 20 questions.

3.3.2 Autonomy Questionnaire

An autonomy questionnaire was given to all participants to recognize which participants are autonomous and which participants are non-autonomous. Iowa Developing Inventory (IDAI) was used. IDAI includes 90 sentences and 5 substandard. The researcher followed IDAI rules to calculate the scores.

3.3.3 Pretest

A pretest of listening was given before the treatment to the experimental and control groups. The goal was measuring the participants’ listening ability. The pre-test has 6 questions. The students were asked to answer the questions of listening in 10 minutes.

3.3.4 Posttest

A posttest of listening was given after the treatment to the experimental and control groups. The pre-test and the post-test were equivalent. The test has 6 questions. The students were asked to answer questions of listening in 10 minutes.
3.4 Procedure

After administering OPT test among 100 participants, 60 participants were selected at pre-intermediate level. Then, the autonomy test was conducted through the autonomy test, 30 autonomous and 30 non-autonomous participants were selected randomly. In the next step, both autonomous and non-autonomous groups were divided randomly into two groups (one experimental and one control group). The experimental groups were taught during 5 sessions and the podcasts were used by the researcher. Each session was 45 minutes, the researcher played the podcast and after each sentence asked them to repeat the sentence and helped them to understand the whole sentences. The researcher played the podcast two times and then asked them to answer some questions from the podcast in 15 minutes and then elaborated the answers. After these steps, post-test was administered and the questions were answered in 15 minutes by the learners.

3.5 Treatment

The treatment of the study consisted of five sessions of teaching podcast to both experimental groups. Participants were taught 45 minutes in each session. 5 Podcasts were used, one podcast for each session. The researcher played the podcast two times and then asked them to answer some questions from the podcast in 15 minutes and then elaborated the answers.

4. Data Collection

The data obtained from the tests in this study were analyzed via a Paired-Sample T-Test between the pre-test and post-test scores of the study and Two-way ANOVA between post-tests.

5. Data Analysis and Findings

5.1. The Descriptive Analysis of the Data

The descriptive analysis of the obtained data in the current study is concerned in this section. It was done using SPSS software. The following table shows the descriptive analysis of the data between the pre-test and the post-test of the autonomy experimental group of the study:

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>POSAEX</td>
<td>18.4000</td>
<td>15</td>
<td>1.54919</td>
</tr>
<tr>
<td></td>
<td>PREAEX</td>
<td>14.6000</td>
<td>15</td>
<td>2.58567</td>
</tr>
</tbody>
</table>

As is indicated above (Table 1), the number of subjects participated in the study has been 15 in the experimental group. The mean for the pre-test AEX (pre-test of the autonomy experimental group) was shown to be 14.6000 as compared to the mean for the post-test AEX (post-test of the autonomy experimental group) which was 18.4000. The standard deviations obtained for the experimental group show more variability among the scores of pre-test AEX rather than post-test AEX scores. As a result of this fact, subjects’ post-test score in the autonomy experimental group were significantly different after going under the treatment.

The proceeding table shows the descriptive analysis of the data between the pre-test and post-test of the autonomy control group of the study:
As is indicated above (Table 2), the number of subjects participated in the study has been 15 in the autonomy control group. The mean for the Pre-test ACON (pre-test of the autonomy control group) was shown to be 14.2000 as compared to the mean for the Post-test ACON (post-test of the autonomy control group) which was 16.4000. The standard deviations obtained for the autonomy control group shows more variability among the scores of pre-test ACON rather than post-test ACON scores. As a result of this fact, subjects’ post-test score in the control group were significantly different rather than the pre-test.

The following table shows the descriptive analysis of the data between the pre-test and the post-test of the non-autonomy experimental group of the study:

<table>
<thead>
<tr>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>POSACON</td>
<td>16.4000</td>
<td>15</td>
<td>1.84391</td>
</tr>
<tr>
<td>PREACON</td>
<td>14.2000</td>
<td>15</td>
<td>2.67795</td>
</tr>
</tbody>
</table>

As is indicated above (Table 3), the number of subjects participated in the study has been 15 in the non-autonomy experimental group. The mean for the pre-test NAEX (pre-test of the non-autonomy experimental group) was shown to be 13.4667 as compared to the mean for the post-test NAEX (post-test of the non-autonomy experimental group) which was 13.4667. The standard deviations obtained for the experimental group show more variability among the scores of pre-test NAEX rather than post-test NAEX scores. As a result of this fact, subjects’ post-test score in the non-autonomy experimental group were significantly different after going under the treatment.

The proceeding table shows the descriptive analysis of the data between the pre-test and post-test of the autonomy control group of the study:

<table>
<thead>
<tr>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>POSANAEX</td>
<td>15.9333</td>
<td>15</td>
<td>2.25093</td>
</tr>
<tr>
<td>PRENAEX</td>
<td>13.4667</td>
<td>15</td>
<td>2.94877</td>
</tr>
</tbody>
</table>

As is indicated above (Table 4), the number of subjects participated in the study has been 15 in the non-autonomy control group. The mean for the Pretest NACON (pre-test of the non-autonomy control group) was shown to be 14.2000 as compared to the mean for the Posttest NACON (post-test of the non-autonomy control group) which was 16.4000. The standard deviations obtained for the non-autonomy control group show the least variability among the scores of pre-test NACON rather than post-test NACON scores. As a result of this fact, subjects’ post-test score in the control group were not significantly different rather than the pre-test.
The proceeding table shows the descriptive analysis of the data between post-tests of the all groups of the study:

Table 5. Two way ANOVA results of the study

<table>
<thead>
<tr>
<th>Listening</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>108.183</td>
<td>3</td>
<td>36.061</td>
<td>8.650</td>
<td>0.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>233.467</td>
<td>56</td>
<td>4.169</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>341.650</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 indicates the results of two-way ANOVA analysis. Accordingly, the F is estimated as 8.650 which is higher than 1 (F>1). Also, the level of significance is 0.00 which is lower than 0.05. The F-value indicates a high and significant difference among the four groups of the study in terms of post-test score. In addition, the significance level of 0.00 indicates that the difference has not been a random one; rather, it has been due to the effect of the independent variable.

Table 6. The Post Hoc (LSD) Multiple Comparisons results of the study

<table>
<thead>
<tr>
<th>(I) Autonomy</th>
<th>(J) Autonomy</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSD</td>
<td>AEX</td>
<td>2.00000*</td>
<td>0.74557</td>
<td>0.010</td>
<td>0.5064</td>
</tr>
<tr>
<td></td>
<td>NAEX</td>
<td>2.46667*</td>
<td>0.74557</td>
<td>0.002</td>
<td>0.9731</td>
</tr>
<tr>
<td></td>
<td>NACON</td>
<td>3.73333*</td>
<td>0.74557</td>
<td>0.000</td>
<td>2.2398</td>
</tr>
<tr>
<td>ACON</td>
<td>AEX</td>
<td>2.00000*</td>
<td>0.74557</td>
<td>0.010</td>
<td>3.4936</td>
</tr>
<tr>
<td></td>
<td>NAEX</td>
<td>0.46667</td>
<td>0.74557</td>
<td>0.534</td>
<td>1.0269</td>
</tr>
<tr>
<td></td>
<td>NACON</td>
<td>1.73333*</td>
<td>0.74557</td>
<td>0.024</td>
<td>0.2398</td>
</tr>
<tr>
<td>NAEX</td>
<td>AEX</td>
<td>2.46667*</td>
<td>0.74557</td>
<td>0.002</td>
<td>3.9602</td>
</tr>
<tr>
<td></td>
<td>ACON</td>
<td>0.46667</td>
<td>0.74557</td>
<td>0.534</td>
<td>1.9602</td>
</tr>
<tr>
<td></td>
<td>NACON</td>
<td>1.26667</td>
<td>0.74557</td>
<td>0.095</td>
<td>0.2269</td>
</tr>
<tr>
<td>NACON</td>
<td>AEX</td>
<td>3.73333*</td>
<td>0.74557</td>
<td>0.000</td>
<td>5.2269</td>
</tr>
<tr>
<td></td>
<td>ACON</td>
<td>1.73333*</td>
<td>0.74557</td>
<td>0.024</td>
<td>3.2269</td>
</tr>
<tr>
<td></td>
<td>NAEX</td>
<td>1.26667</td>
<td>0.74557</td>
<td>0.095</td>
<td>2.7602</td>
</tr>
</tbody>
</table>
Table 6 is the post hoc analysis of the groups of the study. Accordingly, the LSD table shows the multiple comparisons among the groups: each group has been compared to the other three for difference. AEX is different in terms of mean to the other groups with a significance average of 0.04 which is lower than 0.05. ACON is not significantly different from NAEX because the significant level is higher than 0.05. The NACON is significantly different from the other groups since the average significance level is lower than 0.05.

5.2. The Inferential Analysis of the Data

This section elaborates the inferential analysis of the data which are obtained in the study. It was done using Statistical Package for Social Science (SPSS). The following tables summarize the inferential analysis of the data of the current study:

Table 7. Paired samples results for the AEX group of the study

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>POSAEX – PREAEX</td>
<td>5.924</td>
<td>14</td>
</tr>
</tbody>
</table>

As is pointed out in Table 7, the t-value of the study was calculated between the post-tests of listening in the autonomy experimental group and the control group. The observed t value was calculated as to be 5.924 which is higher than the critical t value (t= 2.145) and the degree of freedom was 14 (df= 14), and also the level of significance was calculated as to be 0.000 which has been used in the rejection or support of the hypothesis of the study in proceeding section. Based on the results of paired samples T-tests, the progress was statistically significant for autonomy experimental group. It means that the autonomy experimental group of the study made a distinct improvement in comparison to the control group.

Paired sample T-test was run to determine students’ progress within groups. It showed the participants’ progress between pre-test and post-test of ACON in the following table:

Table 8. Paired samples results for the ACON group of the study

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 2</td>
<td>POSACON – PREACON</td>
<td>3.556</td>
<td>14</td>
</tr>
</tbody>
</table>

As is shown in Table 8, the sig. value of the control group of the study was calculated to be 0.003 (sig. value= 0.003). The observed t value is 3.556(t=3.556) which is higher than the critical t value (t= 2.145) and the degree of freedom was 14 (df= 14).
Table 9. Paired samples results for the NAEX group of the study

<table>
<thead>
<tr>
<th>Pair</th>
<th>POSANAEX – PRENAEX</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td>3.954</td>
<td>14</td>
<td>0.001</td>
</tr>
</tbody>
</table>

As is pointed out in Table 9, the t-value of the study was calculated between the post-tests of listening in the non-autonomy experimental group and the control group. The observed t value was calculated as to be 3.954 which is higher than the critical t value (t= 2.145) and the degree of freedom was 14 (df= 14), and also the level of significance was calculated as to be 0.001 which has been used in the rejection or support of the hypothesis of the study in proceeding section. Based on the results of paired samples T-tests, the progress was statistically significant for non-autonomy experimental group. It means that the non-autonomy experimental group of the study made a distinct improvement in comparison to the control group.

Table 10. Paired samples results for the NACON group of the study

<table>
<thead>
<tr>
<th>Pair</th>
<th>POSANACON - PRENACON</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
<td>0.361</td>
<td>14</td>
<td>0.723</td>
</tr>
</tbody>
</table>

As is shown in Table 10, the sig. value of the control group of the study was calculated to be 0.723 (sig. value= 0.723). The observed t value is 0.361 (t=0.361) that is lower than the critical t value (t=2.145). Additionally, the degree of freedom was 14 (df=14).

6. Discussion

Listening is a difficult aspect in language teaching even testing. As a result of this fact, many teachers and testers have always tried to find efficient ways to teach listening. Some of them try to teach listening in isolation and some others teach it as integration with other skills such as pronunciation. Few researches are conducted on using podcast practices as a tool in teaching listening which can be beneficial in language teaching classroom, since it is simple, interesting, and effective way of the teaching that helps learners improve their intelligibility.

The findings of the study revealed that using podcast in teaching listening leads to a better performance of language learners in L2 listening accuracy tests. Podcasting is a popular and productive tool with ample academic potential. Such finding is compatible with the research made by Sanjana (2014). The findings of this research showed that the participants would like to listen and practice podcast. They wanted to use it both in classroom and outside of it for their betterment in English language. They believed that by practicing, they could achieve efficiency in listening and speaking skills. Moreover, most participants appreciated the fact that podcast can be used anytime, anywhere. Therefore, they were interested to carry it in their mobile phones and listen to it during their leisure for which their interest in becoming autonomous learner was quite vivid.

Sanjana (2014) also added that podcast has allowed both teachers and students to add their voices to the worldwide collection of resources, which indicates the lowering down of technical barrier. Therefore, it shows that podcast can be beneficial for both teachers and learners. Podcasts can be classified in two types: radio podcasts and independent podcasts. In English language teaching (ELT), independent podcasts are mostly used since they can be tailor-made to suit the needs of different learners (SZE, 2006). Moreover, one of the benefits of podcast is that it promotes learners’ autonomy. In this respect, Ivy (2010-2011) suggested that podcast can be used to make students create their own
podcasts in the foreign language. In terms of speaking skills, podcast can also help students particularly those who have less confidence to speak in front of an audience because podcast can be produced performing behind the scenes.

7. Conclusion

Listening comprehension ability is an important part of effective communication. Listening comprehension ability allows one to make sense of and understand what another person is saying. With practice, learners can improve their listening comprehension skills. Language instructors should respond to their learners’ need to develop increased listening comprehension skills by making listening comprehension an integral component of their instructional course. The findings of this study indicated that learners should be provided with appropriate materials in which they can learn how to understand the English language. By using podcasts, instructors can give learners the opportunity to listen to native speakers’ speech. And also students generally enjoy using podcast. Based on the results obtained from this study, a positive effect of certain tasks such as using podcast on autonomous/non-autonomous EFL learners’ listening comprehension ability at pre-intermediate level can be concluded. Learners see podcasts as an effective tool that has reasonably improved their oral performance in English learning.

References


Ivy, T. I. (2010-2011). Technology and the language teacher. *The Arts Faculty Journal, 4*, 206-223. doi: [http://dx.doi.org/10.3329/afj.v4i0.12942](http://dx.doi.org/10.3329/afj.v4i0.12942)


O'Bryan, A., & Hegelheimer, V. (2007). Integrating CALL into the classroom: The role of podcasting in an ESL listening strategies course. *ReCALL, 19*(2), 162–180. doi: [http://dx.doi.org/10.3329/afj.v4i0.12942](http://dx.doi.org/10.3329/afj.v4i0.12942)

Osada, N. (2004). Listening comprehension research: A brief review of the past thirty years. *Dialogue, 3*(1), 53-66. [https://pdfs.semanticscholar.org/6d58/c7a45da8c9e74cf4f0d9a0a928b1a6923a1.pdf](https://pdfs.semanticscholar.org/6d58/c7a45da8c9e74cf4f0d9a0a928b1a6923a1.pdf)


Sanjana, L. (2014). *Impact of podcast on listening skills of the students of higher secondary level*. A thesis submitted to the Department of English and Humanities, BRAC University. [http://hdl.handle.net/10361/3939](http://hdl.handle.net/10361/3939)


