

26

**PODCASTING:**  
**TOOL TO DEVELOP AND REINFORCE EFL LEARNING**

# PODCASTING:

## TOOL TO DEVELOP AND REINFORCE EFL LEARNING

### PODCASTING: HERRAMIENTA PARA DESARROLLAR Y REFORZAR EL APRENDIZAJE DEL IDIOMA INGLÉS

Anali Carolina Rodríguez-Castro<sup>1</sup>

E-mail: [anali.rodriguez.24@est.ucacue.edu.ec](mailto:anali.rodriguez.24@est.ucacue.edu.ec)

ORCID: <https://orcid.org/0000-0001-9899-0695>

Juanita Catalina Argudo-Serrano<sup>1</sup>

E-mail: [juanita.argudo@ucacue.edu.ec](mailto:juanita.argudo@ucacue.edu.ec)

ORCID: <https://orcid.org/0000-0002-3337-7803>

<sup>1</sup> Universidad Católica de Cuenca. Ecuador.

#### Suggested citation (APA, 7th edition)

Rodríguez-Castro, A. C., & Argudo-Serrano, J. C. (2023). Podcasting: tool to develop and reinforce EFL learning, *UMET. Revista Metropolitana de Ciencias Aplicadas*, 6(S1), 252-260.

#### ABSTRACT

This research explored the application of podcasts in the English as a Foreign Language (EFL) teaching context, mainly focused on the development of speaking and listening skills. This could shed light on the impact of 'Podcasting' in teaching and learning the mentioned skills. As a really important point of start, it offered basic characteristics, types of podcasts, and the topics which might be used throughout the research, that is why three different groups of students with different language levels (A1, A2, B1), according to the Common European Framework of Reference for Languages (CEFRL), belonging to "Be Free English Academy", participated in this study, each level has seven learners of different ages; who were evaluated throughout two different months as well as explored the impact 'Podcasting' might have on them. This research evaluated the advantages, disadvantages, and contributions of podcasts in EFL classrooms to the development of language skills mainly listening and speaking. Also, it examined the effect on the students' attitudes after the podcasting strategy was implemented. Research in this field helps to understand the outcomes that this "relatively" new technological tool has and its implications in the English learning process.

#### Keywords:

Podcasting, speaking, listening, language learning, development, self-learning, motivation.

#### RESUMEN

Esta investigación exploró la aplicación de podcasts en la enseñanza de inglés como lengua extranjera (EFL), enfocada en el desarrollo de habilidades para hablar y escuchar. Esto podría explicar el impacto de 'Podcasting' en la enseñanza y el aprendizaje de las habilidades mencionadas. Al iniciar el estudio, se instaló características básicas, como tipos de podcasts y los temas que se podrían utilizar a lo largo de la investigación, es por ello que tres grupos diferentes, de siete estudiantes cada uno, con diferentes niveles de idioma (A1, A2, B1), según el Marco Común Europeo de Referencia para las Lenguas (CEFRL), pertenecientes a "Be Free English Academy", participaron en este estudio; quienes fueron evaluados a lo largo de dos meses explorando así, el impacto que 'Podcasting' podría tener en ellos. Esta investigación evaluó las ventajas, desventajas y contribuciones de los podcasts en las aulas de EFL para el desarrollo de las habilidades lingüísticas, principalmente escuchar y hablar. Además, examinó el efecto en las actitudes de los estudiantes después de implementar la herramienta. La investigación en este campo ayudó a comprender los resultados que tiene esta herramienta tecnológica "relativamente" nueva y sus implicaciones en el proceso de aprendizaje del inglés.

#### Palabras clave:

Podcasting, hablar, escuchar, aprendizaje de idiomas, desarrollo, autoaprendizaje, motivación.

## INTRODUCTION

The American University School of Education (2020), has written that technology provides students with easy-to-access information, accelerated learning, and giving fun opportunities to practice what they learn. It is also said that it permits students to look for new subjects and enhances their understanding of difficult concepts. Through the use of technology inside and outside the classroom, students can gain 21st-century technical skills necessary for future occupations. Therefore, involving technology in language learning classes might be a way to give a step forward. Mukarrama & Said (2015), mentioned that there are four different skills that students learn in English as a Second or Foreign language (SL/FL), namely, listening, reading, speaking, and writing. Nushi & Orouj (2020), have said that the listening skill has long been recognized as a challenging skill for teachers, students, and researchers working within EFL contexts. They have also implied that *“moreover, up until the recent past, it was the least researched of the four language skills in second language acquisition studies”*. (p.1)

The entry of sources such as mobile technologies introduces the idea of a new research era in language learning and teaching. Mobile digital technology devices such as MP3 players, iPods, iPads, and smart mobile phones offer their users the opportunity to access information almost anywhere, at any preferred time, and their own pace (Schwabe & Göth, 2005). Guerrero (2022), mentioned *“the implementation of podcasts, for instance, represents a new strategy for learning English”*. (p.1)

Listening and speaking skills are the central part of learning a new language because as Sabina (2018), wrote: *“listening and speaking, must be taught thoroughly to confront them as they do with other skills such as they do with grammar”* (p.54). Therefore, the students challenge themselves and confront the world outside the classroom.

This is the reason why the following research has begun to take place to try to find out possible solutions and, especially focus on the problem across this contemporary tool, podcasting, which according to several authors such as Bamanger & Alhassan (2015); Maher-Palencue (2016); Guerrero (2022), it allows students to interact in an active and creative way of learning to promote reflection, self-paced, and independence.

Ramli & Kurniawan (2018), have stated that “Podcasting” which has been analyzed in several previous studies, has taken a lot of people to a new level of deduction and English improvement. In addition, Perkins (1999); and Mayes & De Freitas (2004), postulated that within the classroom, podcasting compliments a constructivist approach, which means that it is a composite of different views incorporating active, social, and creative aspects of learning. Infante-de Freitas (2020) considers learning as the realization of understanding through active discovery,

dialogue, and collaboration. Furthermore, he argued that constructivism is concerned with the internalization of knowledge and skills because this theory supports that the learners construct knowledge rather than just passively take in information.

Also, Schrader (2018), wrote that the constructivist theory emphasizes the role of social interactions between student-student, teacher-student, and student-media; as influencing what students learn. For educational purposes, most constructivists agree on the following attributes for a learning environment: (1) that students are active in constructing their own knowledge and (2) that social interactions are important to knowledge construction (Tennyson & Volk, 2015). Recently, Guerrero (2022), conducted research related to ‘Podcasting’ and sustained that his investigation aimed to determine the impact of podcasts on English speaking skill development by analyzing its influence and identifying the elements that contribute to this skill.

For the above-mentioned, this research paper intended to integrate podcasting into EFL classes in order to explore its impact on learners’ speaking and listening skills, as well as to examine its effect on the students’ motivation and attitude toward the learning process. The questions that guided this study were:

- To what extent does the use of podcasting impact the development of EFL students’ listening and speaking skills?
- What are students’ attitudes toward the use of podcasting to develop language skills?

As Siemens (2005) mentioned *“behaviorism, cognitivism, and constructivism are the three broad learning theories most often utilized in the creation of instructional environments”* (p.2). These theories; however, were developed at a time when learning was not impacted by technology.

Connectivism is a model of learning that can be considered a guide by *“the integration of principles explored as chaos, network, complexity, and self-organization theories”* (Siemens, 2005, p.5); as well as an *“understanding that decisions are based on rapidly altering foundations”* (Siemens, 2005, p.5)

In connectivism, knowledge is distributed across networks where connections take learners through a learning process. Connectivism is a learning theory based on the acquisition of knowledge focused on the future, not the past. It accepts technology as a major factor in the learning process. Nowadays, learning has become universal and thus humans may invent technologies and applications which could encourage them to move outside the common borders to enhance their lives (Sozudogru et al., 2019). Therefore, this theory addresses the importance of technology in the learning process and how the digital age has increased the speed at which students have access to information.

Underwood (1997), has implied that listening means “the activity of paying attention to and trying to get meaning from something that we hear” (p.1). In addition, it is said that listening is a process to identify, as well as understanding what speakers are saying, and the listeners are able to repeat the sound of what they heard (Hamouda, 2013). That is the reason why podcasting as an instrument of connectivism matches perfectly with the objectives of this research.

Kouser & Majid (2021), mentioned that having such a great number of new technological sources to be used in the English learning environment might offer the learners a valuable opportunity to study and learn by themselves, it means self-learning. As stated by Chan et al. (2011), teachers may support their students via the use of podcasts and help them better invest their own time in learning during certain moments, like public transportation or even waiting for a flight. Through the current importance of technological applications, podcasts lectures can be seen as a very powerful teaching and learning tool, which luckily might involve some extra sources such as photos or even videos (Ushioda, 2011; Maher-Palénque, 2016).

In this regard, Masudul & Tan Bee (2013), investigates the effects of podcasting on EFL students' language skills and attitudes. The results of the study revealed that podcasts can be a medium that supports language learning not just in speaking and listening but also in other language skills and areas such as grammar, pronunciation, and vocabulary.

As mentioned by Al Fadda & Al Qasim (2013), podcasting could be a potential tool that might be used to support learning language, especially for listening skill. The authors have conducted quantitative research with 46 female EFL students in higher education in Saudi Arabia. It was concluded that the use of podcasts made a positive and significant difference in EFL Saudi students' listening comprehension skills.

Kargozari & Zarinkamar (2014), after conducting experimental research with 32 EFL students majoring in Teaching English as a Foreign Language (TEFL) in Iran concluded that the use of podcasts as instructive media in learning vocabulary is extensively more viable than the traditional procedures utilized generally as a part of the EFL classes. In this realm, Alfian et al. (2019), found in quasi-experimental research that podcast was an effective tool to teach and learn English. The participants of this study were really interested in the podcast and it had a wonderful effect on their listening skill. Furthermore, the podcast can increase knowledge according to the topic the listener is hearing about. This statement goes on the same idea as Xiangming et al. (2020), who noticed that the implementation of podcasting as an EFL teaching and learning tool is widely researched in Europe and Asia and little research has been done in Latin America.

Important and additional research in Latin America was developed in a Chilean university by Sandoval (2020), who found that the level of spoken English expected from the students is higher than the results they can achieve in the course of one academic term. While their writing and reading skills do improve over time, their oral skills take a longer time to develop. The participants underwent four synchronous podcasting sessions in which feedback was provided using an eight-criteria analytic rubric. At the end of the intervention, a focus group was conducted, in order to collect the participants' perceptions of this new methodology. Their responses evidenced that this methodology was a valuable complement to their EFL classes, being pronunciation and fluency the criteria they perceived as the most benefited one. However, in the Ecuadorian context, Guerrero (2022), studied the use of podcasts in the speaking skill development of EFL learners, these students' improvement is defined by the number of hours they received at school, and the schedule varies among public and private institutions. Most of the time, English teachers become the main source of information in terms of how the English language is used, especially when listening and speaking skills are developed. After the application of podcasting during his research, he concluded that most of the students upgraded their level, from a basic to an intermediate level, demonstrating the effectiveness of using podcasts with an emphasis on the listening skill to the development of English speaking skill.

## METHODOLOGY

This investigation applied a quasi-experimental design where a quantitative approach was used. This approach provides numerical information displayed in statistics, outlining the characteristics and information gathered from the study group (Creswell, 2012). The research was carried out at the “Be Free English Academy” located in Loja city, which aim is to give students the opportunity to study in face-to-face classes as well as online classes. The participants of this study were seven students who were taking the A1 level of language proficiency, seven students of the A2 level, and seven students of the B1. The participants were of different ages, regardless of their language level. The instruments used were pre- and post-tests to grade the participant's English level of learning. Before the study took place, each student was asked to sign a consent document where they agreed to participate in it. In this consent, the students learned about the fact that the information used was anonymous, and in the case of pictures, their faces were going to be blurred. It was also mentioned that they can withdraw their participation at any time.

### Pre-Test/Placement Test

The information from the pre-test was taken from the data collected by the Institute, at the beginning of the programs, these tests are applied to each student to grade

and evaluate their language skills. The test is evaluated with 25 marks, and they come along with a speaking section in order to place each student at the correct level.

This test consists of four different sections with multiple choice questions: Grammar (five questions), Vocabulary (10 questions), Reading (five questions), and Listening (10 questions). After this process, a math calculation is applied to the gotten scores to get a final grade of 25. For the purpose of the study, only the Listening section of the test was considered.

After the written test, the Speaking skill is evaluated using 10 different questions per level that are taken from the database of the Institute. These questions are based on Bloom's Taxonomy. If the student answers between 0-10 correct questions, he/she will be placed in the A1 level. If the student answers 10-20 correct questions, he/she is placed in the A2 level; finally, if the student answers 20-30 correct questions, the student is placed in the B1 level.

### Post-Test

The post-test consisted, the same as the pre-test, of four different sections: Grammar (five questions); Vocabulary (10 questions), Reading (five questions), and Listening (10 questions) with a total score of 25. Only the listening section of the test was taken into account as the study aims to evaluate students' improvement only in two skills, listening and speaking.

The Speaking post-test was applied to evaluate how successful the implementation of a strategy based on podcasts to teach English was. In order to validate this information, questions, which are based on the different levels of Bloom's Taxonomy, from the speaking section of the institute tests were chosen. This strategy was used in order to evaluate how many questions the students were able to respond to at the end of the study. The questions were taken randomly from the database.

### Podcasting

Podcasts were taken from an app called "Spotify" which provides a great variety of content. The general preferences of the student determined the decision on which podcasts to be included in the study so they are connected to the content of the English classes. Podcasts were used with the three experimental groups of each level to develop English listening and speaking skills.

The channel used for this matter is called "Learn English Through Listening" which currently has more than 600 podcasts on different topics. All the Podcasts have a title and an introduction where the person/people who are about to use it can be aware of what is the content of each one. Therefore, 12 different podcasts, per group, were chosen to develop this study. The podcasts last around eight-15 minutes, and they were sent in advance along with a list of five-10 important words for each section. On the day of the

class, the podcast was played again. Then, some discussions took place. Three different students were allowed to give their opinions per day, the other four students were supposed to ask each other questions and share opinions to start a debate at the end of the class. The words of the list should be used by the students when giving their opinions. Follow-up questions to check full comprehension were used as well.

### Questionnaire

The group of students of each level was asked to answer a questionnaire to get general thoughts about their perceptions of the implementation of podcasts in their EFL classes. The questionnaire evaluated to what extent students perceived their listening and speaking skills have improved through the application of podcasts, as well as explored their attitudes towards their use. The questionnaire consisted of eight items. Each item was measured on a five-point Likert scale. The participants of the study were asked to respond to each item as: (1) strongly disagree, (2) disagree, (3) partial opinion, (4) agree, (5) strongly agree.

### Daily teacher's journal

It was useful to record details and evaluate how the teacher perceived students' motivation and attitude aspects in terms of (1) New topics, (2) New words per class, and (3) Time. The journal entries were written down after each class in order to see how much interest was observed. The teacher recorded in the journal entry the new words learned (with different levels of difficulty), the time spent on each of the activities, and possible topics the students would like to listen to in the next podcast. The interest and motivation were measured by triangulating the information from the daily teacher's journal along with the questionnaire. This triangulation strategy allowed the study to evaluate the idea which is being investigated and the percentage of its accuracy, mitigating the weaknesses found in single tools (Creswell, 2012).

## RESULTS AND DISCUSSION

This study focused on exploring the effects of using 'podcasts' on EFL learners' improvement in their speaking and listening performance. Descriptive analysis and paired samples t-tests were done to examine the effect of the podcast application on 21 different students at the "Be Free English Academy" in order to measure whether their performance was enhanced or not. It was important to take into account the results of the study and to explore if there was any significant difference between the pre-test and the post-test regarding the listening and speaking scores. Figure 1 shows the pre- and post-test listening scores of the three groups (A1, A2, B1) and the performance of each student on the specific level they belong to. The main axis shows all of the 21 students who took the pre-test and post-test. This axis has curves ascending and descending

according to the scores that each student got. The scores are differentiated by the kind of lines shown in the figure. It is also important to state that a recount of the listening scores of the 21 students who took the pre-test and post-test was considered in the scale. Figure 1 indicates that the students showed better listening skill performance in the post-test ( $M = 14,0952381$ ) than in the pre-test ( $M = 10,52380952$ ). A statically significant difference between the scores of the tests was found at the  $p < .05$  level [ $T = (4,61178)$ ,  $p = 0.0258$ ]. The increasing scores between the mean in the pre-test and the post-test shows that the participants considerably improved their listening skill grades as can be seen in the lines of the two tests applied.

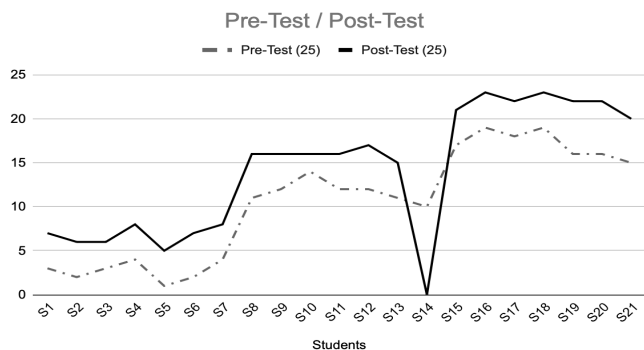


Figure 1. Pre-Test and Post-Test Listening Results.

Figure 2 shows that the students remarkably outperformed their scores obtained in speaking performance. The group of students had a higher post-test mean score ( $M = 13,1428571$ ) than their pre-test ( $M = 8,095238095$ ). These findings may indicate that podcast as a speaking teaching tool when effectively implemented is a useful strategy to be used in EFL classes. The performance in this skill enhanced significantly more than the scores obtained in the pre-test. At the  $p < .05$  level [ $T = (1,24761)$ ,  $p = 0.0156$ ]. The number of questions answered by the students increased after the implementation of a strategy based on podcast to help students improve their EFL speaking performance. Figure 2 shows how much the line of the post-test raised relative to the speaking pre-test.

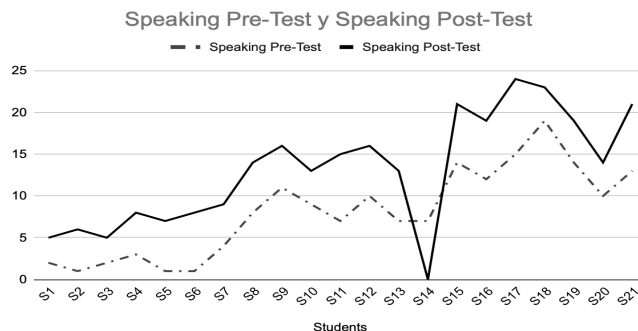


Figure 2. Pre-Test and Post-Test Speaking Results.

To explore the attitudes of EFL learners toward implementing podcast in EFL teaching, descriptive statistics of the means and standard deviations of the experimental group participants' responses were analyzed. The results indicate that the participants agreed that learning English speaking and listening skills through podcasting is an innovative and useful tool that worked well in their classes, the  $M = 30,23809524$  was taken from the subtotal scores obtained from each student after they answered the eight different questions in the proposed questionnaire to inquire about their attitude and motivation to keep up using this technique in their classes. The total score is high but not significantly different because the participants mentioned there was not enough improvement in the time range when the podcast strategy was implemented (Figure 3).

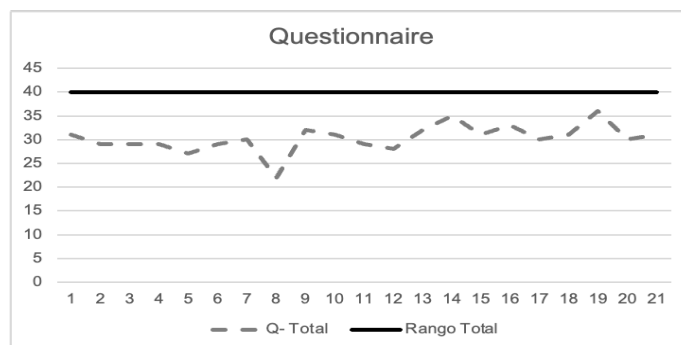


Figure 3. Questionnaire Total Score.

In order to triangulate the results obtained from the questionnaire where students' perceptions about the implementation of podcast in their EFL classes, the teacher's daily journal was analyzed. Results are shown in Table 1. Several data sets were included and comprised different factors such as: possible new topics (Total  $n = 17$ ); new words per class ( $M = 761904762$  which considering the standard error gives as a total  $n = 4$  to 5 words per class); recount of times a week the student were willing to do the activity without complaining ( $M = 2,19047619$  which considering the standard error gives as a total  $n = 2$ ), this account of exploring the range of the students' perception regarding the study.

Table 1. Teacher's daily journal entry results.

	Stud No	Mean	St deviation	Standard Error	Total
New Topics	21	0,761904762	0,43643578	0,095238095	16
New words per class	21	4,047619048	0,920662287	0,200904982	85
Times a week	21	2,19047619	0,980767435	0,214021001	46

After the obtained results, it was found that the students who were involved in the study improved their scores in the researched skills. In this regard, podcasting could be considered an essential tool in EFL classes, that is the reason why educators might create plans as well as guides that develop English listening and speaking skills through the use of podcasts in order to enhance the process of teaching and learning the English language. As mentioned by Al Fadda & Al Qasim (2013); and Kargozari & Zarinkamar (2014), podcasts help improve English skills and instructional media, more than traditional methods used in EFL classes.

Every single teacher might have access to the necessary tools (such as Spotify) which promote the improvement of speaking and listening skills. The fact of using this tool in the present study could be compared to the effective results found in Guerrero's (2022) study. The author concluded that after using Spotify his students upgraded their level, from a basic to an intermediate level. These results showed the effectiveness of using podcasts with an emphasis on developing listening and speaking skills in the EFL classes the same as the present research findings.

Nevertheless, any application might be used in order to get access to podcasts. Podcasts on any topic can be found on the Internet and all kinds of people could have access to them for free. For the aforementioned, Kouser & Majid (2021), stated that nowadays there is a great number of new technological tools, especially those ones that can be found on the internet. The present study is aligned with that statement as it promotes giving students a variety of opportunities to enhance learning by themselves (self-learning). Moreover, the results of the present study suggested that podcasts can help students have a more interesting learning process, results that were also mentioned by authors such as Ushioda (2011); and Maher-Palenque (2016).

To agree with Masudul & Tan Bee (2013), who investigates the effects of podcasting on EFL students' language skills and attitudes, the final results of the study revealed that podcasts can be a way to support language learning not just in speaking and listening but also in other language skills and subskills. This might be compared to the results found in this study, as it was mentioned in the daily teacher's journal, students not only improved their listening and speaking skills but also learned new vocabulary (on average from four to five new words in each podcast session).

It is important to mention that the current study found that EFL learners who took part in podcast listening-speaking instruction were generally happy with it. This might agree with the findings of previous studies which found that people generally enjoy using podcasts in their language-learning process. Alfian et al. (2019), found that podcast was an effective tool, they concluded that the participants of their study were really interested in podcasts and the

strategy had a wonderful effect on their listening skill, a similar situation was described in the present study. The results of these two studies could be close due to the educational context where they took place. In addition, Sandoval (2020), in the final stage of his study, collected the participants' perceptions on the use of this technological tool in the EFL classroom, and the participants' responses evidenced that this was a valuable complement to their classes. In the present study, learners' opinions were also considered, and the findings of both studies are related to the improvement of pronunciation and fluency when speaking, which were the criteria the participants perceived as beneficial.

Finally, based on Xiangming et al. (2020), it is highly noticed there has been a lot of research on podcasting as an EFL teaching and learning strategy in Europe and Asia, but less research has been done in Latin America, that is why Latin American educators should start to consider the internet as an important tool in class and start exploring these kinds of strategies that could help students' learning to boost.

Teachers explore various techniques to strengthen students' English speaking skill. There are several resources to improve English development, especially listening and speaking skills, such as audio recordings, TV shows, apps, and more. However, the use of podcasts is a strategy that introduces many advantages when teachers struggle teaching speaking and listening.

'Spotify', 'Apple Podcasts', and 'Buzzsprout' among others are excellent tools when talking about teaching listening and speaking, even so, the use of the podcasts inside or outside the classroom might reveal the connection between these two English language skills (Figure 4).

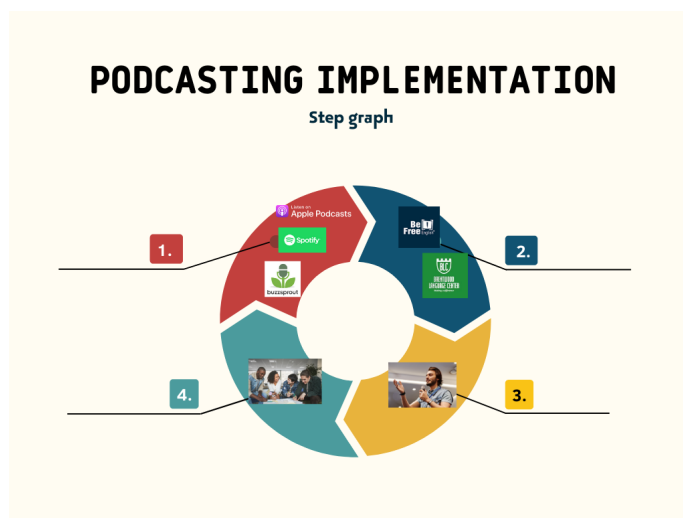


Figure 4. Podcasting implementation.

Students would be encouraged at the time of developing their listening and speaking skills through the use of podcasts by its updated content, accessibility, variety of topics, native speakers' different accents, new words in

context, etc. Podcasts are not a tool commonly used by students for improving their English development; however, it would give them the opportunity to become part of a late scenario to develop their English language.

## CONCLUSION

By the end of this study, it could be concluded that there is an opportunity for raising language awareness by implementing podcasting in the EFL classroom. It allows learners to listen to material they are interested in; therefore, the language acquisition and learning would be in their own pace and under non-threatening conditions, because they could actually enjoy what they are listening to, and at the same time they get a new language.

In addition, results show that listening to a podcast not only engages students in the activity of listening practice but also makes them exchange ideas; therefore, the speaking skill is also developed at the same time in the activity. It was observed that students seem to be engaged in the different tasks because it embraces a form of communication of their own ideas.

Spotify is one of the many platforms that allow students to have access to a variety of podcasts and listen to them in class as well as at their own convenient times, nonetheless, it is important to say that podcasting could be reached anywhere on the media; therefore, teachers/students might find any topic of their own interest.

Follow-up classroom discussions, opinions, and new information is a necessary activity to obtain more insights from students after a podcasting session, and why not in the future to record their own ones.

Some limitations need to be considered when interpreting the findings of this study. First, this study included only 21 students at one institute in Loja City. An extensive study may include all the levels (from A1 to C1) and probably different educators who are in charge of different groups because it would provide a great deal of information regarding background and kinds of students where the results could show enhancement or hindrance in higher/lower levels.

## REFERENCES

- Al Fadda, H., & Al Qasim, N. (2013). From call to mall: The effectiveness of podcast on EFL higher education students' listening comprehension. *English Language Teaching*, 6(9), 30-41.
- Alfian, A., Lio, A., & Marafat, L.O.S. (2019). The use of audio podcast for teaching listening comprehension. *Journal of Language Education and Educational Technology (JLEET)*, 9(1), 68-76.
- American University. (2020). *How Important Is Technology in Education?* American University's School of Education Online. <https://soeonline.american.edu/blog/technology-in-education/>
- Bamanger, E., & Alhassan, R. (2015). Exploring Podcasting in English as a Foreign Language Learners' Writing Performance. *Journal of Education and Practice*, 6(11), 63-74.
- Chan, W. M., Won, S., Kwee, N., & Lin, C. Y. (2011). Students' perceptions of and attitudes towards podcast-based learning. A comparison of two language podcast projects. *Electronic Journal of Foreign Language Teaching*, 8(1), 312-335.
- Creswell, J. (2012). *Educational research*. Pearson.
- Guerrero, F. (2022). *The Use of Podcasts in the Speaking Skill Development of English as a Foreign Language*. (Master Thesis). Pontificia Universidad Católica del Ecuador.
- Hamouda, A. (2013). An Investigation of Listening Comprehension Problems Encountered by Saudi Students in the EL Listening Classroom. *International Journal of Academic Research in Progressive Education and Development*, 2, 113-155.
- Infante-de Freitas, F. (2020, 17 febrero). *El podcasting como aprendizaje basado en proyectos en Ciencias Aplicadas a la Actividad Profesional*. (Master Thesis). UNIR.
- Kargozari, H., & Zarinkamar, N. (2014). Lexical Development Through Podcasts. *Procedia Social and Behavioral Sciences*, 98, 839-843.
- Kouser, S., & Majid, I. (2021). Technological Tools for Enhancing Teaching and Learning Process. Towards Excellence, 13(1), 366-373.
- Maher-Palénque, S. (2016). The power of podcasting: Perspectives on pedagogy. *Journal of Instructional Research*, 5(1), 4-7.
- Masudul, H., & Tan Bee, H. (2013). Podcast Applications in Language Learning: A Review of Recent Studies. *English Language Teaching*, 2(6), 128-135.
- Mayes, T., & De Freitas, S. (2004). e-learning models desk study. *JISC*, 1, 1-43.
- Mukarrama, A., & Said, A. M. (2015). Improving Students' Listening Ability by Using Chain Whispering Words or Sentences Technique at the First Year of SMP Somba Opu Sungguminasa Gowa. *English, Teaching, Learning, and Research Journal*, 1(2), 270-284.
- Nushi, M., & Orouji, F. (2020). *Investigating EFL Teachers' Views on Listening Difficulties Among Their Learners: The Case of Iranian Context*. SAGE.



- Perkins, D. (1999). The many faces of constructivism. *Educational Leadership: Journal of the Department of Supervision and Curriculum Development, N.E.A.*, 57(3), 6–11.
- Ramli, A. M., & Kurniawan, E. H. (2018). The use of podcast to improve students' listening and speaking skills for EFL learners. *Proceedings of the International Conference on English Language*, 145, 2352-5398.
- Sabina, Z. (2018). The importance of teaching listening and speaking skills. *WorldScience*. 7, 52-55.
- Sandoval, M. (2020). Podcast-based lessons: a useful tool to improve university students' descriptive oral skills. *Comunicación*, 29(1), 52-68.
- Schrader, D. (2015). Constructivism and Learning in the Age of Social Media: Changing Minds and Learning Communities. *New Directions for Teaching and Learning*, 144, 23-35.
- Schwabe, G., & Göth, C. (2005). Mobile Learning with a Mobile Game: Design and Motivational Effects. *J. Comp. Assisted Learning*, 21, 204-216.
- Siemens, G. (2005). *Connectivism: A learning theory for the digital age*. Typepad. [https://jotamac.typepad.com/jotamacs\\_weblog/files/connectivism.pdf](https://jotamac.typepad.com/jotamacs_weblog/files/connectivism.pdf)
- Sozudogru, O., Altinay, M., Dagli, G., Altinay, Z., & Altinay, F. (2019). Examination of connectivist theory in English language learning: The role of online social networking tool. *International Journal of Information and Learning Technology*, 36(4), 354-361.
- Tennyson, R. D., & Volk, A. (2015). Learning theories and educational paradigms. In, J. D. Wright (Ed.), *International Encyclopedia of the Social & Behavioral Sciences*. (pp. 699–711). Elsevier.
- Underwood, M. (1997). *Teaching listening*. Longman.
- Ushioda, E. (2011) Language learning motivation, self and identity: current theoretical perspectives, *Computer Assisted Language Learning*, 24(3), 199-210.
- Xiangming, L., Liu, M., & Zhang, C. (2020). Technological impact on language anxiety dynamic. *Computers & Education*, 150, 125-142.