

Uso de Edpuzzle para mejorar la comprensión auditiva en estudiantes de inglés como lengua extranjera

Using Edpuzzle to enhance listening comprehension in EFL learners

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RESUMEN

Escuchar es una de las habilidades que más contribuye al dominio de la competencia comunicativa (Gonulal, 2020). Sin embargo, ha sido la menos investigada, en cuanto a su práctica (Erkek & Batur, 2019). Por otro lado, Edpuzzle ha sido transcendental en clases virtuales. Por lo tanto, esta investigación reporta los hallazgos de la investigación de acción basada en el análisis del efecto de Edpuzzle en la mejora de la habilidad de escuchar y la percepción de los estudiantes después de trabajar con Edpuzzle. La investigación se realizó en una universidad pública con una muestra de conveniencia de cincuenta estudiantes A2. Los investigadores realizaron una encuesta demográfica para conocer mejor la muestra. Se realizaron pruebas previas y posteriores para medir cuánto mejoraron los estudiantes después de la intervención. Para corroborar estos resultados, aplicamos tres mini-cuestionarios. Además, se administró una encuesta de percepción. La intervención duró 8 semanas, 24 horas en total tanto sincrónica como asincrónicamente. Los resultados revelaron una mejora

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significativa en la habilidad de escucha ($d = 0.904516$, $P < .05$, $t = 8.10$) y un cambio positivo en la percepción de los estudiantes hacia el uso y la utilidad de Edpuzzle. En conclusión, esta investigación hace énfasis sobre la importancia de usar recursos tecnológicos durante el proceso de enseñanza aprendizaje como lo es Edpuzzle debido a que el uso de esta aplicación activa el desarrollo de la destreza cognitiva a través del método intensivo de escucha.

Palabras Clave: Edpuzzle, Escucha, Comprensión, ESA, Percepciones.

ABSTRACT

Listening is one of the skills that contribute the most to mastery of communication competency (Gonulal, 2020). However, it has been the least researched, regarding its practice (Erkek & Batur 2019). On the other hand, Edpuzzle has been significant in virtual classes. Therefore, this research reports the findings of action research based on the analysis of the effect of Edpuzzle on the improvement of the listening skill and the perception of learners after working with Edpuzzle. The research was conducted in a public university with a convenience sample of fifty A2 students. The researchers made a demographic survey to know better the sample. Pre-posttests were made to measure how much students improve after the intervention; to substantiate these results three mini-quizzes were applied. Also, a perception survey was administered. The intervention lasted 8 weeks, 24 hours total both synchronous and asynchronous time. Findings revealed a significant improvement in listening skills ($d = 0.904516$, $P < .05$, $t = 8.10$) and a positive change in learners' perception toward the use and usefulness of Edpuzzle. In conclusion, this study emphasizes the importance of using technological resources during the teaching-learning process such as the Edpuzzle application because it activates the development of cognitive skills through intensive listening.

Keywords: Edpuzzle, Listening, Comprehension, ESA, Perceptions.

INTRODUCCIÓN

Communication is one of the twenty-first-century skills needed in a globalized world. English is an international language since it is used in many countries as a first, second, and foreign language. Therefore, more and more people around the world are interested to learn

English through formal education and informal learning contexts (Muhammad, 2018; Mattarima & Hamdan, 2011;). Thus, the four skills (listening, reading, speaking, and writing) intertwine through the input and the output to develop the communication skill.

Regarding the input, listening skill enables learners to be exposed to the language, since it is a receptive skill. According to Weger, (2014), listening skill is a dynamic and constructive process that facilitate active learning and a prior-knowledge connection to understand the message mentioned. The significance of the listening skill is notable in the process of the language learning process since some studies have proved that more people tend to listen rather than speaking, reading or writing (Gonulal, 2020). In Addition, the use of this skill results in the unconscious application of other cognitive skills, such as analyzing, interpreting, judging, among others. Consequently, an outstanding achievement of the mastery of language was obtained as a result of the ability to use listening as a way of language acquisition (Tabieh, Al-Hileh, Abu, & Abuzagha, 2021; Rost, 2001). However, it has been proved that not much focus on the listening learning strategies has been made by the educators (Berne, 2004; Vandergrift, 2007). Moreover, there are two different types of listening practice that focus on different areas of improvement. They are intensive and extensive skills. Both are important and have their own roles. Nevertheless, although this study has focused mostly on the intensive skill, the extensive skill was also considered. It was due to the level of English of the participants (a2). Intensive listening is orientated to the improvement of pronunciation, grammar and, vocabulary through brief listening audios. Therefore, it is regarded as useful to build the basis and key foundational aspects of language acquisition. Some activities that are effective for an intensive approach are gap-fills, multiple-choice, and pronouncing (Schmidt, 2016). On the other hand, extensive listening focuses on increased exposure to a large amount of comprehensible input and meaningful practice since it emphasizes an overall understanding rather than grammar criteria (Gonulal, 2020). In addition, the topics used are meaningful and authentic, orientated to real-world contexts.

On the other hand, CALL (computer-assisted language learning) and MALL (Mobile assisted language learning) resources facilitates the process of teaching and learning in flipped classrooms environments, as a dynamic and motivated hub of knowledge, interaction, and communication (Cesare, Kaczorowski, Hashey, 2021; Aruan, Sari, Bengar, 2019). Video-

based learning holds an important role as it promotes active and meaningful learning and provides an improvement in the learning experience since it involves the use of analytical and reflective questions, and comments (Surya & Binyomin, 2020). Surya and Binyomin (2020) stated, “Edpuzzle is an online video-modifying platform that allows instructors to take videos (both instructor-made as well as pre-existing available videos) and insert questions to create active-learning video experiences” (p.4505). Moreover, Edpuzzle engages learners in self-paced learning and provides student accountability characteristics that enable educators to keep a track of students’ progress, how much time they need in a specific question, and prevent the skip of questions. Research on the use of Edpuzzle in the improvement of teaching English and listening instructions have been conducted (Cesare, Kaczorowski, Hashey, 2021; Pandolpho, 2021) and to improve student accountability and active learning in different field of studies (Shelby & Fralish, 2021; Surya & Binyomin, 2020; Mischel, 2019). Though, more research about the use of this tool in the English learning field is also needed.

In Ecuador, similar to many countries nowadays, classes have turned into a virtual environment. Nevertheless, although the core of the success of education is to investigate, practice, correct, reflect to have a continuous improvement process, exploration on this area haven’t been found, neither on studies that support the use of Edpuzzle to improve the listening skill, nor others that contradict the proposal. This is an issue in English education since it is needed to promote learning methodologies and strategies that enable learners to be competent in a globalized world and to be capable to use communicative competence in not just L1, but also L2 (Jang, 2015; Pattanapichet, 2011); such as in which this study focusses on.

Therefore, after identifying this gap, to contribute to this field of study, it was conducted action research on fifty undergraduate students from a public university in Los Rios, Babahoyo. The participants are in a2 level according to the Common European Framework of Reference for Languages (CEFR). Hence, the present study aimed at enhancing the intensive and extensive listening skills through the use of Edpuzzle for English foreign language learners. Furthermore, the study focused on analyzing the learners’ perspective toward the use of this video-based learning platform.

Thus, the following questions aligned to the aim of the study were addressed:

- Does Edpuzzle have a significant impact in improving students’ listening comprehension?
- What are the students’ perceptions after working with the technological tool Edpuzzle?

METHODOLOGY

This is an action research conducted by public university EFL teachers. According to Mertler (2016) action research is a systematic investigation which includes processes and tools to promote changing in a particular issue. This action research paper includes quantitative information.

A. Participants

The convenient sample was a group of 50 students from the last English curricular level, seventh. All the students attended a public university located in Ecuador-Los Ríos-Babahoyo. According to the placement test results, students’ proficiency English level was A2 according to the CEFR (Common European Framework of Reference). Considering this is the last level, students’ English proficiency is low.

Participants were female mostly (60%), their socioeconomic background was low to medium, and they were between 23 and 35 years old. In addition, students reported having access to the internet from home (100%). Sometimes, there were some students’ connection problems and this was a limitation in the development of the procedures.

Demographic Survey							
Gender		Age		English Proficiency		Internet access	
Female	60%	18-22	0%	A1	0%	Yes	100%
Male	40%	23-27	75%	A2	100%	No	0%
		28-35	25%	B1	0%		

Table 1. Demographic survey

Source: The authors

B. Instruments

A demographic survey was conducted to describe our sample of 50 participants. This survey

had nominal data such as gender, and yes-no questions in order to know if they had internet access at home, if they know the Edpuzzle tool and if they have worked with it at least once. Moreover, this survey had ordinal data like socioeconomic background, age range and English proficiency level.

A proficiency English test was taken to corroborate that the sample were in the same English level. Students gave this free test online through a free open website (<https://www.mmpublications.com/online-placement-test>).

To answer the first research question: Does Edpuzzle have a significant impact in improving students' listening comprehension? A pretest and posttest was applied. The listening was taken from a website (<https://test-english.com/listening/a2/life-changes-listening-test/>), the audio lasts 2:45 minutes. It was adapted by the researchers in order to the students did not know the answers automatically since it is an open access website. The researchers made changes in the items and also added 4 more to have a total of 10 multiple choice questions. The test is focused on the students' comprehension and it was out of 10 points, 1 for each item. The test was validated by five EFL experts who were teachers in the same institution where the study was conducted. This test evaluated intensive listening, extracting specific information by identifying relevant meaningful sentences.

To support the pretest and posttest results drawing the listening comprehension improvement process in students, three mini listening quizzes were taken. These quizzes were taken from open websites: quiz 1 (<https://www.esl-lab.com/intermediate/weekly-activities/>) audio was 2:10 minutes, quiz 2 (<https://www.esl-lab.com/intermediate/smart-phones/>) audio was 1:22 minutes and quiz 3 (<https://www.esl-lab.com/intermediate/bus-trip/>), its audio lasts 2:13 minutes. All quizzes had 5 multiple choice questions and the audios did not last more than 2:13 time. The items for each quiz were also edited by the researchers. These quizzes evaluated intensive listening by identifying facts/ opinions through the recognitions of common expressions.

To answer the second research question: What are the students' perceptions after working with the technological tool Edpuzzle? An online survey was conducted through SurveyMonkey platform. This survey was divided into two sections, one to know students' feelings about working with the tool and the second one aligned to the tool features. There were 6 statements

for section 1 and 8 for section 2, all items were Likert scale style (totally agree, agree, neutral, disagree, totally disagree).

C. Data Analyze

For the demographic survey data was inserted in the excel spreadsheet in order to calculate all the percentages needed to describe the sample features. For the proficiency English test, results were directly received in the researcher's email.

For pre- posttests data was transferred to the SPSS program. Descriptive statistics were calculated: minimum, maximum, mean, and standard deviation. The effect size was calculated to know the impact of the application and define if the innovation was null, small, intermediate, or large. Moreover, the researcher calculated the t-test for related samples in SPSS in order to compare the means of the pre and posttest, and a P value of ,000 ($p \leq 0.05$). It means that changes after the innovation are not rare by chance but they are due to the application of the study. Regarding the three quizzes that are evidence of the students' process, the researchers used Excel to calculate the percentages students were improving at each questionnaire.

For the students' perceptions survey, the reliability was tested by Cronbach alpha. Items from the survey were classified as totally agree, agree, neutral, disagree, totally disagree. After, students' answers were tabulated in each denomination. Finally, these results were converted in percentage to analyze how students had perceived the technological tool and how useful it was for the listening skill improvement aim stated in this study.

D. Classroom procedures

In this action research the teacher chose one class to apply the intervention. This study was about using Edpuzzle platform to enhance students' listening comprehension. The innovation was conducted for eight weeks in one class of 50 students. Three hours per week were considered for the application, one synchronous hour and two asynchronous hours having a total of 24 hours. The time set for applying the proficiency English test, surveys, pre-posttests and mini quizzes was apart from these 24 hours. The proficiency English test, pre-posttests and mini quizzes were taken in synchronous time out of the mentioned 24 hours. Surveys (demographic and perceptions) were taken in asynchronous time. ESA (engage-study-applicate) method was used to construct the lesson plan for each session in order to reach the

learning outcomes. All sessions were hold through Google Meet platform.

Sessions used to start with an engaging activity always aligned to some vocabulary in order to prepare students for the coming listening activities. All listening activities in Edpuzzle were created by the researchers both synchronous and asynchronous ones. The listening activities contained one open ended question at the beginning to open up the activity. While listening students were answering comprehension multiple choice questions and also checking some notes were necessary to figure out the meaning of new words. At the end of the audio the students had an open personal question that they had to answer orally or written to promote the critical thinking about what they had listened to and assure their understanding. Some techniques were applied during the sessions such as visualizing what the speaker (s) say in the videos, asking for word meaning, relate sound with text (subtitles), critical thinking questions for deep understanding, clarification questions, asking for details and summarizing. In the first week, students took the English proficiency test, demographic survey and pre- test. Also, they started participating in the intervention sessions. In weeks 2, 4 and 6 they continued taking part of the sessions and were evaluated with a mini quiz at the end of each week to monitor the process. In weeks 3, 5, 7 the intervention sessions were conducted normally. In week 8, apart from the normal sessions the students took the posttest and perceptions survey.

The topics were based on the textbook in order to cover the syllabus. The content used for building listening tasks were authentic material. Students worked collaboratively (whole course) and individually in the synchronous time intervention. Finally, learners worked listening activities individually in the asynchronous time.

RESULTS

This section reports the results obtained by the pre-post tests and the surveys, which are organized according to the research questions.

- RQ1. Does Edpuzzle have a significant impact in improving students' listening comprehension?

To conduct this first question, table 2 shows the descriptive statistics of the pre-posttests.

Descriptive Statistics						
	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
PRETEST	50	1,0	97,0	64,040	3,3535	23,7125
POST TEST	50	,0	100,0	85,200	3,2630	23,0731
Valid N	50					

Table 2. Descriptive statistics

Source: The authors

Table 2 shows the overall result through a comparison of the means before and after the application of the innovation. It demonstrates that learners improved their intensive and extensive listening skills through the use of Edpuzzle. The mean of the post-test is higher (M=85.20, SD=3.2630) than the mean of the pre-test (M=64.04, SD=3.3535), evincing a moderate growth of 33%.

Also, the T-test paired sample in Table 3 was applied to demonstrate that there is a difference between the means

Paired Samples Test									
			Paired Differences				t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest - Posttest	-21,1600	18,4716	2,6123	-26,4096	-15,9104	-8,100	49	,000

Table 3. T-test paired sample results

Source: The authors

As it is illustrated in table 3, the mean difference (MD=21.16, SD=18.47) within the 95% of

the confidence interval, was statistically significant ($P < .05$, $t=8.10$). In other words, the results suggest that there is a correlation between the students' use of Edpuzzle and their listening skills at pre-test and post-test. In addition, to corroborate it, the measure of the effect size was also obtained. It was a large effect size: Cohen's $d = 0.904516$. Also, it proves that this result can be replicated in other studies and that the size was large (Kelley & Preacher, 2012).

Q2: What are the students' perceptions after working with the technological tool Edpuzzle? To answer the second research question, table 4 shows the results of the pre and post-surveys.

Scale		Pre-Survey				Post-Survey			
		Using Edpuzzle to learn listening skills		Edpuzzle as a useful tool for listening improvement		Using Edpuzzle to learn listening skills		Edpuzzle as a useful tool for listening improvement	
		Frequency	Valid Percent	Frequency	Valid Percent	Frequency	Valid Percent	Frequency	Valid Percent
Valid	Totally disagree	28	56,0	22	44	0	0	0	0
	Disagree	5	10,0	10	20	2	4	1	2
	Neutral	9	18,00	10	20	3	6	2	4
	Agree	5	10,00	5	10	6	12,0	6	12
	Totally agree	3	6,00	3	6	39	78,0	41	82
	Total	50	100,0	50	100	50	100,0	50	100,0

Table 4. Learners' perception of the technological tool Edpuzzle

Source: The authors

Table 4 illustrates the change in the perception of students after the application of Edpuzzle in their learning process of listening skills, with respect to two aspects, the disposition of the Edpuzzle application and the usefulness of the tool to improve skills. auditory. The pre-survey shows that most of the students did not agree with learning to listen through this application

(56%) and with the idea that Edpuzzle presented benefits to improve this skill (44%), while only a few agreed and totally agreed (5%, 3%) with these aspects. On the other hand, the post-survey shows a different scenario. Most of the students changed bad perceptions into good ones (78%, 82% correspondingly), by being willing to use Edpuzzle and considering it as a good tool since they have perceived an improvement in their listening skills due to the application of it. Therefore, it shows that this innovation contributes positively to the change in perception of the participants.

DISCUSSION

The findings of this paper are related with some others paper in how to develop listening skills and how good is to use MALL (mobile assisted language learning) method used at the moment to teach and learn the English language. The usefulness of Edpuzzle application has a significant increase in development listening skill which match with the results of Aruan, Sari, Harahap, (2020) since they highlighted that the learning through media can stimulate the “the thoughts, feelings, attention, and interests of students that lead to the occurrence of optimal learning processes” (p.104). Additionally, Gonulal (2020) in his research made emphasize that the use of digital technology is the basis for creating dynamic learning whether in a physical or virtual classroom. Therefore, results indicated that learners got a high score at the end of the eight weeks with the use of videos through Edpuzzle.

Another investigation with similar results was made by Muhamad (2018) who pointed out that the Suggestopedia method helped learners to improve listening skills and even more have the technology at hand, it is three times faster than the traditional method. The authors of this paper are in accordance with the speed that is advanced when using the Edpuzzle application due to it allows developing intensive and extensive learning during synchronous and asynchronous classes. In addition, working with enough input resources helps to learn vocabulary, idiomatic phrases, useful phrases, etc. which will be able to communicate without barriers later.

Mishel (2019) published research with an almost identical theme labeled “Using Edpuzzle to Enhance the Use of Online Videos” saying that students felt more confident during their learning through watching videos. According to the results shown previously, learners demonstrated a high percentage between pretest and posttest even worked with the same

application as Edpuzzle.

About students' perceptions was negative during their pre-survey activity because they rejected that Edpuzzle application would help them develop listening skills. However, that bad perception was changed at the end by reason of learners testified that they felt more confident to listen because the videos helped them with sound, gestures and content inference it is so the survey showed a high percentage in totally agree with the use of technological tool during the posttest. In comparison with Weger (2014) who mentioned that showing videos during the learning process develop empathic listening as a psycho-therapeutic technique which manifest certain approval in learning to increase the level of listening.

Arun, Sari, Harahap (2020) stressed the negative effects of just listening to a dialogue or interview during a listening activity because it only represents the world of word that many things seem boring and makes lose the attention of the listeners. In conclusion, it makes less enthusiastic learners during their learning. Hence, students confirmed through the post-survey their acceptance that an audio exercise with video is much better to absorb a message mostly.

CONCLUSIONS

The case of using the Edpuzzle application during the learning of listening skills is the best way to enhance listening comprehension in EFL learners because first, they develop feelings of empathy and second they develop feelings of autonomy. According to empathy, they feel more confident listening and watching at the same time a real conversation and trying to understand what people are talking, doing and even more analyzing their gestures and guessing what will be the end. All of these things, really keep learning motivated. About developing autonomy through the application of Edpuzzle, learners are authors of their own learning due to some of them take brief notes while listening, making different questions, and try to locate the main message.

A pertinent class planning based on the three stages as ESA (engage, study, activate) allows constructing the lesson plan with all sessions in an orderly and methodical way to achieve the learning outcomes. Aruan, Sari, Harahap (2020) ensure that the process of planning is the same with three stages such as before, during, and after which have a common

sense with ESA. Those authors confirm that this kind of methodology encourages to develop of better communication due to intensive learning worked in class.

Through the application of Edpuzzle in class, also makes it possible to work the cognitive skill over the Critical thinking method because through observation learners identify, analyze, evaluate and interpret different events that finally, helps students to communicate with good management of clear and orderly ideas. It is so the authors of this research infer that critical thinking stimulates the integral teaching-learning situation accurately.

For this reason, the authors point out that the study of this research had a positive result because students confirmed the significant learning that they have obtained at the end of eight weeks of working intensive listening with a technological application like Edpuzzle. Successively, they learned vocabulary, useful phrases, and sentence structure with the help of videos and questions inserted gradually during the video. In the same way, they were able to work exercises during the synchronous class in a relaxed and autonomous way. In conclusion, work with Edpuzzle resources is an essential way to promote motivation in learners.

In terms of using motivational influences on teaching the English language, nowadays technological resources have a great impact in education, even more, using Edpuzzle because it permits to personalize videos according to the topic taught and evaluate listening skills through attractive elements. In addition, use the Edpuzzle helps teachers watch the progress of students and, contemporarily, makes them responsible during their own learning.

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