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THE USE OF CLASSICAL MUSIC TO IMPROVE READING COMPREHENSION

EL USO DE MÚSICA CLÁSICA PARA MEJORAR LA COMPRENSIÓN LECTORA

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ABSTRACT

This study focuses on an action research project related to the use of classical music to improve reading comprehension in a foreign language classroom at a university level in the town of Ambato, Tungurahua, Ecuador. The need for university students to improve reading skills in this society was analysed, due to the fact that young people have not developed reading habits, even in their mother tongue. This aspect was considered, as well as students' results on reading exercises applied to them, before and after being exposed to the use of classical music in the language classroom, which were evaluated through a comparison between the different experiences revealed in the surveys applied to the students, and their grade reports. The conclusion highlights that there was a significant improvement in the academic performance of students when they felt comfortable in their classroom environment while classical music was played. Even though research has not yet proved scientifically that the use of classical music influences students to improve their reading comprehension in the language classroom, there are studies related to the use of classical music in education and the learning process, related to the topic of this study, which contributed to conclude that further research must be done in this specific area.

Key words:

classical music, comprehension, improving, reading

RESUMEN

Este estudio se basa en un proyecto de investigación-acción relacionado con el uso de música clásica para mejorar la comprensión lectora en la clase de idioma extranjero, llevada a cabo a nivel universitario en la ciudad de Ambato, Tungurahua, Ecuador. Se analizó la necesidad de que los estudiantes mejoren la destreza de la lectura, en vista de que los jóvenes en esta sociedad no han estado acostumbrados a desarrollar hábitos de lectura, incluso en su propio idioma. Se consideró tanto esta razón, como los resultados de los estudiantes en los ejercicios de comprensión lectora aplicados antes y después de exponerlos al uso de música clásica en el aula, los cuales fueron evaluados mediante una comparación entre las diferentes experiencias reveladas en las encuestas aplicadas y los reportes de calificaciones. La conclusión resalta que existió una significativa mejora en el desempeño académico de los estudiantes, cuando se sintieron cómodos en su ambiente de clase mientras escuchaban música clásica. A pesar de que las investigaciones, científicamente, no han logrado comprobar que el uso de música clásica pueda mejorar la comprensión lectora en la clase de idioma extranjero, existen estudios relacionados al uso de la música clásica en la educación y el proceso de aprendizaje, relacionados al tema de este estudio, que han ayudado a concluir que se necesita más investigación en esta área específica.

Palabras clave:

comprensión, lectura, mejorar, música clásica.

INTRODUCTION

The need for university students to develop reading skills has been noticed for more than fifteen years in English as a Foreign Language (EFL). In Ecuadorian society, people tend to have insufficiently developed reading habits and motivation from early stages, even in their mother tongue. Regarding this aspect, the latest census performed in Ecuador, to people older than 16 in Quito, Guayaquil, Cuenca, Machala and Ambato, demonstrated that:

El 26,5% de los ecuatorianos no dedica tiempo para leer, de ellos el 56,8% no lo hace por falta de interés y el 31,7% por falta de tiempo. Según el estudio, el 50,3% de los ecuatorianos lee de 1 a 2 horas a la semana [26.5 % of Ecuadorians do not dedicate time to reading; from them, 56.8% do not do it due to lack of interest, and 31.7% due to lack of time. According to the study, 50.3% of Ecuadorians read 1 to 2 hours per week] (INEC, 2012).

Consequently, this problem becomes additionally complex when it is a foreign language, especially at a university level. Therefore, students of EFL need external motivation in the skill of reading, to foster their concentration, achieve higher results in their academic performance and obtain advanced levels of retention of what they have read. This research intended to discover to what extent the use of classical music in the EFL classroom encourages university students to improve reading comprehension in their language class.

Motivation and good stimulation are important in the learning process, especially of a foreign language; therefore, the classroom environment is an element to be analyzed. Regarding this topic, the importance in creating a safe, welcoming learning environment, where all students feel safe and welcome; teachers have the duty to make sure students feel comfortable in a respectful and friendly environment, concluding that:

Reading in any language has a crucial role to play in creating independent learners and increasing their educational attainment. Reading is the basis of a student's success at all levels of education. Developing good reading habits is vital to a child's future – not just academically, but in everyday life as well. Students with good reading habits learn more about the world around them and develop an interest in language and in other cultures. Reading leads to asking questions and seeking answers, which expands students' knowledge on a constant basis (Teacher Education through School-based Support in India, 2016).

Nowadays, as a result of research that has been performed, it is possible to see the truth in Plato's statement "musical training is a more potent instrument than any other for education" (Harris, 2009, p. xi), as neuro-musicology studies the form in which music affects the brain. Ramos (2008, p.6) for instance, states that music is in the environment, all around us, and the voice is the first musical instrument possessed by humans; consequently, the qualities of sound and its effects in learning are possible to investigate, as people musically express themselves in an improvised voice with everyday objects.

To illustrate the latter, Canal & Cabacés (2009, p. 6) indicate there are professions in which the voice is frequently used: actors, narrators, teachers, singers, among others; their tone of the voice makes their work attractive; consequently teachers, have a gift in their hands due to through their communicative activities they are able to use the language of music.

Regarding teaching and the learning process, teachers have been using different types of activities to reach students' attention and motivation, being as creative as possible to motivate their students in order to achieve higher results in the skills of the language they aim to teach. Motivation and good stimulation therefore, are important in the learning process. This is the case of music, which is suggested to be used from early stages.

The well-known philosopher Nietzsche stated that "without music, life would be a mistake" (Berlioz, 2002, p.91); thus, he suggests that babies need to be prepared from the mother's uterus, due to the fact that the hearing system, from very early stages, starts to get vibrations that are transformed into sounds approximately between the fifth and the sixth month of pregnancy. The baby is not able to interpret the sounds; however, the baby is capable to recognize and process them, once being born.

Consequently, music during childhood is an important stimulus. For example, Canal & Cabacés (2009, p.9) state that babies are very receptive to music even before they are born. After birth, they experience different types of contact with music. Through the lullabies, they learn melodies, and perceive the movement from balancing. Later, children produce their own sounds, not only with their voice, they use their body and objects that are around them. These examples are expressions of how music is important in human life, and how it is acquired from early stages.

The music of Mozart for instance, has been studied for decades due to its strong influence in children from pregnancy. The so called 'Mozart effect', first proposed by Rausher and Zupan

(1993), has been under investigation regarding the influence of his music on children and their brain. However there has been the constant questioning of why Mozart, and what is special about his music. To respond to these questions Berlioz (2002, p.93) states Tomatis' studies, claiming Mozart to have been virtuous in the neurovegetative system and a specialist in functional neurology, transmitting special vibrations that evidence the creative potential of people. Moreover, Jausovec, Jausovec, & Gerlic (2000), studied the influence of Mozart's music on brain activity in the process of learning, based on the Mozart effect, concluding that his music activates task-relevant brain areas, which enhances the process of learning spatio-temporal rotation tasks.

Regarding the effect music has in learning, Habermeyer (1999, p.25) states that music is a powerful vehicle to reach knowledge and academic success, not only a form of art which adds aesthetic experiences to life. For instance, studies using other types of music have been proven to be effective in learning. One example is the research performed by Cripe, 1986, testing children with Attention Deficit Disorder (ADD), and rock music, who demonstrated a decreased level of activity in those children, and an increasement in attention span. This is to say that scientists, neurologists, and researchers that study the effect of music in the brain, have started to reveal the potential that music has in the development of human beings.

Additionally, concerning music perception, Corrigan & Trainor (2011), state that music training, especially in children, predicted academic achievement; measured in two aspects: through standardized tests and grade reports from school. Another example of the relationship between music and reading is found in Tsang's (2011, p.30) study, where he proved that music training improves music perception skills, which are associated to reading.

The skill of reading therefore, has been demonstrated to involve reasoning, and imagination of abstract situations; on the other hand, music is perceived by Habermeyer (1999, p.39) as a powerful tool to increase the temporal-spatial reasoning, which is the ability to perceive, with accuracy, the visual world and form mental images of the objects; aspects that are close related to reading.

Consequently, spatial reasoning, and its relationship with music, is relevant to be mentioned when referring to reading, as this skill is an abstract activity; therefore, what teachers aim to achieve with their students is forming a visual image of what students are reading, knowing that music contributes to it. Regarding this field "studies have shown that young children who take keyboard

lessons have greater abstract reasoning abilities than their peers, and these abilities improve over time with sustained training in music" (Rauscher & Zupan, 2000).

Music, therefore, has been used for learning purposes. The use of classical music, for instance is illustrated by Habermeyer (1999) through the findings of researchers from the University of California and Wisconsin, who specified that listening to classical music increases memory and concentration. Learning how to play a musical instrument has been verified to increase spatial reasoning. Thus, proving that music benefits students who lack confidence, disabilities, and learning problems. To illustrate what happens in the brain. Habermeyer (1999) states that the left, right, anterior and posterior parts of the brain are involved in music, explaining why people learn and retain information in an easier way when learning is marked by music.

Furthermore, throughout history, classical music composers, have used their sounds to identify certain characters from a narrative. Cabacés-Vilaplana (2008, p.54) discussed the following as an example of the latter: Prokófiev, for instance wrote a piece for a narrator and an orchestra called Peter and the Wolf; in his work, there are several characters, each one of them represented by a specific musical instrument, or a group of them, as well as a specific musical tone. Another example can be found in the Disney film Fantasia, an illustrated narration through images, giving life to Paul Dukas' symphonic scherzo called The wizard's apprentice which was based on Gothe's ballad, the story is about an old wizard that wants to imitate his master.

Additionally, parental support at home is important when children are in school. Learning could be supported with the use of classical music according to the topics studied in class. A number of specific examples are to be considered regarding the moment children are studying. For example, The Flight of the Bumblebee from Rimsky-Korsakov when studying bees, where children are able to visualize the sound of the bees through their imagination. Another example is the carnival of animals from Camille Saint-Saëns, where children are able to guess thirteen animals that appear in the tune, therefore learn through music. Finally The planets by Gustav Holst, when children are studying the universe, as there is a representation of the Solar System and each one of its planets seen from Earth, with their astrological character (Habermeyer,1999, p.226).

As stated above, the use of classical music for learning purposes, especially for children, has been a matter of research. The best example is the above-mentioned 'Mozart effect'. However, regarding language learning, Dr. Lozanov, who has been studying music, the brain, and language learning for decades, developed

a methodology for teaching foreign languages that used baroque music. According to Walker (1993), Lozanov suggested the use of certain Baroque pieces to master foreign languages with more effectiveness, recalling what they have learned in the foreign language, even when they had not studied it for four years. Dr. Lozanov studied foreign language instruction through the use of what he called Suggestopedia, defined as “a system of suggestive-accelerative learning and teaching techniques professing such a claim; Lozanov claims that a 1,000% increase in learning is possible with Suggestopedia” (Dipamo & Job, 1991).

Since research has shown that music affects the brain, scientists have discovered that “music has the capacity to train the brain for levels of thought that are superior. Those types of thought include solving problems; inferring information; getting conclusions;

comparing and contrasting similarities; synthesising and evaluating information” Habermeyer (1999, p.32), these aspects are remarkable for this study, especially due to the fact that reading, including in a foreign language, requires the previously mentioned actions from the brain.

Restating the objective of this research, to discover whether students, when exposed to listening to classical music while performing reading activities in the classroom, improved in their foreign language reading comprehension activities in order to achieve higher results, it has been based on supporting studies related to the use of classical music in education and the learning process, explained together with the analysis of the information obtained from the results of this project and supported with previously performed studies.

METHODOLOGY

This study is based on an Action Research project carried out at the University of Ambato (in Ecuador) which intended to discover to what extent the use of classical music in the EFL classroom encourages university students to improve reading comprehension in their language class.

The term action research was first used by Lewin “to describe research that will help the practitioner by providing clarity about what is to be done in complex situations” (Baumfield, Hall, & Wall, 2013, p. 3). Furthermore, Efron & Ravid, (2013, pp. 2-6) stated that, according to Lewin, action research is an inquiry conducted by educators in their own settings with the aim of advancing their practice and improving their student’s learning. It emphasizes the role of practitioners in conducting investigations in their classrooms and schools. The members of the group that intend to be changed should participate in the action research. This is the case of the thirty-three students of upper-intermediate level from the previously mentioned university who were the participants of this action research project.

This type of research is conducted in a classroom; consequently, “The starting point for AR (Action Research) is identifying a problem you want to focus on” (Burns, 2009, p.32). Therefore, the need of students for developing reading comprehension in the language classroom was established. As a result, it is essential that teachers start applying the use of reading material in the classroom habitually. This is, reading activities which were meant to be applied once a week as part of the curriculum. For this project they were performed two or three times instead.

Afterwards, following Guskey’s suggestion (2002, p.50) that “using appropriate pre- and post-measures provide valuable

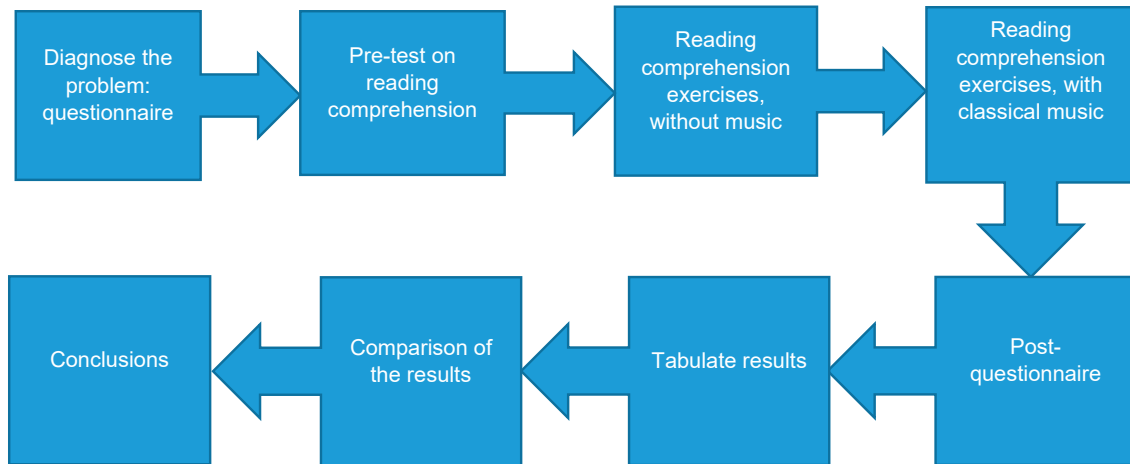
information”, comprehension questions were applied to the students to obtain a grade of their understanding of the reading text. First without being exposed to classical music; subsequently, with similar types of texts, comprehension questions were asked again, this time using classical music as background while students were reading, to analyse whether the results are different in both stages. Questionnaires were once again applied to the students to check how they feel about this activity in terms of comprehension, to know if they feel they are improving or not, and then compare that with the obtained results from the exercises previously applied to them.

As stated above, it was important to select the sample group to work with; therefore, the chosen group was a class of thirty-three students of upper-intermediate level from the previously mentioned university. The way in which the study was developed is based on the teacher’s experience in classroom management. To start, students were given time to read with short pieces of classical music in the background, which means that they were not exposed directly to reading whole long texts with classical music. They started with short exercises, improving the level of retention. Subsequently, the texts were longer and the time of exposure to the classical music was increased, until reaching the reading of whole texts in English with classical music as background. The stages covered in this action research project were: first, to diagnose the problem with a questionnaire given to students. Second, a pre-test on reading comprehension applied to the students. Subsequently, students were given reading comprehension exercises on the topics from the class syllabus, without the use of music, which is the usual environment they have when reading. Later, the use of classical music in the classroom was introduced, while students were reading the

same type of texts, to compare the differences. At that point, the questionnaires, applied to the whole class and the results, were tabulated. Finally, a comparison of the results obtained from the

exercises and the questionnaires was analysed to obtain the correspondent conclusions.

Figure 1. Stages of the Action Research project to find out whether students, when exposed to listening to classical music while performing reading activities in the classroom, improved in their foreign language reading comprehension activities



Source: developed by the author, based on Burns (2002), and Guskey (2009)

The tools used to develop this action research project were the reading materials that were part of the textbook and workbook, Passages 2; extra reading materials related to the class topics; the previously selected classical music tracks; reading comprehension questions; and the questionnaires applied to each student before and after being exposed to the use of classical music in the foreign language classroom. In these questionnaires, students were asked to answer questions about their perception when reading without music and with classical background music; whether they found any difference in their concentration, retention of the reading texts in English; and,

to conclude, students responded to whether classical music contributed to comprehend their reading texts when they were exposed to listening to classical music while performing reading activities in the classroom.

Once in the place where this action research took place, it was necessary to select appropriate pieces of music, and the length of the music tracks. Both depended on the type of reading exercises students would be exposed to, and their difficulty. The following are the examples of the music themes played to the students for the purpose of this research:

Figure 2. Pieces of classical music chosen to be played as part of the Action Research Project

AUTHOR	COMPOSITION /PIECE
Johann Sebastian Bach	<ul style="list-style-type: none"> • Concerto N° 2 Brandenburg-third movement • Toccata and fugue in D minor • Suite N° 2 in B minor for flute and strings
Ludwig Van Beethoven	<ul style="list-style-type: none"> • For Elise • Fifth Symphony-first movement • Sixth Symphony-first movement • Ninth Symphony-Ode to joy
Johannes Brahms	<ul style="list-style-type: none"> • Hungarian Dance N° 5 in G minor
Frederic Chopin	<ul style="list-style-type: none"> • Waltz Opus 64 N°1 – The minute Waltz • Polonaise in A major, opus 40 N°1, Raindrop Prelude
Georg Friedric Handel	<ul style="list-style-type: none"> • Water music, Alla Hornpipe • Music for the fireworks • The Messiah, Alleluia chorus
Joseph Haydn	<ul style="list-style-type: none"> • Symphony N°94 – Surprise-Second movement • The hymn to the Emperor

Source: developed by the author, based on music pieces suggested by Habermeyer (pp. 205-216), and Berlioz (pp.38-50)

Figure 2. Pieces of classical music chosen to be played as part of the Action Research Project

AUTHOR	COMPOSITION /PIECE
Wolfgang Amadeus Mozart	<ul style="list-style-type: none"> • Sonata in D for two pianos, K488 • Symphony N° 40-first movement • A little nocturnal serenade • Rondo alla Turca
Maurice Ravel	<ul style="list-style-type: none"> • Bolero
Nicholas Rimsky-Korsakov	<ul style="list-style-type: none"> • The flight of the bumblebee
Franz Schubert	<ul style="list-style-type: none"> • Military March N°1 • Unfinished symphony-first movement
Johann Strauss	<ul style="list-style-type: none"> • Blue Danube • Radetzky March
Igor Stravinsky	<ul style="list-style-type: none"> • Russian Dance • Tarantella
Piort Tchaikovsky	<ul style="list-style-type: none"> • The nutcracker • The sleeping beauty
Giuseppe Verdi	<ul style="list-style-type: none"> • Rigoletto-La Donna e Mobile • La Traviata-Libiamo ne'lieti
Antonio Vivaldi	<ul style="list-style-type: none"> • The four seasons-spring

Source: developed by the author, based on music pieces suggested by Habermeyer (pp. 205-216), and Berlioz (pp.38-50)

RESULTS

The following is the analysis of the results obtained from the answers students provided in the questionnaires applied to them at two different stages of the process. The first one before the research started, and the second one after they were exposed to perform reading activities with the use of classical

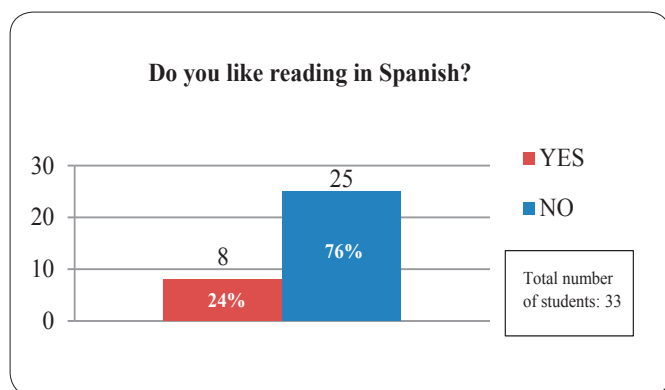
music as background. Due to the fact that statistics in Ecuador (INEC, 2012) demonstrated that 26.5% of Ecuadorians do not dedicate time to reading, the first group of questions asked about student's likes regarding the skill of reading, their feelings while reading in English.

Data obtained from the questionnaires handed in to the total of thirty-three (33) students before using classical music in the EFL reading class.

QUESTION 1:
Do you like reading in your native language (Spanish)?

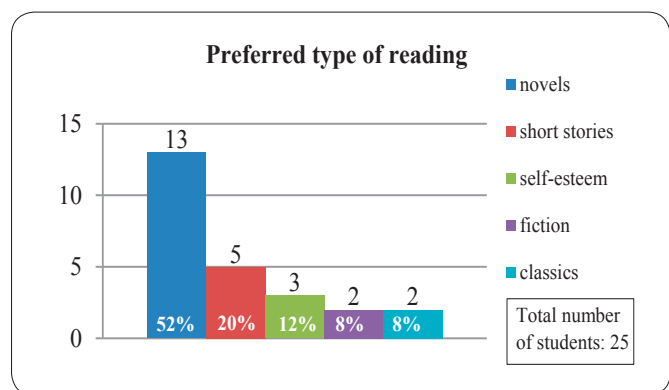
When the answer was affirmative, the following question was required to be answered: What kind of texts do you prefer to read in in your native language (Spanish)?

Figure 3: Question 1 - Stage 1



Source: developed by the author, based on Question 1-Stage 1 from the questionnaire applied to students

Figure 4: Question 1 - Stage 1

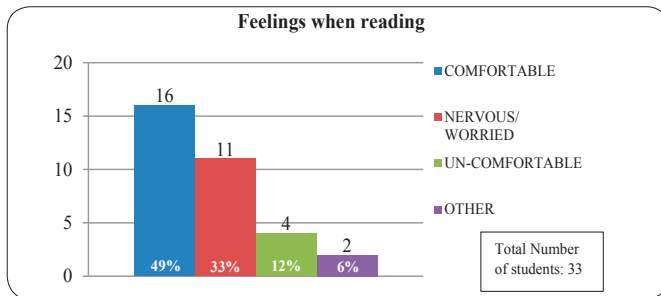


Source: developed by the author, based on Question 1-Stage 1 from the questionnaire applied to students

QUESTION 2:
How do you feel when reading texts in the foreign language you are studying (English)?

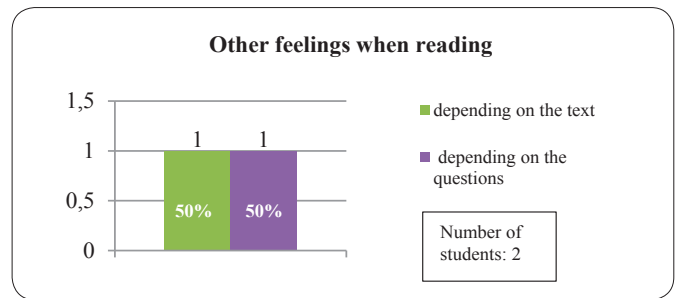
The following is the representation of the answers when students marked Other as a response to question 2:

Figure 5: Question 2 – Stage 1



Source: developed by the author based on Question 2-Stage 1 from the questionnaire applied to students

Figure 6: Question 2 - Stage 1

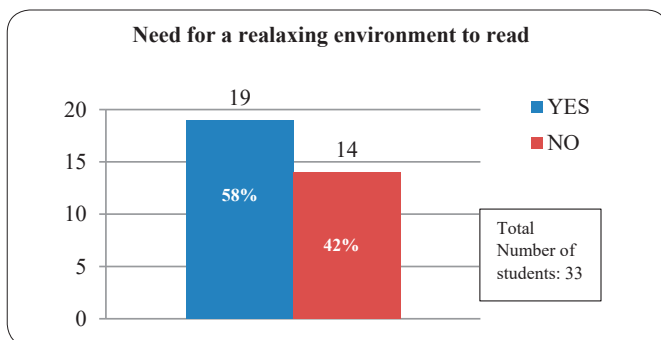


Source: developed by the author based on Question 2-Stage 1 from the questionnaire applied to students

QUESTION 3:
Do you need to feel in a relaxed environment in order to read in the foreign language?

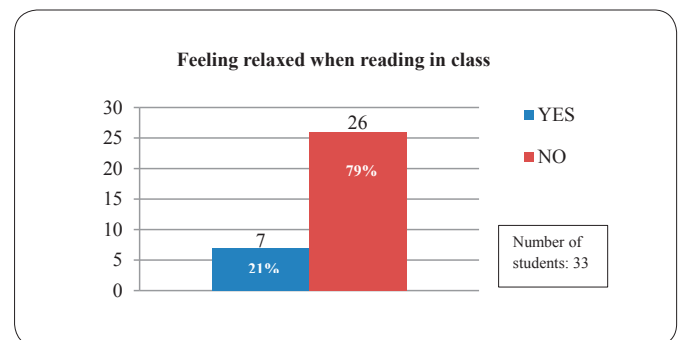
QUESTION 4:
When you read texts in your English class, do you feel relaxed?

Figure 7: Question 3 – Stage 1



Source: developed by the author based on Question 3-Stage 1 from the questionnaire applied to students

Figure 8: Question 4 - Stage 1



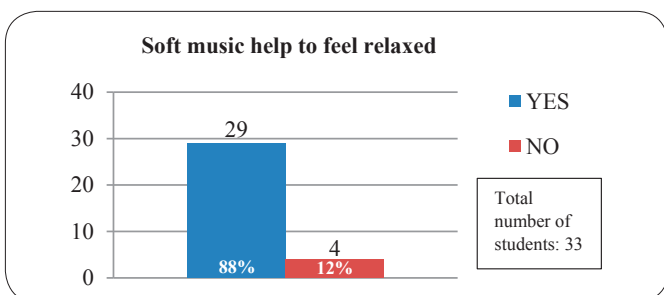
Source: developed by the author based on Question 4-Stage 1 from the questionnaire applied to students

This second group of questions asked about student's perception regarding the use of music to feel relaxed, concentration, comprehension, retention of texts in the EFL class.

QUESTION 5:
Do you think soft music in the language class may help you feel relaxed?

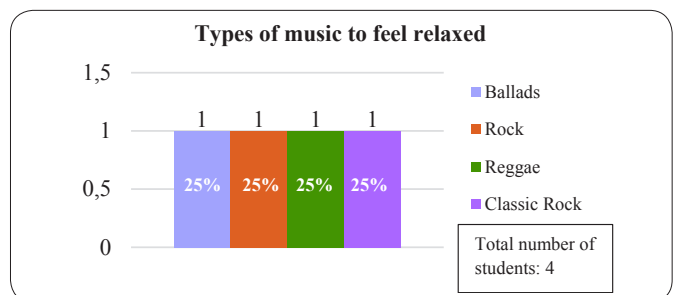
When the answer on the previous question was NO, students were required to answer the next question: What kind of music helps you feel relaxed in a language classroom?

Figure 9: Question 5 - Stage 1



Source: developed by the author based on Question 5-Stage 1 from the questionnaire applied to students

Figure 10: Question 5 – Stage 1

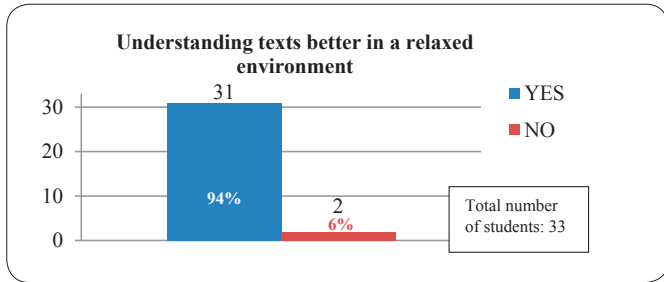


Source: developed by the author based on Question 5-Stage 1 from the questionnaire applied to students

QUESTION 6:

Do you understand better texts in the foreign language (English) when you are in a nice and relaxing environment?

Figure 11: Question 6 - Stage 1

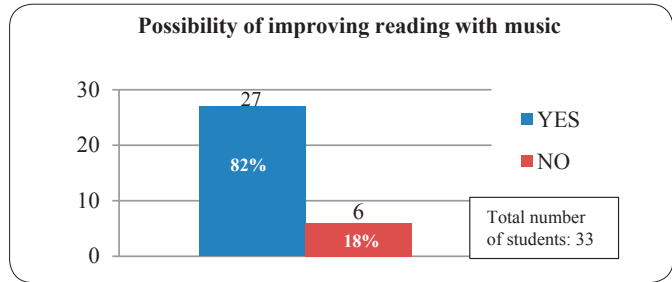


Source: developed by the author, based on Question 6-Stage 1 from the questionnaire applied to students

QUESTION 7:

Do you think it is possible to improve your reading skills in the foreign language (English) if you listen to background music?

Figure 12: Question 7 - Stage 1



Source: developed by the author, based on Question 7-Stage 1 from the questionnaire applied to students

Once having analysed the results from the questionnaire before the process of using classical music in class, it is time to analyse the results of the scores students achieved in the reading exercises applied to the them during this first stage, without using classical music as background.

Figure 13. Scores obtained in the 10 reading exercises applied without the use of classical music- Stage 1

STUDENT N°	Reading Exercise N°									
	1	2	3	4	5	6	7	8	9	10
	SCORE / 10									
1	6	6	6	7	6	6	6	6	7	6
2	6	6,5	6	7	7	6	7	6	6	7
3	7	6	6	7	6,5	6	6,5	7	6	6,5
4	6	7	6	6,5	6	6	6	7	6	6
5	7	6	7	7	6	7,5	6	6	7	6
6	7	7	6	6,5	7	6	6	7	6	7
7	6,5	7	7	7,5	6	7	6,5	7	7	6
8	7,5	6,5	7	7	6	7	6	6,5	7	7
9	6	7,5	6,5	7	7	6,5	7	7,5	6,5	7
10	6,5	6	7,5	6	6	7,5	7	6	7,5	6,5
11	7	6,5	6	6	7	6	6,5	6,5	6	7,5
12	7	7	6,5	6,5	7	6,5	7,5	7	6,5	6
13	7	7	7	7	6,5	7	6	7	7	6,5
14	6,5	7	7	7	7,5	7	6,5	7	7	7
15	7	6,5	7	6,5	6	7	7	6,5	7	7
16	6,5	7	6,5	6	6,5	6,5	7	7	6,5	7
17	7,5	6,5	7	7	7	7	7	6,5	7	6,5
18	7	7,5	6,5	6	7	6,5	6,5	7,5	6,5	7
19	7	7	7,5	7	7	7,5	7	7	7,5	6,5
20	6	7	7	7	6,5	7	6,5	7	7	7,5
21	6	6	7	7	7	7	7,5	6	7	7
22	6,5	6,5	6	6,5	6,5	6	7	6	6	7
23	7	6,5	6	7	7,5	6	7	6,5	6	6
24	7	7	6,5	6,5	7	6,5	6	7	6,5	6
25	6,5	7	7	7,5	7	7	6	7	7	6,5
26	6	6,5	7	7	6	7	6,5	6,5	7	7
27	7	6	6,5	7	6	6,5	7	6	6,5	7
28	6	7	6	6	6,5	6	7	7	6	6,5
29	6,5	6	7	6	7	7	6,5	6	7	6
30	7	6,5	6	6,5	7	6	6	6,5	6	7
31	6	7	6,5	7	6,5	6,5	7	7	6,5	6
32	6,5	6	7	7	6	7	6	6	7	6,5
33	7	6,5	6	6,5	7	6	6,5	6,5	6	7
Average per exercise	6,6	6,6	6,6	6,7	6,6	6,6	6,6	6,6	6,6	6,6

TOTAL CLASS AVERAGE
(in the 10 reading exercises applied without the use of classical music)

6,6 / 10

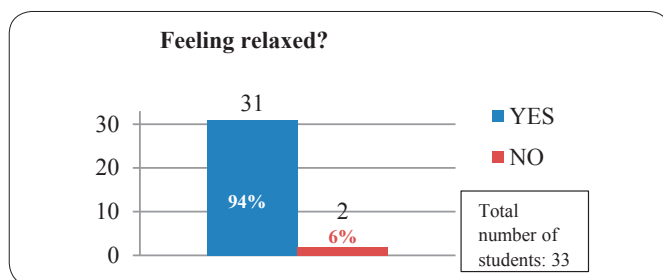
Source: developed by the author, based on the Scores the 33 students obtained in the 10 reading exercises applied before using classical music as background

The graphic above clearly demonstrates that, in the first group of ten reading exercises applied to students without using classical music in their EFL classroom, the scores achieved by students are below seven point five points over ten (7.5/10), even though the reading exercises were appropriate for their level of English, as the activities were taken from the textbook and workbook they used for their classes, Passages 2.

QUESTION 1:

Did the use of soft, low music in your English class help you feel in a relaxed environment?

Figure 14: Question 1 - Stage 2

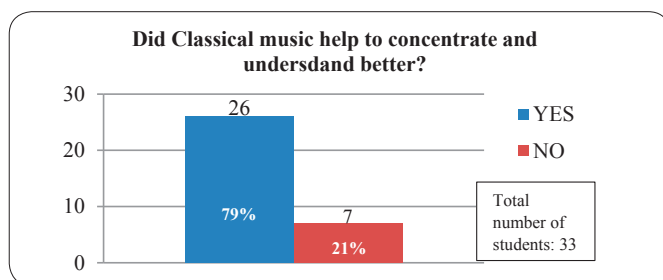


Source: developed by the author based on Question 1-Stage 2 from the questionnaire applied to students

QUESTION 3:

Did the use of background classical music while reading text in your English class help you concentrate more and understand the texts in the foreign language in a better way?

Figure 16: Question 3 – Stage 2



Source: developed by the author based on Question 3-Stage 2 from the questionnaire applied to students

QUESTION 5:

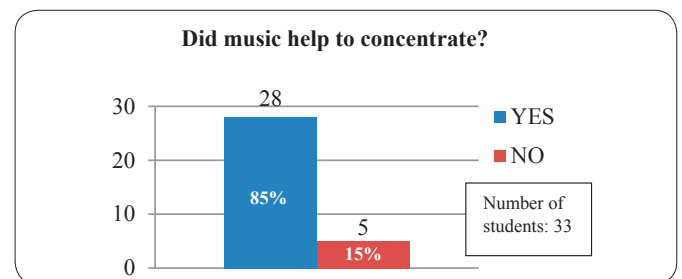
How did you feel when reading texts in English while listening to classical background music?

On the other hand, the following are the results obtained from the answers to the questionnaire given to students after they were exposed to the use of classical music as background while performing reading exercises. Data obtained from the questionnaires handed in to the total of thirty-three (33) students after being exposed to using classical music in the EFL reading class.

QUESTION 2:

Did the use of soft, low music in your English class while you read help you concentrate better?

Figure 15: Question 2 – Stage 2

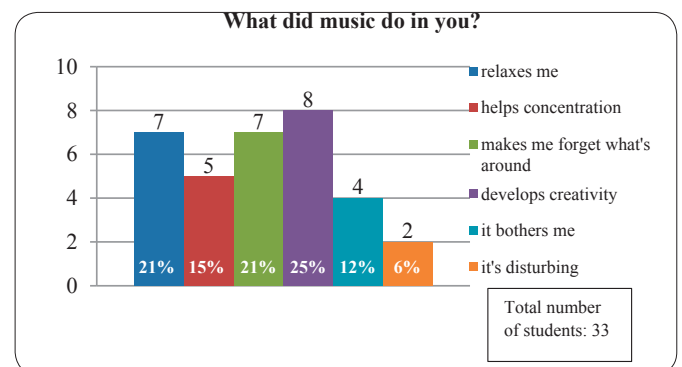


Source: developed by the author based on Question 2-Stage 2 from the questionnaire applied to students

QUESTION 4:

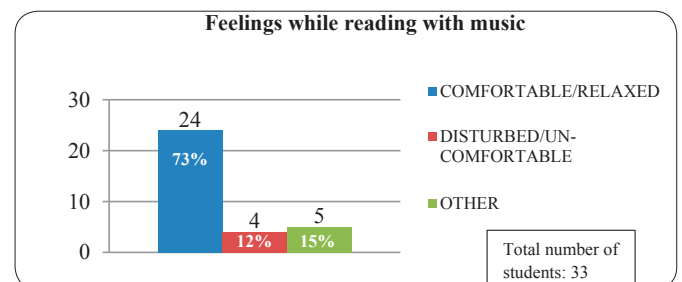
What do you think the use of classical music while reading in the foreign language did in you as a student?

Figure 17: Question 4 – Stage 2



Source: developed by the author based on Question 4-Stage 2 from the questionnaire applied to students

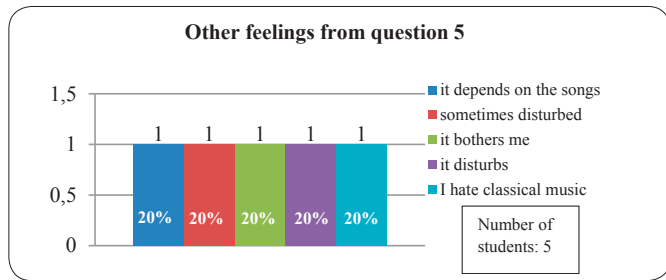
Figure 18: Question 5– Stage 2



Source: developed by the author based on Question 5-Stage 2 from the questionnaire applied to students

When the answer of the students in the previous question was Other, these were the responses they provided:

Figure 19: Other feelings from question 5 – Stage 2



Source: made by the author, based on Question 5-Stage 2 from the questionnaire applied to students

As visualized in the previous graphics, students' answers reflect a positive attitude towards the use of classical music in their language classroom when performing reading activities. Students expressed that they indeed experienced a difference when they were exposed to reading with music rather than when they did it without music; they showed improvement in concentration, therefore, comprehension of the texts.

Once the results from the questions asked to the students after being exposed to the use of classical music in their EFL class when performing reading activities, it is time to analyse the scores obtained on the reading exercises applied to the students during this stage, in order to compare them with the scores from the first stage.

Figure 20. Scores obtained in the 10 reading exercises applied with the use of classical music- Stage 2

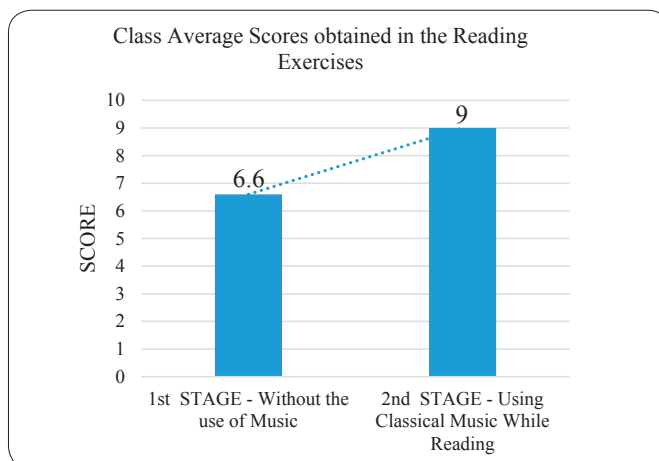
STUDENT N°	Reading Exercise N°										TOTAL CLASS AVERAGE (in the 10 reading exercises applied without the use of classical music) 9.0 / 10
	11	12	13	14	15	16	17	18	19	20	
	SCORE / 10										
1	8	8,5	9	10	8,5	8,5	9,5	9	8,5	9,5	
2	8,5	9	9,5	9	8,5	9,5	9,5	9	8,5	9,5	
3	8	8,5	8,5	9	8,5	9	8,5	9	8,5	9	
4	7,5	9	9	9	9,5	8,5	8	8,5	9	9	
5	9	10	8,5	8,5	9	10	8,5	9	10	8,5	
6	10	8,5	9	9	10	8,5	9	10	8,5	9	
7	8,5	7,5	10	8,5	8,5	7,5	10	8,5	8,5	8,5	
8	9	9	8,5	9	8,5	9	8,5	8,5	9	9	
9	8,5	8,5	9	10	9	8,5	7,5	9	8,5	10	
10	9	9,5	9	8,5	8,5	9,5	9	8,5	9,5	8,5	
11	10	9	8,5	8	9,5	9	8,5	9,5	9	8,5	
12	9	9	9,5	9	9,5	9	9,5	9	9	9	
13	7,5	8,5	9	8,5	9	8,5	9	9	8,5	8,5	
14	9	8	9	9,5	8,5	8	9	8,5	9	9,5	
15	8,5	9,5	8,5	9	8	9,5	8,5	8	9,5	9	
16	9,5	10	8	9	9,5	10	8	9,5	10	9	
17	9	8,5	9,5	8,5	10	8,5	9,5	10	8,5	8,5	
18	9	9	10	8	8,5	9	10	8,5	9	8	
19	8,5	10	8,5	9,5	9	10	8,5	9	10	9,5	
20	8	9,5	9	10	10	9,5	9	10	9,5	10	
21	9,5	9,5	10	8,5	9,5	9,5	10	9,5	9,5	8,5	
22	10	9	9,5	9	9,5	9	9,5	9,5	9	9	
23	8,5	9,5	9,5	10	9	9,5	9,5	9	9,5	10	
24	9	9	9	9,5	9,5	9	9	9,5	9	9,5	
25	10	8	9,5	9,5	9	8,5	9,5	9	8	9,5	
26	9,5	9	9	9	8	9	9	8	9	9	
27	9,5	8,5	8	9,5	9	8,5	8	9	9	9,5	
28	9	9,5	9,5	9	8	9,5	9	8,5	9,5	9	
29	9,5	9	8,5	8	8,5	9,5	9	8,5	8,5	8	
30	9	10	9	9,5	9,5	9	8	9,5	9	9	
31	8	8,5	9,5	9,5	9,5	9	8,5	8	9,5	8,5	
32	9	9	9,5	9	8	9,5	9	9,5	10	9,5	
33	8,5	8,5	9	9,5	9	9,5	9,5	9	9	10	
Average per exercise	8,9	9,0	9,1	9,1	9,0	9,0	8,9	9,0	9,1	9,1	

Source: made by the author, based on the Scores the 33 students obtained in the 10 reading exercises applied after using classical music as background

Clearly, in this second group of ten (10) reading exercises applied to students using classical music, as the above graphic demonstrates, students improved their grades significantly from the previous stage, reaching grades from seven point five points over ten (7.5/10) to ten points over ten (10/10) in spite of the

fact that their readings were at the same level. In the latter stage, students were exposed to using classical music while reading in their EFL classroom, achieving higher scores in their reading activities in class, as expressed below.

Figure 21: Comparative Scores



Source: made by the author, based on the class average scores obtained in the two stages of the project: without the use of music, and using classical music while reading

DISCUSSION

As stated above, in the last decades there has been a tendency in researching about what effects music has in the brain, either referring to the effects music has in children from early stages, or to the influence music has in education. There are studies related to music having a close relationship to the mind, to the soul, and others to learning, supporting the use of music, for learning and for reading. In the latter aspect, Habermeyer (1999, p.60) states that parents, and how they raise their children, influence on how they are going to grow up from early stages; therefore, their children are able to feel their parents' presence from their mother's uterus, which has a positive influence in the babies' future.

Regarding the use of music as a tool in the classroom and for reading Berlioz (2002, p.12) mentions that "sounds, apart from their capacity to transmit aesthetic values and the possibility to increase our motor capacity, can improve our health, control stress, and is able to stimulate intelligence, as it arouses the comprehension of abstract things." This statement is closely related to the skill of reading, due to it refers to something abstract that is process in the mind; therefore, music and sounds contribute to stimulating comprehension of texts while students are reading, which was a matter of analysis in this study. This

theory is supported with the studies performed on Mozart's music, explained above, which guided this research throughout its process.

Furthermore, regarding the use of classical music, the suggestion made by Habermeyer (1999, p.205) to parents and teachers is that, when choosing classical music to play, they should choose pieces that are played by orchestras instead of instruments' solos. The pieces that are chosen should be agile, entertaining, and lively; and when presenting symphonies, the best idea is to play the fastest movements first. This method of exposure attracts learning through music, which was the aim of this project. Consequently, the pieces of classical music were carefully selected to be played in the classroom for the purpose of this study.

Finally, the results of this action research project have clearly demonstrated that, when choosing the appropriate pieces of classical music to expose students during reading exercises in the EFL classroom, there was a significant improvement in their scores especially when compared to the scores obtained in the stage where students experienced non-exposure to classical music when reading.

CONCLUSIONS

The action research project, which intended to discover to what extent the use of classical music in the EFL classroom encourages university students to improve reading comprehension in their language classroom, based its purpose on the need of university students for developing reading skills. This is important as Ecuadorians have insufficiently developed reading habits from early stages. Once the study and its results were analysed, they contributed to reaching the following conclusions:

- When exposed to the use of classical music while performing reading activities in the EFL classroom, students achieved higher results in this second stage. Consequently, it supported students in acquiring higher standards of comprehension when reading the foreign language. The scores obtained in the exercises applied to students in the second stage, after using classical music, support this statement, where they achieved scores from eight (8.0) to ten (10) in the reading exercises, with a class average of nine points over ten (9/10); compared with the first stage, where students obtained lower scores, from six (6.0) to seven fifty (7.5), and a class average of six point six points over ten (6.6/10).
- Students who were subject of this study realized there was a significant difference between reading with classical music and without background music, and expressed their preference towards the stage when they were exposed to the use of classical music while performing reading activities in the EFL classroom. This is supported with the

answers of the questionnaire in the second stage, where students' answers to questions 1, 2, 3 obtained 94%, 85% and 79% in the affirmative answers.

- Additionally, results from this research confirmed that students felt comfortable, or relaxed, in their classroom environment, when exposed to the use of classical music while performing reading activities in the EFL classroom, due to answers for question 5 from the questionnaire showed percentages of 73% towards feeling comfortable or relaxed.
- Finally, students stated that reading with classical music contributed to improve their concentration, therefore obtain higher scores on their reading tasks in the classroom, which is possible to visualize in the answers of questions 3 and 4 from the second stage questionnaire, where 79% of them stated music encouraged them concentrate and understand better; as well as in question 5 where 21% stated that music relaxed them, 15% answered it contributed to concentration, 21% said it made them forget what is around, and 24% stated that it facilitated to develop creativity; and supported once again, with the scores obtained in the second group of reading exercises (11-20), reaching a class average of nine points over ten (9/10).

These conclusions, therefore,, contributed to the recommendation that further research should be performed in the specific field of EFL teaching, and its relationship with fostering reading with the use of classical music.

REFERENCES

- Baumfield, V., Hall, E. & Wall, K. (2013) *Action Research in Education: Learning through Practitioner Enquiry*. SAGE.
- Berlioz, S. (2002) *Educar con Música*. México: Aguilar.
- Brandler, S. R. (2003) Differences in mental abilities between musicians and non-musicians. Retrieved from *Psychology of Music*, 31 (2), pp. 123-138.: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-33745130242&doi=10.1177%2f0305735603031002290&partnerID=40&md5=8d622a97c80d94fb8c524e3b7749595e>
- Brewer, C. (1995) *Music and Learning*. Florida: Lifesounds.
- Burns, A. (2009) *Doing Action Research in English Language Teaching: A Guide for Practitioners*. In A. Burns. New York: Routledge.
- Cabacés, R. & Vilaplana, E. (2008) *Juguemos con la música 2: Exploremos los caminos de la música*. Barcelona: Parramón.
- Canal, M. & Cabacés, R. (2009) *Vivamos la música*. Madrid: Parramón.
- Corrigall, K. A. & Trainor, L. J. (2011) Associations Between Length of Music Training and Reading Skills in Children. Retrieved from *Length of Music Training and Reading*: <https://pdfs.semanticscholar.org/abab/c044bf45342676cacf84f664651925c56d65.pdf>
- Cripe, F. (1986) Rock music as therapy for children with attention deficit disorder: An exploratory study. Retrieved from *Journal of Music Therapy*, 23 (1), pp. 30-37:

<https://www.scopus.com/record/display.uri?eid=2-s2.0-0010848034&origin=resultslist>

- Dipamo, B. & Job, R. F. S. (1991) A methodological review of studies of SALT (Suggestive-accelerative learning and teaching) techniques. *Australian Journal of Educational Technology*, 7(2), 127-143. <http://www.ascilite.org.au/ajet/ajet7/dipamo.html>
- Efron, S. & Ravid, R. (2013) *Action Research in Education: A practical guide*. NY-London: The Guilford Press,.
- Granvik, M. (2006) From Vivaldi to Mozart – The Classical approach to Foreign Language Teaching. Retrieved October 2017, from 19th Annual EA Education Conference 2006: <https://es.scribd.com/document/165751944/The-Lozanov-Method>
- Guskey, T. (2002) Educational leadership. Retrived on November,2018, from Does it make a difference? Evaluating Proffesional Development: uknowledge.uky.edu
- Habermeyer, S. (1999) *Cómo estimular con música la inteligencia de los niños*. México: Selector.
- Haris, M. (2009) *Music and the Young Mind: Enhancing Brain Development and Engaging Learning*. Plymouth, UK: MENC: The National Association for Music Education.
- INEC Instituto Nacional de Estadísticas y Censos. (28 de Noviembre de 2012) 3 de cada 10 ecuatorianos no destinan tiempo a la lectura. (Noticias, Ecuador en cifras) Ecuador. Retrived from <http://www.ecuadorencifras.gob.ec/3-de-cada-10-ecuatorianos-no-destinan-tiempo-a-la-lectura/> on Novembre 2018
- Jausovec, N., Jausovec, K. & Gerlic, I. (2000) The influence of Mozart's music on brain activity in the process of learning. Slovenia: Pedagoška fakulteta. Retrieved from <https://accounts.google.com/ServiceLogin?service=mail&passive=true&rm=false&continue=https://mail.google.com/mail/&ss=1&sc=1&itpl=default&itmplcache=2&emr=1>
- Lozanov, G (1978) *Suggestology and Suggestopedia: Theory and Practice*, United Nations Educational, Scientific, and Cultural Organization
- Ramos, C. (2008) *Juguemos con la música 1: Exploremos la naturaleza con la música*. Barcelona: Parramón.
- Rauscher, F. H. & Zupan, M. A. (2000) Classroom keyboard instruction improves kindergarten children's spatial-temporal performance: A field experiment. Retrieved from https://www.researchgate.net/publication/222652420_Classroom_keyboard_instruction_improves_kindergarten_children's_spatial-temporal_performance_A_field_experiment
- Schellenberg, E. G. (2006) Long-Term Positive Associations Between Music Lessons and IQ. Retrieved from University of Toronto Mississauga: www.erin.utoronto.ca/~w3psygs/JEdPsych2006.pdf
- Teacher Education through School-based Support in India. (2018) Open Learn Create. Retrieved on Nov, 2018, from Promoting the reading environment: http://www.open.edu/openlearncreate/pluginfile.php/134852/mod_resource/content/4/EE08_AIE_Final.pdf
- Tsang, C. D. & Conrad, N. J. (2011) Music Training and Reading Readiness. *Music Perception*, 29(2), 157-163. Retrieved from <https://search.proquest.com/docview/911787389?accountid=36765>
- Walker Duke, J. (1993) *Lozanov, suggestopedia, and foreign language instruction: perspectives from Soviet psychology and learning*. Texas, University of Texas.

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GRAMMAR VIDEO LESSONS TO FOSTER INDEPENDENT LEARNERS IN THE ENGLISH AS A FOREIGN LANGUAGE CLASSROOM

LECCIONES CON VIDEOS DE GRAMÁTICA PARA PROMOVER APRENDIZAJE INDEPENDIENTE EN LOS ESTUDIANTES DE INGLÉS COMO LENGUA EXTRANJERA

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ABSTRACT

This research analyzes the impact of the implementation of the flipped classroom to improve the low development of cognitive skills in the students and to promote the autonomous learning in 30 English as a Foreign Language (EFL) students Level Four in the English Center at Escuela Superior Politécnica de Chimborazo through grammar video lessons. The proposal consisted of eight grammar video lessons based on the syllabus designed for this level. These videos became both: a valuable tool to foster independent learning and a strategy to flip the traditional classroom, which allowed additional time to work on practical activities in the classroom, considering that the theory was studied outside the classroom. The instruments applied in this research project are as initial survey, a satisfaction survey, a pre-test, and a post-test. The initial survey and the pre-test determined the necessity students had to consolidate their knowledge regarding grammar and apply those contents in a real life context. The post-test results revealed that there was a meaningful improvement in the level of grammar knowledge, which is demonstrated in the results analysis and interpretation. Once the study ended, the students concluded that the grammar video lessons are effective and useful to achieve independence in learning the English grammar rules. Students who were part of the intervention reached a level of autonomous learning which influenced markedly in the students grades as showed in the interpretation and analysis of the results. Additionally, students felt motivated because they had less "homework." Thus, it is concluded that the grammar video lessons foster independent learning.

Key words:

independent learning, grammar video lessons, flipped classroom.

RESUMEN

Este trabajo de investigación analiza el impacto de la implementación de la clase invertida en el aula de Inglés para mejorar el bajo desarrollo de las habilidades cognitivas de los estudiantes y promover el aprendizaje autónomo en 30 estudiantes de inglés como Idioma Extranjero, perteneciente al Cuarto Nivel del Centro de Idiomas de la Escuela Superior Politécnica de Chimborazo aplicando videos de gramática. La propuesta consistió en ocho lecciones de gramática, basadas en el sílabo establecido para éste nivel, estos videos consistieron una valiosa herramienta para fomentar el aprendizaje autónomo y una estrategia para cambiar el aula tradicional, dedicando más tiempo de la clase a la ejecución de actividades prácticas, puesto que la teoría gramatical se trasladó fuera del aula. Los instrumentos utilizados fueron: encuesta inicial, encuesta de satisfacción, pre-test y post-test. La encuesta inicial y el pre-test mostraron la necesidad de los estudiantes por consolidar sus conocimientos de gramática y tener la habilidad de aplicarlos en situaciones de la vida real. Los resultados del post-test revelaron una mejora significativa en el nivel de conocimientos gramaticales lo que se comprobó en el análisis e interpretación de resultados. Al finalizar la investigación los estudiantes concluyeron que las lecciones de gramática en video fueron efectivas y útiles para lograr independencia en el aprendizaje de reglas gramaticales del idioma Inglés. Adicionalmente los estudiantes se sintieron motivados puesto que los "deberes" disminuyeron. Se concluye por tanto que el uso de lecciones gramaticales en video promueve el aprendizaje autónomo.

Palabras clave:

aprendizaje autónomo, lecciones de gramática en video, clase invertida.

INTRODUCTION

Nizar (2015) states that students appreciate being given educational capsules in a similar way to eating fast food. Based on this statement, this paper analyzes the facts that made the researchers propose this investigation on video grammar lessons to foster independent learners. Additionally, it describes the theories that scientifically support the proposal and discusses the results from an objective and real point of view comparing them with results of other studies which apply the same variables. Furthermore, this presentation creates awareness about the need students have to become independent learners (Zhen, 2014), as well as the urgency of teachers' commitment to push students toward that independence (Hammond, 2015). Finally, the research question seeks to know whether the implementation of the flipped classroom model through grammar video lessons as homework train independent learners.

This study acquired a high level of importance due to the problems to be solved and the results that can be generalized and used by other professors in any other educational background. During the research students' insufficient development of cognitive independent skills affecting their learning is identified. Furthermore, the major problems at the beginning of the semester are to students[lacked engagement with the learning-teaching process. It is difficult for them to acquire the ability to create their own knowledge and critical thinking. Additionally, a considerable amount of students in the intervention showed insufficient autonomous learning and they had difficulties to identify the role of the teacher as a facilitator of the knowledge (Ellis, 2004).

According to the researchers and other faculty's point of view, even teachers struggle with their responsibility in giving students the necessary tools to become active participants in the learning process (Murphy, 2016). The fact that classroom climate affects the student' ability to learn independently was additionally considered (Alpha Omega Academy, 2012). Therefore, proving the hypothesis, which facilitated understanding a solution to this problem, implied to seek deeper on student's perceptions of how knowledge is acquired, the roles they are willing to take in order to satisfy their needs and what the results from the intervention they are able to apply along their learning process.

Additionally, it was observed that the majority of students were visual learners, this fact is supported by a research from the group of StudyMode in which they proved that approximately 65% of the population are visual learners (Kydiam, 2018). Besides, it is important to mention that, nowadays, young people prefer technology to printed material, as shown in the study by

Solano, Cabrera, Ulehlova, Espinoza (2017) in which 89% of the participants agreed that technology is effective to improve English language knowledge. Therefore, the general objective of this study was to create video lessons of the grammar contents studied in English Level 4 at Escuela Superior Politécnica de Chimborazo as instruments for fostering independent learning. The specific objectives were to use the video grammar lessons to diminish the in-class theory time. This would create a way to take that acquired knowledge into practice and to give students the opportunity to learn grammar in a non-traditional way by combining virtual education with face-to-face activities while motivating self-study. The achievement of these objectives helped to reach a better comprehension of the generalizations discussed in this article.

The first variable is the so-called independent variable, which deals with video grammar lessons with focus on the flipped classroom model. The second variable, known as dependent variable has to do with independence, specifically to develop the necessary cognitive skills required for independent learning. The first variable was additionally used in the study by Ílin (2013), An Action Research: Using Videos for Teaching Grammar in an ESP Class presented by in which it is shown that 80% of students nowadays prefer learning grammar using videos.

Flipped classroom was developed in 2007, the founders are Jonathan Bergman and Aaron Sams, both science teachers. They were not taking full advantage of the face-to-face time with their students and realized that when they sent homework they were not physically there to guide their students. All those situations contributed to the Flipped Classroom model creation. The concept of flipped class is this: which was traditionally done in class is now done at home, and which was traditionally done as homework is now completed in class (Sams & Bergmann, 2012: 145).

Furthermore, the founders of this model started to record the theory or lecture on videos and podcasts for their students to have the opportunity to watch them as many times as they needed, at their own pace, and in the comfort of their homes. Moreover, several studies dealing with the same variables refer to technology as the main tool to work with the flipping approach (Han, 2015; Chen Hsieh, 2016). One of these showed the results that students outperformed the pre-test with a mean of 93 compared to 73.

The grammar video lessons, which are the recorded materials carried out by the class tutor with content based on the syllabus and on student's needs, have to be designed with specific

features such as an adequate length. It is essential to have the singularity to catch student's attention, in order to get them involved in the teaching-learning process. Due to this fact, the teacher became easily reachable. Students were able to turn on, mute, rewind or repeat the class at will (Young, 2017). Seeing a video of the content class has the same impact as the teaching of one on one. This is something that it is challenging to achieve in a public school setting.

Authors refer to independent learners as a student with the ability to take charge of one's learning (Carl, 2016). This is necessary to comprehend that circumstances and learning style play a crucial role, as age and maturity do (Alpha Omega Academy, 2012). When a student becomes an independent learner, he or she exhibits features such as curiosity, persistence, autonomous comprehension, critical thinking, accountability, self-examination, self-motivation and are capable to choose their own study strategies. This is remarkable because it's difficult for teachers to design tasks specifically directed to one or another. The tasks done at home have to match the level of proficiency with focus on production (Harvey & Ckie-Wolfe, 2007). Lastly, providing effective feedback contributes positively to this independence.

Additionally, it is necessary to highlight some results from other researchers. For instance, Han (2015) points out that autonomy was gained once the teacher created more opportunities for meaning-focused output. This was clearly identified when students submitted more work than the teacher expected. Furthermore, when the tutor planned for them to look for resources that possibly facilitate them learn independently they enthusiastically look for learning activities that worked for them and were valid to share with others. The second study developed

by Hsieh, Wu, & Marek (2016) remarks that doing autonomous activities, student's motivation and active participation notably increased and additionally, their knowledge of the content managed in class significantly improved. Finally, the study by Sung (2015) suggests that it is necessary to make students realize that they are able to learn by themselves, becoming active participants in the class.

The context in which the research was applied, the findings on students' survey and tests from this study show a tool which takes EFL students and teachers to the next level. This is conducted by switching from traditional to flipped classroom. These showed that students who participated in the intervention evidenced a significant improvement in their grammar knowledge as detailed in the pre-test and post-test results.

According to Boulhuis and Voeten (2001), cited by Meyer, promoting independent learning requires a new role for teachers, a flip from traditional transmission of information to a process-oriented teaching, which ensures that students are actively involved in the learning process (Meyer, 2010). It is crucial to identify how everything fits, equally considering the teacher's and the students' role changes. The dependent learner is a passive recipient of knowledge, who accepts the teacher as the expert in the learning process; whereas the independent learner is active in directing and regulating his or her own learning and becomes the expert. Furthermore, the ability to blend processed information and processing information without teacher intervention sets the independent apart from the dependent learner (Meyer, 2010).

METHODOLOGY

The background of this proposal draws on EFL students enrolled in Level Fourth at a public undergraduate school. The equivalence of this level is A2 of the Common European Framework of Reference for Languages. Students come 4 hours weekly to class and taking the English program is a mandatory requirement for them to graduate. Before graduating, students are supposed to reach B1 level. The sample was of thirty students; in this group, 50% of students were male and 50% female. They had different cultural backgrounds and different levels of knowledge. A considerable amount of students had issues in studying English continuously and for the majority of them the proposed method was unfamiliar. However, they agreed on the importance of using technology in the classroom and the necessity of becoming independent, active learners. Due to these facts, the following research question was formulated: to

what extend does the use of grammar video lessons recorded by the researcher foster independent learning? It is necessary to emphasize that the course content was designed with a grammar-based syllabus (Nunan, 2002) and the tutor had to create her own material and implement her own methodology.

Furthermore, a previous-research stage was planned to identify the problem. Once this problem was identified, a problem-tree was structured in order to establish the cause and effect, as well as the possible solution for it (Barreto, 2018). Moreover, it is essential to remark that the research design was quasi-experimental because the study was empirical and aimed to analyze the impact of the intervention on the target group. The experimental and control were chosen and the research was developed in natural educational scenarios.

In order to prevent bias, the control group, which was not exposed to the intervention, belonged to a different teacher, not the researcher; whereas, the experimental group was intervened by the researcher. The experimental and control groups had 30 students from different cultural and educational background. For that reason, an initial survey and a pre-test were applied at the beginning of the intervention. It was clear that students had not developed the necessary cognitive skills required for independent learning; therefore, the researcher chose the flipped classroom as the method to solve this problem.

This idea is definitely innovative, challenging, and motivating. Therefore the researcher reordered eight grammar video lessons for the English Fourth Students. The videos were based on the grammar contents planned in the syllabus: Wishes in Present, Past and Future; Zero Conditional, First Conditional, Second Conditional, Third Conditional and Adjective clauses. The series were divided into two categories: lecture and exercises. The purpose was for students to understand the grammar rules first by watching the grammar video lessons created by the teacher and practice what they learnt in class with the teacher's guidance afterwards.

RESULTS

The initial survey determined that students were aware that watching video lessons help them to learn English since 91% of the surveyed answered yes. Therefore, it was essential that students had the videos available all the time; for that reason, first, the researcher opened an account on YouTube to upload the videos. The videos were also included in the Virtual Classroom students had for the English class.

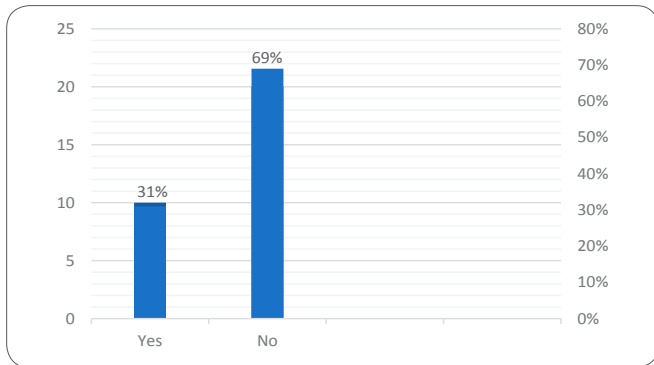
Regarding the evaluation and monitoring, the teacher used the WSQ chart, which students had to fill in and discuss with the teacher and the class the next day. In this chart, students had to write information about what they watched and include the name of the video. Afterwards, students needed to summarize the new content they learned and finally, they wrote questions they still had about the topic. Once the teacher read the questions, 10 minutes from the class were given for feedback. At this time, the teacher reinforced the information or knowledge students already had and then started with the practice.

As the flipped class model was implemented, the main focus was on practice: the researcher created worksheets to work with the students in class. The emphasis was on letting students take an active part in their learning and notice the necessity to learn by themselves. Furthermore, the researcher used the YouTube Teacher Channel and a Virtual Learning Environment to have the videos available for students to watch at their own pace. In addition, for recording the videos, the researcher had the support of students and teachers of the Graphic Design School, who allowed her to record in their studio; making an enormous contribution to the video quality. Additionally, the videos were recorded on a CD, in order to let students to use them without Internet access. It is crucial to mention that 90% of the sample had Internet access i.e. except for one student in the experimental group who had to work offline.

Concerning the statistics, the T-test, known as student's T-Test was applied because it compares two averages and establishes the difference from each other. Furthermore, it verifies the significance of the differences to make sure that they are accurate. This statistic was applied to the results of the pre-test and post-test allowing them to be tabulated and analysed, both were given online by using the Virtual Classroom created for this purpose. The test had 31 questions, which focused on the grammar contents assigned for Level Fourth: Wishes, Conditionals, and Adjective Clauses. The results evidence a noticeable difference between the control and the experimental group, since the control group students only went from 1.48/10 to 2.68/10, whereas the experimental group students' scores were 1.00/10 to 7.00/10. Besides the inferential statistic, the descriptive one was additionally considered to analyze the results from the initial and satisfaction surveys taken by the experimental and the control group students. In the satisfaction survey, the students verified the efficiency of the grammar video lessons' use to learn grammar for 26.67% of the students they were good and for the 56.67% were excellent.

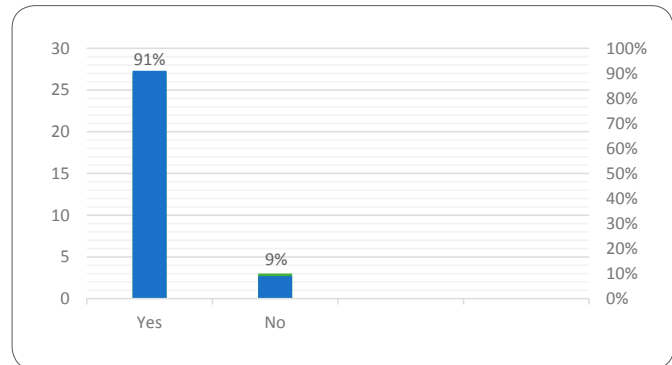
Moreover, at the first stage of the research the problem was identified by elaborating a problem tree, which showed three relevant findings: low level of intrinsic motivation to learn English, insufficient use of technology as part of the English classroom, and the necessity to look for new methods or strategies to teach grammar. In this stage, the researchers also took advantage of the data gathered through observation and the notes in the logbook. The next step was to apply the initial survey to have a clearer idea of the chosen groups (experimental and control) needs. Different interesting facts were found and they are detailed in the charts below:

Figure 1: Percentage of students who had heard about flipped classroom at ESPOCH level four.



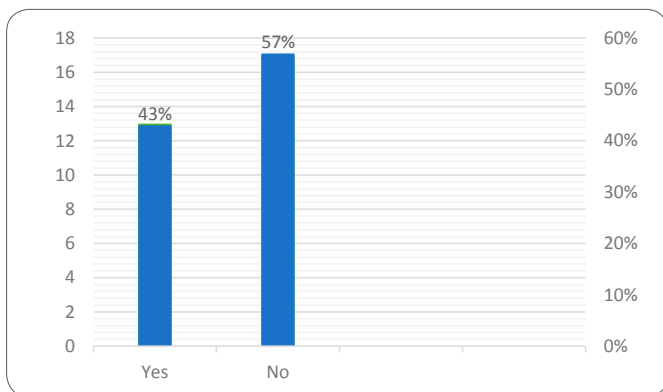
Source: Survey applied to students by the author.

Figure 4: Percentage of students who think that classes should be directed to production more than to content.



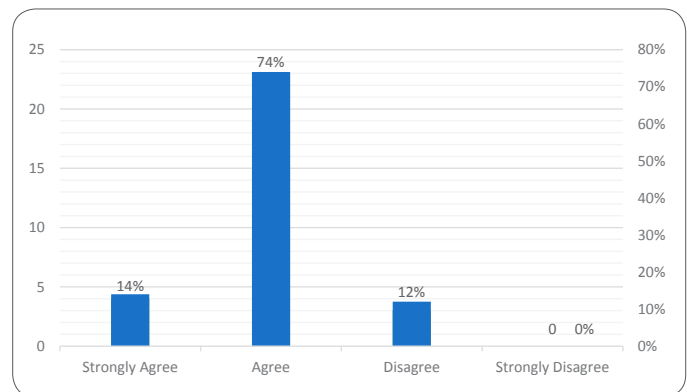
Source: Survey applied to students by the author.

Figure 2: Percentage of students whose teachers have used grammar video lessons at ESPOCH.



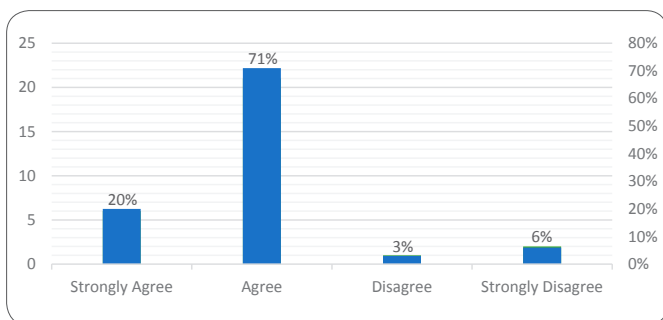
Source: Survey applied to students by the author.

Figure 5: Percentage of students who think that one of the teacher's goal should be to foster independent learners.



Source: Survey applied to students by the author.

Figure 3: Percentage of students who think video lessons could be helpful to learn grammar at ESPOCH.



Source: Survey applied to students by the author.

In the initial survey, which students completed on-line (google drive), the most relevant findings were the following: 57% of students mentioned that they had not heard about flipped classroom, 69% of students stated that their teachers had not used video lessons to teach grammar, 91% of students considered that grammar video lessons could be helpful to learn grammar, 74% of students agreed that English classes are to focus on production rather than content, and 71% of students were aware of the importance to foster independence in the learning process.

After applying the post-test, the pre-test and post-test results, from experimental groups and control group were tabulated; these results are detailed in the following table.

Table 1: Pre-test and Post-test applied to students to identify their grammar knowledge and progress.

N° students	Pre-Test				N° students	Post-Test			
	Control Group		Experimental Group			Control Group		Experimental Group	
30	Mean Value 1.48	Percentage 14.80%	Mean Value 1.00	Percentage 10.00%	30	Mean Value 2.68	Percentage 26.80%	Mean Value 7.00	Percentage 70.00%

Note: This table shows the average of grammar knowledge improvement.

Source: Results thesis "Flipped teaching implementation to improve students' high order thinking skills"

The average for the control group in the pre-test was 1.48; whereas, in the experimental group, it was 1.00. These results suggested that the level of the experimental group was lower than the control one. In the post-test the control group average was 2.68 and the experimental group average was 7.00. These

results showed that the experimental group students' knowledge about grammar improved significantly. Finally, the results of the satisfaction survey, which was applied at the end of the intervention, were analyzed. This instrument results are detailed below.

Table 2: Level of satisfaction of using videos to learn grammar

	1	2	3	4	5	DA	Total
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Does not apply	
Using video lessons to introduce new grammar content is an effective technique?	0	0	1	18	7	4	30
How useful were the video lessons to learn grammar?	0	0	3	11	12	4	30
How would you rate the content of the videos?	0	0	1	8	17	4	30
How would you rate the quality of the videos (audio, image)?	0	0	1	6	19	4	30
The video lessons were enough to understand and apply the grammar contents.	0	1	2	18	5	4	30
How useful was the WSQ chart for understanding the grammar content in the video lessons?	0	1	4	16	5	4	30
Based on your experience would you recommend the use of the grammar video lessons in the English classroom?	0	0	1	13	12	4	30
To what extend did the grammar video lessons contribute to the development of the activities in the class in an autonomous way?	0	0	3	17	6	4	30
Overall, how satisfied were you with the grammar video lessons?	0	0	4	14	8	4	30

Note: This table shows the students answers regarding the use of grammar video lessons.

Source: Satisfaction survey

The parameters considered for the survey were strongly disagree (1), disagree (2), neither agree or disagree (3), agree (4), and strongly agree (5). A number of students equivalent to 70% of students agreed that using video lessons to introduce grammar content was an effective technique, 46% of students strongly

agreed on the usefulness of video lessons to learn grammar, and 42% agreed as well. The majority of students considered that the content of the videos was excellent, and the same percentage agreed that the image and audio were also high quality, 88% of students stated that video lessons were enough to understand

and apply the grammar content, 81% considered that the WSQ chart was useful for understanding the grammar content in the video lessons. Students who recommended the use of grammar video lessons in the English classroom was 96%, and 88% of them recognized the high contribution of the video lessons in

the development of activities in the class in an autonomous way. Overall 85% of students felt satisfied with the grammar video lessons used as a tool to develop independent learning cognitive skills.

DISCUSSION

Teachers are always innovating by finding new methods and strategies to motivate students to learn English. However, learners are not conscious of the need to speak a foreign language. Numerous students take English classes as a requirement to graduate from the different undergraduate programs. In general, students consider English as one of the most difficult subjects to study. For that reason, it is essential to give them reasons to learn and master this language. Students need to acknowledge the importance of English to study a master's degree, to be granted an international scholarship in the most recognized universities around the world, read and understand books, and the experience of interacting with English speakers through social networks.

Various statements about the technology in the 21st century have been made; however, it is possibly complicated to introduce it in the classroom. Nevertheless, it is essential to remember that technology transforms the classroom experience from a classic teacher-centered into a student-centered experience with students taking a more active role in their learning. Certain constraints teachers face when inserting technology in the classroom were limited to time, to experimentation, and inefficient training for teachers. Despite the attraction technological activities add to the lesson, planning the activities in the Virtual Classroom require extra time. The teacher has to administrate the classroom and choose the most effective activities to reach the main goal, which is to motivate students to learn English. While technology keeps evolving, English teachers have limited possibilities to stay updated regarding the managing of new technologies and the technical support they are able receive. Since the main qualification of an English teacher is not mastering the use of new technology, there are several possibilities to get effective training in the area of recording videos and managing Virtual Classrooms efficiently.

The first related study mentioned in the introduction of this paper showed how students had to record their activities as homework (Han, 2015). In contrast to this study which used grammar video lessons that students had to watch. They are similar in terms of measuring the effects of creating independence in learning, which, in fact, was proved once student exhibited a high level of independence by doing the task voluntarily and repeatedly

without any inhibition at the end of the interventions. The second comparison is made between the article Using the flipped classroom to enhance EFL learning and the present study, they concentrated on improving independence to increase knowledge, however the former one focused on motivation which in fact proved to be a key point to create students' autonomy.

Different studies have pointed out that the flipped classroom model, which in fact, and based on evidence, is successful. Nevertheless, it is reasonable to discuss some findings from studies related to traditional classroom models (Kaye, 2008), especially to those for which it is claimed the flipped classroom is not able applicable. For instance, in the study Flipped in communication: the author points out that students working with flipped classrooms do not create opportunities to engage in real communication, which sometimes is not accurate (Olsen, 2018). In fact, this study contradicts this view because the flipped classroom has to do with blended learning and since this study concentrated on watching the theoretical part at home, the real communication indeed happened in class. In addition, the environment flowed smoothly creating natural interaction with other learners.

Furthermore, Tarhini (2014), stated that another disadvantage of the flipped classroom model possibly includes little or no in-person contact with the faculty member. Conversely, during the project intervention, the teacher was able to answer questions about what problems students had in understanding and discussing in class the student's doubts, points of view and feedback from students' WSQ chart. This process facilitated the teacher to have more control over the aims, the pace and the materials. Another benefit of traditional classroom over the flipped classroom method is that it provides students with a fixed schedule and specific periods dedicated exclusively to learning (Paduraru, 2008). With flipped classrooms procrastination can become a common attitude while traditional classrooms preserve a feeling of real time (Paduraru, 2008). Finally, learning about technology is conceivably a drawback for flipped classrooms teachers who are less technologically literate and this class approach probably becomes time consuming, adding more workload to teachers. However, since teachers do not have to worry about other problems such as mixed-abilities classrooms, late arrivals and

misbehavior as happens in on-site classrooms, the use of their time in managing the technology is likely compensated. Finally, every approach presents pros and cons, it is necessary for

teachers to analyze students' performance and evaluate which approach will suit the intervention.

CONCLUSIONS

After developing the study and analyzing the research question, the conclusions are the following: there was a need to change the way the English classes were being developed to emphasize autonomous learning with activities outside the classroom. These activities did not necessarily have to be homework. Various students agreed with this proposal and it was proven that the use of grammar video lessons recorded by the researcher fostered independent learning.

Taking the in-class theory out of the classroom by blending the English learning brought effective and productive results in the students' performance. Therefore, the usage of grammar video

lessons and the flipped classroom model proved to be effective in promoting autonomy in learners, according to what was shown in the post-test results. Furthermore, that experimental group outperformed the control group. Additionally, according to the satisfaction survey, a considerable number of students strongly agreed that the benefits of watching a video and using the WSQ chart is more effective than the practice achieved while they are in class. They explained that this procedure is quite different from what it is done in the traditional classroom where they listen to the teacher and rarely have the chance to practice what they learn in a real environment.

REFERENCES

- Alpha Omega Academy. (February 12 2012) Alpha Omega Academy. Retrieved From <https://www.aoademy.com/7-Characteristics-Of-Independent-Learners/>
- Barreto, L. (November 19 2018) Problem Tree Analysis. Retrieved From <https://sswm.info/planning-and-programming/decision-making/situation-and-problem-analysis/problem-tree-analysis>
- Carl, H. (September 4 2016) Wellington Learning And Research Center. Retrieved From <http://learning.wellingtoncollege.org.uk/what-do-we-mean-by-independent-learning/>
- Chen Hsieh, J. S., Wu, W. C. V. & Marek, M. W. (2016) Computer Assisted Language Learning. Retrieved Using The Flipped Classroom To Enhance Efl Learning: <https://www.tandfonline.com/action/showcitformats?doi=10.1080%2f09588221.2015.1111910>
- Chen Hsieh, J. S. (2017) Using The Flipped Classroom To Enhance Efl Learning. *Computer Assisted Language Learning*, 1-21.
- Ellis, A. K. (2004) *Exemplar Of Curricular Theory* P.33. Larchmont, Ny: Eye On Education.
- Hammond, Z. (2015) *Culturally Responsive Teaching And The Brain: Promoting Authentic Engagement*. Corwin.
- Han, Y. J. (January 2015) *Nys Tesol Journal* Vol. 2, No. 1. Retrieved From http://journal.nystesol.org/jan2015/han_98-109_nystj_vol2iss1_jan2015.pdf
- Harvey, V. S. & Ckie-Wolfe, L. A. (2007) *Fostering Independent Learning: Practical Strategies To Promote Student Success*. London: The Guilford Press.
- Ílin, G. (2013) An Action Research: Using Videos For Teaching Grammar In An Esp Class. *Procedia - Social And Behavioral Sciences*, 272-281.
- Karen Murphy, P. A. (2016) *Understanding How Students Learn: A Guide For Instructional Leaders*. California: Corwin Press.
- Kaye, P. (2008) *Teaching One To One*. Retrieved From British Council: <https://www.teachingenglish.org.uk/article/teaching-one-one>
- Kydiam, S. (2018) *Studymode*. Source <https://www.studymode.com/>
- Mcleod, S. (2008) *Simply Psychology*. Retrieved From <https://www.simplypsychology.org/Likert-Scale.html>
- Meyer, W. R. (2010) *Independent Learning: A Literature Review And A New Project*. British Educational Research Association Annual Conference, 35.
- Nizar, M. (2015) *Research Gate*. Retrieved From https://www.researchgate.net/post/How_Important_Is_Learner_Autonomy
- Nunan, D. (2002) *Syllabus Design*. New York: Oxford University Press.
- Olsen, E. (2018). *Running Head*. Retrieved From <https://www.suu.edu/hss/comm/masters/capstone/thesis/olsen-e.pdf>
- Paduraru, C. (March 8 2008) *The Advantages Of Traditional Classroom Learning*. Retrieved <https://classroom.synonym.com/advantages-traditional-classroom->

Learning-7964781.Html

Sams, A. & Bergmann, J. (2012) Flip Your Classroom. Colorado: International Society For Technology In Education.

Sung, K. (2015) A Case Study On A Flipped Classroom In An Efl Content Course. Kmall, 159-187.

Solano, L., Cabrera P., Ulehlova E., Espinoza V. (2017) "Exploring the use of Educational Technology In Efl Teaching: A Case Study Of Primary Education in the South Region of Ecuador". Teaching English with Technology. n° 17, vol 2: 77-86.

Young, C. A. (2017) Applying the Flipped Classroom Model to English Language Arts Education. Hershey PA: IGI Global.

Zhen, H. (2014) Teacher beliefs as a complex system: Engglish Language Teachers in China. Chengdu, Singchua, Rp China: Springer .