

Universidad de Cuenca

Facultad de Filosofía, Letras y Ciencias de la Educación Maestría en Lingüística Aplicada a la enseñanza de Inglés como Lengua Extranjera

The Effect of Critical Thinking Strategies on Oral Production of EFL University Students:

An action research

Trabajo de Titulación previo a la obtención del título de Magíster en Lingüística Aplicada a la enseñanza de Inglés como Lengua Extranjera

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Resumen:

En el campo de la enseñanza de inglés como idioma extranjero, muchas estrategias son utilizadas de las cuales las de pensamiento crítico son las menos empleadas. Por lo tanto, este estudio se enfoca en explorar los efectos que tres de estas estrategias tienen en las habilidades de producción oral de estudiantes universitarios que aprenden inglés como idioma extranjero. Esta investigaciónacción fue realizada en la Universidad Nacional de Educación, UNAE en Ecuador. En este estudio se recolectó información cuantitativa y cualitativa. Se aplicó una prueba al inicio y al final para recolectar datos cuantitativos. Un grupo focal también fue realizado al final del tratamiento para recolectar información cualitativa. Los resultados de la prueba aplicada al final del tratamiento revelaron que los estudiantes mejoraron considerablemente en su producción oral. Además, los resultados del grupo focal que se realizó con participantes claves sugirieron que los estudiantes disfrutaron de las estrategias aplicadas en el tratamiento. También es importante mencionar que el vocabulario y gramática dentro de las habilidades del habla fueron las que alcanzaron el menor puntaje de mejora de acuerdo a la prueba posterior aplicada. Por el contrario, la interacción mostró mayor mejora. Esto se explica debido a que las estrategias aplicadas se enfocaban en fluidez y no en exactitud o precisión en el uso del idioma. Se establece nuevas áreas de investigación en el ámbito de vocabulario.

Palabras claves: Estrategias de pensamiento crítico. Producción oral. Clases de inglés como idioma extranjero. Estudiantes universitarios.



Abstract:

Although many strategies have been used in the development of oral production in EFL students, critical thinking strategies are less frequently employed. Therefore, this study focused on exploring the effects of three of these strategies on the oral production abilities of Ecuadorian EFL university students. This action research study was carried out at the *Universidad Nacional de Educación* (UNAE) in Ecuador, where qualitative and quantitative data was collected. A pre-test and post-test were used to collect the quantitative data. Furthermore, a focus group discussion was used to collect the qualitative data. The post-test results revealed that students increased their oral production considerably after finishing the treatment. Moreover, the focus group discussion suggested that students enjoyed the strategies used because they helped pupils to improve their vocabulary and reasoning before speaking. It is also important to mention that according to the quantitative results grammar and vocabulary had the lowest improvement in speech production; meanwhile, interactive communication had the highest improvement in oral production. This has to do with the focus of the strategies on fluency over accuracy. Implications for further research regarding vocabulary were stated.

Keywords: Critical thinking strategies. Oral production. EFL classroom. University students.



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Introduction

The term critical thinking has been defined by various scholars and it is considered to be a broad term (Reed, 1998) in current educational programs. According to Harpen (2006), critical thinking (CT) is the term used to describe a kind of thinking that is conscious and goal-directed. Critical thinking is used to examine assumptions and beliefs which are supported by evidence, provided by experience, or any other source in order to draw conclusions (Glaser, 1941). Richard and Elder (2008) define critical thinking as a self-controlled process which is related to effective communication and problem-solving abilities. Paul (1996) describes CT as the process by which a person takes responsibility for his/her own thinking. Ennis (1985) adds that this thinking should be reflective and logical, specifically while deciding what to believe and what to do. Other authors have similar definitions; for example, according to Chaffee (2014), critical thinking is our active, purposeful, and organized thought to make sense of our world examining our own and others' thinking in order to clarify and enhance our understanding. For this study, the definition coined by Fahim and Rezanejad (2014) is taken into consideration. These authors defined critical thinking as the ability a person has to think about their own thinking. Consequently, the person is able to recognize their strengths and weaknesses. A person who thinks critically reflects, infers, calculates, makes decisions, evaluates and solves problems; skills that students need to develop when expressing themselves orally.

Critical thinking strategies used in EFL classrooms

Teacher Questioning, Think-Pair-Share, and Debates are the critical thinking strategies used in this research. Teacher Questioning is a very important strategy

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used in class because it initiates students' participation. This strategy can motivate, focus students' attention on a particular topic, and help students think and learn more effectively while the teacher checks comprehension (Dillon, 1988). According to Shen (2012), Teacher Questioning is closely linked with the development of students' higher-order thinking and therefore their language acquisition. It can help learners analyze, evaluate, and construct their thinking (Glaser, 1941). It allows teachers to check students' understanding and comprehension of the topic discussed (King, 1990).

Think-Pair-Share is a strategy that was developed by Frank Lyman in 1981. It is a student-centered strategy, based on the three stages students go through to accomplish a task. First, the teacher provokes students' thinking by giving them a few minutes to simply think about a question. Second, students find a partner and talk about the topic proposed. Finally, the pair of students share their ideas with the whole class (Robertson, 2006).

Debates are used in EFL classrooms as tools to encourage students to practice the target language in real-life situations (Alasmari & Salahuddin, 2012).

According to Krieger (2005) Debates not only help students develop their language skills but also their cognitive skills. While preparing Debates, students develop their critical thinking which helps them to perform better while learning a language.

The utility of critical thinking in language learning environments

The exploration of how critical thinking helps people to be conscious of their own thoughts and actions is extremely important (Ghanizadeh & Jahedizadeh, 2017). Consequently, studies have been carried out at the university level to analyze students' critical thinking abilities. Boyd and Fales (1983) noted that in Jessica Elizabeth Ochoa Delgado

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higher education it is indispensable to push students to develop a deeper understanding of how they learn. Doing so may allow students to abandon negative habits of learning and develop new habits that may help them reflect on, evaluate, and analyze topics during their own process of learning.

Currently, universities all around the world are getting ready to promote their institutions as international centers, in which culture is respected along with the content that universities can offer to national and international students from all over the world. Developing cultural awareness in university students is essential and this is highly influenced by the way they think. To promote understanding, a language student should develop their critical thinking abilities to support and gain more insights from their own and other cultures (Zhao & Coombs, 2012). This idea has led many researchers to look for ways to improve students' English abilities along with skills used in the 21st century, such as critical thinking.

In order to achieve a society of 'global citizens', Zhao and Coombs (2012) suggest the following: "International teaching strategies need to focus on enabling learners to critically engage in identifying and dealing with any personal prior cultural constraints and acquire different thinking devices (or schemas) to function in the target language and culture competently" (p.249).

Fluquen and Jiménez (2013) note that the education system currently demands students who can reflect, analyze, self-assess, be autonomous, and evaluate their own learning process to succeed in their academic and professional lives. As a result, English teachers have also started to use critical thinking strategies to achieve better results in their students' language learning since by developing their thinking skills, students can improve their ability to communicate

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more effectively. However, a study done by Rezanejad and Fahim (2014), showed that despite being important, critical thinking strategies have not been used enough in EFL classrooms.

As a result of a limited system of education in which thinking critically is not valued, our students are generally not taught to think for themselves. There are few activities included in an EFL class in which students find a chance to develop their higher-order thinking skills while learning a language (William, 2003). Sousa (2001) points out that teachers lack the ability to teach the brain to think. In order to increase students' achievement, critical thinking skills can be taught at all levels and can be taught alone or integrated with other subjects. Teaching critical thinking skills in foreign language settings should be taught along with language skills. However, language teaching remains focused on the lower cognitive level in which memorizing and remembering information are important. This disregards application, synthesis, and evaluation, which are considered higher-order thinking skills (Chaffe as cited in Marin, 2017). Wanger (as cited in Nosratinia & Zaker, 2013) suggests that students should be able to go beyond repetition and memorization of information; students should strengthen their skills of analysis, evaluation, and comprehension of information to be involved in a true thinking process. For that reason, teachers should implement strategies in their English classrooms to develop these higher-order thinking skills that will allow students to develop academically and to gain proficiency in their language skills. These abilities are not only necessary in their educational life, but also in their personal lives and professional careers.

At this point, it is important to see what research tells us about the use of

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critical thinking strategies. A study conducted by Ramezani, Larsari, and Kiasi (2016) showed a significant relationship between critical thinking and speaking ability. According to Malmir and Shoorchech (2012), speakers who have developed their critical thinking take a more dynamic role in speaking and try to understand and make decisions in challenging circumstances. As a result, students who think critically are able to initiate conversations and control topics which, according to Ellis (1990), are classroom conditions that improve students' thinking skills by increasing their chances to speak.

In a qualitative study conducted in Colombia with EFL teachers in which critical thinking conceptions in an EFL classroom were discussed, it was concluded that the teachers' understanding and knowledge related to the topic was not enough. The authors agreed on the fact that CT is related to cognitive development, reflection, and analysis; however, the study concluded that teachers needed more training in strategies, activities, methodologies, resources, and all that involves the teaching-learning process itself, including critical thinking skills. The study suggested that critical thinking is an important element in EFL classrooms because it provides students with "communicative competence, creativity, argumentation, problem-solving, decision making, autonomous learning, metacognition, and emotions" (Marin & Pava, 2017, p 78).

Lately, research studies conducted in Latin America have demonstrated the importance that critical thinking skills have gained in educational settings. In Colombia, for instance, there was a qualitative study in which teachers wanted to know to what extent critical thinking activities helped students develop their second language. The teachers recorded the lessons and also collected data through Jessica Elizabeth Ochoa Delgado

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observation. After the analysis, the results showed that critical thinking tasks enhanced second language learning, as it gave students a way to improve the language together with their critical thinking skills (Pineda, 2004).

Questioning in a classroom is necessary to develop the ability to think critically. This is what Freire calls "Pedagogy of questions" (Freire as cited in Nosratinia & Zaker, 2013). Nosratinia and Zaker (2013) studied critical thinking (CT) and Autonomy (AU) in university students whose majors were Translation and English Literature. The results indicated that CT and AU were positively interrelated. Moreover, the study showed the importance of the development of critical thinking while learning a language. Therefore, the authors suggested creating a curriculum based on students where books should be designed with different activities to develop students' higher-order thinking skills.

The relationship between the use of critical thinking and speaking in an EFL setting was researched by Sanavi and Tarighat (2014) who examined how teaching critical thinking explicitly affects students' speaking proficiency in English. A mixed-method study was employed to collect and analyze the data. The results showed that the experimental group of students who were taught critical thinking explicitly had a positive result in their speaking performance.

In the same line, Ramezani, Larsari, and Kiasi (2016) carried out a study on speaking and critical thinking where they concluded that those students who were better critical thinkers performed higher in their speaking tests. This was a quantitative study in which the IELTS test was used to measure the students' speaking ability, while the Lauren Starkey critical thinking test was used to test students' critical thinking skills. With the obtained results the researchers

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concluded that students who increased their level of critical thinking, improved their speaking performance, too. (Ramezani, Larsari, & Kiasi, 2016).

According to a study done by Iman (2017) at the University of Indo Global in India, students aimed to improve their English skills because of the importance English has in their country. The researcher wanted to measure how Debates would help develop speaking and critical thinking skills, specifically relating to how a globalized world requires students to develop their low and higher-order thinking abilities when expressing their thoughts in their second language. This was a quasi-experimental study in which a non-equivalent pre-test/post-test control group design was used. The results showed how this academic activity helped students improve their speaking skills. According to the analysis of the data obtained regarding students' speaking, their biggest improvement was in fluency. Moreover, critical thinking skills were developed along with speaking skills, as students were asked to reflect on, evaluate, and research the topics that were discussed.

The aforementioned studies illustrate how critical thinking skills are key to the development of second and foreign language skills in today's globalized world. However, in our country, Ecuador, there are few studies related to critical thinking in the EFL classroom. At the University of San Francisco in Quito, Martínez (2011) implemented critical thinking activities in an EFL classroom. This was an action research study in which quantitative and qualitative data was collected. The results showed that there was no significant difference between the two groups, but students who received the treatment showed more motivation and were able to better voice their opinions. Rodas (2014) centered her post-graduate thesis on the application of critical thinking strategies to develop writing and reading in a high Jessica Elizabeth Ochoa Delgado



school in Cuenca. This study used an experimental-qualitative-statistical method. The author analyzed the data through pre-test, mid-test, and post-test results. The results showed how the activities helped students to improve their reading and writing skills in foreign language learning. As it can be seen, and as far as we know, there is no research done on oral production in the context of Ecuador. For that reason, more research needs to be conducted using critical thinking strategies in our country. That is why the present study aims to analyze how strategies like Debates, Teacher Questioning, and Think-Pair-Share affect oral production development in Ecuadorian university-level students and contribute to filling the gap in the literature.

Statement of the problem

The Ecuadorian Educational system

Learning English is a must for today's Ecuadorian university students. In many universities, students are required to complete a level of English to graduate. According to the *Ley Orgánica de Educación Superior* (*LOES*)¹, universities need to create an intercultural environment in which learning foreign and national languages will promote research and national development. Therefore, public and private universities in Ecuador need their students to achieve a B1 English level according to the Common European Framework of Reference. Consequently, the incorporation of different teaching alternatives plays a main role in today's higher education in Ecuador. We want our students to learn a foreign language, thus, providing students with the necessary skills that help them to accomplish that goal

¹ It is a law that regulates higher education in Ecuador.



is essential for today's global educators and students.

This study was completed in *Universidad Nacional de Educación* (UNAE), which is a new public university in Ecuador with an educational focus. This university has its own pedagogical model, which includes different methodologies, such as flipped classroom, project-based learning, cooperative learning, etc. Its main purpose is to improve the Ecuadorian educational system.

When the first author started to work with university students at UNAE, she thought they would ask her hundreds of questions, discuss different topics, and give their opinions frequently since she believed their English level was better. This is because according to the Ecuadorian Curriculum of English as a Foreign Language (Ministry of Education, 2016) students who have finished high school are supposed to have a B1 English level. However, she realized that her students struggled when using English. Most of them entered the university with little to no English knowledge.

Education First (as cited in El Comercio 2017), indicated that the English level in Ecuador is 49.42/100. This shows clearly that the English level is quite low in our country. An Ecuadorian study conducted by Calle, Calle, Argudo, Moscoso, Smith, and Cabrera (2012) determined that "the use of traditional teaching strategies, the teacher-centered approach, the lack of interaction with and among students in the target language, and the confusion of teachers when applying different communicative strategies" (p.1) are determining factors that impede students from learning English effectively at public schools in the city of Cuenca. This has made the researcher realized the problem our educational system has had for many years, and the scarce opportunities English teachers provide



Students with in order to learn this language in a more meaningful way.

Considering one of her classes², the majority of her students were not able to express their ideas freely in English. Very few students were interested in learning more than what was presented in class, and therefore most of them did not frequently think deeply or ask questions about the material; therefore, they were not used to reason and inquire. This seems to correspond with our educational model of memorization, which has been practiced in schools for years. According to Espinoza (2017), most Latin American countries have societies in which a mere transmission of content and theories is the basis of the system of education; which is not always interrelated with practice. In this context Freire (1976) idealized education which would transform society through critical and reflexive thought.

At UNAE, students are expected to develop a high level of English in a relatively short time and are also required to develop critical thinking skills to become teachers in the future. According to the *Reglamento de Régimen Académico*³ article 80, it is stated that university students must obtain a B1 level of English to complete their studies. In order to improve the educational system in Ecuador, future teachers should possess the ability to speak aloud and express their opinions in English in the classroom – abilities that will help them in their future professions. Stirling and McGloin (2015) point out that the role of a university is to form students with high critical awareness, which allows them to solve social problems.

However, developing speaking abilities can become a distinct challenge we

² This refers to the first author's class

³ The statutes, regulations, and other rules that govern the Ecuadorian higher education system.



face in our context. In specific reference to Ecuador's colonial education history, students are not taught to reflect, analyze, or evaluate the content, but to simply repeat content provided by teachers (Freire, 2005). Mota (2010) agrees with the fact that teachers in Latin American countries are not implementing critical thinking strategies in the classroom, and that education is based more on a transmission model. Pineda (2003), in her study done in Colombia, emphasized that our communities have limited knowledge on how to incorporate critical thinking into our EFL classrooms. That is why Freire's (2005) pedagogy looks to emancipate individuals, allowing them to bring support to the critical thinking model's incorporation into every classroom, and to help learners have their own voices.

Taking into consideration this need in EFL at a university level and the gap in the literature, the purpose of this research study is twofold: the first goal is to analyze the effects of using critical thinking strategies in the oral production of students in an EFL university classroom. The second is to understand how students perceive these strategies. The following questions guided this study.

- 1. What are the effects of critical thinking strategies on oral production in EFL students?
- 2. How do students perceive these critical thinking strategies applied in their classroom?

Methodology

An explanatory mixed-method approach was used for this study "where quantitative data are collected first, followed by the collection of qualitative data" (Mertler, 2016, p. 261). Two tools for gathering data, namely a pre-test/post-test exam and a focus group discussion were employed. This approach was used in Jessica Elizabeth Ochoa Delgado

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order to ensure the quality and trustworthiness of the findings, and therefore, achieve the main objective of this study which was to observe the effects that three critical thinking strategies had on oral production applied in an EFL classroom in Ecuador.

Research Design

This study was a classroom-based action research project. This type of study involves conducting research in a classroom in which the teacher attempts to improve the students' performance by taking into account the quality and purpose of their practices (Convery, 2019) and the needs of the students. However, there are many scholars who do not consider classroom-based action research as a scientific approach. Burns (2010) supports it by explaining that action research exhorts the teacher to assume the role of a researcher, and uses a self-reflective, critical, and systematic approach to explore a teaching context. The central idea of action research, according to Burns, is to create changes or improvements to one's own practice. This study attempted to improve students' oral production by using critical thinking strategies.

The research involved a pre-test and post-test to measure students' oral production. A group pretest-posttest design is defined by Mertler (2016) as a kind of study in which no comparison is made, thus, there is no control group. Instead, the study was comprised of just one group which received the experimental treatment. Moreover, a focus group discussion was carried out at the end of the treatment to analyze the students' perceptions regarding the strategies applied, and to understand in depth the participants' point of view. The focus group discussion helped to collect the qualitative data of the study.



Context and participants

This classroom-based action research study was applied in an EFL classroom in the Ecuadorian university UNAE. This is the first public University in Ecuador to offer education-only related majors. It is located in the city of Azogues, Ecuador. Due to higher education policies in Ecuador, students are required to obtain a B1 level in a foreign language in order to graduate which is stated in *Reglamento de Régimen Académico article 80*. Therefore, UNAE offers language courses to fulfill this requirement. There are 6 levels of English offered in the Language Institute of UNAE. To enroll in their final semester, students must take a proficiency B1 exam, which is designed by the teachers of the University. To teach English, teachers use the English File and Touchstone series and each level covers 6 units per semester. Participants have 4 hours of class per week. They have a total of 60 hours of English per semester.

Fifteen students, whose ages ranged from 19 to 25 years old, voluntarily agreed to participate in this study by signing an informed consent (see appendix A). Their English level was A.1. and A.2 according to the oral pre-test (University of Cambridge, 2013) applied to students (see appendix B for the rubric of the exam) before the treatment. Participants came from different provinces of Ecuador, some of whom were first-generation college students. Pupils came from low and low-middle income classes; therefore, scholarships were given to many students by the government. The native language of all of the students was Spanish. This group of students was in the third level of English according to the leveling of the English area at UNAE. The participants passed the first and second levels, respectively. There were 12 women and 3 men in the classroom. Each of the students was



completing a major in an education-related field.

Data Collection Techniques and Instruments

Quantitative Data: Procedure

In order to collect pre-intervention data, students completed a Cambridge A2 speaking exam (see appendix C). All the students were assessed in three categories which evaluated oral production, described in the exam as grammar and vocabulary, pronunciation, and interaction. Students were evaluated following the same logic of the international exam. Students completed the pre-test in pairs. After the treatment, the same Cambridge A2 speaking exam was applied. All of the students were evaluated in pairs. A rubric was used which gave 5 points for each category (see appendix B) previously described. In total, students were assessed out of 15 points.

To collect the quantitative data, the pre-test and post-test grades were used to explore the influence of the critical thinking strategies applied in the development of speaking skills. Later, in order to analyze the data, the SPSS 25 software was used with a significance level of 0.05. Graphics (e.g. Histograms, etc.) illustrated whether the distribution of the variables was symmetric or asymmetric across the data set. These results showed the type of distribution that the variables followed, in order to decide the use of parametric or non-parametric tests.

Qualitative Data: Procedure

The qualitative data was collected by applying a focus group discussion to a group of seven participants to recognize the students' points of view about the strategies applied in their English lessons. According to Flores and Alonso (1995), a focus group is a technique used in research which entails the collection of data Jessica Elizabeth Ochoa Delgado Página 19



by the researcher which involves the discussion of certain topics or questions by the participants of the study. It is said that focus groups can provide more meaningful information based on the interaction among participants and moderator (Lederman, 1990). This led to the collection of information from the participants in which they expressed their ideas freely, avoiding the interference of the researcher's prejudices in their opinions (Bertrand, Brown & Ward, 1992). Key participants were selected to be part of the focus group discussion. In order to get meaningful data, participants who had high, medium, and low results in the posttest were chosen. A topic guide was created based on the following elements: the objectives of the study, unpredictable aspects that came up during the treatment application, and the pre-test and post-test results. Furthermore, during the focus group discussion, a question guide was used to help students direct their conversation. The moderator was the first author, based on her familiarity with the study. The discussion was recorded and transcribed. Later the data was coded manually and the information was classified into themes and categories. These results were analyzed and interpreted.

Procedure of intervention

Fifteen English language learners, who voluntarily agreed in participating (see appendix A for the consent form), were part of this study. All the students belonged to the third level of English according to the leveling of the university. The intervention had a duration of 4 months, with a total of 60 hours, from April 2019 until July 2019. The topics employed during the treatment were based on the university syllabus. We covered six topics during the semester: making friends, interests, health, celebrations, growing up, and around town. Each critical thinking Jessica Elizabeth Ochoa Delgado



strategy was used based on the topics under study.

During the intervention, Teacher Questioning, Think-Pair-Share, and Debates were applied. Sometimes two of the strategies were used in each class due to the importance of discussion in the development of the speaking ability. Teacher Questioning was mainly used in each class because of the nature of the strategy. To apply Teacher Questioning, the teacher created a series of high order thinking questions based on the topics. Think-Pair-Share was applied when students needed to interact amongst themselves. Debates were planned ahead in order to organize the topic, the participants on each team, and the time. Students sometimes prepared their ideas at home to defend them during the Debates. The Debates were also based on the topics listed above. As Debates needed more preparation, this strategy was used mostly at the end of units in which students were able to use all of the new vocabulary and grammar structures learned during the unit to illustrate their improvement. For example, one Debate topic considered whether Saint Valentine's should or shouldn't be celebrated. This Debate topic is an example of the "celebrations" unit (see appendix D and E for examples of a lesson plan and the application of the strategies).

Data Analysis

The information processing was carried out using the statistical program

SPSS 25 and the creation of tables and graphs in Microsoft Excel 2019. The

results are expressed through measures of central tendency and dispersion. Also,

to determine the number of students with or without changes, absolute frequency

measures were used. To determine the changes generated, the statistical test was

used for related Wilcoxon samples, and decisions were made with a significance of

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5%. On the other hand, the qualitative part was analyzed by organizing the information in different themes. After that, the information was organized and categorized. Finally, the information was interpreted.

Results

Quantitative results

Oral production was measured as the sum of the sub-skills grammar and vocabulary, pronunciation and interactive communication, and presented oscillations between 6 and 24 with an average of 14.00 (SD = 4.96). This result implies that the students reached 46% of the maximum grade. Table 1 shows that the interactive communication skill was the weakest (M = 4.13; SD = 1.92).

Table 1.

Pre-test results

	Minimum	Maximum	Mean	SD
Grammar and Vocabulary (/10)	2	8	4.93	1.67
Pronunciation (/10)	2	8	4.93	1.83
Interactive Communication (/10)	2	8	4.13	1.92
Results (/30)	6	24	14.00	4.96

It was also detected that 5 students were on an A1 level; 5 in A1.1 and 5 in A2.

Generated Changes

The results revealed that after the intervention no student showed negative changes and that at least 11 had improved their oral production skills. Four people remained unchanged in grammar and vocabulary, two in pronunciation and one in



interactive communication. The participants improved on average 2.27 points (SD = 1.67) in grammar and vocabulary, 2.80 (SD = 1.66) in pronunciation, and 3.60 (SD = 1.72) in interactive communication, implying that this last skill was the one with the greatest improvement. In all cases, the improvement was significant (p <0.05).

Considering the total oral production score, it was observed (Figure 1) that all students recorded positive changes of between 4 and 14 points with an average change of 8.67, and a high data dispersion (SD = 3.6) reflecting a heterogeneous behavior of changes. This means that each student differed in their results (see appendix F for detailed figures explanation of the changes generated).

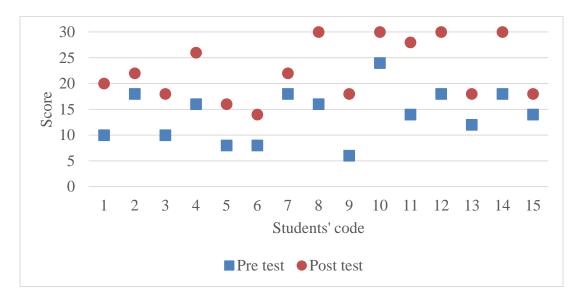


Figure 1. Pre-test vs Post-test scores

Post Test

After the intervention, it was found that the scores of each sub-skill of oral production – grammar and vocabulary, pronunciation, and interactive communication – ranged between 4 and 10, with averages greater than 7.20/10. It was also found that the grammar and vocabulary sub-skill reached the lowest



performance and greatest data dispersion. (M = 7.20; 2.24); while pronunciation and interactive communication were in the same conditions (M = 7.73; SD = 1.98) with a lower dispersion of data reflecting similar behavior in students. The final results registered a minimum of 14 points while the maximum was 30 with an average of 22.67 (SD = 5.79), achieving 75% of the maximum score.

It was also found that 2 students were in level A1 in this skill, 8 in level A2, and the remaining 5 in B1.

Table 2.

Post-test results

	Minimun	Maximum	Mean	SD
Grammar and Vocabulary (/10)	4	10	7.20	2.24
Pronunciation (/10)	4	10	7.73	1.98
Interactive Communication (/10)	4	10	7.73	1.98
Results (/30)	14	30	22.67	5.79

Qualitative results

The following table displays the qualitative results by means of themes and categories.

Table 3.

Focus group results⁴

Themes	Categories	Students' Quotes
	1	

⁴ The focus group discussion was conducted in Spanish (see appendix G), but because of space constrains it was not included in this section; instead direct translations of relevant information were provided in the table.



	Students enjoyed the	"The strategies are really
	critical thinking	good"
	strategies applied	"I like them a lot"
	Participants considered	"I wanted to win the Debate,
	Debates as their	so I spoke more to do it"
	favorite strategy	"We had to do collaborative
		and cooperative work"
		"They made us think in order
		to provide answers"
		"I provided my own ideas"
		"We all participated"
Positive effects of		"Debates helped us to improve
applying Teachers		our fluency and vocabulary"
Questioning, Think-		"We could prepare our ideas in
Pair-Share and		advance"
Debates in an EFL	Students felt they	"We spoke all the time with the
classroom in an	developed more their	teacher and classmates"
Ecuadorian University	fluency and vocabulary	"I extend my vocabulary"
	in relation to oral	"They helped me to speak
	production	fluently"
		"We interact with our
		classmates"



	Increased some	"I was willing to learn"
	participants motivation	"We had a nice teaching
	and created a good	environment"
	classroom environment	"I felt really good"
		"I felt comfortable"
	Participants had the	"We reason and then speak"
	time to think before	"I thought more than usual"
	speaking	"We provided good answers to
		questions"
	Use of Spanish	"We sometimes spoke in
		Spanish when interacting with
Negative effects of		peers"
applying Teachers	Some participants felt	"At the beginning, I was
Questioning, Think-	stressed using the	stressed because I did not
Pair-Share and	strategies	have the vocabulary to speak"
Debates in an EFL	Topics they did not like	"I had to defend topics I did
classroom in an	to defend while working	not agree with"
Ecuadorian University	on debates	

According to the qualitative data, all of the students who were part of the focus group discussion agreed that the strategies were good for their learning. All of the participants agreed that the strategies were very good and that they liked them a lot. This illustrates that critical thinking strategies used in an EFL classroom



have a positive effect on students' preferences. Students mentioned different reasons to support their predilections towards these strategies. They indicated that these strategies helped them to improve their oral production. One of the participants mentioned that these strategies helped them to interact with the teacher as well as their classmates. Another participant mentioned the way how these strategies helped them to acquire new vocabulary, specifically because they needed it to communicate their ideas. "We could talk and think more", mentioned one participant. Another participant referred to the steps they followed during the activities. He said, "We thought, reasoned, and later spoke." These reasons supported the fact that these strategies indeed were useful among students during the treatment. Even though the teacher applied other strategies and worked with different activities, participants stated their opinions specifically towards critical thinking activities.

Participants during the focus group also discussed their preferences among the three strategies used in the treatment. Six of the seven students who participated in the focus group discussion agreed that Debates were their favorite strategy. One of the participants had a different opinion and mentioned his preference for Think-Pair-Share because he could interact with his classmates. One of the students also mentioned both Teacher Questioning and Debates as her favorite activities. The participants pointed out that Debates were their favorite strategy because these pushed them to speak and express their ideas, as students were motivated to win the Debate. Moreover, they wanted to defend their thoughts and increase their lexicon. A participant mentioned that working on Debates helped him to develop collaborative and cooperative work. Everybody wanted to speak Jessica Elizabeth Ochoa Delgado



and make themselves heard while expressing their ideas. A participant concluded that while working with Debates in class, they gained fluency and vocabulary. Debates forced participants to think and speak, as they had to reply their classmates with answers they spontaneously created. A participant stated that he preferred the Teacher Questioning Strategy because the questions made him think and he had time to reflect and give a well-thought-out answer. He said that having time to think was very effective because he could provide a better answer.

Regarding the last sub-skill they developed the most during the treatment, three participants suggested that fluency was the area they developed the most. This likely happened because they had to speak consistently, and they did not focus on accuracy but fluency. A participant mentioned they interacted quite a bit with the teacher and with their classmates. Three participants agreed that they had acquired a good amount of vocabulary and improved their lexicon. This was as a result of having time to organize their ideas and look for new words in the dictionary in order to speak to the whole class or with their classmates.

The participants also mentioned some of the things they did not like about the treatment. Some students said that while they worked with their peers, they tended to speak in Spanish rather than in English. Also, they felt nervous and a little bit anxious at the very beginning of the treatment because they did not know the way the strategies worked, and because of their English level. Participants could not express everything that they wanted to, but with time and practice, they overcame their initial fear and began to improve in both confidence and language ability. Two participants noted two negative things about Debates; namely, they mentioned that defending a topic that sometimes they did not agree with was

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difficult because they did not feel comfortable speaking about such topic.

Furthermore, a participant mentioned that when participating in Debates some students did not stay on topic, and this situation of students not being on task, created conflicts among them which made it difficult for students to manage the strategy.

Three of the participants of the focus group mentioned that they were nervous and afraid during the first classes because they did not have enough linguistic ability to communicate their ideas. They also noted that this changed when they learned more vocabulary and built confidence in themselves, their classmates, and the teacher. One of the participants mentioned he was very motivated to learn and speak because he felt that he was improving his English language abilities. Three of the participants reported that they felt comfortable and happy during the treatment.

Discussion

The main objective of this study was to observe the effects that three critical thinking strategies had on oral production applied in an EFL classroom in Ecuador. The participants started the course with a 46% of achievement out of 100%. This was the result of the pre-test. Also, it is important to mention that interactive communication was the weakest sub-skill. After the treatment, the results showed the improvement students had. Eleven out of fifteen students had positive changes in their oral production. These results are in line with the findings by Ramezani, Larsari, and Kiasi (2016) who concluded that students who are better critical thinkers performed higher in their speaking tests. The results of the present study showed a 74% of achievement out of 100%, with which it is noticeable that most of Jessica Elizabeth Ochoa Delgado



the students had positive effects in their performance in the post-test. Therefore, the results revealed that critical thinking strategies used in an EFL classroom have positive effects on the participants' oral production. This aligns with Malmir and Shoorcheh's (2012) study which concluded that a student who thinks critically will learn English more effectively.

Analyzing the quantitative results, we can also see that grammar and vocabulary had the lowest improvement in speech production; meanwhile, interactive communication had the highest improvement in oral production. This also has to do with the focus on fluency over accuracy. Students were more engaged with speaking freely or fluently rather than accurately. This is supported by Marin and Pava (2017) who concluded in their research that critical thinking strategies are important elements in an EFL classroom as they allow students to develop communicative competence. As well, Pineda (2004) noted that critical thinking strategies enhance second language learning.

Another important finding was the students' perceptions in relation to the strategies applied in class. All the participants mentioned that they enjoyed the critical thinking strategies because these helped them to enhance their oral production as they had to speak in class frequently. Participants mentioned these strategies helped them to think before speaking, which is one of the advantages that critical thinking strategies offer. When students have time to think before speaking, they produce better-structured sentences and with more meaningful content. Also, they mentioned the importance of having time to prepare their ideas at home or in class with their classmates.

Debates were participants' favorite strategy because, according to students,

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these motivated them to express and defend their ideas using valid arguments. Krieger (2005) pointed out the importance of debates to develop a foreign language. Participants mentioned that debates provided them with the ability to increase their fluency and vocabulary as they had limited time to speak in their debates. This suggests that students increased their fluency in their foreign language.

Students mentioned during the focus group that they improved their vocabulary because they needed the words to speak in class. Critical thinking strategies like Teacher Questioning, Think-Pair-Share, and Debates force students to produce oral speech in class. Therefore, according to the results of this study, students increased their vocabulary. This resembles the research conducted by Sanavi and Tarighat (2014) in which deeper learning of new vocabulary was seen during the course because of the use of critical thinking skills. Also, Fahim and Komijani (2010) found a positive effect on critical thinking in L2 vocabulary learning.

The area that participants developed the most according to the students' perceptions was fluency, as they interacted with their teacher and peers. Students mentioned the importance of Teacher Questioning. They addressed this strategy on occasions in which when they needed to answer the questions in English.

Sanavi and Tarighat (2014) reinforced this idea in their study which found that participants who belonged to the experimental group performed better in their speaking ability than those in the control group. This forced student to improve their vocabulary because the questions were challenging for them. The participants needed more complex vocabulary to answer the questions. Also, students valued Jessica Elizabeth Ochoa Delgado



the necessity of interacting with their classmates. They felt less anxious when they worked with their classmates. Moreover, they said they developed cooperative and collaborative learning abilities because they helped each other during the activities. However, an interesting fact was found when one of the participants mentioned that when they had to interact with their friends, sometimes they did it in Spanish. He mentioned that this was not good for their English practice.

Most of the students reported that they were nervous and afraid at the beginning of the course. The participants argued that speaking in another language produces anxiety because they could not express what they have in their minds in the target language. However, they mentioned that this changed with time as they started to feel more comfortable and confident in class. Students struggled with oral production at the beginning of the course because they were not used to working on similar strategies in their previous courses.

Conclusions

Critical thinking strategies applied in a university-level English class led to positive effects in the development of oral production. Participants showed an increase in communicative interaction as these strategies allowed students to interact with the teacher and their classmates frequently and consistently. It seems that these strategies helped students to develop their speaking skills although we cannot affirm this happened exclusively because of the treatment. Grammar was the sub-skill in oral production that showed the least improvement. This corresponds with the nature of the strategies considered. It can be said that these strategies are more useful to develop fluency than accuracy.

Critical thinking strategies are appealing to students. In fact, participants

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mentioned that they liked the strategies. University students like to provide their opinions, but they need to be trained to think, and opportunities should be provided in class in which they can have the chance to participate actively. These strategies give a voice to students and allow them to improve their oral production while training their brain to think critically and analyze their answers before speaking.

Students mentioned many times that they learned a considerable amount of new vocabulary, as they needed the words to speak. It can be concluded, then, that these strategies can help to increase vocabulary acquisition.

Critical thinking strategies provide students with time to reason. This is extremely important to students in early levels of foreign language learning because they need to organize their ideas before speech is produced. Using these strategies with students who have an A1 level of English is possible despite the common idea that low English level students cannot deal with high order thinking skills. However, we can now say that this group of A1 and A2 students could work with these strategies as well.

All of the strategies included in the study were easy to use and adapt to the topics presented in class. Teacher Questioning needs to be prepared in advance if the teacher is using this strategy for the first time. Think-Pair-Share is a very adaptable strategy, as the instructor does not need to prepare anything in advance, just a discussion topic or question. It takes up very little time in class as well. Debates usually take more time to set up, regarding specifically the formation of groups and asking students to organize themselves and gather ideas. Also, during this study, this strategy needed more time to be completed as students liked to give their opinions and defend them.



This study has contributed to the Ecuadorian EFL context. However, further research needs to be conducted in other settings and focused on specific subskills, such as vocabulary. Thus, by carrying out research in different conditions of other educational contexts, such as private and public universities and high schools, we will be able to have a better idea of what is happening in our country regarding the effects of critical thinking skills in oral production in our EFL students.



References

- Alasmari, A., & Salahuddin Ahmed, S. (2012). Using Debate in EFL Classes. *English Language Teaching*, 6(1), 147-152. doi:10.5539/elt.v6n1p147
- Bertrand, J., Brown, J., & Ward, V. (1992). Techniques for analyzing focus group data. *Evaluation Review*, 16(2), 198-209.

 doi:10.1177/0193841X9201600206
- Beyer, B. K. (1985). Critical thinking: What is it?. *Social Education*, 49 (4), 270-276.

 Retrieved from https://eric.ed.gov/?id=EJ316045
- Boyd, E. M., & Fales, A.W. (1983). Reflective learning: Key to Learning from Experience. *Journal of Humanistic Psychology*, 23(2), 99-117. doi: 10.1177/0022167883232011
- Burns, A. (2010). *Doing Action Research in English Teaching: a guide for practitioners*. New York: Routledge.
- Calle, A.M., Calle, S., Argudo, J., Moscoso, E., Smith, A., y Cabrera P. (2012). Los profesores de inglés y su práctica docente: Un estudio de caso de los colegios fiscales de la ciudad de Cuenca, Ecuador. *Maskana*, 3 (2), 1-17. https://doi.org/10.18537/mskn.03.02.01
- Chaffee, J. (2014). *Critical Thinking, Thoughtful Writing, 6th ed.* Stamford: Cengage Learning.
- Consejo de Educación Superior. (2019). Reglamento de Régimen Académico, (111) 80, 1-53.
- Convery, A. (2019) Encouraging practitioners' agency through action research approaches. *Educational Action Research*, 27(5), 647-650.



doi:10.1080/09650792.2019.1674003

- Dillon, J. T. (1988). Teacher Questions. In New York: Teachers College Press

 (Ed). Questioning and teaching: A manual of practice. (pp.42-77). London:

 Croom Helm.
- Ellis, R. (1990). *Instructed Second Language Acquisition*. Oxford: Basil Blackwell.
- El Comercio. (2018). El nivel de inglés en el Ecuador todavía es bajo. Retrieved from http://www.elcomercio.com/tendencias/ecuador-nivel-ingles-adultos-educacion.html
- Ennis, R. H. (1985). A logical basis for measuring CT skills. *Educational*Leadership, 43(2), 44–48. Retrieved from

 https://jgregorymcverry.com/readings/ennis1985assessingcriticalthinking.pdf
- Fahim, M., & Komijani, A. (2011). Critical Thinking Ability, L2 Vocabulary

 Knowledge, and L2 Vocabulary Learning Strategies. *Journal of English Studies*, 1(1), 23-38. Retrieved from

 https://www.sid.ir/en/journal/ViewPaper.aspx?id=207747
- Fahim, M., & Rezanejad, A. (2014). Critical Thinking in the EFL Context of Iran.

 International Journal of Applied Linguistics and English Literature, 3(4), 128135. doi:10.7575/aiac.ijalel.v.3n.4p.128
- Flores, J. G., & Alonso, C. G. (1995). Using focus groups in educational research:

 Exploring teachers' perspectives on educational change. *Evaluation Review*,

 19(1), 84-101. doi:10.1177/0193841X9501900104
- Fluquen, A.Y., & Jimenez, P. K. (2013). Implementing tasks that stimulate critical thinking in EFL classrooms. *Cuadernos de Lingüística Hispánica*, 21(1),143-158. doi:10.19053/0121053X.1955



- Forehand, M. (2005). Bloom's taxonomy: Original and revised. In M. Orey (Ed.), *Emerging perspectives on learning, teaching, and technology*, (pp. 1-10).
- Freire, P. (2005). *Pedagogía Del Oprimido*. México: Siglo Veintiuno Editores.
- Freire, P. (1976). *Educación y Cambio (Education and Change)*. Buenos Aires: Comisión Ecuménica Latinoamericana de Educación (CELADEC).
- Ghanizadeh, A., & Jahedizadeh, S. (2017). Validating the Persian Version of Reflective Thinking Questionnaire and Probing Iranian University Students' Reflective Thinking and Academic Achievement. *International Journal of Instruction*, 10(3), 209-226. doi: 10.12973/iji.2017.10314a
- Glaser, E. M. (1941). An experiment in the development of critical thinking. New York: Teachers College, Columbia University.
- Halpern, D. (2006). The Nature and Nurture of Critical Thinking. In R. Sternberg, H.
 Roediger III, & D. Halpern (Eds.), *Critical Thinking in Psychology* (pp. 1-14).
 Cambridge: Cambridge University Press.
 doi:10.1017/CBO9780511804632.002
- Iman, J. N. (2017). Debate Instruction in EFL Classroom: Impacts on the Critical

 Thinking and Speaking Skills. *International Journal of Instruction*, 10(4), 87
 108. doi: 10.12973/iji.2017.1046a
- King, A. (1990). Enhancing Peer Interaction and Learning in the Classroom through Reciprocal Questioning. *American Educational Research Journal*, 27(4), 664-687. doi:10.3102/00028312027004664
- Krieger, D. (2005). Teaching debate to ESL students: A six-class unit. *The Internet TESL Journal*, 11(2). Retrieved from http://iteslj.org/Techniques/Krieger-Debate.html



- Kuhn, D. (1999). A developmental model of critical thinking. *Educational Researcher*, 28(1), 16–26. doi:10.3102/0013189X028002016
- Lederman, L. (1990). Assessing educational effectiveness: The focus group interview as a technique for data collection. *Communication Education*, 39(2), 117-127. doi:10.1080/03634529009378794

Ley Orgánica de Educación Superior (2014). Quito, Ecuador.

Malmir, A., & Shoorcheh, S. (2012). An investigation of the impact of teaching critical thinking on Iranian EFL learners speaking skill. *Journal of Language Teaching and Research*, 3(40), 608-617. doi: 10.4304/jltr.3.4.608-617

- Marin, M., & Pava, L. (2017). Conceptions of Critical Thinking from University EFL

 Teachers. *English Language Teaching*, 10(7), 78-88. doi:

 10.5539/elt.v10n7p78
- Martínez, C. (2011) Tres actividades de pensamiento crítico: debate, solución de problemas y dramatización aplicadas en una clase de inglés como lengua extranjera en una universidad privada ecuatoriana (Master's thesis).
 University of San Francisco de Quito. Quito, Ecuador.
- Mertler, C. (2016). *Action research improving schools and empowering educators* (5th ed.). Thousand Oaks, CA: SAGE Publications.
- Ministerio de Educación. (2016). Currículo Ecuatoriano. Retrieved from

 https://educacion.gob.ec/wp
 content/uploads/downloads/2018/09/MINEDUC-MINEDUC-2018-00089
 A.pdf
- Mota de Cabrera, C. (2010). Desarrollo del pensamiento crítico a través del discurso argumentativo: Una experiencia pedagógica en un curso de lectura

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- y escritura. *Entre lenguas*, 15(1), 11-23. Retrieved from http://www.saber.ula.ve/bitstream/handle/123456789/32629/articulo1.pdf;jse ssionid=4FA88E24AB11753F3438495FB9114FBE?sequence=1
- Nosratinia, M., & Zaker, A. (2013). Autonomous Learning and Critical Thinking:

 Inspecting the Association Among EFL Learners. *CIVILICA*,1(2),100-114.

 Retrieved from http://www.civilica.com/Paper-TELT01-TELT01_226.html
- Paul, R. W. (1985). Bloom's taxonomy and critical thinking intervention.

 Educational Leadership, 42(8), 36-39. Retrieved from

 https://eric.ed.gov/?id=EJ319813
- Paul, R. (1996). *Critical thinking workshop handbook*. Rohnert Park, CA: Centre for Critical Thinking, Sanoma State University.
- Pineda, C. (2003). Searching for improved EFL classroom environments: The role of critical thinking-related tasks. Bogotá: Departamento de Publicaciones Universidad Externado de Colombia.
- Pineda, C. (2004) Critical Thinking in the EFL Classroom: The Search for a

 Pedagogical Alternative to Improve English Learning. *Íkala, Revista de*Lenguaje y Cultura, 9, (15), 45-80. Retrieved from

 https://www.researchgate.net/publication/277834572
- Ramezani, R., Larsari, E., & Kiasi, M. (2016). The Relationship between Critical

 Thinking and EFL Learners' Speaking Ability. *English Language Teaching*, 9

 (6), 189-198. doi: 10.5539/elt.v9n6p189
- Reed, J. H. (1998). Effect of a model for critical thinking on students' achievement in primary source document analysis. (Ph.D. dissertation) University of South Florida. Retrieved from www.criticalthinking.org



- Richard, P., & Elder, L. (2008). *The Miniature Guide to Critical Thinking Concepts*and Tools, Foundation for Critical Thinking. Tomales, CA: Foundation for Critical Thinking.
- Robertson, K. (2006). Increase student interaction with "Think-Pair-Shares" and "Circle Chats". Colorin: Colorado. Retrieved from https://www.colorincolorado.org/article/increase-student-interaction-think-pair-shares-and-circle-chats
- Rodas, T. (2014) Critical Thinking Skills Development and English Improvement through Reading and Writing Activities at Lower-Intermediate Level in Sagrados Corazones High School in Cuenca, Ecuador (Master's thesis).

 University of Cuenca. Cuenca, Ecuador.
- Savani, R., & Tarighat, S. (2014). Critical Thinking and Speaking Proficiency: A

 Mixed-method Study. *Theory and Practice in Language Studies*, 4 (1), 79-87. doi: 10.4304/tpls.4.1.79-87
- Shen, P., & Yodkhumlue, B. (2012). A Case Study of Teacher's Questioning and Students' Critical Thinking in College EFL Reading Classroom. *International Journal of English Linguistics*, 2(1), 199-206. doi: 10.5539/ijel.v2n1p199
- Sousa, D. (2001). *How the Brain Learns, 2nd Edition*. Thousand Oaks: Corwin Press.
- Stirling, J., & McGloin, C. (2015). Critical pedagogy and social inclusion policy in Australian higher education: identifying the disjunctions. *Radical pedagogy*, 12 (2), 1-20. Retrieved from https://ro.uow.edu.au/cgi/viewcontent.cgi?article=3016&context=lhapapers



- Zhao, H., & Coombs, S. (2012). Intercultural teaching and learning strategies for global citizens: A Chinese EFL perspective. *Teaching in Higher Education*, 17(3), 245-255. doi:10.1080/13562517.2011.611874
- Zhao, C., Pandian, A. & Mehar, M. (2016). Instructional Strategies for Developing

 Critical Thinking in EFL Classrooms. *English Language Teaching*, 9(10), 14
 21. doi:10.5539/elt.v9n10p14



Appendix A: Participant consent form

Formulario de Participación Voluntaria

Nombre del estudio: Efectos de estrategias de pensamiento crítico en el desarrollo de la habilidad de hablar en el idioma inglés.

Investigador: Jessica Ochoa D. E-mail: jessicaochoa 92@hotmail.com El presente estudio tiene como objetivo analizar los efectos que tienen las estrategias de pensamiento crítico en el segundo idioma. Es de su completa decisión aceptar el ser parte del estudio o no. Después de haber aceptado, usted tendrá la opción de abandonar hasta antes del análisis de datos recolectados. Es importante recalcar que usted no será afectado de ninguna forma por el estudio y sus resultados; al contrario, su participación supone una valiosa contribución para la academia y futuras técnicas de enseñanza del inglés como lengua extranjera. El estudio comprende la aplicación de técnicas de enseñanza en el inglés y el impacto de las mismas en el dominio de la lengua. Se busca aplicar estrategias que promueven el trabajo en equipo y el progreso estudiantil. El tratamiento del estudio durará 3 meses en los cuales usted desarrollará actividades académicas las cuales serán analizadas para obtener medidas y sacar conclusiones. Todo resultado obtenido del estudio o tareas, no será incluido en su promedio de calificaciones.

Toda la información del estudio será de absoluta confidencialidad, así como resultados individuales de los participantes. Usted será asignado un número el cual solo usted y el docente tendrán conocimiento, y en caso de publicación del estudio como artículo académico, su identidad no será revelada por ningún concepto. Finalmente, es importante recalcar que usted no pagará por ser parte Jessica Elizabeth Ochoa Delgado

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estudio ni recibirá un pago por lo mismo.

Appendix B: Speaking Rubric

Speaking Rubric used to evaluate participants' oral production.



A2	Grammar and Vocabulary	Pronunciation	Interactive Communication					
5	Shows a good degree of control of simple grammatical forms. Uses a range of appropriate vocabulary when talking about everyday situations.	Is mostly intelligible, and has some control of phonological features at both utterance and word levels.	Maintains simple exchanges. Requires very little prompting and support.					
4	Performance shares features of Bands 3 and 5.							
3	Shows sufficient control of simple grammatical forms. Uses appropriate vocabulary to talk about everyday situations.	Is mostly intelligible, despite limited control of phonological features.	Maintains simple exchanges, despite some difficulty. Requires prompting and support.					
2	Performance shares features of Bands 1 and 3.							
1	Shows only limited control of a few grammatical forms. Uses a vocabulary of isolated words and phrases.	Has very limited control of phonological features and is often unintelligible.	Has considerable difficulty maintaining simple exchanges Requires additional prompting and support.					
0	Performance below Band 1.							

Source: University of Cambridge. (2003). Cambridge Key English Test 1 Student's Book: Examination Papers from the University of Cambridge ESOL Examinations.

Cambridge, United Kingdom: Cambridge University Press.



Appendix C: Cambridge Speaking Exam

KET TEST 1 SELF-STUDY

Speaking parts 1–2

Time allowed: 8-10 minutes

Part 1

In part 1 of the Speaking test you have 5–6 minutes to talk about personal information. The examiner asks you questions about your personal details, daily life, interests, likes, etc.

Answer these questions:

What's your name? and what's your surname? and how do you spell that?

Where do you come from?

What do you do/study?

Do you like your work/studies?

Who do you like going on holiday

with? Where did you go on your

best holiday? What is your favorite

time of the year? Tell me

something about your family

Part 2

In part 2 of the Speaking test you and your partner have 3–4 minutes to complete two exercises using the information cards that the examiner gives you.

You will work in pairs. Candidate A has a card with some

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information and Candidate B has a card with some question prompts. Candidate B has to use the prompts to ask questions to Candidate A. When the questions and answers have finished, the examiner will give you new information cards with different information. This time, Candidate A has to ask questions and Candidate B has to answer.

Skateboarding club

Candidate A, here is some information about a skateboarding club.

Candidate B, you don't know anything about the skateboarding club, so ask Candidate A some questions about it.

now, Candidate B, ask Candidate A your questions about the skateboarding club and Candidate a, you answer them.

Candidate A – your answers

Candidate B – your questions



SkaTeBOarDing CLUB

- open / now?
- cost / morning?
- where?
- dangerous / sport?
- phone number?

TV program



Candidate B, here is some information about a TV program.

Candidate A, you don't know anything about the TV program, so ask Candidate B some questions about it.

now, Candidate A, ask Candidate B your questions about the TV program and Candidate B, you answer them.

Candidate B – your answers



Candidate A – your questions

TV prOgraMMe

- programme / called?
- channel / on?
- time?
- website?
- interesting for / teenagers?

5

⁵ **Source:** University of Cambridge. (2003). *Cambridge Key English Test 1 Student's Book: Examination Papers* from the University of Cambridge ESOL Examinations. Cambridge, United Kingdom: Cambridge University Press.



Appendix D: Lesson Plan Sample

Lesson Plan:



Level 3, Unit 4, lesson A

Topic: Celebrations

Objectives: At the end of this class, students will be able to talk about

celebrations

Materials: English book, computer, projector, markers, paper, dictionary

Lesson Structure:

Activity

Vocabulary Presentation

20min

- Tell Ss the new topic of the new unit "Celebrations"
- Ask them to name celebrations they know.
- Show Ss slides with images of famous celebrations and ask them to guess the celebration that is under the squares.

Teacher Questioning. The teacher asks students the following



questions while presenting the vocabulary and during the whole lesson What other special days do people celebrate? Which celebration is your favorite one? Why? Which one is your least favorite one? Why? Can you think of special days that should be celebrated and aren't? During celebrations people usually spend a lot of money, do you agree or disagree? Why? What are you teaching children when you have those festivities? 20min Think-Pair-Share: Students think of an answer for the following questions, share their ideas with a partner, and finally share them with the whole class. What do people do during these events? Can you give me one example related to your country? Why do people do that? If you could change something from a celebration, what would it be? 40min Dialogue Show Ss slide 14 and ask them to describe the picture. Ask questions like: Where are they? What's their relationship? What are they talking about?



- Play the recording and ask Ss to listen and take notes about the three events they are talking about.
 Ask Ss to open their books on page 34 and check answers.
- Have Ss practice the dialogue. Maybe give them emotions to practice the conversation or music. Possible suggestions are:

Use baby voice to present dialogue

https://www.youtube.com/watch?v=6MYO5ouwVSY

Use angry voice to present dialogue

https://www.youtube.com/watch?v=nHRqTSgKJGg

Use a sad voice to present dialogue

https://www.youtube.com/watch?v=FlrGSngblQY

Debate

Students form two teams to have the debate

Students first gather ideas together

Students explain their positions to the other group.

Topic for the debate:

own ideas and opinions.

Is it correct to celebrate special days in schools? Why? Or Why not?

Success

Students are able to discuss about celebrations providing their

Indicator



Appendix E: Pictures taken during the treatment

Students working on Debates





Teacher Questioning strategy being applied





Students working on the Think-Pair-Share strategy







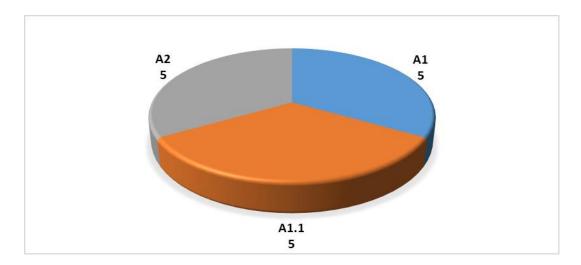
Appendix F: Pre-test and Post changes in relation to the participants' English levels on their oral production

Pre and Post-test table changes

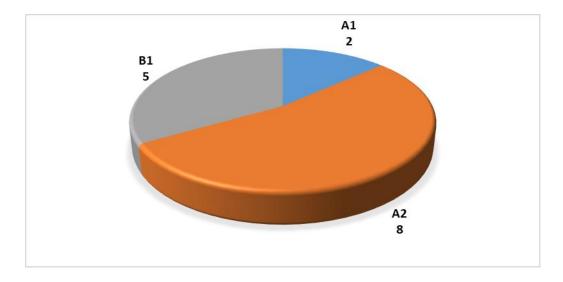
	Positive	Without	Minimum	Maximum	Mean	SD
	changes	changes	William	Waxiiiaiii	Mean	OD
Grammar and	11	4	0.00	4.00	2.27	1.67
Vocabulary	• •	·	0.00	50		
Pronunciation	13	2	0.00	6.00	2.80	1.66
Interactive	14	1	0.00	6.00	3.60	1.72
Communication						
Results	15	0	4.00	14.00	8.67	3.60

This graphic represents the participants' English level in the pre-test on their oral production. Five students had an A2. Five an A1, and 5 an A1.1.





This graphic represents the participants' English level in the post-test on their oral production. Five students had a B1. Eight students had an A2, and 2 students had an A1.





Appendix G: Spanish Focus Group transcript

Datos cualitativos trascripción

Investigadora: Vamos a hablar de tres estrategias aplicadas en clases. Las primeras son de las preguntas para desarrollar su pensamiento crítico, luego el think pair and share y los debates. Comenten que les pareció.Participante 1: Las estrategias me parecieron muy buenas porque nos permiten a nosotros hablar de manera fluida porque si nos equivocamos no importa porque de eso aprendemos. En el caso de los debates nos pareció interesante porque ya intentábamos ganar y queríamos hablar más y más para poder fundamentar nuestras ideas y defender lo que pensamos con el propósito de aprender más y de poder ganar más vocabulario.

Participante 2: De igual manera comparto mucho la opinión de la participante 1.

Pienso que las estrategias que fueron utilizadas fueron bastante amplias y
bastante buenas porque pienso que como estudiantes nos va a servir bastante en
los próximos niveles de inglés. No solo nos permite pensar sino también adquirir



un vocabulario bastante amplio en el momento cuando nos decían en las clases primero piensen, tómense un minuto para pensar y luego hablamos entre todos era bastante bueno porque escribíamos las ideas en el cuaderno y de igual manera en los debates queríamos todos hablar y por ganar. Era una metodología, una estrategia bastante buena y yo personalmente he aprendido bastante.

Participante 3: Yo también comparto con mis compañeras, bueno las estrategias utilizadas nos permiten interactuar tanto con Ud. como con nuestros compañeros. Las opiniones, la participación que teníamos nosotros era en base a nuestro diario vivir y se relacionan tanto con la materia y entonces pienso que sí es una metodología bien buena utilizar estas estrategias.

Participante 4: Yo también estoy de acuerdo con mis 3 compañeras.

Personalmente estas estrategias me han ayudado mucho a hablar con mis familiares que tienen este idioma. Las estrategias fueron muy dinámicas y muy divertidas. No se notaba lo que pasaban las horas de clases; o sea de 11 a 1 o de 9 de la mañana a 11. O sea no se sentía esa presión; es más nos faltaba tiempo para continuar con más actividades.

Participante 5: De igual manera pienso que las estrategias aportaban a fortalecer lo que es el habla y a extender nuestro vocabulario en inglés y fueron muy provechosas también los juegos y me llamaba mucho mi interés y también por aprender si antes no me gustaba mucho la materia, pero gracias a estas estrategias he aprendido muchas cosas nuevas y también me llama más la atención. Del mismo modo los juegos, los debates ayudaban también a mejorar.



Participante 3: Es bueno saber que nosotros también estamos estudiando justamente para ser profesores y que Ud. nos da un buen ejemplo en cuanto al usar estrategias. También ha estado pendiente mediante estos métodos que todos vayan avanzando, bueno no de la misma forma pero que vayan teniendo un aprendizaje bueno. Es como una motivación con un gran ejemplo que nos da.

Participante 6: Yo bueno de las estrategias que nos ha dado me ha gustado mucho ya que nos ha ayudado a poder nosotros hablar no solo en presente sino también en pasado, en futuro. A veces no se avanza tanto como algunos compañeros, pero yo creo que es más por decisión de uno mismo porque ya los ejercicios estaban ahí y nos ayudó bastante. Nos ayudó a que sigamos hablando más, a que sigamos pensando. Poníamos un cuaderno en el medio y todos tenían que colaborar con palabras o cualquier cosa. Pensamos razonamos y luego hablamos. Eso es lo que pensamos nosotros primero sería la definición de la palabra, sería como va conjugada la palabra y después poder dar una respuesta. Sería, como le digo, me ha gustado bastante; como dice mi compañera, no se sentía las horas que pasaba inglés, era algo chévere así que nos gustaba a todos porque todos jugábamos y mientras estábamos divirtiéndonos estábamos también aprendiendo. Antes no sabía bien hablar inglés y ahora si un poco más y voy a perfeccionar lo que es el idioma del inglés.

Investigadora: ¿Cuál les gustaba más y cuál les gustaba menos?

Participante 6: Bueno a mí lo que me gustó más fue los debates ya que nosotros al estar intercambiando información, unos que están a favor y otros que están en



contra, estamos nosotros pensando en nuestra mente en que podemos responder ante esa pregunta o respuesta que nos están dando y estamos viendo que palabras poner, si hablamos en presente si hablamos en pasado, si estamos diciendo bien las palabras aunque algunas digamos en español pero estamos intentándolo y estamos mejorando nuestro léxico.

Participante 3: A mí también me gustó la actividad del debate ya que este nos permite fomentar el trabajo colaborativo y cooperativo, nos permitió llevarnos de mejor manera con los compañeros y así generar un ambiente de confianza en el que todos podamos preguntar y pedir ayuda sobre alguna palabra que no sepamos o como expresarnos. Eso también es bastante bueno porque si trabajamos conjuntamente vamos a tener mejores resultados y vamos a aprender más.

Participante 2: A mí también me gustó el debate y creo que una de nuestras ventajas de la clase es que somos un grupo pequeño entonces era más fácil interactuar entre nosotros y que la docente nos ayude en palabras que no sabíamos el significado, pero teníamos, o sea, esas ganas de decirlo para poder debatir con el compañero y dar nuestras ideas.

Participante 1: Yo igual me sumo de igual manera con Uds. el debate fue una estrategia bastante amplia y una metodología nueva porque en los niveles de inglés anteriores no he utilizado este tipo de actividad. Pero también a mí me gustó el intercambio de las preguntas que hacíamos con los compañeros porque así se podía conocer más a los compañeros de clase, o sea una buena



interacción y quiera que no cuando íbamos conversando con todos los compañeros se aprendía. Si uno no sabía una palabra, se ayudaba con el otro compañero, se intercambiaba las ideas y de poquito a poquito se iba aprendiendo de todos. Entonces fueron las dos estrategias que más me gustaron.

Participante 5: Bueno a mí también me gustó más el debate y también las preguntas debido a que nos relacionamos con los demás compañeros, también todos hacíamos el esfuerzo por participar y eso nos ayudó mucho a mejorar nuestra fluidez y tener un poquito más de vocabulario.

Participante 4: Bueno a mí también si me gustó lo que es los debates porque la ventaja es que nosotros ya nos preparábamos muchas de las veces previamente y complementábamos con las ideas de los compañeros. Y una compañera mencionó sobre el trabajo cooperativo porque nosotros al ser un grupo nos esmerábamos entre todos por ganar al otro grupo y eso es algo que se comparte y que nos ayuda para trabajar entre todos.

Participante 7: Yo discrepo un poco del debate, o sea no digo que está mal. Era bueno, pero si tuviera que elegir elegiría una combinación de las preguntas que nos hacia la profesora sumado con el espacio que nos da el tiempo para pensar y así organizar nuestras ideas. Creo que esas dos técnicas en conjunto son muy provechosas y me gustaron más porque puedes responder las preguntas y además si la docente te da dos minutos para organizar lo que quieres decir vas a dar las respuestas muy buenas, aunque el debate también era bueno porque te ayudaba a pensar un poco más y como decían los compañeros traía ya ideas y



como desventaja tal vez sería que había temas que no querías defender, pero te tocaba defenderlos.

Participante 6: En cuanto es el debate como decía la compañera antes de comenzar teníamos ya algunas ideas preparadas, pero me gustaba así ya traíamos las ideas ellos ya decían otra cosa y teníamos que reformular esas ideas para poder enfrentar al otro equipo.

Participante 6: Bueno también lo que me gustó más aunque ya dije que fue los debates, pero también me gustó el hablar con los compañeros porque eso depende mucho; o sea yo realmente no es por creerme superior a mis compañeros o algo así pero sentía que la profesora se daba la vuelta o algo y no estaba pendiente y hablaban en español; vuelta en el debate estamos hablando abiertamente entre todos y ya no podemos hablar solo en español podemos decir si una palabra en español pero todas la ideas deben haber sido en inglés.

Investigador: ¿Algo que no le haya gustado?

Participante 2: yo pienso que cuando hicimos las conversaciones con los compañeros también como dice mi compañero hablábamos también en español y la profe como no se daba cuenta y como se nos hacíamos más fácil.

Participante 6: Bueno, como ya había mencionado lo de los debates me parece una estrategia bastante buena y nueva, pero también personalmente cuando recién se comenzaba eso para mí era como un poquito de nervios, un poquito estresante porque no tenía aun esa facilidad o las palabras fluidas para poder enfrentar y decir bueno si voy a dar mis argumentos. Eso personalmente fue un



poquito pesadito al principio y que, pero luego mientras más se practicaba las palabras iban fluyendo. Las palabras eran mucho más amplias y se iba interactuando mucho mejor.

Participante 5: Me gustaban los debates, pero considero que hay que elegir bien los temas para poder llegar a tener esos acuerdos entre sí. Más que competitividad a veces se generaban pleitos entre ellos eso ya no iba saliendo más allá de la metodología. Entonces creo que es importante los temas que se van a tratar en los debates.

Participante 7: sí, yo también opino hasta cierto punto está bien, pero si te desvías del tema ya no es provechoso ya que puede haber conflictos, entonces sí tendría que elegir algo entonces lo que menos me gusto seria el debate porque tenías que defender temas que no eran de tu gusto y no te sentías cómodo, por ende no podías dar lo mejor de ti.

Participante 2: yo prefiero el debate y yo sé que no nos gustan algunos temas, pero no se trata de gusto de tema sino se trata de poder defender o hablar en inglés. Ese es el punto: poder expresarnos quieras o no quieras. Poder expresarnos de algo que tú no quieras, de alguna necesidad que tengas de algo que quieras hacer para pedir a alguien. A veces no vas a estar de acuerdo con alguna persona de otro país y no por eso vas a dejarle de hablar a esa persona debes de pensar primeramente y de ahí dar tu opinión. Siempre es respeto ante todo y ya las enseñanzas vienen por añadidura.



Participante 1: Yo creo que sí se desarrolló bastante la fluidez al momento de hablar porque las actividades, o sea ya mencionadas anteriormente era hablar ya sea con el compañero con la profe. Responder frente a la clase, pero era hablar. Nosotros teníamos en ese momento que pensar lo que queríamos decir, pero teníamos que hablar. Teníamos que hablar porque para aprender necesitamos hacer las cosas y de una buena manera no importaba si nos equivocábamos, pero hablábamos y aprendíamos.

Participante 3: Yo también con mi compañera estoy muy de acuerdo porque uno para poder aprender una primeramente tiene que aprender a fracasar primeramente porque mientras más vamos cayendo, más vamos aprendiendo. La fluidez no está muy buena porque estamos recién comenzando y estamos todavía en tercer ciclo, pero yo sé que si seguimos trabajando con estas estrategias podemos avanzar mucho más. Y terminar teniendo mucha más fluidez y podernos comunicar con cualquier persona; podemos hasta estar hablando con un compañero en inglés. Ya no sería como una materia diferente. Como estoy hablando inglés por una materia o trabajo. Sería estoy hablando en inglés por un hobby. Poder hablar porque a uno le gusta no porque la sociedad te lo pida. Sino que tú debes aprenderlo, además de que es muy bonito aprender otras cosas, indagar, investigar que es innovar y eso es lo que queremos.

Participante 5: yo también pienso que las palabras, que nuestro léxico ha avanzado bastante, de cómo comencé antes eran las típicas preguntas que te hacían en inglés, eran sí, no y ya. Pero ahora el desarrollar el criterio de por qué, arguménteme, cuénteme algo más e incluso reconocer cuando es el pasado y



decir una respuesta en el futuro nos ha ayudado a tener un vocabulario bastante amplio y lo que se ha trabajado con esas estrategias aquí en el aula se ha perdido también el miedo a dar las ideas en inglés. Y pienso que si se ha avanzado bastante con esta metodología.

Participante 2: yo también comparto con la compañera, la profe no nos dejaba decir sí o no sino siempre por qué. Danos una razón de lo que está diciendo, argumente lo que dice. Entonces de acuerdo lo que ella nos ha dado ya nos compete bastante a nosotros a seguir aumentado nuestro vocabulario, nuestras palabras y formas de hablar en inglés para poder avanzar.

Participante 4: Yo creo que también hemos mejorado bastante en la pronunciación porque al estar hablando seguidamente nos permite corregir los errores que hemos tenido antes. Y además de estar en grupo pequeño tenemos la facilidad de podernos expresar todos los mismos días. Si el grupo es más grande ya hay veces que ya no se avanza, pero aquí podíamos expresarnos en un ambiente de más confianza.

Investigador: ¿Cómo se sintieron?

Participante 1: nervioso

Participante 6: O sea, al principio uno se siente así con un poco de miedo a poder expresarse y conforme una va aprendiendo más, uno se siente más seguro y quiere participar y quiere hablar dentro de esto. Entonces se va motivando y nos vamos sintiendo mejor y con más ganas de poder aprender.



Participante 5: al principio era un poco de nervios como todo no se sabe cómo iba a ser la profesora, los compañeros, las clases y eso era todo un pensar, pero luego el ambiente que se fue generando era un ambiente chévere que nos permitió aprender. Y yo me sentí súper chévere en las clases. Yo incluso creo que fue el mejor curso que tuve de todos los niveles de inglés. Creo que hubo un buen ambiente, se compaginó bastante lindo y hubo una comprensión bastante buena.



Proposal

Methodology

This chapter will include all the relevant information related to how the study was conducted. It will explain how the effect of the three critical thinking strategies, Teacher Questioning, Think-Pair-Share, and Debates were measured. Moreover, it will describe how the students' perceptions towards the strategies already mentioned were elicited.

Context

This classroom-based action research study was applied in an EFL classroom in an Ecuadorian University UNAE. This is the first public University in Ecuador to offer education-only related majors. It is located in the city of Azogues in Ecuador. Due to higher Education policies in Ecuador, students are required to obtain a B1 level in a foreign language in order to graduate stated in *Reglamento de Régimen Académico article 80*. Therefore, UNAE offers language courses to fulfill this requirement. There are 6 levels of English offered in the Language Institute of UNAE. To enroll in the final level of majors, students must take a proficiency B1 exam, which is designed by the teachers of the University. To teach English, teachers use English File and the Touchstone series and each level covers 6 units per semester. Participants had 4 hours of class per week with a total of 60 hours of English per semester.

Participants

There were 15 students in the classroom, whose ages ranged from 19 to 25 years old. Their English level was within A1 and A2 regarding the rubric used to measure their oral production. Students who participated hailed from different

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provinces in Ecuador, some of whom were first-generation college students. Students came from low or low-middle income; therefore, scholarships were given to many students by the government. The native language of all of the students was Spanish. This group of students was in the third level of English according to the leveling of the English department at UNAE. The participants passed the first and second levels respectively. There were 12 women and 3 men in the classroom. Each one of the students was completing a major in an education-related field. At the end of this course, students had to achieve an A2 according to the Common European Framework Reference (CEFR) for languages. All the participants were part of an intact class (an already formed group) and all of them were part of the study. This group was chosen because it was the only group the researcher had with that level of English.

Ethical Considerations

Following the policies of the University, one of the researchers asked the coordinator of the English Department for permission. The approval allowed us to start this research. It is important to mention that the UNAE supports research and production of new knowledge to help students improve their English proficiency. Moreover, authorities motivate teachers to do research in order to improve education in the country.

All the students were informed about the study and its purpose. Moreover, in order to apply this action research, the researcher asked students to sign an informed consent form that described "[...] what the study [was] about and what" students would do (Mertler, 2016 p. 162). Therefore, I was able to use all the data collected as evidence. All the participants accepted to be part of the study and Jessica Elizabeth Ochoa Delgado

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signed the informed consent.

This study took into account the confidentiality and anonymity of each individual who was not exposed to any situation that could harm them. The researcher changed students' names and last names to avoid further ethical issues.

Research Design

This study was a classroom-based action research project, which employed quantitative and qualitative tools to collect and analyze data. A classroom-based action research study involves conducting research in a classroom in which the teacher attempts to improve the students' performance by taking into account the quality and purpose of their practices (Convery, 2019). The study involved a pretest and post-test to measure students' oral production. A group pretest-posttest design is defined by Mertler (2016) as a kind of study in which no comparison is made, thus, there is no control group. Instead, therefore, the study was comprised of just one group which received the experimental treatment. Moreover, a focus group discussion was carried out at the end of the treatment to analyze the students' perceptions regarding the strategies applied, and to understand in depth the participants' point of view. This methodology helped to the collection of qualitative data. Ho (2006) in his study argues how focus group interviews, as a method of data collection, can be considered relevant in relation to other conventional methods employed in ESL research studies, as this method collects viewpoints and opinions of participants in detail.

Variables

Independent Variable: Use of Critical Thinking Strategies in an EFL

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classroom

Dependent Variables: Students' performance on oral production and their perceptions of Critical Thinking Strategies

Resources

This study required the elaboration of lesson plans from the teacher in charge of the class. Moreover, the creation of questions to ask in each class related to the topic presented was essential. The questions were presented in a PowerPoint presentation where all the students could visualize them from their desks. Therefore, some basic technological tools like a computer and a projector were needed. Students used their notebooks to write their ideas down when they were given time to think. Also, they used their English textbooks and sometimes their cellphones or English dictionaries to look for the meaning of words.

Data Collection, Techniques, and Instruments

As this research uses qualitative and quantitative tools to collect the data, the data collection and instruments will be explained in two parts respectively.

Quantitative Data

In order to collect pre-intervention data, students completed a Cambridge A2 speaking exam. All the students were assessed in three categories which evaluated oral production, described in the exam as grammar and vocabulary, pronunciation, and interaction. Students were evaluated following the same logic of the international exam. Students completed the pre-test in pairs. After the treatment, the same Cambridge A2 speaking exam was applied. All of the students were evaluated in pairs. A rubric was used which gave 5 points for each category previously described. In total, students were assessed out of 15 points.



To collect the quantitative data, I used the pre-test and post-test grades to illustrate the influence of the critical thinking strategies applied in the development of speaking skills. Later, in order to analyze the data, I used the SPSS 25 software with a significance level of 0.05. I used graphics (e.g. Histograms, etc.) to illustrate whether the variables' distribution is symmetric or asymmetric across the data set. These results helped to know the type of distribution that my variables followed, in order to decide the use of parametric or non-parametric tests. (The pre-test and post-test and rubric are available in Appendix 2).

Qualitative Data

The qualitative data was collected by applying a focus group discussion to a group of participants to know the students' points of view about the strategies applied in their English lessons. According to Flores and Alonso (1995), a focus group is a technique used in research which entails the collection of data by the researcher which involves the discussion of certain topics or questions by the participants of the study. It is said that focus groups can provide more meaningful information based on the interaction among participants and moderator (Lederman, 1990). This led to the collection of information from the participants in which they expressed their ideas freely, avoiding the interference of the researcher's prejudices in their opinions (Bertrand, Brown & Ward, 1992). Key participants were selected to be part of the focus group discussion. In order to get meaningful data, participants who had high, medium, and low scores in the post-test were chosen. A topic guide was created based on the objectives of the study, interesting aspects that came up during the treatment application, and the pre-test and post-test results. The moderator was the researcher, based on their familiarity with the Jessica Elizabeth Ochoa Delgado



study. The discussion was recorded and transcribed. Later, the data was coded manually and the information was classified into categories. These results were analyzed and interpreted. Furthermore, during the focus group discussion, a question guide was used to help students direct their conversation.

Procedure

Fifteen English language learners were part of this study. All the students belonged to the third level of English according to the leveling of the university. During the intervention, Teacher Questioning, Think-Pair-Share, and Debates were applied. Sometimes two of the strategies were used in each class] due to the importance of discussion in speaking ability. Teacher Questioning was mainly used in each class because of the nature of the strategy. Debates were planned ahead in order to organize the topic, the participants on each team, and the time. Students sometimes prepared their ideas at home to defend them during the debates. The intervention had a duration of 4 months, from April 2019 until July 2019. The topics were based on the university syllabus. We covered six topics during the semester: making friends, interests, health, celebrations, growing up, and around town. Each strategy was used based on the topics under study. To apply Teacher Questioning, the teacher created a series of high order thinking questions based on the topics. Think-Pair-Share was applied when students needed to interact amongst themselves. Debates were also based on the topics listed above. As Debates needed more preparation, this strategy was used mostly at the end of units in which students were able to use all of the new vocabulary and grammar structures learned during the Debate, in order to illustrate their improvement. For example, one debate topic considered whether Saint Valentine's Jessica Elizabeth Ochoa Delgado Página 69



should or shouldn't be celebrated. This Debate Topic is an example of the "celebrations" unit.

Data Analysis

The information processing was carried out in the statistical program SPSS 25 and the creation of tables and graphs in Microsoft Excel 2019. The results are expressed through measures of central tendency and dispersion. In addition, to determine the number of students with or without changes, absolute frequency measures were used. To determine the changes generated, the statistical test was used for related Wilcoxon samples, and decisions were made with a significance of 5%. On the other hand, the qualitative part was analyzed organizing the information in different themes. After that, the information was organized and categorized. Finally, the information was interpreted and summarized.



References

- Bertrand, J., Brown, J., & Ward, V. (1992). Techniques for analyzing focus group data. *Evaluation Review*, 16(2), 198-209.

 doi:10.1177/0193841X9201600206
- Convery, A. (2019) Encouraging practitioners' agency through action research approaches. *Educational Action Research*, 27(5), 647-650. doi:10.1080/09650792.2019.1674003
- Flores, J. G., & Alonso, C. G. (1995). Using focus groups in educational research:

 Exploring teachers' perspectives on educational change. *Evaluation Review*,

 19(1), 84-101. doi:10.1177/0193841X9501900104
- Ho, Debbie. (2006). The Focus Group Interview: Rising to the challenge in qualitative research methodology. *Australian Review of Applied Linguistics*. 29(1). doi: 10.2104/aral0605
- Lederman, L. (1990). Assessing educational effectiveness: The focus group interview as a technique for data collection. *Communication Education*, 39(2), 117-127. doi:10.1080/03634529009378794
- Mertler, C. (2016). *Action research improving schools and empowering educators* (5th ed.). Thousand Oaks, CA: SAGE Publications.