

# UNIVERSIDAD DE ANTIOQUIA

Trabajo de investigación presentado como requisito parcial para optar al título de: Licenciada en Lenguas Extranjeras

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# Implementing Problem-Solving Activities to Enhance Critical Thinking Among EFL Young

Learners

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June 2021

#### Abstract

This action research aimed to identify to what extent the implementation of problemsolving activities enhances EFL young learners' critical thinking. The participants were 15 students from PINJ (Programa de Inglés para Niños y Jóvenes) from Universidad de Antioquia. Actions consisted in the creation of problem-solving activities around subtopics related to students' realities and context: gender role issues and gender inequality within the families; elder mistreatment and abandonment; and violence on Mother's Day. The activities were developed introducing the issue, its causes and consequences, encouraging students to propose solutions from their point of view. Data collection instruments included a teacher journal, a student survey, and an interview with my CT. Findings suggest that problem-solving activities fostered students' critical thinking, participation, motivation, and language skills.

Key words: Problem-solving, critical thinking, language performance, motivation

# **Degree Requirement**

This action research project is submitted as a requirement of the Bachelor of Education in Teaching Foreign Languages (English-French) at the Escuela de Idiomas, Universidad de Antioquia, in Medellín, Colombia.

#### Acknowledgments

First of all, I would like to thank my family for their unconditional support during these years, especially my sister Doris for her love and for motivating me to finish my studies. Secondly, I want to thank my advisor Marlon Vanegas for all his support, accompaniment, patience, and great ideas that helped me to develop this project. I also want to say thanks to my colleagues Wilmar Sánchez and Sebastián Loaiza for their solidarity, trust, and support during these years of study and hard work. I am grateful for having had the opportunity to work with two extraordinary people like you. Last but not least, thank you, Universidad de Antioquia, for opening your doors to me and giving me this wonderful opportunity to become a graduate in foreign languages.

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#### Preface

This text presents the results of an action research project carried out in my experience as a service teacher in an English program for children and teenagers at Universidad de Antioquia in Medellín, Colombia. The purpose of this study was to describe to what extent the implementation of problem-solving activities enhances EFL young learners' critical thinking. The participants were fifteen students between 8 and 9 years old, most of them in 5th and 6th grade. In general, they were enthusiastic kids, always willing to participate during the lessons sharing their ideas, creations, feelings, and thoughts.

Therefore, I implemented a unit based on problem-solving activities to promote critical thinking among the students, developing relevant and close topics to their context. To explore the benefits of such implementation, I used three data collection instruments: a teacher journal, a students' survey, and an interview with my cooperating teacher. From the data analysis, it was possible to see that students' critical thinking skills improved by implementing problem-solving activities, having a significant impact in their critical reflection abilities and their lives and language development.

### **Description of the Context**

The setting of the study was the PINJ (Programa de Inglés para Niños y Jóvenes), a program offered by the unit of Extensión, which belongs to the School of Languages of Universidad de Antioquia. The courses take place in the main campus of Universidad de Antioquia, located in the northeastern zone of Medellín. The university is surrounded by important cultural, entertainment, and academic centers such as Parque Norte, Parque Explora, Jardín Botánico, and Parque E. The classes are taught during the weekends in the classrooms of Escuela de Idiomas (block 11). Such classrooms are spacious, fresh, and very well equipped. They have Internet, a TV SET, speakers, markers, and a blackboard. Besides, the teachers and the students have the chance to use the library and the computer room.

PINJ consists of 9 courses, each lasting 64 hours, and it is offered to children and young students from first to eleventh grade. It is an alternative to train students in aspects that can support their academic life regarding English use. The program has two main objectives to reach its goals: firstly, to develop students' communicative competence. They can achieve such a purpose by interacting with coherence and clarity in tasks related to their social, personal, and academic life through oral and written texts. Secondly, to train and encourage students to describe (with words and simple expressions) themselves, their families, and their immediate environment in oral and written form.

The English class was a level two course, dictated every Saturday from 12 to 4 p.m. The syllabus was developed under a task-based teaching and learning approach, promoting collaborative work and a reflective attitude towards texts, language, and culture. The class had

seven students, six females and one male. They were teenagers between 14 and 16 years old and between ninth and eleventh grade. These students belong to different economic backgrounds, and most of them live in Medellin, yet one of the students' lives in Barbosa, and another one lives in Entrerríos. Regarding their attitudes towards the class, I found out that they were very motivated to learn the language and were very participative and enthusiastic about the different topics and activities.

My cooperative teacher was from Quibdó, Antioquia. He is an EFL teacher with diverse teaching experience in universities and institutes. He has a bachelor 's degree in English and French from Universidad Tecnológica del Chocó; he has a master's degree in English didactics from Universidad de Caldas; and he holds a PhD. in Educational Sciences from Universidad Tecnológica de Pereira. Additionally, he has more than 12 years of experience teaching English and other subjects in different topics related to training teachers in pedagogical and research processes.

It is essential to mention that the cooperative teacher and the students were different for the second part of the practicum. My C.T. has a bachelor's degree in English and French from Universidad de Antioquia, and he has been working with the PINJ for a year. The students were fifteen young learners between 8 and 9 years old, most of them in 5th and 6th grade. Despite this course's virtual teaching modality, the young students were always enthusiastic about the activities and were always willing to participate. There was no pressure for participation, and most of them enjoyed sharing their ideas or the tasks they developed. Generally, students liked to

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answer questions about their daily life and their hobbies. During the classes were presented written and listening activities.

#### **Statement of the Problem**

I observed my class for five weeks before teaching them my first lesson. Through the observations, I saw how the lessons were mainly organized around the teacher's explanations, listening and reading comprehension, and examples. Moreover, I realized that the young students were very interested in learning English and that they were very active and participative regarding the teacher's different activities. In this sense, what caught my attention was that the students sought to go beyond what the teacher proposed in the various topics developed during the classes. Still, their interventions were limited to the repetition of models and examples presented by him.

On August 22, 2020 (as evidenced in my journal entry), the teacher introduced the daily routine topic. The teacher showed some slides with vocabulary related to the topic and some grammar structures. Then he set an example showing how to talk about daily routines, and students had to develop the same pattern. However, during the interventions, a 16 years old student manifested that her everyday life changed significatively because of the Covid-19 and that she could no longer do what she used to do. Instead of encouraging the student to express her thoughts and feelings further, the teacher asked her to remember what she used to do before the pandemic. I realized that the teacher's primary purpose was to develop the activity, which consisted of repeating the same pattern shown in the examples but adapted with their personal information.

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Another situation that caught my attention was evidenced in the journal entry for September 12, 2020. During this class, the topic of mental health was developed. Once again, the topic was "*reduced to elementary participation of the students, following the example set by the teacher, without holistically connecting them, and without generating a real and significant impact for their lives.*" During the interventions for this topic, one of the students manifested that she started to suffer from sleep disorders. I think that it would have been interesting to discuss the causes of the issue that the student expressed. Moreover, she could have listened to the solutions that her colleagues would have proposed. However, the teacher just listened to her intervention and continued with the next student.

The situations mentioned above caught my attention because, from my beliefs as a teacher, I like the idea of promoting critical thinking through language learning. Therefore, given the type of topics, the variety of interventions of the students, and their interest in learning the language, I saw an opportunity in this class to promote critical thinking in young students through problem-solving activities. As a critical pre-service teacher, I believe that it is vital to develop young students' critical thinking to have flexible minds that can readily absorb new information and respond to complex problems. I also believe that we need to allow students to discuss and propose solutions to real issues, situations that they're likely to face when they get outside the classroom.

According to Abdollahzadeh and Narafshan (2016), critical thinking gives the students the elements to question their context's different issues. At the same time, it increases their motivation and social action while they learn the language better. Moreover, it is essential to promote criticality among young learners in today's global and rapidly changing world. In this way, they can become critical thinkers who can make sense of information, analyze, argue, contrast, and make inferences instead of repeating patterns and grammar structures.

I firmly believe that the EFL classroom is the ideal scenario for that purpose, given the endless possibilities to bring all kinds of knowledge. In this regard, teachers need to give students a voice (Pennycook, 1990) to select the issues relevant to their lives, to choose the course materials, to accept and reject discourses, and most importantly, to explore their own identities and question the status quo (Rashidi, 2011).

Considering the aspects mentioned above, I decided to develop a series of activities based on problem-solving learning. I developed the idea taking into account the "highly political nature of language itself, and the many issues around second language education." (Pennycook, 1990. p. 305). Therefore, problem-solving activities would allow students to develop or improve their critical thinking to find solutions to issues relevant to their lives.

## **Theoretical Background**

The complex living conditions and the large amount of information circulating in our current society raise the need for critical thinking citizens capable of solving the issues of their daily lives and proposing effective solutions to the social problems of their context. For this reason, critical thinking is considered an essential skill for the 21st century and a desirable educational outcome by educators (Lai, 2011). Concerning the objectives of this research project, this theoretical background includes the exploration of the following concepts: Critical Thinking, Critical thinking in the EFL classroom, and Problem-solving.

# **Critical Thinking**

Many authors have defined the concept of critical thinking from various perspectives. Sarigoz (2012) states that "critical thinking means that the individual features his/her such intellectual thinking skills as reasoning, analyzing, problem-solving, reading comprehension, scientific thinking, creative thinking, and judgment and deciding accurately" (p. 5315).

According to Pineda (2004), critical thinking involves much more than the accumulation of information. It is about finding issues that require relevant answers and supporting those answers with solid arguments. Martínez and Niño (2013) argue that "critical thinking means no to take everything for granted, but open the eyes and develop skills to problematize and support our positions by activating our curiosity, motivation and mental skills" (p.148). Zárate (2016) indicates that critical thinking is about solving problems related to daily life.

Critical thinking requires the development of a series of skills to achieve its purposes. Such skills involve higher-order thinking processes, including observation, reflection, inference, analysis, synthesizing information, and decision-making, enabling individuals to make reasoned judgments in the classroom and everyday life. Enciso et al. (2017) state that critical thinking involves values and cognitive skills. Among the values, critical thinkers should be prudent, humble, empathetic, and intellectually upright. Regarding cognitive skills, the critical thinker must develop abilities such as interpreting, augmenting, inferring, analyzing, evaluating, making proposals, creating, and making decisions according to his/her context. Moreover, he/she must be capable of seeking relevant and reliable information. Regarding the development of critical skills in young learners, Law (2012) states that it is crucial to help them improve those skills to deal effectively with the amount of information they receive every day, so they become responsible citizens. In this sense, teachers of young learners should give the proper importance to promoting critical thinking in the classroom. Shek (2018) argues that young learners are already critical thinkers, capable of displaying a significant degree of insightful thinking. The teacher's task is to develop those skills as much as possible, so young learners are prepared for the world's changing demands.

## Critical Thinking in the EFL Classroom

Nowadays, critical thinking is one of the main objectives in education since it can give the students the elements to question different issues of their context. In this sense, the perspectives of language teaching are changing. Today's language teachers must aim not only for their students to acquire the grammar features or the communicative aspects of the language but also to develop students' critical abilities that allow them to question the world they live in and find solutions to issues related to their lives. In this regard, the EFL classroom becomes an ideal scenario to foster criticality among students through its political and cultural components. Rashidi (2011) states that

critical students and teachers are planned to bring their actual life experiences and needs to the classroom to demystify power implications in pedagogical activity and struggle to alter the means and ends of learning to form a more ethical, educational, and social environment. (p. 252)

According to Liaw (2007), "critical thinking involves the use of information, experience, and world knowledge in ways which allow language learners to seek alternatives, make inferences, pose questions, and solve problems, thereby signaling understanding in a variety of complex ways" (p.51). Similarly, Pineda (2004) talks about a categorization that allows students to monitor their process in becoming critical thinkers. Such categorization is designed around a taxonomy of cognitive skills based on precepts from Bloom and Facione. Such skills include knowledge, interpretation, analysis, evaluation, inference, explanation, and self-regulation. Hughes et al. (2004), as cited in Arias et al. (2013), talk about three essential critical thinking skills. The first one is an *interpretative skill*, related to conveying meaning clearly; the second one is *verification skill*, which has to do with an inquiry for the reliability and truthfulness of an argument; and the third one has to do with reasoning skills, which involve the decision-making process.

It is important to bear in mind that critical thinking and language competence cannot be developed overnight. Both are ongoing processes that require time and investment. However, teachers can improve them through thought-provoking, stimulating activities, such as those based on problem-solving.

#### **Problem-Solving**

One way of developing students' critical thinking is through the incorporation in the EFL lesson plans activities based on problem-solving. According to Fisher (1995), "problem-solving is applied thinking to real problems that require conscious effort, involving strategies such as formulating, defining, implementing, and reviewing possible solutions" (p. 107).

Bashith and Amin (2017) argue that problem-solving uses problems from context, which authenticity and reliability to students' reality, help them think critically to make decisions and propose solutions. Regarding the process of problem-solving activities, Mathews (2007) presents four main steps that include: 1) Introduction of the problem; 2) exploring students' previous knowledge about the problem; 3) proposing solutions, and 4) discussing the consequences of each solution and selecting the most viable one.

It is important to remark that, for these activities to meet their objectives, they should be created around topics related to the reality and interests of students (Jiménez & Gutiérrez, 2019). Besides, the activities should be developed through fun activities such as poems, songs, videos, puzzles, word games, role-playing, and storytelling. In the same way, according to Gómez (2018), the activities must meet specific characteristics to avoid students' tiredness or frustration. Some of these characteristics have to do with the duration, length, accessibility, readability, and clarity.

In conclusion, this theoretical background set the basis to implement problem-solving activities to promote critical thinking among the EFL group mentioned above. Having established the theoretical background for this action research project, I will continue by presenting the research question, the objectives, and the action plan.

# **Research Question**

How can the implementation of problem-solving activities enhance critical thinking in a group of EFL young learners?

# **Objectives**

# Main Objective:

To describe the way problem-solving activities enhance EFL young learners' critical thinking. Specific Objectives:

• To identify the problem-solving activities that foster the development of critical thinking.

- To define the way problem-solving activities impact students' lives.
- To reflect on the impact that problem-solving activities have on students' language learning.

### **Action Plan**

In order to answer the research question stated for this project, different actions were developed for two months and a half, starting in February and finishing in May. The actions were divided into four stages. Firstly, I created the problem-solving activities around the family's topic, which was proposed in the program's syllabus, to develop it during the whole semester. Secondly, I critically introduced the family's topic by showing examples of the different types of families in our society. The purpose was that students could distinguish the different types of families and find one to identify themselves.

Thirdly, I developed four subtopics related to the family, which allowed me to introduce the problem-solving activities critically. Such subtopics were: *gender role issues in families*, *gender inequality within the families, elder mistreatment and abandonment*, and *violence on Mother's Day*. The problem-solving activities were developed so the students could feel related to the situations and associate them with their own experiences, which would allow them to propose solutions from their point of view.

### **Development of Actions**

This section describes the actions developed during the implementation of problemsolving activities, aiming to meet the research objectives. In February, we had the first two classes, which were introductory to the general topic for the semester: *the family*. I critically introduced the topic, presenting the diversity of families that exist in our society. I allowed students to identify themselves within any of the families presented, understanding that each family is different and completely normal. During the first lesson, students watched two short videos about different types of families. After watching the videos, I encouraged them to think about the components of each family. I also asked them to find similarities and differences among them. For that activity, we discussed a series of questions related to what was presented in the videos and to the students' personal experiences. Eventually, I displayed a set of pictures and descriptions, in which the students had to match each description with its corresponding image. Finally, as an extension and personalization activity, they drew a picture of their own family. They also wrote a short text describing what type of family they have, answering the question: *why do you think your family is special*?

For the second lesson, we continue identifying different types of families. This time we did it through a short story called "*Families are different*" by Nina Pellegrini. During the activity, we developed the three stages of reading comprehension. For the pre-reading stage, I showed the students a photo of the book's cover, and they brainstormed the following questions: What do you see in the picture? What type of family do you think they are? What do you think this book will be about? Who do you think is going to tell the story? The purpose was to give them the chance to infer and predict. For the while-reading stage, students read aloud short passages of the story. I asked them to pay attention and to take notes about the ideas they got and the aspects that called their attention. For the post-reading stage, we developed a drill to check their understanding of the story. Finally, students extended and personalized the activity by

finding similarities and differences between the story's family and their own families. For this activity, they created a poster and presented it to the class.

In March, we had four lessons. This month, I introduced some critical thinking topics regarding the family to develop through problem-solving activities. I created the lessons based on Freire's problem-posing process adapted by Wallerstein (2004). Such adaptation consists of five questions that lead the discussion from concrete to analytical. In these questions, "people are asked to 1) describe what they see; 2) define the problem; 3) share similar experiences of their own lives; 4) question why there's a problem, and 5) strategize what they can do about the problem". (p.37)

During the first lesson of March, I introduced the *gender role issues in family's* topic, aiming to identify this issue in families and discuss the different causes, consequences, and possible solutions. To develop this topic, we worked around a story called "PiggyBook" by Anthony Brown. The story tells the difficulties that face a mother who has to take care of all the household chores. Before starting the reading, I taught students some useful opinion expressions with their respective examples so they could have some tools to express their ideas. For the prereading stage, we inferred with images the most complex vocabulary of the book. For the whilereading stage, I read the story to the students, constantly checking for comprehension. The students were very attentive during the reading. Moreover, the images of the book helped them a lot to understand and to capture their interest. At the end of the reading, we began the discussion with a series of questions to check comprehension of the story and to listen to students' feelings about it. After discussing the questions together, we drew up a table of causes, consequences,

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and solutions to the gender problem of the Piggot family. Once we filled the chart with the information, I asked the students to draw together some conclusions about the ideas we collected. Several students asked to participate, and at the end, we wrote the ideas they most agreed to conclude.

For the second lesson of March, I presented to students the *gender inequality within the families*' topic. For this activity, students watched three different videos related to gender stereotypes and gender inequality. The idea was to understand the concept and to see some examples represented. Through different questions, we discussed those stereotypes, identifying how they were present within the families.

The purpose of the discussion was to allow students to express what they consider wrong or right. Also, to encourage them to propose solutions that can help to change those situations. For the final activity, I presented to the students four cases that reflected inequality within families. Each student had to choose one case, and they had to propose a solution and share it with the whole class. During the fourth lesson of March, we continued working on the inequality topic. During this lesson, we developed the extension and personalization activity. I presented to the students an example that reflected some inequalities related to housework in one family. Eventually, they had to identify a situation of inequality within their own families. Students described the problem, proposed solutions to it, and committed to improving it. They presented it to the class. In April, we had two lessons; both developed around the topic of grandparents. During the first lesson, the warming-up activity allowed students to talk about their grandparents, describe them, and express their feelings for them. Eventually, students watched two videos about situations with grandparents. The first video was for checking comprehension, using past tense to answer some questions. The second video was to promote reflection on the way to treat our grandparents. Students discussed the question: *have you ever mistreated or ignored your grandparents?* After finishing the discussion, I asked students to write a letter to their grandparents. In this letter, they had to share the best memories with their grandparents, and they had to express their love to them. Each student read aloud the letter to the whole class.

The second lesson of April was about *elder abandonment and mistreatment*. This lesson's purpose was to identify the difficulties that many elderlies face in their lives and to propose solutions to give them a more dignified life. During the first activity of this lesson, students took turns to read an adaptation of a Brothers Grimm tale called *The Old Man and His Grandson*. During the reading, I was constantly checking for comprehension, and once we finished, we discussed the question *Why do you think children or grandchildren mistreat or ignore their parents or grandparents*? After the reflection, I presented a news item about the abandonment and mistreatment of the elderly in Colombia. After reading the news, students should write a short presentation to present in class (in word or PowerPoint), answering the following two questions: *What do you think of this situation experienced by the elderly in our country? What solutions do you propose so that our elderly population has a better quality of life*?

The last lesson was in May, and we addressed the issue of violence on Mother's Day. To introduce the topic, the students watched a video about Mother's Day. Then, we talked about what they understood from the video and what they felt after watching it. Eventually, each student read a passage from the book *My Mom* by Anthony Browne, and similar to the descriptions presented in the book, they had to say in a couple of sentences why their mothers are special. For the final activity, I presented to the students a newspaper report about violence on Mother's Day in Colombia. They had to identify the causes of this problem and the consequences and proposed solutions to this issue in our country. We filled a chart with the answers.

To answer the research question, I collected data through three different instruments: first of all, I recorded the class observations in a journal during the development of the activities to register all the events, actions, outcomes, situations, and personal reflections that came up during the research. Burns (2009) stated that in action research, observations are important because they allow us to record vital information and reflections in "an ongoing way" (p.89). Second, I implemented a survey to the whole group to know their opinions about the problem-solving activities and their impact on their lives.

Finally, I conducted a semi-structured interview with my cooperating teacher. According to Burgess (as cited in Burns, 2009), interviews are conversations with specific objectives. In this regard, I carried out this interview to reflect on the impact of problem-based activities on developing criticality among students.

#### **Findings and Interpretations**

To analyze the data gathered throughout this action research, I cross-checked the data collected through journals, interviews, and surveys, using a triangulation method to assure their validity. According to Burns (20), triangulation uses different sources to obtain different views, therefore, being more objective.

Firstly, I went over my journal entries to find out the most important and relevant aspects, productions, and events presented during the lessons. Consequently, I started to select the most pertinent information to meet the research objectives. Then, I reviewed the two data collection protocols that registered the students' and the cooperating teacher's perspectives and impressions regarding the problem-solving activities.

Accordingly, I followed the data analysis process proposed by Burns (2010), looking within the information for patterns that could help me find the answer to my research question. Eventually, I coded the data identifying the main categories to meet my research objectives. So, after reducing and merging the number of categories that emerged from the analysis, I decided to come up with the following four final main categories: 1) Critical thinking development; 2) Impact of problem-solving activities on students' lives; 3) Students' motivation and participation; 4) Language performance.

## **Critical Thinking Development**

As a result of implementing different problem-solving activities, data revealed that the students already had a reflective critical capacity that was put into practice from the first activities. The activities developed during the classes allowed the students to understand

different problems of social order, reflecting on their causes and consequences. Besides, they had the possibility of proposing, from a critical perspective, different solutions for these problems. Students showed their critical reflective ability from the first activity, as the following excerpt from one of my diaries illustrates:

It is well known that in our country, there are taboo topics. In this sense, I was afraid to present families with parents of the same sex. However, my students' responses showed that they know all types of families, even the diverse ones. When they explained the different types of families portrayed in the videos, they talked about all of them with all naturality, making clear that they were already familiar with diversity, even in the family context. During these activities, students showed awareness of the importance of the families and expressed their respect for the difference. (Journal 2/27/2020)

In this sense, we can say that young students come with seeds of critical reflection. Still, according to Murawski (2014), it is necessary to establish a good learning environment to stimulate their critical capacities both in the classroom and beyond. The author also states that "students who implement critical thinking skills approach the courseware more thoughtfully and effectively, ask more challenging questions and participate in the learning process more intensely." (p.25)

Data also revealed that the problem-solving activities allowed students to identify situations of inequity and injustice, and they were able to express their thoughts of disagreement

with such situations. I described in one of my journals a more specific case that exemplifies this matter:

The different opinions that the students gave about the situations presented in the videos reflect critical thinking about conditions of inequity or inequality since they are providing more profound reflections and solutions. They expressed their disagreement with what they consider wrong and proposed solutions that could help change those situations. Similarly, they showed the ability to put themselves in those different situations and express what they would do from their personal view or perspective. (Journal 3/13/2021)

In this sense, it should be noted that critical thinking implies having cognitive skills and values. According to Enciso et al. (2017), critical thinkers should be prudent, humble, empathetic, and intellectually upright. Such abilities would help them accept and reject discourses and, most importantly, explore their own identities and question the status quo (Rashidi, 2011). It can be inferred then that the students reflected in a critical way when identifying situations of inequity, showing their disagreement with them, and proposing solutions to this issue.

Additionally, I found that the students also had a critical capacity to reflect on issues that affect Colombian society, issues we can see every day in the news. To exemplify the above, in one of the activities related to the topic "elderly abandonment," one student formulated the following solution to the problem: "I think we need to ask the government for free nursing homes for abandoned elders. The government should give them food and protection" (Journal 17/04/2021).

The previous answer reflects an attitude of a citizen who advocates for fulfilling a right for another fellow citizen. Therefore, it can be said that problem-solving activities had the power to transform students into critical thinkers and agents of change. In this regard, Giroux (as cited in Ruiz, 2013) states that:

Critical thinking is a political act that holds the key to the continuance of democracy and an open society. This act implies teaching the students to think and reflect for themselves and to gain a better understanding of reality, truth, and knowledge through critical thinking. (p. 209)

This finding shows the positive impact that the implementation of problem-solving activities has on developing critical thinking in young students, potentially preparing them to think and act critically in the promotion of democratic values.

Although it is a process that requires a lot of patience and continuous accompaniment, it is crucial to promote this type of thinking, especially in learning English, given its political and cultural nature. Encouraging critical thinking from an early age is shaping the citizens of the future so that they are responsible, empathetic and can debate speeches and fight against situations of oppression or injustice.

## **Impact of Problem-solving Activities on Students' Lives**

Data collected demonstrated that the problem-solving activities developed in classes from a critical perspective gave students elements that will help them in their lives when solving a conflict, respecting a difference, expressing a point of view, etc. I found that problem-solving activities positively impacted the students' lives and their environments. They were more aware and committed to their roles at home, respecting the differences and using the dialogue to solve conflicts. For instance, one student said that he believed his only obligation at home was to study. However, he made a personal commitment to begin organizing his toys, making his bed, and being more helpful with the housework, because it is a shared responsibility. (Journal 20/03/2021)

It can be said that the problem-solving activities made the students aware of their responsibilities as members of a family, leading them to reflect on their actions, what they should improve, and how to bring that home. Moreover, students gave importance and value to the activities because they connected them with daily life situations. They expressed how they felt regarding the activities in terms of what they found unfair or incorrect.

Furthermore, it can be said the problem-solving activities had the power to transform students' lives, creating critical thinkers and agents of change. Pescatore (2007) supported this, stating that critical thinking instruction fosters "engagement in the public interest rather than just self-interest, enabling young people to become significant forces for change" (p. 339). Correspondingly, when the cooperating teacher was asked about the impact of critical thinking in students' lives he asserted that "el pensamiento crítico es sumamente importante para ellos porque se dan cuenta de cómo solucionar problemas en sus hogares y eso les ayuda a crecer bastante como personas. Lo otro es que ellos también se comprometen, no solo durante las clases

sino también con sus responsabilidades como estudiantes y como miembros de una familia" (C.T. interview, 13/05/2021).

## **Students' Motivation and Participation**

Data revealed that students felt motivated when developing the problem-solving activities and participated actively and meaningfully with their productions and interventions. In this regard, Abdollhzadah and Narafshan (2016) state that critical thinking activities increase EFL learners' motivation because they encourage them to understand their world better and take social action while learning meaningfully. This is evidenced in the following journal lines:

All the students participated actively during the problem-solving activity. Some of them shared their screens to show the whole class their creations. Some of them created slides with texts and images to illustrate their ideas. Some even included photos of their families. Other students made hand drawings of their families and showed them through the camera. I found that the topic and class activity made students participate spontaneously. They were eager to share their productions and experiences. (Journal 6/03/2021).

Furthermore, data suggested that the students' positive response in terms of motivation and participation had to do with the fact that the topics were directly related to their realities and contexts. In that sense, the activities were appealing and attractive to the students because they could connect them to their own life experiences, as one student claimed in the survey: "me gustaba mucho cuando un tema se parecía a cosas que vivimos en la casa o en la escuela porque así era más fácil entender qué pasaba, mirábamos por qué pasaba y nosotros podíamos decir soluciones a eso". (Survey, 15/05/2021). The above was also corroborated by the cooperating teacher, who argued the following: En las clases vi que los estudiantes estaban muy comprometidos con ciertos temas y preguntas. En especial aquellos relacionados con temas de pensamiento crítico, cómo responder sobre diferentes tipos de familias, parejas LGTBI, las situaciones críticas que podían vivir los abuelos, los problemas de las madres, etc. Esos fueron los temas donde vi que más se comprometían y donde más participaban. (C.T. interview, 13/05/2021).

Consequently, the student's significant level of motivation and participation shows that it is essential to connect critical thinking topics with their contexts and realities. In this way, students can find significant and useful elements for their lives, and they will be more willing to share their ideas, thoughts, and feelings.

## Language Performance

Data demonstrated that when students were engaged in problem-solving activities connected to their reality, they showed an improvement in language proficiency, putting a significant effort into expressing their ideas and thoughts. Some students said that as the topics were of their interest or knowledge, this motivated them to participate with their opinions, making a significant effort to speak and write in English and requesting help from the teacher to express themselves. In this way, they considered that they learned more. The above can be evidenced in the following answer of a student when I asked in the survey about their language improvement:

(...) Como los temas eran de nuestra cotidianidad uno quería hablar más para poder decir bien lo que piensa y participar mucho. Si de pronto nos equivocábamos la profe nos corregía y así íbamos aprendiendo cositas, palabras, expresiones y mejorando en el inglés. (Students' survey, May 15, 2021)

As indicated by the preceding, students' interest in the topics and their willingness to participate increased their desire to learn more aspects of the language that would allow them to express their ideas correctly. In the same way, they welcomed the help and corrections of the teacher to achieve the purpose of expressing their ideas, thoughts, and feelings.

In this regard, Gómez (2018) states that despite fluency and accuracy limitations, when EFL students are genuinely engaged in the negotiation of meaning through critical thinking activities, they use the language (orally and in writing) in the best of their possibilities to produce interpretations and arguments in the target language. Similarly, Jiménez and Gutiérrez (2019) point out that students can improve their language level significantly through critical thinking activities, using different vocabulary and grammar structures to express their viewpoints about different topics. In this sense, students can construct more elaborate discourse as a result of being engaged in critical thinking enhanced activities.

However, during all the classes, the participation of the students was not entirely in English, as they sometimes had difficulties expressing some ideas. For this reason, codeswitching was an ongoing strategy during classes, a process that gradually helped to increase the use of English in student interventions. This can be evidenced in the following journal entry:

I realized that students are good at comprehending texts and videos. They have a vast vocabulary, and they can understand written and oral texts of a medium level of difficulty. Also, during their interventions, they try to use the grammatical elements provided to them. However, they tend to use Spanglish when they find complex expressions or use more Spanish when engaged in a topic. In this sense, code-switching has been an excellent strategy to help them to express their ideas correctly. (Journal. 3/06/2021)

According to Malaysia (2013), code-switching is necessary when learning a language, not only as a communicative resource but also as a compensatory learning strategy, "meaning that using L1 in an L2 context plays a crucial role for learners to organize, enhance and enrich their speech" (p.190)

This finding reflects the positive and significant impact of developing enhanced critical activities in the EFL classroom on developing language competences of medium proficient students. It can be said that when students feel encouraged to express their points of view, they make an effort to use language to make themselves understood, and the result is the increase of their communicative competence.

#### **Conclusions and Suggestions**

This research project was set out to identify to what extent the implementation of problem-solving activities enhances EFL young learners' critical thinking. The results suggest that students significantly improved their critical and reflective skills through the development of problem-solving activities. Moreover, the activities allowed the students to identify situations of social order that included inequity, violence, or injustice, understanding their causes and consequences, and giving them the chance to propose solutions from a critical stance. In addition, it can be said that the English classroom was a proper setting to develop these issues and that the early age of the students was not a limitation. On the contrary, young students already have seeds of critical thinking that needed to be promoted to prepare them as citizens. Moreover, the closeness and relationship of the topics with the context and the students' reality led to a significant motivation, making the students participate actively, with deep reflections and well-elaborated productions.

Additionally, the reflections that problem-solving activities promoted had a significant impact on the students' lives. Students' critical reflections led them to understand their roles as family members (thinking about modifying behaviors) or their role as citizens when advocating for other people's rights. Consequently, problem-solving activities gave the students elements to improve the critical skills that will help them solve a conflict, respecting a difference, stating a point of view, or expressing a disagreement with an injustice.

Finally, the problem-solving activities also had a positive impact on the students' language performance. The results showed that when the students were engaged in topics close to their realities, they made a significant effort to express their ideas and thoughts orally and written. However, they had some difficulties using English the whole time; therefore, codeswitching was a valuable communication tool that allowed them to learn new vocabulary and expressions, which they gradually used in different classes.

Although problem-solving activities positively affected students' development of critical thinking and even their language performance, some limitations of this study should be pointed out. First of all, time constraints prevented more reflection and in-depth discussions of problem

solutions and relevant related issues. Secondly, virtuality limits the type of activities, the participation of some students, and the implementation of group work, which is very important in developing critical thinking. And thirdly, the limitation to a single topic (the family) restricted the development of other issues that could be of interest to the students and could develop a more critical perspective from the young learners.

To conclude, my suggestion for teachers who want to continue working in this field is that they should develop different topics, close to the students' contexts and interesting to them. Moreover, I think it is important to develop the activities for a more extended period, preferably for a year, to learn about the scope of these activities on EFL young learners' learning process and critical thinking.

#### Reflection

Conducting this action research project was a very enriching experience for me, as a person and as a future teacher, from different aspects. First of all, I had to overcome two initial challenges: the age of the students and virtuality. Secondly, I found that promoting critical thinking should be included within the objectives to be achieved in my English classes.

To begin with the challenges, I have to say that this action research project was designed to work with a group of adolescents; however, I had to work with children between 8 and 9 years old due to some changes. The change of the target audience scared me at first as I thought that problem-solving activities could be complex for such young students. However, this change gave a positive result because it allowed me to assess how important it is to promote critical thinking from the youngest age and learn about the great reflective capacity children have. Additionally, the other challenge that taught me significant lessons was working from virtuality. It took hard work, time, and devotion to design the lessons and activities to work virtually and get the students motivated and participating. This led me to explore new ideas and resources that will be useful in my future classes. I must also say that although virtuality limits and restricts aspects such as collaborative work and time management, it is a good and enriching way of learning.

Finally, after seeing the positive results in developing the critical thinking of young EFL learners, I remain interested in introducing students to this field in my classes. I believe that we need more critically oriented classrooms. I am also convinced that the language teaching classroom is an ideal scenario for that purpose, given the endless possibilities to bring all kinds of knowledge. In these lines of thought, I intend to be a teacher who is aware of her students' needs and realities and who will help them find alternatives to transform those realities. I want to engage my students in discussions around relevant issues, giving them the opportunity and the elements to raise questions about inequalities of power and encourage them to question their own internalized systems of beliefs.

To conclude, being an educator is a huge responsibility. It involves great social commitment. When we have a real vocation, our best interest is to transmit the best to our students and encourage them to be excellent citizens with critical abilities and capacity for action. We don't need more content players. In our current society, we require committed citizens willing to change situations of inequity, inequality, and injustice. We need to break the mold, and

as teachers, we have the power to do it, and for this purpose, we have valuable tools such as critical thinking.

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