

**PROBLEM BASED LEARNING AND ITS IMPACT ON LEXICAL
COMPETENCE ON THIRD GRADERS**

**APRENDIZAJE BASADO EN PROBLEMAS Y SU IMPACTO EN LA COMPETENCIA
LÉXICA EN TERCER GRADO**

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SCHOOL OF EDUCATION

UNDERGRADUATE PROGRAM IN BILINGUAL EDUCATION

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PBL AND ITS IMPACT

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Table of content

List of appendices	4
List of tables	5
Abstract	6
Chapter I: Introduction	7
Statement of the problem	8
Rationale	10
Chapter II: Literature Review	14
Lexical Competence	14
Problem Based Learning.....	17
Problem Solving Activities	21
Chapter III: Research Design.....	25
Type of Study.....	25
Context and Population.....	27
Instruments.....	28
Instructional Design	30
Chapter IV: Data Analysis and Findings	35
From Code-Switchers to Proper Speakers	37
Coherence in the Speech Through the Use of Grammatical Aspects	44
Meaning in the Oral Production through the Implementation of Vocabulary Learned....	49
Chapter V: Conclusions and Implications for Further Research	54
References.....	58
Appendices	64

List of appendices

Appendix 1. Consent format-school	64
Appendix 2. Consent format-students' parents	65
Appendix 3. Lessons planned	65
Appendix 4. Interviews Format	69
Appendix 5. Field Notes Format	70

List of tables

Table 1. Long term retention results	43
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Abstract

The aim of this study was to identify the impact of implementing Problem Based Learning (PBL) to help EFL learners develop their Lexical Competence. The participants were 6 Third graders (2 girls and 4 boys), from a bilingual private school located in Bogotá, Colombia. Their oral production in the interviews along with audio-recordings and the observations in the field-notes were corroborated through data triangulation. Subsequently, we analyzed the data collected following the qualitative and action research methodologies. Findings evidence that PBL impacted learners' lexical competence shown in three categories: first, changing from code-switchers to proper speakers; second, acquiring coherence in the speech through the use of grammatical aspects; and third, giving meaning to their oral production through the implementation of vocabulary learned.

Key words: Lexical Competence, Problem Based Learning (PBL), Problem Solving Activities.

Resumen

Este estudio tuvo como fin, identificar el impacto de la implementación de Aprendizaje basado en Problemas en la Competencia Léxica de los estudiantes. Los participantes fueron 6 estudiantes de tercer grado, (2 niñas y 4 niños), de una escuela privada bilingüe ubicada en Bogotá, Colombia. La producción oral en las entrevistas junto con las grabaciones de audio y las observaciones en las notas de campo, fueron corroboradas a través de triangulación de datos. Posteriormente, analizamos los datos recolectados utilizando las metodologías cualitativa e investigación-acción. Los resultados muestran que el Aprendizaje basado en Problemas tuvo un impacto en la competencia léxica de los estudiantes, que fué revelada en tres categorías: La primera, de alternantes de código a hablantes adecuados; segundo, adquiriendo coherencia en el discurso a través del uso de aspectos gramaticales; y la tercera, significando la producción oral a través de la implementación de vocabulario aprendido.

Palabras clave: Actividades de Desarrollo de Problemas, Aprendizaje basado en Problemas, Competencia Léxica.

Chapter I: Introduction

On a third grade classroom in a private school located in the north side of Bogotá, lexical problems have been identified as students' lexicon in English, as their Foreign Language (EFL) is insufficient for language outcome. Lexical problems were evidenced when they were asked to produce orally in English which demonstrated they had a limited lexicon as it was hard for them to reach a successful and complete communication. As it is common that from an early age students learn English through memorization, they are not required to reflect upon new means of language construction, thus, learners do not understand new language content, as what they get is an abstract concept (Al-Qahtani, 2011). In other words, memorization has been implemented as the main practice to learn a new language, leaving logical thinking aside (Chon, 2007). Furthermore, on this study, we aim to analyze the impact of Problem Based Learning (PBL) on students' Lexical Competence, as we consider that this approach promotes the acquisition of new vocabulary through the implementation of problem solving activities, which we will explain later on in this document.

Furthermore, lexical problems were evidenced on third graders in a school in the north of Bogota, leading us to require new ways of promoting lexis learning and innovative ways of interacting with the language. As mentioned by Caro & Rosado (2017), lack of vocabulary handled systematically may increase lexical and communicative competence overall. Our study, intends to apply the PBL approach, that may foster lexis knowledge on third graders while encouraging them to have an active role as problem-solvers (Brush & Sayen, 2017). Hence, PBL may satisfy the need of promoting and exploring new ways of

PBL AND ITS IMPACT

lexis language learning by applying activities that involve problem-solving skill development.

As these lexical problems have been identified, we will define the concepts needed to understand the theoretical support of this project through the literature review.

Furthermore, this study includes the research design, type of study, instruments, instructional design and population to provide accountability of the processes carried out. Likewise, this research will include a data analysis based on the results obtained from the elements applied previously. Lastly, our attempt to conclude this research and the implications for further research will be exposed.

Statement of the problem

As lexical competence is a subcategory of the communicative competence, its development is indispensable for proper communication; however, our target population showed evidence of lack of lexical competence. Therefore, the core of this paper is the analysis of the low development of lexical competence as a problem in the English learning process on third graders from a private bilingual school. In the following lines, our effort is to provide an accurate description of this problem. In this regard, lexical competence, according to Schmitt (as cited in Chon, 2007), is defined as the ability to properly use words and its accurate practice. In addition, Nation, agrees that “a rich vocabulary makes the skills of listening, speaking, reading, and writing easier to perform” (as cited by Al-Qahtani, 2015, P. 8), therefore; the importance of lexical competence lies in the impact that it has on linguistic and communicative competences and consequently language intake as well as written and oral production. Throughout this paper, we present the description of

PBL AND ITS IMPACT

the problem and how it was identified, the approach to be implemented, and a short discussion of a few other studies related to our problem.

Underdevelopment lexical competence on third graders from a private bilingual school is the problem that was identified through the application of two observational techniques. Students had difficulties to create successful oral production due to their inadequate awareness and words knowledge. This issue was identified throughout the application of collecting qualitative data (note taking) and audio recordings. While analyzing the information collected by note taking during the observation of the class, we concluded that even though students tried to communicate their ideas during the class, most of the time it was not possible for them as they did not have enough vocabulary knowledge. On our second observational technique based on audio-recordings, the main struggle identified was learners' hesitation to express their own ideas in order to convey their answers or comments, due to the absence of vocabulary knowledge. Throughout these two observational techniques, it was concluded that there was a need to implement an approach to increase students' lexical competence.

In order to tackle the lack of lexical development on our students, we decided to implement Problem Based Learning (PBL), which could allow them to foster their lexicon. Ormond defines PBL as the “approach to instruction in which students acquire new knowledge and skills while working on a complex problem similar to those in the outside world” (as cited in Doghonadze and Gorgiladze, 2008, p.101). Besides fostering vocabulary PBL may also have students develop other aspects like problem solving skill; nevertheless, this is not the focus of our study. Likewise, a study developed by Doghonadze and Gorgiladze (2008), demonstrated that by the implementation of this teaching approach,

PBL AND ITS IMPACT

there was a positive impact on subject knowledge learning. Furthermore, a study carried out by Lin (as cited in Iswandari, Prayogo & Cahyono, 2017, p.609) concludes that “through PBL approach, students gained a significant advancement in the vocabulary test and higher proportion of vocabulary use”, this is the reason why we are implementing PBL. Hence, through the use of PBL, it has been evidenced that this approach enriches students’ lexicon as proved by Lin (as cited in Iswandari et al., 2017, p.609), and according to Doghonadze and Gorgiladze (2008), it impacts problem-solving skill positively.

According to the above, PBL has shown an impact on students’ lexical development. Therefore, it led us to formulate the following research question and objective: What is the impact of the implementation of Problem Based Learning on third graders’ lexical competence? Thus, our main objective is to analyze the impact of the implementation of Problem Based Learning on third graders’ lexical competence.

Summarizing, third graders from a private school in the north of Bogotá showed low performance on language production due to their limited lexis knowledge. Their lack of lexical competence does not enable proper language and words usage as well as assertive language production. This hesitation on our students’ language outcome, was evidenced in two applied observational techniques. Consequently, as described on the multiple asserts and benefits that PBL brings up, our efforts are to analyze the effect of the implementation of PBL as a strategy to foster students’ lexical competence.

Rationale

The importance of the development of lexical competence at an early age is to foster students’ communicative and linguistic competences. Consequently, due to the low development of these, our population encountered some difficulties to create successful oral

PBL AND ITS IMPACT

production, thus failing in their communication with others (Al-Qahtani, 2015). Therefore, it is relevant to support from a theoretical and observational standpoint the importance of developing this study. As a result, throughout further studies, we took into consideration three main fields. First, Colombian EFL community; second, the bilingual education in the school for third graders, and lastly, contributions for us, as teachers.

The main reason why we became interested in this topic was due to the results obtained from a needs analysis carried out in an English class from a private bilingual school in Bogotá, Colombia. The problem we could identify was that students had a low familiarity with the target lexicon, which affected their ability to express their ideas.

Therefore, we considered that a possible cause of this problem lied on the lack of exposure from students to the target language, English in this case. Consequently, the implementation of the PBL approach could trigger the acquisition of new vocabulary. As a result, these topics caught our attention because of the needs that were found on some English teaching sessions.

By the implementation of this educational project in Colombia, the teaching and learning EFL community will be benefited. In the EFL field, some authors have developed the lexical competence in their students which has brought different positive outcomes such as students' expression of thoughts while increasing the language learning process (World Applied Science Journal, 2013). Besides, other positive outcomes are the effect of lexical competence on students' writing processes to compensate the lack of linguistic resources in order to convey meaning (Chon, 2007), and the development of speaking skills which makes students feel comfortable creating good relationships between students and teacher (Hadee, 2012). However, in Colombia this academic field has not been explored deeply.

PBL AND ITS IMPACT

Due to the lack of the development and application of studies related to lexical competence and the implementation of (PBL), this project aims to contribute to the Colombian EFL community. Consequently, this could expand and promote the knowledge and the benefits of the development of lexical competence, taking into account the Colombian context and students' specific needs by offering an analysis in regards to this matter. In other words, through the application of this project in the Colombian context, some of the benefits promoted by the development of lexical competence may benefit the learning and teaching EFL community.

Furthermore, the benefits for the school and our population lie in the following lines. Firstly, this research could benefit the school because throughout the implementation of PBL, students might be able to improve their ranking on areas where vocabulary and problem solving activities are required when attempting international tests, placing the school in a better position. Secondly, the development of our project may impact third graders in the way that it could promote the development of lexical competence through the implementation of PBL, so that they could be capable of conveying orally their ideas in a more elaborated way. Moreover, due to the fact that students will be able to have better problem solving skills in order to communicate effectively by using new vocabulary, they could have a better EFL learning process. In short, throughout the implementation of this study, we discussed the contributions to this school and for third graders from a private school in Bogotá.

Now, as pre-service teachers, we may find some benefits on the application of a different approach than the current one, that is established on the target school. It is important to come up with different ways of promoting lexical knowledge and its relevance

PBL AND ITS IMPACT

on English language teaching. Therefore, this is how we will benefit as pre-service teachers, as we will find new practices of applying the PBL approach in our classes while being innovative. In other words, this project may be a cutting-edge methodology as it has not been applied in our particular context nor setting.

Lastly, by implementing the PBL approach, one of the possible effects could be students' lexical competence enrichment. In addition, it includes students' problem-solving skill improvement; which also could be applied on real life situations and not only on language production, since it involves a series of cognitive aspects related to daily life (Doghonadze and Gorgiladze, 2008). In this paper some aspects have been discussed, such as the way we became interested in this field, the benefits this study has and some literature as well as a few studies related to our research project. Furthermore, the importance of our project in some of the existing theories and literature lie in offering an analysis about how the implementation of PBL can impact third graders' lexical competence in a private school in Bogota, Colombia. On the whole, in the literature and studies mentioned above, we addressed the ability to solve problematic activities as a component of the PBL approach into the classroom, aiming to increase and enrich their lexical competence.

Chapter II: Literature Review

Lexical Competence is an important aspect to be developed in EFL classrooms in order to have a successful language learning and teaching process. In order for us to implement a proper research study, it is important to explore furtherly on the constructs that are the basis for this research. In this particular case, Problem Based Learning (PBL), Lexical Competence and Problem-Solving Activities as a component of PBL. Along this paper, the importance of each construct will be developed while explaining their connection to students' learning language process and their relevance for the project. Lexical competence will be introduced in a first stage. Later on, Problem Based Learning will be defined with its principles, phases and effects on students' learning process. Finally, we will explain the importance of problem solving activities with its impact on lexical competence.

Lexical Competence

When we realized that students from third grade in a bilingual private school in Bogotá struggled on language production, we found out this was due to their limited lexical knowledge in their L2. However, in order to tackle this issue appropriately, there is a need to review, reinforce and define the main concepts that lexical competence entails. Caro & Rosado (2017), explain how the term lexical competence makes reference to lexis as a unit. Lexis does not address one particular aspect on the knowledge of words; rather than that, it embodies a series of aspects on its definition that will be studied below. Therefore, on the following lines our effort is to give a clear meaning on the concepts that lexical competence entails.

PBL AND ITS IMPACT

In order to properly define lexis, there is a need to demonstrate that it does not merely involve the knowledge of a word and its meaning. According to Schmitt & Meara (as cited in Chon, 2007), it comprises a series of word units, and these units relate to other units creating a network of meanings that include, but are not limited to, polysemy, collocation, ambiguity, and frequency. Better explained, it means that lexis is not the same as the knowledge of words and its meaning; its definition goes further and lies on the proper usage of the words and what this usage entails. Therefore, when using a word properly, users need to link some other aspects in order to produce words accurately such as relevance, spelling, pronunciation, phonology, morphology, among other aspects. As Caro & Rosado (2017) state, when the vocabulary is brought up, it is usually related to words and meanings; while lexis, on the other hand, is not exclusively linked to the word itself and its meaning, but it expands to include other layers of lexical knowledge. Furthermore, this broader view of the concept might change how lexical pedagogical practices are instructed.

On the one hand, regarding the definition of lexical competence and in an effort to provide an accurate description, it is important to define competence in advance. The term competence is such a wide and broad term to define, but we will base our definition on the Ministry of Education of Colombia, which defines it as “the set of knowledge, skills, abilities and individual characteristics that allows a person to perform actions in a given context ...” (as cited in Caro & Rosado, 2017, p.11). This means that an individual possesses a certain set of parameters to succeed on their daily performance duties.

On the other hand, according to another study by Quintanilla, Méndez and Rodríguez (2017), we can identify the two elements that are part of the lexical competence.

PBL AND ITS IMPACT

Mistakenly, it was seen as an area only needed in grammar learning. The purpose of their study was to reflect lexical competence as a tool to produce oral and written communication and how through it, not only language learning could be easier, but at the same time it may boost confidence among students. Lexical competence is seen from two sets of elements; the lexicon elements and grammatical elements, which are the communicative source and the word by word structure. At the moment of acquiring a new language, “comprehension and production carry the same value, therefore both have the same importance at the moment of L2 learning” (Quintanilla, Méndez & Rodríguez, 2017, p. 75). In relation to lexical competence as a trigger for language production, Al Qahtani (2015) states that knowledge of vocabulary allows language use and increases lexical competence; therefore, comprehension and production are side-by-side when it comes to language learning. By understanding lexicon and grammatical elements, their role on second language learning, L2 learning and outcome processes might be successful and comprehensible.

Based on the definition lying above for lexis and what it entails, and the definition of competence reviewed, we can state that lexical competence deals with the components mentioned on the definition provided by the MEN, in relation to Lexis, which is captioned within the linguistic competence by Caro & Rosado (2017). However, this definition stays short in terms of addressing what lexical competence really entails. Consequently, Caro & Rosado (2017) define lexical competence as:

a cluster of knowledge (form, meaning and use of a lexical item), abilities and skills that a person develops and deploys in different contexts of communication. Learners can resort to their mental lexicons and construct varied relationships, which

PBL AND ITS IMPACT

contribute to lexical size and depth by activating knowledge appropriate to the communicative purpose, the interlocutor and the social context. (p. 207).

Taking the studies considered above, lexical competence was discussed from different sides, such as the definition and the impact in communication and comprehension skills. The definition of lexical competence is more accurate by identifying it as the core of communicative competence performance and not merely as the knowledge of words and knowing how to pronounce them, but it is a more complex term that involves a series of language aspects such as collocation, background knowledge, context usage and lexical abilities (Bezukladnikov, Shamov & Novoselov, 2013). Also, it was evidenced that to be able to achieve a second language learning process, it is necessary to learn the lexicon not only as means of a grammatical use (on the morphology of the words), but also as a tool for comprehension, interpretation and communication purpose (Al Qahtani, 2015). By understanding the core of lexical competence, and what it entails in L2 written and oral production, our chosen population might be able to improve their communication and comprehension skills.

Problem Based Learning

Problem Based Learning (PBL) is an approach that could help third graders from a private school in Bogotá to foster their lexical competence. PBL has been defined by Iswandari, Prayogo & Cahyono (2017) as “a student-centered pedagogical approach in which students learn about a subject through the experience of solving an open-ended problem found in trigger material” (p.608). Keeping this into account, there are different studies that demonstrate a positive impact of the application of PBL on students’ learning process. Along this document, we explained different aspects of PBL and how it can

PBL AND ITS IMPACT

contribute to the development of our project. Thus, some principles, phases, effects of PBL and its connection with lexical competence will be discussed.

There are some principles of PBL that contribute to our students' improvement of their learning process. Firstly, Myers. et al. argued that some of the aspects of effective learning that can be developed on students by the implementation of PBL, are students' engagement and confidence with problem solving situations, critical thinking, team-work practice, and connections to real life circumstances (as cited in Iswandari et al., 2017, p.608). Secondly, we consider that by applying PBL in the class, students will develop problem-solving strategies and acquire disciplinary knowledge. Moreover, students will also be encouraged to have an active role as problem-solvers as it has been proposed by Glazewski et al. (2016) that "PBL is effective in helping students master both discipline-based content and higher-order thinking skills, including problem solving, critical thinking, and decision making" (as cited in Brush & Sayen, 2017, p. 165). In brief, PBL's principles play an important role in students' learning process development.

Besides, there are PBL phases that influence students' learning process. First, problem analysis is the first stage to be followed in this approach; it consists on providing students a problem to be analyzed in order to stimulate their high thinking skill to learn a topic (Iswandari et al., 2017). In this stage, students could increase their vocabulary repertoire since they will be focused on solving problems as they acquire new vocabulary. Second, self-directed learning is the phase of PBL in which students spend time for individual study and analysis of the topic in order to get a solution for a problem. Finally, the third phase which is reporting phase is in charge of deep discussions developed by students about the problem and its solution (Iswandari et al., 2017). Thusly, problem

PBL AND ITS IMPACT

analysis, self-directed learning and reporting are the PBL phases that impact students' learning process.

We find viable that, as in different studies, the development of lexical competence in different PBL stages is appropriate, since it may allow us to implement different activities on third graders in order to achieve this purpose. One analysis that supports the previous statement is the one mentioned by Wirkala and Kuhn in which it is explained that “students engaged in PBL instruction versus lecture-based instruction performed better on a number of outcome variables including content knowledge and argumentation” (as cited in Brush, & Saye, 2017, p.8), which means that by implementing PBL activities there is a positive outcome regarding knowledge about a subject. In brief, the development of lexical competence in the different phases of this approach through the implementation of different activities stimulate the development of students' learning process.

Moreover, there have been several positive effects by the implementation of PBL on learners' EFL learning process. On the one hand, one of the effects PBL has is that “[PBL]... helps to improve the quality of learning by developing students' reflective critical and collaborative skills” (Yew & Goh, 2016). On the other hand, an analysis made by Strobel & Barneveld (2009) proved that regarding long-term knowledge retention, performance, skill based assessment, and mixed knowledge, PBL approach is more effective than the traditional ones (as cited in Yew & Goh, 2016, p.76) . Furthermore, a study carried out by Lin concludes that “through PBL approach, students gained a significant advancement in the vocabulary test and higher proportion of vocabulary use” (as cited in Iswandari et al., 2017, p.609). On the whole, different studies have shown that PBL

PBL AND ITS IMPACT

impacts positively students' EFL learning process and specifically their vocabulary acquisition.

Taking into account the effects of PBL on students' learning process, lexical competence development plays a central role in this project. Regarding this connection, Al-Batel (2006) suggests that it is necessary to promote context-building activities with a view to increase students' lexicon, instead of providing isolated lists of vocabulary (as cited in Caro & Rosado, 2017, p.206). For this reason, we consider that PBL could be an approach to be implemented on third graders from a private school in order to foster their lexical competence because of the activities that can be applied through PBL, which consist on providing students problems related to their own environment where they can feel involved. As Myers & Botti (2000), Tan (2004), Prince & Felder (2006) and Hung, Jonassen, & Liu (2007) proposed, learners "show confidence in problem solving situations, and make connections between the classroom and everyday life" (as cited in Iswandari et al., 2017, p.608). Hence, as mentioned by Iswandari et al. (2017) by the incorporation of PBL environment education, students' vocabulary related to their own context could increase while having the opportunity to learn language instruction and experience it on their daily basis. To sum up, the development of lexical competence is directly linked with the implementation of new vocabulary based on their context, which may foster their language knowledge through the application of PBL in this project.

In conclusion, PBL is an approach that could promote the development of third graders' lexical competence from a private school in Bogota, through the following aspects: First, the principles of PBL promote connections to real life circumstances through a series of aspects developed by students and the development of problem-solving strategies. In

PBL AND ITS IMPACT

addition, phases of PBL such as problem analysis, self-directed learning and reporting phase were explained. Taking into account PBL phases and principles, it is evidenced some positive effects in the classroom such as the improvement of learning quality, effectiveness regarding long-term knowledge retention, performance, skill-based assessment and mixed knowledge. Therefore, the development of lexical competence on third graders from a private school in Bogotá could be developed throughout the implementation of the PBL approach.

Problem Solving Activities

Since we will implement activities with the aim to foster the Lexical Competence, we are to address unknown lexis for our population using their existing knowledge and skills on new circumstances; which is in summary the goal we have with the activities to implement. Consequently, we aim to foster the development of lexical competence in our population through the implementation of problem solving activities as a component of the PBL approach. Furthermore, the importance of problem solving activities in the teaching process, the definition of problem, as well as the abilities involved in the problem solving activities and its impact on third graders' lexical competence are explained in the following lines.

Problem solving activities play an important role in language learning and teaching process. Regarding the activities to be implemented, Vygotsky (1978) suggests “pupils need to link all new learning with previous learning, finding the conceptual links and extending understanding (as cited in Wallace et al., 2013, p. 31-32). Additionally, Vygotsky proposes that “unless children's learning is firmly embedded in an active problem-solving process, then much of the factual content is lost anyway” (as cited in Wallace et. al, 2013,

PBL AND ITS IMPACT

p. 31-32). According to the previous information, if students jump from one topic to another without reflecting on what they previously know and without using that knowledge to solve problems, they tend to forget what they are learning. For the reasons above, we can suggest that activities implemented to third graders along with the PBL approach should be related to the resolution of problems with topics and vocabulary linked from one activity to another.

It is necessary to state the definition of problem in order to understand the connection of problem solving activities with this research project. On the one hand, Copeland, defined problem as a challenging and puzzling situation and creative process in which problem solvers attempt to define goals and pursue actions in order to reach them (as cited in Orgovanyi-Gajdos, 2016, p.48). On the other hand, problem solving is defined by Ghodrati, Bavandian & Moghaddam (2014) as “a cognitive process that imposes control over memory and leads memory toward appropriate selection of activities” (p.1093). Based on the definitions lying above, it is our attempt to define the theoretical foundations for problem solving activities with the aim to understand its purpose in this project.

Through the implementation of problem solving activities as a component of the PBL approach, the development of lexical competence could be promoted. Since humans have a variety of abilities, Wallace, Belle, Cave, Diana, Maker & June (2013), explain how the combination of these skills lead to solving problems dealing with challenges and the creation of new ideas and products. One of these abilities is the linguistic one in which this project is focused on, since it is associated with the use of words to reason, explain ideas, evoke emotions and persuade others. The capacities that are involved in the process of problem solving are intuition, memory, reasoning or logic, metacognition and creativity

PBL AND ITS IMPACT

(Wallace et. al, 2013, p. 4-5). Some of these capacities may have an impact on students' lexis as it is explained in the next paragraph.

Creativity and reasoning are the capacities involved in problem solving activities that may develop lexical competence as part of the linguistic field. Creativity is an essential capacity in problem solving since students “think of, develop, and implement new or appropriate ideas and solutions or to bring unusual ideas together in a new way” (Wallace et al., 2013, p. 6). Reasoning or logic is defined by Wallace et al., (2013) as “the capacity to link ideas in systematic steps that can be explained or justified” (p.6). In addition, Wallace et al., (2013) propose “reasoning or logical thinking is used when evaluating ideas in problem-solving and also is a key element in critical thinking” (p.6). We consider that by taking into account these specific capacities involved in the process of problem solving, we could propose and develop different activities that enhance students' lexical competence.

In the application of problem solving activities in the field of language teaching, there is a specific impact on students' ability to acquire vocabulary. As it is proposed by Doghonadze & Gorgiladze (2008), the vocabulary and grammatical structures are not given explicitly to students, but through the process of problem solving, which are inferred from examples and contexts (as cited in Doghonadze & Gorgiladze, 2008, p.104). On the same study, PBL was applied throughout the implementation of problem solving activities. It displays the presentation of new vocabulary, grammar and texts, where teachers did not give students a reading-made answer but they had to analyze the context and situation. Furthermore, they received guidance from the teacher who led them to find synonyms and antonyms in order to understand the words semantics by themselves. This study demonstrated that there was a positive impact regarding vocabulary acquisition and subject

PBL AND ITS IMPACT

content knowledge. Thus, problem solving can be implemented on third graders as a component of PBL with the aim to develop their lexical competence.

Summarizing, by implementing problem solving activities, there are aspects that impact students' lexical competence. First of all, we explained the importance of problem solving activities in the teaching process and the definition of problem. In addition, the abilities involved in the problem solving activities and its impact on third graders' lexical competence was explained. In regards to the connection of this theoretical construct with our research project, we suggested that activities implemented to third graders along with the PBL approach should be related to the resolution of problems including certain capacities such as creativity and logical thinking to enhance students' lexical competence.

In conclusion, lexical competence plays an important role in foreign language and learning processes. Thus and so, students' lack of lexical competence could be addressed by the implementation of problem solving activities as a component of PBL. The importance of these theoretical constructs, their implications and benefits in the acquisition and learning of a second language, and for the development of our project were discussed in this paper. On the whole, through the application of PBL and the development of problem solving activities, lexical competence could be fostered.

Chapter III: Research Design

In the EFL learning process on third graders from a school located in the north of Bogota, Colombia, we identified that learners hesitated on language production, which caused a struggle on their language learning process. We evidenced that the reason why this was occurring, is because students lacked of lexical competence on their target language, as they have the accurate knowledge in their mother tongue but not in the foreign one (p. 6, Baker, 2001). Formerly, pre-service teachers figured out that this could be one of the reasons why students did not succeed on language production. Problem Based Learning (PBL) along with problem solving activities applied to third graders may foster lexical competence in order to modify the efficiency of their interaction and language production.

Consequently, the purpose of this chapter is to display the research design and the techniques that were used to examine the impact of PBL on student's lexical competence, as well as to expose the instructional design. For such purpose, two observational techniques and one non-observational technique were applied to gather all necessary information to overcome this issue. Such techniques will be described below, along with the research method carried out, and their consequent activities, lessons and indicators afterwards.

Type of Study

Our attempt to foster lexical competence on third graders from a private school in Bogotá, took place in their own setting and context where the main issue was identified. The evidence of low Lexical Competence was established by carrying out a needs analysis explained later on this chapter. Since we evidenced this lack of development on lexical competence, we carried out a qualitative action research process as through the data

PBL AND ITS IMPACT

collection we aim to study the language interactions and communicative processes in our population, as well as the effects of PBL in their natural environment in a non-numerical process. The importance of this research method and the way it relates to our study lays on the following lines.

Qualitative research is a form of systematical and empirical research turned into meaning (Shank, 2002). Our manners of empirical research state that this study is carried out within their natural setting in order to make sense of new constructions to the target population (Denzin and Lincoln, 2000). This means that the research deployed within their natural setting, may lead us to gather new knowledge on the empirical application of the selected tools, systems, etc. Consequently, our research will be carried out to gather new knowledge by means of the target issue.

Action Research is the method to be followed along this project. According to Creswell (2012), “action research uses data collection based on either quantitative or qualitative methods or both. However, it differs in that action research addresses a specific, practical issue and seeks to obtain solutions to a problem” (p.577). In addition, action research is compound by three main stages. The first stage is the identification of a given issue, second, teachers and practitioners’ involvement towards the solution of the problem through the development of a plan to be applied, and finally, the implementation of the plan and the reflection upon the results obtained (Creswell, 2012). In our case, the problematic situation identified on third graders is their difficulty to communicate effectively due to their lack of vocabulary. For this reason, we consider that Action Research is adequate to address this problem to obtain a solution when following its stages.

PBL AND ITS IMPACT

In order to reach the objectives of this project, we followed four main stages. These main stages were proposed by Kemmis and McTaggart which are planning, acting, observing and reflecting. Taking into account the model, planning is the step in which the problem is identified and a plan of action is developed. The action step consists on the development of some interventions into the problematic situation. In addition, the following phase refers to the observation of the effects of the actions taken previously. Lastly, the last step focuses on the reflection, evaluation and description of the effects triggered by the actions taken in order to understand the process (as cited in Burns, 2010, p.7-8). Finally, these stages are crucial for the development of our project.

After finding out third grader's difficulty with their lexical competence, we proceed to get a strategy to be applied in the classes. Aside, we implemented PBL with problem solving activities during the sessions, as the action taken to have an impact on students' lexical competence. Moreover, the necessary data on the impact on the students' ability to improve their lexical will be gathered and observed, through the application of three data collection instruments. Hence, the information collected will be analyzed and the teachers will reflect on it. On the whole, the strategy and actions, procedures and instruments, help us to answer our research question, which leads us to a reflection of the planning, acting, observing and reflecting stages.

Context and Population

The target population consisted on 6 third graders aged between 9 and 10 years old, from a bilingual school in the north of Bogotá. Since an early age, they have been learning their foreign language (English) simultaneously with their native language; hence, their mother tongue is practiced in school and at home frequently. However, due to the lack of

PBL AND ITS IMPACT

foreign language practice, their knowledge in vocabulary is limited, creating difficulties in communicating effectively. Therefore, with PBL implementation along with problem solving activities, students will have more spaces to interact with their foreign language fostering their communicative skills.

Furthermore, for data handling and ethical considerations, this research has asked in advance-. For information access, research implementation and information handling according to the school criteria. Consequently, the current research project fully attains and complies with the elementary school considerations and measurements as instructed.

Likewise, our target population's parents or representatives in some cases, have been acknowledged about the importance of this project, as well as the permission to use any sort of outcome during this study and academic purposes through the sign of letters of consent (see appendix I & II). Thus and so, not only the school but also the parents have been informed and both have agreed on the role that the target population will have on this research. Therefore, we always protect students' rights and privacy by not revealing their names or any private information as it is mentioned in article 40 of (Código de la Infancia y la Adolescencia Concordado, 2010) which means that our study does not represent any sort of risk to the population. Lastly, none of the names from parents or learners have been shared nor addressed on this research for privacy and confidentiality purposes.

Instruments

In order to identify and analyze students' progress by the implementation of PBL in regards to their lexical competence, we applied three instruments for data collection. We implemented two observational techniques for collecting data and one non-observational technique with the aim to analyze the data through a process of triangulation. These

PBL AND ITS IMPACT

instruments were field notes (FN), audio-recordings (AUD) and semi-structured interviews (INT) as it is explained in the following lines.

Field notes is an observational technique that consists of the description of different events happening in the classroom (Burns, 2010). Through the implementation of field notes, we will identify verbal and non-verbal information, language learning items and types of interactions through a reflective and analytical observation (Burns, 2010), in order to know the impact of the implementation of PBL along with problem solving activities on students' lexical competence. In short, field notes permit the description of events in the classroom to be analyzed and consequently identify students' progress.

Interviews are a data collection instrument to gather information through questions (Canals, 2017). According to Canals (2017) there are two main types of interviews: structured and semi-structured. The one we have selected for this project is the semi-structured interview, which consists on a specific number of questions; however, the interviewer has freedom to modify some words or questions in order to identify personal aspects or deep details by making it more conversation-like (Canals, 2017). Interviews will help us to answer our research question because it will let us identify students' lexical competence progress when they answer the questions in the target language. For this reason, interviews are appropriate to identify students' progress in their communicative competence.

Finally, audio-recording is another technique we will implement for the analysis of the impact of PBL on third graders' lexical competence. Burns (2010) suggests that audio recording is a tool that allows to capture oral interactions exactly as they were said. In addition, tape recording permits the identification of specific and interesting insights of

PBL AND ITS IMPACT

what is happening in a classroom. Furthermore, a transcript of significant parts of the audio-recording has to be developed in order to analyze and identify through students' oral production, in this case, their progress in regards to their lexical competence. In brief, students' progress will be identified and analyzed through the implementation of audio-recordings and the analysis of the transcripts of the audios.

Instructional Design

The Communicative Language Teaching (CLT) approach involves a set of principles focused on language teaching. The goal of this approach is to teach the communicative competence to help learners to be successful when using the language to communicate in a meaningful way (Richards, 2006). For the reasons mentioned above, we consider that CLT is an appropriate approach that could be applied along with PBL, which may as well foster the development of our research project, due to the fact that both approaches focus on the development of the lexical competence as part of the communicative competence; which is the main purpose of our research project. Finally, along with the principles involved in the CLT, Problem Based Learning (PBL) will play a fundamental role.

In order to properly adapt PBL approach to foster third graders lack of lexical competence, this research implemented this approach divided into three phases: Problem analysis, in which a problem is given to the students for them to analyze the factors that are involved. Self-directed learning, which is the phase in which the students find possible solutions to the problem by checking different resources. Finally, the reporting phase in which students present the possible solutions they found (Iswandari et al, 2017). By

PBL AND ITS IMPACT

applying this approach with its stages, we will trace the progress on PBL implementation and will evidence if such application fosters lexical competence on our learners.

PBL implementation needs to be well detailed and show evidence of the topics to be studied as well as the objectives, considerations, materials and structure of each lesson. Hence, our lessons intent to show evidence and keep track of students' progress on their lack of lexical competence through the implementation of PBL. The way we attempt to achieve this, is by organizing each lesson on a presentation, practice, production (PPP) model. The advantages, considerations, specifications, elements and features of this model will be studied next.

The design we attempt to answer our research question is explained on the following lines. First, the problem found on third graders is the low development of lexical competence which is evidenced in their oral production performance. Taking this into account, we decided to implement PBL with problem solving activities as the strategy to tackle this issue.

Second, Presentation, Practice and Production (PPP) was the sequenced that we followed in the development of our classes as mentioned above. This model is a very logical procedure as it allows teachers to control the teaching/learning process (Criado, 2013), since the teacher acts as a guide/facilitator in PBL. The main purpose of each lesson plan sequences, are the following:

- **Presentation:** The introduction of the topic in order to contextualize the students with what the class is going to be about. Refreshers any necessary knowledge for lessons proper development and engagement.

PBL AND ITS IMPACT

- Practice: Students will have the opportunity to interact with the topic while the teacher provides assistance, guides and supervises them.
- Production: Learners will have a more independent task in which assistance is provided by the teacher when necessary. Language outcome is key for successful production.

On the whole, PPP model allows teachers to have a detailed sequence structured that aligns with some PBL considerations and allows students to have contextualization on the target topic/language, stimulates topic/language interactions on students and permits students to produce target language outcome.

Furthermore, the general topic for the nine lesson plans is public speaking having as a problematic question “why do students struggle to communicate effectively in public?”. Taking into consideration this, there are four elements of public speaking presented as problems which are “the lack of knowledge of the content in a speech”, “the excessive use of filler words”, “the inappropriate use of tone of voice” and “the wrong use of body language”, which we will develop along the nine lesson plans (see appendix III). Public speaking was chosen as the general topic for this project as it is an area that the school wants to improve in their national and international tests, it is related to lexical competence as the main core of this project. Besides, in each lesson plan there is a lexical competence component which is compound by a range of vocabulary related to public speaking and the previous components which are explained. This vocabulary will be introduced to students through the development of different activities along the steps of PPP.

PBL AND ITS IMPACT

Through the implementation of our nine lesson plans, we aim to analyze the impact on students' lexical competence by the implementation of PBL approach with problem solving activities. Taking into account the 3 stages of PBL, we have decided to follow each one of them, in the practice and production phases of the PPP model in each lesson plan.

The nine lesson plans will be divided in the following way: First, lesson plan number one and two will be focused on “the lack of knowledge of the content in a speech” as the problem to be solved and they will be divided into problem analysis, self-directed learning and reporting phase of PBL as shown:

Lesson 1 Problem Analysis /Self-directed Learning: Knowledge of the content

(Interviews)

Lesson 2 Reporting Phase: Knowledge of the content *(Audio recordings)*

Second, lesson plan number three, and four will be in charge of “the excessive use of filler words”. In here, lesson plan number three will be unified with two PBL phases that “are problem analysis and self-directed learning, while lesson plan number four will have the reporting phase as illustrated below.

Lesson 3 Problem Analysis /Self-directed learning: (introduce vocabulary) (Filler words) **(Field notes)**

Lesson 4 Reporting Phase: Filler Words *(Interviews / Audio recordings)*

Then, from lesson five to lesson number seven, the three phases of PBL will be followed having as a main problem “the inappropriate use of tone of voice”.

Lesson 5 Problem Analysis: Tone of the voice *(introduce vocabulary)*

PBL AND ITS IMPACT

Lesson 6 Self-directed Learning: Tone of the voice (*Field notes*)

Lesson 7 Reporting Phase: Tone of the voice (*Interviews / Audio Recordings*)

Finally, lesson plan number eight and nine will be in charge of “the wrong use of body language”. In here, lesson plan number eight will be unified with two PBL phases that are problem analysis and self-directed learning, while lesson plan number nine will have the reporting phase as shown below:

Lesson 8 Problem Analysis /Self-directed learning Body language (introduce vocabulary)

Lesson 9 Reporting Phase (*Interviews*)

To sum up, we mentioned relevant aspects of this project along this document First, this is a qualitative research study in which through the development of PBL on third grade students from a private school located in the North of Bogotá, we implemented action research as the method to analyze the impact of the implementation of PBL in their lexical competence. Second, techniques such as audio recording (AUD), semi-structured interviews (INT) and field notes (FN), let us know the impact that our research project had on the target population during the nine sessions. Furthermore, these lesson plans were design with the PPP methodology following some Communicative Language Teaching principles and the stages of the PBL approach. All of it, with the purpose of analyzing the effects of the PBL approach along with problem solving activities on students’ lexical competence to reach a better oral performance.

Chapter IV: Data Analysis and Findings

The main objective of this research study is to observe and analyze the effects of the implementation of Problem Based Learning (PBL) on third graders' lexical competence from a private bilingual school in the north of Bogotá. Consequently, throughout the assemblage and analysis of the data collected with the instruments, the findings of the impact of PBL on students' lexical competence were possible.

As researchers, we became interested on the application of this project, as students showed limited vocabulary to completely develop their ideas, leading our population to have a limited oral production. Thus and so, when students tried to communicate in their foreign language, we could observe the use of their native language to complete their ideas as they were age-properly competent to communicate in L1 but not in L2, being in the middle level of threshold bilingualism (Baker, 2001). Therefore, to fulfill the research question and objective of this project, researchers designed and implemented 9 lesson plans following the PPP methodology (presentation, practice, production), so the teacher could keep track of each activity and serve as a facilitator in the process (Criado, 2013). In addition, it caused the replacement of one part of the lexis on their oral production and reflecting no awareness of it during their foreign language production. Taking this into account, researchers implemented PBL approach along with problem solving activities as its component, aiming to identify the effects of this approach on students' lexical competence.

Therefore, after collecting the information through some formats (see appendix IV & V), researchers proceeded to analyze and define the three categories directly connected with the PBL impact in third graders' lexical competence. Semi-structured interviews, audio-recordings and field notes were interpreted through grounded theory, which is a

PBL AND ITS IMPACT

method “for discovering theories, concepts, hypotheses, and propositions directly from data,” (Taylor, Bogdan, & DeVault, 2016, p.164). With the goal of answering the research question: what is the impact of the implementation of PBL on third graders’ lexical competence? We used triangulation defined as, “checking out insights gleaned from different informants or different sources of data” gaining “a deeper and clearer understanding of the setting and people being studied” (Taylor, Bogdan, & DeVault, 2016, p.93- 94). The different ideas and concepts identified in the information collected through our three data collection instruments, were compared to generate subcategories leading to merge them into general categories. As a result, we identified three general categories, which led us to understand how through the use of PBL in our classes there was an impact in students’ lexical competence.

Moreover, to present the information gathered through our instruments, we established a specific coding in the following way: semi-structured interview (INT), audio-recordings (AUD), part in situations where the audio was divided in sections based on students’ participation (P) and field notes (FN) followed by the class number (CL) and the students’ gender and number (SW), e.g. (INT1CL1SW1). By implementing this codification, we attempted to code, organize and classify the data within the categories of our project.

Likewise, after identifying some patterns in the information collected, we connected different ideas through the process of triangulation in order to establish clear categories for the analysis of the effects of PBL on third graders’ lexical competence. Taking into account that our investigation aims to analyze the impact of PBL on students’ lexical competence, we consider that it is important to understand lexical competence as the knowledge and

PBL AND ITS IMPACT

ability to perform properly the vocabulary of a language. Lexical competence is divided on two main components, which are the lexical elements and grammatical elements (Gelderen, 2017). Hence, the goal of this chapter is to provide the categories with the outcomes analyzed through the data collected. All in all, after analyzing the data we came up with three categories. The first one was defined as Code-switchers to Proper Speakers, the second one as Coherence in Speech Through the Use of Grammatical Aspects and the third one as Meaning in the Oral Production Through the Implementation of Vocabulary Learned, all these categories are related to lexical competence which is what we want to analyze through PBL.

From Code-Switchers to Proper Speakers

The first category emerged through the implementation of the PBL lessons and the analysis of students' outcomes. After a thorough interpretation of semi-structured interviews, audio-recordings and field notes, we recognized that most of the students were using the lexical aspects inaccurately and code-switching continuously, therefore we gave them tools and vocabulary words with meaning to have a better communication about the specific topic; being these the core of lexical elements. We identified these lexical elements, classified into four lexical aspects as noun, verb, adjective, and adverb. Such aspects carry meaning, words with similar meaning (synonym) or opposite definition (antonym) as expressed by Gelderen (2017). Therefore, in this category the main four parts of speech (noun, verb, adjective and adverb) mentioned before will be taken into account, throughout the analysis of the excerpts.

Alongside the execution of the lesson plans, we decided to implement PBL and analyze the impact it may have on students' lexical competence. As mentioned by Wirkala

PBL AND ITS IMPACT

and Kuhn (2011), “students engaged in PBL instruction versus lecture-based instruction, performed better on a number of outcome variables including content knowledge and argumentation” (as cited in Brush, & Saye, 2017, p.8). This may lead students to improve on content knowledge, in this case content knowledge of the lexis of words, which are the core of speech and consequently their sentence production. Facilitate the improvement of the argumentation in their foreign language and stepping further from code-switchers to proper speakers. Consequently, it is through the implementation of PBL and the instruments chosen, that we can analyze the impact of PBL in students’ lexical competence.

During the first session, through the analysis of the interview we evidenced the lack of knowledge of the content. Students did not answer some of the questions completely, leading to the production of incoherent and incomplete answers. This lack of knowledge is due to the stage of bilingualism which is the second threshold Cummins (as cited in Baker, 2001), where code switching takes place, where the students are able to produce knowledge in their L1, but cannot fully operate in their L2 (Baker, 2001). Therefore, students may produce the content knowledge in their L1 but not in L2 in regards to public speaking, which led the first session to introduce some vocabulary briefly. Consequently, aspects that demonstrate lack of knowledge are shown as participants do not use the target vocabulary due to the bilingualism stage they are in, and there is native language (L1) interference, in this case Spanish.

As the research moved forward, we could identify that at the beginning, students used Spanish whenever they wanted to produce an idea but could not retrieve the proper word in English from their mental lexicon. This code-switching was identified when students were asked about a term or a concept about a topic and they did not know the lexis

PBL AND ITS IMPACT

to define or answer it and instead, retrieved the morphological form from their native language (L1) as shown on the following excerpts:

Excerpt 1 (CL1INT1SW5)

Min 0:07 - 0:14

R1: “What do you know about public speaking?”

SW5: I know that public speaking are different how do you say in English pasos? at different pasos for you ... I start to do something

Excerpt 2 (CL2AUD1SM6)

Min 0:01 - 0:36

SM2: One day a boy named Maximiliano create cat man in the police station the cat and the police are working and a dog see, he put a bomba and the two friends have an accident the two are in the urgency the enfermera have an idea they quitarle la cabeza to the cat and he the la cabeza of the cat he put it on the cuero of the police

R2: okay very good, thank you

Excerpt 3 (CL1INT1SM6)

Min. 2:42-3:20

R1: what are the symptoms of distractions that a person can have when he or she is nervous while speaking in public?

SM6: if the person is nervous ehh it have to rait and talk como si hubiera imaginado como hubiera eh hubiera habido nadie

R1: imagine what?

SM6: imagine that the people is not there and

R1: and

SM6: and ehh that that's why that is why is not nervous

Excerpt 4 (CL2AUD1SW5)

Min: 0:01- 1:00

SW5: that one day eeeh ah in aaah a bosque, bosque encantado o algo así? **R2:** Enchanted forest

PBL AND ITS IMPACT

SW5: Enchanted forest eeh is eeh are animals like a animals buenos and but he use the forest to escabullirse and the theeee the persons want to eeh pensar he think that eeh she the animals are bad eeh “pesos” and and one day the persons eeh atacar.

R2: Attack

The previous excerpts demonstrated that students are in course of bilingualism as they code-switched from their native language to their foreign language. First, on excerpt 1, we, illustrated how the student used a Spanish noun – “pasos”- to complete an idea.

Second, on excerpt 2, line 1, we can see how the student did not recall the noun “bomb” in English and replaced it with one from their L1 lexicon, as well as in line 4 used a collocation –“quitarle la cabeza”- and the noun “la cabeza” from L1 to complete some ideas. Third, on excerpt 3, line 3 and 4, the student produced a sentence mixed with a Spanish sentence “como si hubiera imaginado” and moved forward on the production of the idea. Lastly, (excerpt 4) the student used the Spanish verbs “atacar” and “escabullirse”; two Spanish words used to end the idea. In other words, in excerpts 1 to 4, we can infer that code-switching happened on words that have meaning Gelderen (2017).

From the previous excerpts most of the cases the code-switching did not affect the syntactic structure (Council of Europe, 2001), as the students were looking forward to completing their idea. These examples prove how students needed to identify more words of the target vocabulary and how they did not make a proper use of the target lexicon. On the other hand, as the lesson plans moved on and students gained further knowledge on the target vocabulary and its properly use, they were able to participate and produce complete sentences. This was evidenced on the final sessions where they did not give room to code-switching, (excerpts 5 to 8).

PBL AND ITS IMPACT

Excerpt 5 CL9INT4SW5

Min 0:01 - 0:10

R1: What do you know about public speaking?

SW5: public speaking is like different tone *tones of voice*

Excerpt 6 CL9AUD4SM6

Min 0:04-0:38

SM6: I am going to tell you how to Laura is going to improve. ehh Laura have to eh she has to *review more the topic* that she is talking, and eh don't touch a lot her hair, and ehh yup

Excerpt 7 CL9INT9SW5

Min 2:31 - 2:45

R1: what do you think are the advantages of a proper public speaking?

SW5: the advantages is like that the person can how do you say...eh can listen eh more clear when you are talking

Excerpt 8 CL9INT9SM6

Min 3:40 - 4:00

R1: okay, what are the symptoms or expressions that a person can have when he or she is nervous while speaking in public?

SM6: ehh *use filler words*, and with the face we can, how do you say notar?

R1: see

SM6: see that the that the person that is giving the information don't know how to how to speak in the public speaking.

From the previous excerpts, we evidenced some examples of a complete answer using the target vocabulary in L2. The same students who showed limited target vocabulary (excerpts 1, 2, 3 and 4) as they used Spanish, have not used L1 by means of completing their ideas or communicating when being asked about the target topic on the previous excerpts. Instead, they used the target vocabulary. As shown on excerpts 5,6,7 and 8, students used “tone of voices” (excerpt 5 line 2), “review the topic” (excerpt 6 line 2), and “use filler words” (excerpt 8 line 3), which are part of the vocabulary taught throughout the lesson plans.

PBL AND ITS IMPACT

Leading their answers to be more confident and coherent when expressing their ideas, moving forward onto the bilingualism stages (Baker, 2001). All in all, students showed more proficiency in the knowledge of lexis and the production of speech as the repetition of code-switching diminished, as the vocabulary taught was illustrated on the final sessions.

Ultimately, from the previous excerpts, the difficulties that our target population faced by the misuse of the lexical elements were evidenced. Their single word selection was in their L1 by not having the knowledge of the word on their foreign language.

Therefore, the cohesion was affected on their speech outcome (Council of Europe, 2001). Students retrieved the morphological form of the needed word from their L1, leading code-switching to happen as the meaning of the concept exists as an abstract concept. As a result, they may borrow lexis from their native language to complete their ideas. Therefore, students' need of lexical competence was illustrated through the particular use they had of the code-switching aspect in their speech.

On the implementation of PBL, we have also identified students' long-term retention on the knowledge of lexis of the target vocabulary. To illustrate the previous statement, we analyzed students' answers from the first sessions as shown on the Table 1 shown below:

PBL AND ITS IMPACT

Table 1. Long term retention results

<i>What do you know about public speaking?</i>	
<u>Excerpt 9 CL1INT1SM2</u> SM2:Public speaking is the volume of the voice.	<u>Excerpt 10 CL9INT9SM2</u> SM2: I know that public speaking that you need to talk no loud and no soft R1: That's all you know about public speaking? SM2: and you need to know the topic R1: that's all you know about public speaking, are you sure? SM2: yes
<u>Excerpt 11 CL1INT1SM6</u> SM6: eemm that the the definition is that ehh is talking in public in English o in different language and ad mm and with different types of different public speaking	<u>Excerpt 12 CL9INT9SM6</u> SM6: ehh public speaking is when a person have to ehh give information for the people that is in front of him. R1: so is when a person has to give information to other people? SM6: yes
<i>What do you think are the advantages of a proper public speaking?</i>	
<u>Excerpt 13 CL1INT1SM2</u> SM2: Be connecting, talk louder and R1: that's it? SM2. Yes	<u>Excerpt 14 CL9INT9SM2</u> SM2:Know the topic, don't talk loud and don't talk soft. R1:That's all you know, don't talk soft or loud? SM: and to and to sound the words correctly, R1: what about the body? Does the body is important in public speaking? SM2: yeah, hand movement R1: yes it's important SM2: eye contact R1: yes is super important, what else do you remember? SM2: No more
<i>How do you know that someone knows about the topic when giving a speech?</i>	
<u>Excerpt 15 CL1INT1SM2</u> SM2: it's on the volume of the voice	<u>Excerpt 16 CL9INT9SM2</u> SM2 you know that he will talk or she will say will talk about car you know that he R1 what is the name of that.. SM2 know that topic R1 good job, what else SM2 speaks the words correctly and to use eye contact

PBL AND ITS IMPACT

On the excerpts provided above, we can evidence that on the first lessons, students provided short answers in regards to the questions asked and used little vocabulary considered to public speaking as evidenced on excerpt 9,13 and 15 which are in the left column. On the other hand, the same students who provided those answers, used vocabulary taught on the very first lesson reflected on the excerpts on the right column as shown on excerpt 10, 12, 14 and 16. We can see that students had more complete answers and were able to provide information in regards to public speaking using vocabulary from the first lesson, showing long term retention at least in the use of “knowledge of the topic”. All in all, we evidenced the impact of PBL as students used vocabulary and content knowledge from the very first sessions taught, as they implemented it on the final lesson. Therefore, PBL impacted students’ long term-retention.

Lastly, the PBL approach as the core approach of this research project had a positive outcome on the students’ code-switching to proper speakers’ category. We can state this, as students learned how to use the target vocabulary properly in their oral and written communication. From lesson 1 to lesson 9 it was illustrated how students learned and then applied their vocabulary and consequently gave a complete and coherent speech avoiding code-switching. Although in the last class we evidenced some progress, when students showed a positive outcome as they could express their thoughts and ideas completely without referring to their native language.

Coherence in the Speech Through the Use of Grammatical Aspects

As the focus of our research project is to analyze students’ lexical competence, we defined the second category as Coherence in the Speech Through the Use of Grammatical Aspects, which is a component of the lexical competence (Council of Europe, 2001). We

PBL AND ITS IMPACT

observed in the analysis of the data collected that students omitted and misused some words such as pronouns, the auxiliaries in the present simple, and conjugations to join ideas in their oral production. Later on, we found out that those different aspects identified in their oral production were related to a concept defined as grammatical elements. These aspects refer to closed word classes such as articles, quantifiers, demonstratives, personal pronouns, question words, relatives, possessives, prepositions, auxiliary verbs, conjunctions and particles which have an impact on students' features in their oral production (Council of Europe, 2001). With the implementation of PBL, the researchers found that at the end of the process of this investigation there was an impact on students' lexical competence since they started to use grammatical components properly. In the following lines we explain how was the initial stage of students in regards to grammatical aspects and then they implemented properly these components in further sessions. Finally, is is addressed how PBL had an impact in this category.

From the first class, researchers identified that students omitted and misapplied some grammatical aspects in their oral speech. It was evidenced through the analysis of students' oral production and the information collected that students did not use a significant amount of these words that are part of the grammatical aspects. This situation led students to have some grammatical gaps when producing oral speeches, which made them hesitate at the moment to express their ideas. The following excerpts accounted for students' omission of grammatical aspects, which was evidenced through the analysis of the information collected along the first sessions.

Excerpt 17 (CL2AUD1P2SM2)

Min 0:01 - 0:36

PBL AND ITS IMPACT

S2: One day a boy named Maximiliano create cat man (missing conjunction) the police station the cat and the police are working and a dog see, he put a bomba and the two friends have an accident (missing conjunction) the two are in the urgency the enfermera have an idea they quitarle la cabeza to the cat and he the la(SW) cabeza of the cat he put it on the cuerpo of the police

Excerpt 18 (CL2AUD1P5SM5)**Min 0:04 - 1:00**

S5: Enchanted forest eeeh is eeeh are animals like a a animals buenos (SW) and but he use the forest to escabullirse (SW) and the theeee the persons want to eeeh pensar (SW) he think that eeeh she the animals are bad eeh “pesos” (SW) and and one day the persons eeh atacar (SW)

Excerpt 19 (CL2AUD1P4SM4)**Min 0:05 - 0:25**

S4: one day I pled futbol in a park with my frends and and one frend are hert and I held him and the next day I played futbol and I her and the frend that I held he held me and we are friends

Excerpt 20 (CL4INT2SW1)**Min: 3:37 - 3:48**

R1: Ok. What does it mean when a person uses a lot of filler words?

S1: That he or she don't practice, that he is, he is he don't know, review the content ehh

R1: Aja

S1: He don't prepare

Excerpt 21 (CL4INT2SW5)**Min: 2:55 - 3:22**

S5: Ah! Ok. “Preocupeid”, when he is “preocupeid”, when he is “nervius”, when he **don't** know and he is like “pensando” and he is in the public. He is saying words that **don't is, don't, is don't** of eeh the thing that he is saying is **don't** important

Min: 4:37- 4:52

S5: He is nervous, he **don't** know some things, he **don't** know many things of the, ehh of the filler words or anything that he is talking.

In the excerpts portrayed above, we could identify that in students' responses there was incongruence in the use of some grammatical aspects and sometimes a limited use of them.

PBL AND ITS IMPACT

The following samples demonstrate that there was a lack and misapplication of grammatical aspects that are part of the lexical competence and that had to still be developed. First, in (excerpt 17, lines 1, 3 and 4) we evidenced that conjunctions were missing, which showed that there was not connection of ideas. Then, in (excerpt 18, line 3), there was confusion in the use of the personal pronoun “she” and the article “the”, this confusion made students’ speech lack of fluency and coherence. Furthermore, (excerpt 19, line 2) there was a misuse and confusion of personal pronouns, which made it difficult to understand the ideas. Finally, (excerpts 20 and 21) we evidenced that there was a wrong use of another component of the grammatical aspects; the auxiliary verb “do”. In brief, these aspects mentioned before were connected directly to grammatical features and affected students’ oral production.

In spite of the negative features identified in the first classes related to the grammatical aspects, in the last sessions, it was evidenced that students started to use properly some grammatical aspects in their oral speech. The impact of the application of the PBL approach on students’ ability to use grammatical aspects properly, and consequently lexical competence, is demonstrated in the following excerpts.

Excerpt 22 (CL7INT3SM2)

Min 4:00 - 4:15

R1: can you give me an example of the tone of voice?

S2: I will tell you about cars, car is a machine that is constructed by the humans.

Excerpt 23 (CL7INT3SW5)

Min: 1:08 - 1:34

R1: Ok, listen again to the question. What do you think are the positive things of having a proper public speaking?

PBL AND ITS IMPACT

S5: The positive things are that you can, ah, you can wait to think a little bit for, eh, for a presentation if you want to “see”, you can use public speaking

Excerpt 24 (CL9AUD4SM2)

Min: 0:01 - 0:36

SM2: Hello my name is (SM2) and I will tell you I will tell you about how to help Laura. Laura dont need doesn't need to talk a lot your hair and he need to know the topic, don't use filler words and use eye contact. No more.

Excerpt 25 (CL9AUD4SM3)

Min: 0:01 - 1:26

SM3: Ehhh hello I am going to tell you how to help to Laura. Eh first Laura use a lot of filler words so she have to, she has to **doesn't** use does not to use a lot of filler words. ehh she touch a lot her hair, so she eh have to has to calm down and be calm, ehh she has to ehh to use body movements and because **if she dont doesn't use** body movements ehh she is not going to use a good public speaking.

In the previous excerpts the aspects related to this category are explained in the following

lines. First, (excerpt 22, line 2) the students used properly the pronoun “that” in order to communicate a complete idea when answering a question related to public speaking.

Second, (excerpt 23, line 3) the quantifier “a little bit” was implemented properly by the student to answer a question. Third, our population (excerpt 24, line 2, and excerpt 25, lines 2 and 5), was able to self-correct a mistake made in the oral performance related to the use of the auxiliary “don’t and doesn’t” in present simple. Even though students needed to reinforce this aspect, it was evidenced that they noticed the mistake and corrected it, which is a positive improvement compared to the first lessons when they did not notice the mistakes to self-correct them.

In the excerpts previously presented, it was proved that students used properly some of the grammatical features, which means that PBL had a positive impact on students’ lexical competence. The way PBL impacted grammatical characteristics was through the PBL phases, as students had the opportunity to analyze different problematic situations

PBL AND ITS IMPACT

related to public speaking, as well as creating possible solutions to be reported through a speech in the “reporting phase”. In addition, students reflected and practiced what they were going to say with the teacher’s guidance and support. Along this process, students could practice their speaking having the opportunity to use and self-correct the implementation of grammatical components (Iswandari, Prayogo & Cahyono, 2017).

In conclusion, by implementing PBL along the development of its different phases, we evidenced a positive impact on students’ implementation of grammatical aspects in their speech. As it was analyzed, in the first lessons students misemployed and sometimes did not use important grammatical aspects that give coherence to their ideas, however, at the end of the process students demonstrated their ability to self-correct mistakes and have a proper implementation of some grammatical aspects in their comments and answers.

Meaning in the Oral Production through the Implementation of Vocabulary Learned

After implementing PBL through the lesson plans and collecting additional data to be analyzed, we identified that students started implementing target vocabulary related to public speaking to communicate complete ideas. After analyzing theory about lexical competence, we came up with a third category defined as Meaning in the Oral Production Through the Implementation of Vocabulary Learned, which is related with semantics. First, Correa, Alfaro, & Orduña (2015) proposed that the presence of semantics is a basis for the development of lexical competence. Having that into account, it is important to understand semantics’ connection with lexical competence since Correa, Alfaro, & Orduña (2015) proposed that it “includes rational aspects of meaning, the way in which that meaning is reproduced when mixing words” (p.13). Furthermore, Correa, Alfaro, & Orduña (2015) proposed that one of the sub-branches of semantics is lexical semantics, which is related to

PBL AND ITS IMPACT

the meaning created by the combination of words. In regards to our project, we found through semi-structured interviews, audio-recordings and field notes that students started implementing target vocabulary related to public speaking to communicate complete, coherent and meaningful ideas as shown in the following excerpts.

Excerpt 26 (CL7AUD3SM3)

Min: 0:01 - 0:37

SM3: I can I can say to Mario that calm down and relax and don't speak to loud and if he didnt know what he have to say, to practice, because if he dont practice all the people is going to be bored.

R2: Okay very good thank you, do you have something else in regards to emotions or don't?

SM3: aa that don't be sensitive and thrilled.

Excerpt 27 (CL7FN2SW1)

Do they relate TOV with previous Public Speaking vocabulary	X				How? Provide examples to be calm, don't talk so soft, and know the topic.
What words do they use the most in regards to TOV?	X				How? Provide examples Talk loud.
What words do they use the most in regards to Public Speaking?	X				Know the content

Excerpt 28 (CL9AUD4SM2)

Min: 0:04 - 0:36

SM2: Hello my name is (SM2) and I will tell you I will tell you about how to help Laura. Laura dont need doesn't need to talk a lot your hair and he need to know the topic, don't use filler words and use eye contact. No more.

Excerpt 29 (CL9AUD4SM3)

Min: 0:04 - 1:26

SM3: Ehhh hello I am going to tell you how to help to Laura. Eh first Laura use a lot of filler words so she have to, she has to doesn't use does not to use a lot of filler words. ehh she touch a lot her hair, so she eh have to has to calm down and be calm,

PBL AND ITS IMPACT

ehh she has to ehh to use body movements and because if she dont doesnt use body movements ehh she is not going to use a good public speaking

Excerpt 30 (CL9INT4SM2)

Min: 2:26 - 3:19

R1: wow, good you have learned a lot. what are the tips that can help you give a better public speech?

SM2: know the topic

R1: the tips, you remember the tips? what were the tips?

SM2: the tips know the topic, use eye contact, know the words correctly and don't talk

R1: super important

SM2: very important

In the previous excerpts there is evidence from students' oral production that supported the development of the category Meaning in the Oral Production Through the Implementation of Vocabulary Learned through the implementation of PBL. First, (excerpts 26, 28, 29 and 30), the Meaning in the Oral Production Through the Implementation of Vocabulary Learned category is illustrated when the students identified and implemented some of the target vocabulary taught along all the classes such as "practice, calm down, relax, sensitive, thrilled, know the topic, filler words, eye contact, body movements and public speaking" to convey meaning. Second, in excerpt 27 it was evidenced that in the class the student implemented some of the target vocabulary in the speech to share some ideas related to public speaking while solving a problematic situation. To sum up, it was evidenced that students implemented vocabulary related to public speaking to convey their ideas.

Some evidences of the positive impact of PBL are exposed in the following lines.

Since some studies such as the one carried out by Lin (as cited in Iswandari et al., 2017, p.609) has proved that "through PBL approach, students gained a significant advancement

PBL AND ITS IMPACT

in the vocabulary test and higher proportion of vocabulary use”. Another one developed by Strobel & Barneveld (as cited in Yew & Goh, 2016, p.76) proved that regarding long-term knowledge retention, performance, skill-based assessment, and mixed knowledge, PBL approach is more effective than the traditional ones. Having that into account, we can infer that through the implementation of the PBL approach there was a positive impact on students’ lexical competence, meaning in the oral production through the implementation of vocabulary learned. Therefore, along the process students used the vocabulary taught from the first class to the last one to communicate ideas. In other words, PBL had a positive impact on students’ lexical competence.

In Brief, this category demonstrated how along the development of the classes through the PBL approach students acquired and implemented target vocabulary. This acquisition was visible from the beginning of the lessons as students started to use in a regular basis the vocabulary related to public speaking to transmit meaningful ideas at the moment to answer or solve problem solving situations. In other words, PBL approach impacted positively the meaning in the oral production category as they used the vocabulary acquired in the development of activities.

In conclusion, the main effort of our research project was to see the impact of PBL on third graders' lexical competence. We implemented nine lesson plans along with the PBL phases (problem analysis, self-directed learning, and reporting phase) and three data collection instruments were applied. After analyzing the data collected with the instruments and connecting it with some theory, we came up with three categories defined as code-switching to proper speaking, coherence in the speech through the use of grammatical aspects and meaning in the oral production through the implementation of vocabulary

PBL AND ITS IMPACT

learned. In the first category, we conclude that PBL approach helped students recognize and use properly the target language in their speech production and students' code-switching decreased as their vocabulary increased. Furthermore, in the second category even though students did not always properly use all the different grammatical aspects in their speech, at the end of the process, as evidenced in the data collected, students self-corrected the use of grammatical aspects and they used some of them in their speech. However, we concluded that students still need to reinforce the proper application of grammatical aspects to communicate their ideas adequately. Lastly, in the third category students used the target vocabulary to express ideas in regards to the main topic of the lesson plans, which was public speaking. Finally, this analysis demonstrated that PBL approach had a positive impact on students' lexical competence.

Chapter V: Conclusions and Implications for Further Research

By implementing the needs analysis, we evidenced that our target population needed development of their lexical competence in their speech. This was shown, as they code switched in their conversational practices when expressing their thoughts in the foreign language, as well as omitting grammatical elements in their oral practices, leading to incomplete ideas by the lack of vocabulary. Therefore, we implemented Problem Based Learning (PBL) as a strategy to influence this competence in our population. According to Iswandari, Prayogo & Cahyono (2017), PBL is defined as “a student-centered pedagogical approach in which students learn about a subject through the experience of solving an open-ended problem found in trigger material” (p.608). We implemented PBL approach along with the Communicative Language Teaching (CLT) as a complement for the PBL, as they both are related to the Communicative Competence, which aim to help learners to be successful when using the language to communicate in a meaningful way (Richards, 2006).

The purpose of this chapter is to present the conclusions reached based on the research findings, regarding the impact of implementing PBL on third graders' lexical competence. In addition, in the following lines we aim to show the overall conclusion of this research.

First, we present the findings related to the main topic of our lesson plans. Second, we will address how students identified and used lexical elements (code-switchers to proper speakers' category) in their oral speech and the use of target vocabulary to convey meaning. Finally, we present the challenges that emerged during the process of this research project as well as further suggestions for future studies.

PBL AND ITS IMPACT

From the collected data, we concluded that PBL influenced students' lexical competence in their communicative processes. Lexical competence, according to Schmitt & Meara is not only the knowledge of words but also the ability to use the vocabulary of a language (as cited in Chon, 2007). This competence derives into two main components: lexical elements and grammatical elements (Gelderen, 2017). We can conclude that the implementation of PBL had an impact on students' lexical competence, as we were able to evidence that during the first lessons students did not use the target vocabulary and properly grammatical and lexical elements.

However, along the process, students started to use these components on their speech communicating clear and coherent ideas by the end of the lessons. This demonstrated that through the implementation of this approach, students could improve their lexical competence by properly acquiring and using the target vocabulary to communicate meaningful ideas.

The first evidence we identified in our population was the inappropriate use of words with meaning, (being these the core of lexical elements) when producing a written or oral speech. Consequently, we established these words with meaning (lexis) and classified them into four lexical aspects as noun, verb, adjective, and adverb, which were identified as code-switchers to proper speakers in their speech. Such aspects carry meaning, words with similar meaning (synonym) or opposite definition (antonym) as expressed by Gelderen (2017). Consequently, every three lessons new vocabulary was introduced according to the target topic which was public speaking. Later on, through problem solving activities, students were increasing the knowledge of new vocabulary on the target topic as lessons

PBL AND ITS IMPACT

were passing on. Therefore, we evidenced the use of new lexis on the audio recordings applied on every reporting stage from PBL.

Another evidence of students' lexical competence is related to the use and self-correction of grammatical elements. This refers to coherence in the speech through the use of grammatical aspects such as articles, quantifiers, pronouns, etc. The use of these words contributes to the coherence of students' speech. At the beginning of the lessons, our population was not able to use these words to complete their ideas; however, in the last sessions, students had the opportunity to analyze different problematic situations related to public speaking. Furthermore, they could create possible solutions through a speech in the "reporting phase". In addition, they practiced and reflected what they were going to say with the teacher's guidance and support while implementing some of the grammatical aspects and identifying and self-correcting their mistakes when they used these categories improperly. Thus, the use of these elements demonstrates the development of participants' lexical competence.

The last evidence refers to the meaningful use of target vocabulary to express ideas. The category meaning in the oral production through the implementation of vocabulary learned has to do with lexical semantics which is the combination of words to convey meaning (Correa, Alfaro, & Orduña, 2015). Through this category, we concluded that by the implementation of the PBL approach there was a positive impact on students' lexical competence. It was due to along the process students used the vocabulary taught from the first class to the last one to communicate ideas in a meaningful way, while implementing and referring to the vocabulary taught. The combination of the target vocabulary by students to transmit messages evidenced the development of their lexical competence.

PBL AND ITS IMPACT

To conclude, we identified some aspects that could open further investigations on this field by detailing some challenges throughout the application of this study and suggesting some criteria. Consequently, we suggest the creation of the proper amount of lessons to develop and establish clearly the phases of PBL and its assertive material design. This needs to be done before the actual delivery of the lesson, which is time consuming and requires a lot of effort not only from the teacher, but also from researchers involved. In addition, it is important to act consequently for every goal assigned to every lesson by detailing which PBL phase belongs to each lesson, and what is the outcome from students.

Furthermore, some other important aspects need to be taken into account such as time management, class time frame and setting where the research is being implemented on the lesson. This is important to foresee with very detailed and careful lesson planning, as students may not be receptive during class time depending on these factors. In the whole, these challenges will definitely contribute to the greater development in our field of study, with a great value for the sake of education.

All in all, we certainly believe that lexical competence is the core of the basis of a communicative process. Therefore, we consider that this competence needs to continuously be developed in a creative and non-traditional way, which promotes reflection upon the language itself. As a result, this could increase mental lexicon and improve communicative processes in the foreign language. On the other hand, we believe that the implementation of problem-based activities will make students focus on resolving a problem by not being conscious of the learning itself but on the contrary, promoting problem solving skill. As a conclusion, our project aims to increase mental lexicon in a creative and non-traditional way through problem solving activities.

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Appendices

Appendix 1. Consent format-school

Bogotá D.C, agosto del 2019

Señores

A quien corresponda

Bogotá

Asunto: Solicitud para realizar proyecto de investigación

Somos Andres Felipe Castro Torres, Natalia Andrea León Acosta, Henry Nicolás Vargas y Jesús David Mesa Piñeros, estudiantes de noveno semestre de la Licenciatura en educación bilingüe con Énfasis en la enseñanza del Inglés en la universidad El Bosque y durante este semestre debemos cursar la signatura Proyecto de Grado II.

De acuerdo con el programa de esta asignatura, debemos implementar algunos ejercicios encaminados a desarrollar competencias investigativas, con el fin de enriquecer nuestra formación profesional.

Por tal motivo, nos dirigimos a ustedes para solicitar el desarrollar actividades lingüísticas en la clase de Inglés, aplicando técnicas e instrumentos para la recolección de datos, para indagar acerca de los efectos del Problem Based Learning con la finalidad de mejorar la competencia léxica en los estudiantes del grado **solicitado**.

Las actividades correspondientes a nuestro ejercicio se llevarán a cabo los días viernes en la última hora del día, desde el mes de **agosto** hasta el mes de **noviembre**.

Tomaremos en cuenta el manejo de todo lo referente a procedimientos éticos y de confidencialidad del colegio, de datos personales para la recolección y uso de información personal de toda la población vinculada a este ejercicio de investigación.

Cordialmente

Henry Nicolás Vargas Moreno

Jesús David Mesa Piñeros

Andrés Felipe Castro Torres

Natalia Andrea León Acosta

Appendix 2. Consent format-students' parents

Bogotá D.C, agosto del 2019

Señores
Padres de Familia
 Bogotá

Estimados padres de familia del grado 3C

Sus hijos participaran en unas actividades de Public Speaking con la finalidad de mejorar la competencia léxica dirigidos por la profesora titular Natalia León. Agradezco que diligencien la siguiente información.

Yo _____ identificado(a) con cédula de ciudadanía N° _____
 autorizo a mi hijo(a) _____ a ser partícipe de las actividades del programa Public speaking.

De antemano agradezco su valiosa atención.

Appendix 3. Lessons planned

Lesson # 2 September 20th - 2019

Topic	The lack of knowledge of the content using fiction and non-fiction literature as a tool to develop a public speaking presentation
Learning Objective	To report vocabulary seen on lesson #1 regarding knowledge of the content when presenting about fiction and non-fiction literature in an oral presentation.
Teaching objective	To identify if the information acquired in the previous lessons regarding the knowledge in fiction and non-fiction literature to have a successful public speaking presentation, has been applied by students through interviews.
Warm up (8 mins)	Teacher will brainstorm concepts learned on previous lesson with Ss.
Presentation (15 mins)	Teacher will read and handout a nonfiction story (Hamlet) to Ss organized by pairs.

PBL AND ITS IMPACT

Practice (15 mins)	Students will create a story based on their personal preferences in a fiction or nonfiction way. Also, students will have to take into account the different concepts related to public speaking introduced and studied in the previous class. While creating their own story, they will be solving the lack of knowledge of the content as a problem presented in the previous class.
Production (12 mins)	<p>In the production session, each student will tell his or her story during 2 minutes each one and they will explain at the end how was the process of creation of their speech and the steps they followed which are the ones exposed last class and during the presentation stage of this class.</p> <p>(Instrument to be applied: Audio Recordings) This instrument is implemented with the aim to identify if students use the vocabulary introduced in previous classes.</p>

Lesson # 3 (complement) September 27th - 2019

Topic	Filler Words in public speaking
Learning Objective	The students will learn four states of mind related to public speaking and filler words while talking about fiction and non-fiction literature; and their relationship. They will learn how to avoid it as well.
Teaching Objective	<p>To provide the meaning and use of filler words in public speaking, through audio recording and videos.</p> <p>To provide enough activities and examples so the students can identify self- directly how to recognize and avoid filler words.</p>
Warm up (5 min)	The students will watch two videos in which they will identify and recognize the different uses of filler words in a speech.
Presentation (15 min.)	<p>The teacher will explain what filler words are, such as; yeah, mmm, so, like; and why they are used, through a PowerPoint presentation and how to avoid it.</p> <p>States of mind:</p> <ol style="list-style-type: none"> 1. Doubtful (mmmm) 2. Hesitation (so) 3. Insecurity (like) 4. Pause (yeah)
Practice (5 min)	During the practice session, through out a workshop student will match the filler words with the corresponding vocabulary words.

PBL AND ITS IMPACT

Production (25 min)	The students will be divided in four groups; each group will have a filler word, the vocabulary word and a strategy to avoid it. They will have to write down on a piece of paper key words on how to avoid it and they will give it to the teacher to continue working with it during the following lesson.
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Lesson # 8 November 1st - 2019

Topic	Situations in which body language interferes in the proper development of speech.
Learning Objective	Students will practice their vocabulary learned in regards to public speaking, while being able to identify which is the inadequate and proper use of body language in order to accurately use of it.
Teaching Objective	To provide different activities and resources about fiction and non-fiction literature in which students can put into practice the vocabulary acquired while finding solutions to the problem of inadequate body language usage.
Warm up (10 mins)	Students will play Hot chair. A couple of students will take turns in coming in front of the classroom and them classmates will help them identify the word that is on the board. The teacher will be asking words from previous class and synonyms of new vocabulary.
Presentation (5 mins)	A presentation about tips for successful public speaking performance in regards to the proper use of body language will be developed by definitions presented on a PowerPoint presentation. The words will be explained are: Vocabulary <ol style="list-style-type: none"> 1. Hand Gesture 2. Body Posture 3. Eye Contact 4. Facial Expressions
Practice (20 mins)	Students will develop an activity following the dynamic of the popular game "Pictionary". Per groups, students will be given a word (the same words introduced in the presentation) related to body language and they could act or draw so that the other students could guess the word.
Production (15 mins)	Students will watch a video about fiction and non-fiction literature in which there is an inappropriate use of the body language. Then, they will write down what solution they will use to improve the speech shown in the video and what things to avoid about it.

PBL AND ITS IMPACT

Lesson # 9 November 8th - 2019

Topic	Report creation and presentation about the problems' solutions analyzed and discussed in lesson #8 in regards to body expressions.
Learning Objective	Students will elaborate solutions according to the problems presented regarding misuse of body expression.
Teaching Objective	To guide students to prepare and present solutions they found to the problems about the inadequate use of body expressions during public speaking.
Warm up (10 mins)	For the warm up activity the teacher will show some of the parts of the presentation introduced last class with some of the vocabulary, so students can remember it. Then, the teacher will mention some of the vocabulary and the students have to act or imitate the vocabulary that is mentioned by the teacher.
Presentation (5 mins)	Students will watch the first minute of a video (https://www.youtube.com/watch?v=YivQYeI0vys) in order to identify some of the problems exposed there.
Practice (10 mins)	<p>For the practice session, the students have to analyze and write down possible solutions to the problem exposed in the video in presentation part in regards to: tone of voice, body language, use of filler words and knowledge of the content. In addition, students have to think and write down on a piece of paper the things that the person does not have to do in the video and the students have to prepare a speech and discourse in regards to the previous points.</p> <p>(Instrument to be applied: Audio Recordings) This instrument is implemented with the aim to identify if students make a proper implementation and use of the vocabulary learned before</p>
Production (25 mins)	<p>Students will go in front of the classroom and they will give speech in regards to the possible solutions for the problem exposed and the things the person does not have to do.</p> <p>(Instrument to be applied: Field Notes) This instrument is implemented with the aim to identify if students make a proper implementation and use of the vocabulary learned before</p>

PBL AND ITS IMPACT**Appendix 4. Interviews Format****Interviewer:****Student name:****Date and time:****Location:****Instrument:**

General Questions

1. What do you know about public speaking?

2. What do you think are the advantages of a proper public speaking?

3. How do you know that someone knows about the topic when giving a speech?

4. What are the tips that can help you give a better public speech?

5. How would you teach someone about public speaking?

6. What are the symptoms or expressions that a person can have when he/she is nervous or anxious while speaking in public?

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Follow up question: Have you ever had shaky voice while speaking in public?

Appendix 5. Field Notes Format

Date:

Class N°:

Student name:

Researcher:

ASPECTS	YES	NO	A LOT	SOMETIMES	COMMENTS
Use of the vocabulary in regards to public speaking					All Public Speaking vocab
Students use lexis in regards to TOV					Specific TOV
Do they use Spanish to express or finish a TOV idea?					Specific examples
Do they use Spanish to express or finish a Public Speaking idea?					Specific examples
Do they relate TOV with previous Public Speaking vocabulary					How? Provide examples

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What words do they use the most in regards to TOV?					How? Provide examples
What words do they use the most in regards to Public Speaking?					
Do Students take time to analyze a problem?					

TOV = Tone of Voice