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Fostering Behavioral Engagement Using Problem-Based Learning in a group of Night
School Students in El Santurario, Antioquia

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Abstract

This action research aimed at fostering the behavioral engagement towards the English class by using Problem-Based Learning, in a group of night school students. It was conducted in a public institution located in El Santuario, Antioquia. The actions implemented used the 6-step cycle proposed by Problem-Based Learning, accompanied by the development of activities to improve positive conduct and involvement of academic tasks. Data instruments used were journal entries, students' artifacts mainly written reflections and a checklist. Findings revealed that Problem-Based Learning help to foster students' conduct by increasing their interest and involvement in class by following instructions, asking questions, and contributing to class discussions.

Keywords: Behavioral Engagement, Problem-Based Learning, night school students, reflections,

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Degree requirement

This action research project is submitted as a requirement to obtain a bachelor's degree in foreign language education (English- French) at the Escuela de Idiomas, Universidad de Antioquia, El Carmen de Viboral, Colombia.

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Preface

I am a student of foreign languages teaching program from a public university in Antioquia, Colombia. My interest in doing this research came from my desire in learning more about teaching and knowing that education is one to contribute to students' lives when taking decisions. This research study was carried out from August 2022 to June in 2023. As a pre-service teacher, I conducted the project in a night public school in El Santuario, Antioquia and I was assigned to a group of students who were taking Ciclos Lectivos Especiales Integrados 5. This research project is mainly addressed to educators, who acknowledge the importance of agency in the teaching practices and learning experiences in EFL night school contexts.

Emely Alejandra Garzón Guayabo

El Santuario, Antioquia, June 14, 2022

Description of the Context

This research project was implemented in a public urban educational institution of El Santuario, Antioquia, Colombia. This institution offers education for elementary, high school, and night school. The focus of this project was on night school, where people from divergent backgrounds and ages study to get their high school diploma. The institution's mission is "To offer students various levels of knowledge, that are based on El Santuario's jobs for teenagers and adults based on human dignity, the rights and responsibilities based on skills and values that promote coexistence, peace, and citizenship". As for its vision by 2025, the institution will be recognized for its leadership in the process of comprehensive training for children, youth, and adults through education. (Nuestra Institución, Rivera, 2008,)

The English classes were a 2-hour period once a week. In night school modality, they arrange the academic calendar by stages based on how normal groups that are in a high school but finish faster. Each grade is called Ciclos Lectivos Integrados Especiales (CLEI) for Formal Education for Adults. In these classes students are divided into separate groups according to the Colombian school system, CLEI 3 is sixth and seventh grades. CLEI 4 is eighth and ninth grades. CLEI 5 is tenth grade and CLEI 6 is eleventh grade. There were more than 40 students enrolled, yet only around 18 to 25 students attend class regularly.

Regarding the curriculum and class dynamics, they focus on grammar structures and parts of speech. The activities that students did were on the cellphone or worksheets on copies.

Participants in this research were students from CLEI 5. Their ages range between 16 and 40 years. The majority liked English but found various challenging aspects, but they had an optimistic attitude towards the foreign language. They also expressed that the biggest barrier to learning a language was their thoughts and beliefs. (Students' Questionnaire, October 18th, 2022). Concerning the cooperating teacher (CT), he holds a bachelor's degree in Basic Education with an Emphasis on Humanities- English. He has been teaching for 12 years. (CT's Personal Communications, September 12th, 2022)

Additionally, this institution had a particular context, because it is mostly a school for adults, with different school rules and the school's weekly schedule is different due to their responsibilities. Finally, students were learning English after they had had a long day at work, they had taken care of their children, or solved personal issues, consequently, unwilling attitudes towards the English class and other courses were present, and it was noticeable that it was challenging for them to understand grammar topics.

To conclude, the main issue found in this group was the lack of opportunities for students to be involved in the lessons as active participants, and to be engaged in the class to complete activities that relate to their interests.

Statement of the Problem

After the observation period, I could evidence the lack of opportunities for students to solve problems which negatively affected students' behavior towards EFL classes. In an English class, learners' production, development, or knowledge on a specific topic may be

evident, through their behavior towards the dynamic of the class and the activities developed, but this was not the case.

In addition, the classes observed evidenced that the students did not have a clear idea of the objectives towards the language acquisition nor the skills to develop, most lessons included only a very brief explanation from the teacher, as to what they would learn during the session. Because of this, most of the students did not show any interest when the teacher gave a concise introduction to the class, most of them would be on their cellphone or talking with others. (Journal entry excerpts, August, September 2022). Additionally, while students did the worksheets or activities proposed by the teacher, it was noticeable that students were confused about the way they had to write to complete the activity. To exemplify, in one of the classes, learners had to complete a worksheet implementing the past tense form, yet they were answering with the present tense form. (Journal entry excerpts, August 9th, 2022).

Moreover, students in these classes did not have any type of guide or control when one student made harsh comments to another, in cases where their way of thinking was different, if they had a problem, or if they did not know about the topic. In most classes, what mattered most was the grammar part, therefore in situations where this occurred, it was ignored by the teacher and classes focused only on having students completing activities and worksheet writing in three forms, affirmative, negative, and interrogative. (Journal entry excerpts, August 16, 2022).

Furthermore, students' context, background, and interests were not considered in the lesson planning, the activities implemented did not have any relation to the student's lives. Most of the activities were translation, fill-in-the-blank, and verb conjugation with topics

that students did not understand because they did not know the vocabulary. (Journal entry excerpts, August 2nd, 9th, 16th, 2022). The classes were teacher-centered, and the dynamic of the class was always to give a concise explanation of the grammar rule in Spanish and an exercise.

Nonetheless, the possibility to implement strategies that would improve students' behaviors towards the English class is high and valid for this context. Therefore, the use of Problem-Based Learning Approach could develop flexible learning, effective problem-solving skills, self-direct learning skills, effective collaboration skills, and intrinsic motivation (Barrow & Kelson, 1995).

Theoretical Background

In this section, I present the main theoretical concepts that supported this action research. Firstly, I will provide a definition of the term 'engagement'. Secondly, I will present the definition of the specific type of engagement addressed in the present study, namely 'behavioral engagement'. Finally, I will define and explain the steps of Problem-Based Learning as the teaching approach that was used in this project.

The concept of 'engagement' has plenty of definitions depending on its area of knowledge, however, I will focus on its definition from the educational point of view. As Skinner (2009) stated, he mentioned that engagement refers to students' motivation to perform in an educational environment providing determined results. From this definition, engagement is understood as the result of students' attitude towards what occurs in an educational atmosphere or environment, particularly a classroom setting where students interact with the teacher and other classmates. Moreover, Christenson et al. (2012) explains

that “Engagement is co-constructed in the classroom moment as interaction plays out between teacher and students and students and themselves” (p. 453). Taking this into consideration, it is important to know students’ level of engagement based on how they act towards their educational surroundings such as their teacher and classmates. Hence, knowing students’ level of engagement can help shape the course of the class and enrich the possibilities for achieving the class goals.

Some authors elaborate on the diverse types of engagement that affect learning, for instance, Fredricks, et al. (2004) subdivide the concept of engagement into 3 components: behavioral, emotional, and cognitive. For this action research, I centered the efforts on gaining insight regarding ‘behavioral engagement’ only. This, with the intention of evaluating the possibility of gaining improvements in students’ behavior towards certain classroom situations that occur when students are learning a foreign language. Behavioral engagement entails three main academic actions and for the purposes of this research project we focused on some characteristics from two of these academic actions that could help have a follow up of the behavioral engagement in this context.

The academic actions of behavioral engagement are described as follows: (a) *positive conduct*, it pays attention on how students do certain activities in class, E.g., following instructions, class attendance, and disruptive behavior (Finn, 1993; Finn, Pannozzo, & Voelkl, Ji 1995; Finn & Rock, 1997); (b) *involvement of learning academic task*, refers to observing students’ behaviors such as effort, persistence, concentration, attention, ability to ask questions, and contributions to class discussion (Birch & Ladd, 1997; Finn et al.,1995; Skinner & Belmont, 1993); (c) *mode of student involvement in*

school-related activity such as school government or sport teams which is also a factor to take into consideration when describing behavioral engagement (Finn, 1993; Finn et al., 1995; as cited in Fredricks, et al., 2004)

As explained earlier, for the purposes of this action research, I selected two behaviors from *positive conduct* and two behaviors from *involvement of learning academic tasks*. Regarding the first one we chose: following instructions. As for the second one we chose students' ability to ask questions and contributing to class discussions. These two actions of behavioral engagement could allow students in this context to improve in different interactions in the class as it was evident that students lacked respect for one another, they did not follow instructions, their assistance to class was very irregular and their participation in class activities were either limited or nonexistent.

From this perspective, researching about behavioral engagement could provide valuable insight to understand students' behavior in terms of EFL classrooms and could help obtain tangible information on students' behavior improvements. Moreover, one advantage of behavior engagement is that it allows teachers to understand the knowledge on how the connection of the student and his or her surroundings of the school is. Finally, behavioral engagement also helps analyze the situation with students who study in a night school, who may come from difficult backgrounds and whose purpose of graduating is to belonging to this class is to graduate to have better working conditions.

Regarding Problem-Based Learning, it is the teaching approach used in this action research and its principles are suggested by Hmelo-Silver (2004), she defines Problem-Based Learning as "an instructional method in which students learn through facilitated

problem-solving” (p. 235). This gives insight to teachers wanting to use this method in heterogeneous EFL classes; similarly, this method can serve as guide for students or people to start solving real-life situations. Additionally, Graaff and Kolmos (2003) state some characteristics of implementing Problem-Based Learning, such as:

- It involves a real-life problem, the problem that is chosen for the class, which is a starting point, should be part of their context to increase improvement in motivation and comprehension towards the content.
- It encloses self-directed learning which allows students to make class’s decisions, for instance, in some cases, students choose the problem they would like to approach, in others the teacher gives them the starting point, but they are the ones who elaborate each point.
- It connects experience learning to self-directed learning based on how they will develop the activity based on their personal experiences which causes a positive effect in students’ because they can contribute with their opinions, thoughts, and understandings.
- It involves activities-based learning, which is how the class should be done, to promote students to research, make decisions and write with relation to the problem.
- It increases inter-disciplinary learning, as the teacher’s subjectivity should be set aside and be very open in terms of culture, letting students go beyond traditional subject-related boundaries and methods.
- It provides exemplary practice, which is the final part after approaching the problem, students can transfer knowledge obtained by learning through the problem presented.

- It promotes group-based learning, most of the activities are done in groups with the intention of them knowing how to handle the process of group co-operation.

Similarly, Barrow and Kelson state that Problem-Based Learning originated with some goals for students to develop. In this sense, students will acquire flexible knowledge, effective problem-solving skills, self-directed learning skills, effective collaboration skills; students also increase their intrinsic motivation, and the students' role in class plays a relevant part in the development and achievement of the proposed goals.

Regarding the steps for implementing Problem-Based Learning in an educational context, Hmelo-Silver (2004) advise a 6-step cycle, describe as follows:

- Step 1: present or introduce a problem scenario to students.
- Step 2: create spaces in class to identify the facts of the problem scenario, which help them to represent the problem.
- Step 3: generate a hypothesis; students can do this when they understand the problem and think of premises as viable solutions.
- Step 4: identify knowledge deficiencies which are an important part of the cycle because it leads students to do their own research about the problem presented.
- Step 5: apply new knowledge to solve the problem, with the help of an evaluation that helps us to verify learning.
- Step 6: abstract or reflect on the process and information obtained.

As presenting a problem scenario to students is paramount, Barell (2007) arguments that problematic scenarios should be taken from real life situations. If students will be learning through a problem, it is ideal that this has an approach to their context, influencing

on their way of realizing each part of the learning process because of the knowledge, experiences, thoughts, and ideas they have in relation of a problem. Implementing Problem-Based Learning in the context of this research, it may foster students' behavioral engagement, as Leong (2009) states "Problem based is a curriculum model that emphasizes the use of task-based problems to engage students in active and multidisciplinary learning." (p. 40). Therefore, PBL is an ideal approach to implement in class, especially in spaces of EFL because it is a subject which is out of students' comfort zone, even where some do not see it as something important, applying principles and characteristics of PBL can help students engage more in the class.

To conclude, this project aimed at engaging students' behavior in class in terms of *positive conduct*, namely, students follow instructions; and *involvement of learning activities* based on students asking questions and contributing to class discussions in the EFL classes with the help of Problem Based Learning. All in all, attempting to overcome class issues regarding meaningful class activities, involvement of students in class activities and improve their behavior.

Research Question

How can Problem-Based Learning Approach foster night school students' behavioral engagement?

Objectives

General Objective

To determine to what extent Problem Based Learning foster night school students' behavioral engagement.

Specific Objectives

1. To examine students' improvement in their ability to follow instructions, ask questions, and contribute to class discussions.
2. To determine the impact of Problem-Based Learning on students' behavior towards the class.

Action Plan

With the intention of answering the research question stated for this project, I implemented the 6-step cycle for Problem-Based Learning proposed by Hmelo-Silver (2004). The six steps were implemented during a period of three months. The first step was to set a problem scenario was a presentation of the necessary vocabulary to develop the class activities. This problem must have a connection with students' reality and the curriculum. This problem resulted from analysis of the content stated in the curriculum, which was global warming. The second step was to identify the facts of the problem, motivating students to ask questions and contribute to class discussions to contextualize the issue further. The third step was to generate a hypothesis or solution to the problem, here students were able to produce and think freely based on their own experiences and beliefs. The fourth step was to check their knowledge deficiencies, identifying what they did not know about the problem and allowing them to research deeper into the problem scenario as they needed to understand each aspect better. The fifth step was to apply new knowledge to solve the problem, the ideas were for students, with all the information obtained with the first steps, to be able to analyze a specific subproblem of global warming and speak about it. Also, they were able to know the steps to approach a problem. Lastly, the sixth step was abstraction which refers to a

reflection on the process and information obtained, to which students drew and wrote reflections that gave their opinion and wrote what they learned of the entire process.

Data was collected through students' artifacts (written reflections), teacher's journal (supported by audio and video recordings) and a checklist to assess their behaviors with the objective of seeing how students could improve their behavioral engagement with the implementation of the six steps of Problem-Based Learning

Development of Actions

To begin, step 1 was developed with the idea of sharing the problem as the starting point to start a conversation about the problem, and for students to familiarize themselves with the class, we decided that the problem would be 'global warming'. In this step we only needed one class session, they learned new vocabulary and situations that involved global warming through the implementation of games, such as a relay race. This first step, the ideas was to do a diagnosis of how the students were in terms of following instructions, asking questions, and contributing to class discussions

In step 2, we worked on the identification of issues, critical problems, controversial situations that involve global warming. We included readings from different sources, brainstorming of ideas and creating posters as the means for students to demonstrate their previous knowledge about facts of global warming, however, at the same time, they did small investigations about the corresponding facts through readings, and they had to create summaries or reports about the information they read, using 'spiderwebs' type of graphic organizers and posters. We did whole group activities and small group activities. Here we discuss as a group all the background knowledge they had about global warming. After we

decided on the problems/fact they knew about global problem/fact to learn more about. I gave them readings which were modified for them to understand. When they finished this, they did a spiderweb as a method of brainstorming activity where they put all the information of the specific facts of global warming, and some investigated on internet more information of each fact, evidencing their ability to ask questions and contribute to class discussions.

Step 3 was the generation of a possible hypothesis or solutions to the problem. Students identified various problems within global warming , through articles, self-investigation in the internet and their previous knowledge. For each one of these problems, they reflected and wrote a possible solution based on their thoughts, experiences, and opinions. After that, we shared them, as a whole group activity to see the amount of variety of solutions there were towards the problem stated. Students were introduced to various problems as war conflict, mental health, women violence, deforestations, and debts. These were presented with pictures which were posted all around the classrooms and they first identified the problem, then they looked at the solution which was under. However individually they wrote about what solutions are possible for them and each problem, to later discuss allowing students to provide their personal ideas and hypotheses. With this discussion the class environment agreed that diverse solutions were acceptable, understanding and not despise the others' proposals because everyone's unique perspectives could contribute to fixing a situation.

Then, in groups, I gave them a paper with a problem of global warming, each person of the group had a problem and wrote a possible solution and they had to change the paper

so they can write another solution for another problem. With these activities the intention was to see how students were able to follow instructions and contribute to class discussion.

In step 4 we checked knowledge deficiencies. It was necessary to teach them how to develop the step and what type of language they needed and what other information they needed to fully understand the process. I adapted a viral game which was on social media called 'Flip the bottle' and an activity where they had to choose a side of the classroom if they knew or not the concept mentioned, to understand what the step was about. After this explanation, I passed out a checklist I created as a guideline for them to complete and to check how they were. We answered some questions using the strategy 'I know, and I do not know' to make sure they understood this step. They checked their knowledge deficiencies with a written guideline of questions about what has been learned so far. All the questions were about each step of PBL implemented in terms of global warming. Then, we did a poster where they presented the information they knew and did not know and explain the reasons for their answers.

Step 5, applying new knowledge, was developed in two classes. I created activities, such as scavenger hunts and the creation of posters with the intention of giving them activities to apply the new knowledge obtained. In the scavenger hunt the clues had all the steps in it. So, there were activities about the problem scenario and with a word search they had to find vocabulary taught in this step. Next, with the identification of facts, the activity was to find something to recycle. When they found it, they had to draw something as a representation of global warming. Then we played hangman to know the next clue which was "write the steps". Then they had to find a picture with a fact of global warming which was deforestation, then,

to finish, they had to write a knowledge deficiency of deforestation. When they did that, they wrote a solution and they to finish. We socialized and they expressed comments about how they felt, and later on, they did a poster in groups answering questions and then they shared it to the whole group.

The last step was the abstraction process. We pasted posters on a classroom wall, where they did drawings, quotes, and personal reflections giving their opinions about the project. We played two online games ‘Kahoot’ and ‘Blooket’ to wrap up all the information learned and introduced to the new ways of seeing what they learned, after that, we did posters with reflections, drawings, and words and posted it on the wall.

Data analysis

Data was analyzed using the 5 stages proposed by Burns (2010): assembling the data, coding the data, comparing the data, building interpretations, and reporting the outcomes. To assemble information, I stored the students’ artifacts and classified them. The audio and video recordings were done with my cellphone, they were transcribed and stored in a folder, these helped me write the journal after each class was implemented. I analyzed quantitatively the checklist. Then, I created codes using the ‘subcoding’ and ‘process coding’ suggested by Saldaña (2015). They were saved using the Software *Atlas.ti*. To compare the data, I identified codes in the raw material and then I summarized the codes into an Excel chart. I started looking for patterns, connections, and comparisons to build interpretations and make meaning of the categories and themes that came up. Finally, I reported results and outcomes in order of importance.

Findings and Interpretations

This research project aimed at supporting the learning experience of night school students with various characteristics of Problem-Based Learning to obtain a positive change in students' behavioral engagement towards EFL classes. Data evidenced improvements in the student's behavior in EFL classes. The two main findings referred to Problem-Based Learning Fostering Students' Behavioral Engagement in Terms of their Positive Conduct, particularly when following instructions, and Fostering Involvement of Learning Academic Tasks, particularly when asking questions and contributing to class discussions. In the following paragraphs I provide an in-depth explanation of each finding.

PBL Fostered Students' Behavioral Engagement in terms of their Positive Conduct by Following Instructions for Class Activities

Data showed that students followed instructions by doing the proposed activities in the class, and students commenting or speaking out positive reactions towards the type of activities, students knowing the steps of the PBL cycle, and students being able to mention what step or activity was being developed. It was evident that students did the proposed activities when developing each of the steps of the PBL cycle. Along the process, several activities were designed for students to work on the topic. These activities involved (a) working in groups, (b) reading articles and information of 'global warning', (c) writing sentences that answered information questions about "global warning" and writing sentences about their own knowledge deficiencies and toward the issues discussed, and (d) warm-up activities in the mode of short games to review the topic of the previous class.

As illustrated in the following excerpt from the journal, it is evident that students followed the instructions and guidelines given in the class, therefore, students stopped doing tasks from other courses during the development of the class activities, students stopped breaking the rules of the class (speaking out loud, not listening to the teacher or classmates, using the cellphones, interrupting the teacher), and they also stopped making jokes about any issue or other classmates' performance, which were negative behaviors that were observed before the implementation.

“I gave them the instructions that in the same groups, they had to do a poster by applying the steps seen to a problem they knew about ‘global warning’ in the region, and each group agreed: contamination, deforestation, and pollution. I handed them a guideline for them to follow to create the poster. As soon as their group had the guidelines, they started working as a group doing the activities for each role. Some divided the steps of the guideline, others were doing the poster, some were looking for the question” (Journal entry, April 11th, 2023)

Another example of students' positive conduct was their answers to what was reported in students' artifacts of the written reflections which were done at the end of each class with the intention for students to become aware and implicated in the process. This helped them to reflect on class activities and the knowledge learned in each class. In the following answers from the written reflections, it can be observed that students reported what they have done in class in their own words. To illustrate, students were interested in the class activity proposed which permitted them to not pay attention to other subjects as done before.

Figure 1*Students' Artifact - Written Reflection*

1. Cuál es el paso que se completó hoy?

2. Hago comentarios sobre las ideas de mis compañeros?

3. Qué parte fue difícil concentrarme? ¿por qué?

Solución

1.P// Saber si teníamos claras algunas cosas que se han visto en clase y qué debemos mejorar hoy.

2.P// Cuando estoy siendo participe la charla y sé a lo que se están refiriendo sí

3.P// Cuando al principio se ocasionó una situación de agresión física entre dos personas.

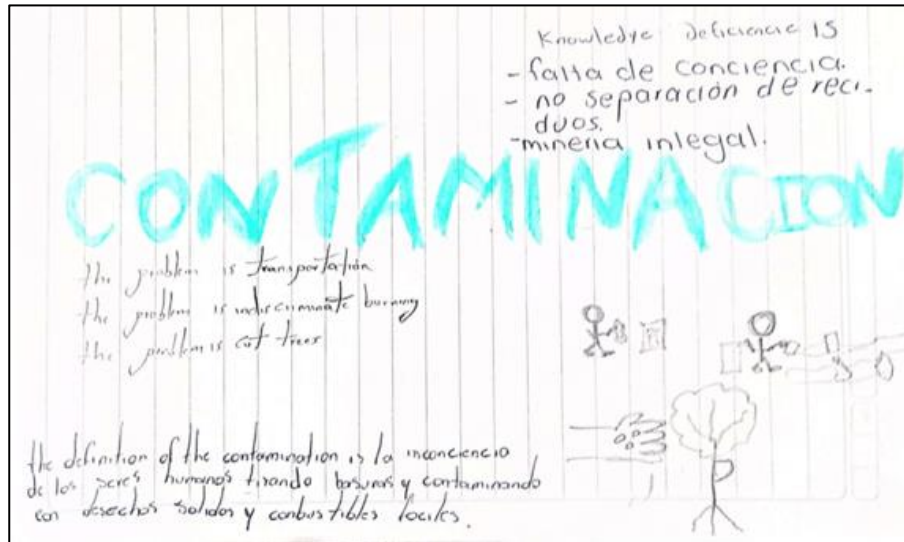
Note. Students' responses to different questions posed at the end of the class as a class reflection on their behavior.¹

Additionally, the way students did the activities proposed by the teacher in class demonstrated another way how they developed positive conduct in the EFL class. In the following students' artifacts, it is revealed how they understood the instruction and did the task, therefore, their interest and the way to interpret the information discussed in class, and it showed their own perception of it. Hence, it was noted their interest in the class activities and the fact of not seeing them in their cellphone or doing other activity that did not have relation with the class. The following figures also illustrate the results of one of the steps of the cycle, demonstrating that they followed the instructions proposed.

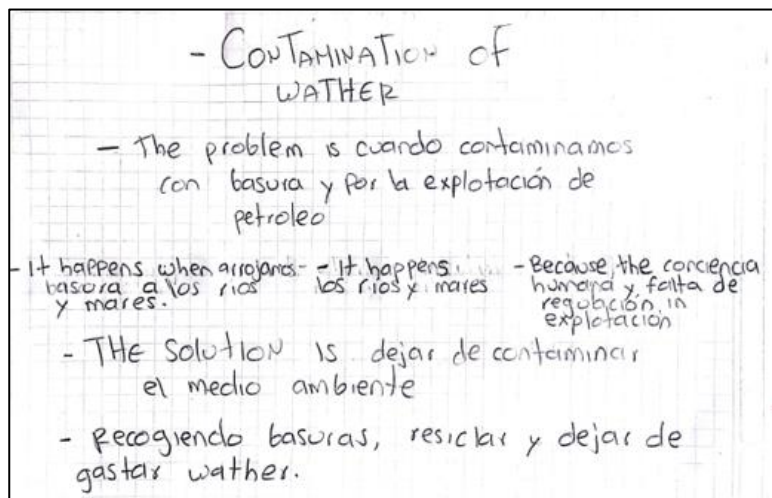
¹ Which was the step that was completed today? To know if we had some things clear, that have been seen in class and what we should improve today.

Do I do comments about the ideas of my classmates? When I am participating in the conversation and I know or about what they refer, yes.

What part was it difficult for me to concentrate? Why? At first when a physical assault occurred between two people. (My translation)

Figure 2*Students' Artifact*

Note. Students' written performance when finishing the Problem-based Cycle.

Figure 3*Students' Artifacts*

Note. Students' written performance when finishing the Problem-based Cycle.

² Knowledge deficiency is lack of awareness. No division of residue. Illegal mining.

The definition of contamination is the unawareness of human beings throwing trash and contaminating with waste products and fossil fuels.

³ The problem is when we contaminate with trash and petroleum mining. It happens when you throw trash to rivers and oceans. Because of the human awareness and lack of regulation in mining. The solution is to stop contaminating the environment, picking up trash, recycle and stop wasting water. (My translation)

Figure 4*Students Artifact*

Note. Visual evidence as to the students' posters summarizing the Problem-based cycle displayed in the classroom.

Consequently, PBL did foster students' behavioral engagement due to how students followed instructions and rules and were able to demonstrate it through their actions of doing what was proposed by the preservice teacher and as a result they did amazing and coherent posters of 'global warning', presentations, and reflections of each class. This sustains what Fredricks et al. (2004) mention of how behavioral engagement can be identified when students do work and follow the rules to be able to participate in class.

PBL Fostered Students' Behavioral Engagement in terms of their Involvement of Learning Academic Tasks

The implementation of PBL helped students to foster their behavioral engagement based on how students got involved in the learning academic tasks that were presented in the lessons. Students showed interest in actions involving academic tasks specifically when asking questions and contributing to class discussions.

Asking Questions

This study demonstrated three types of questions students asked during the process, namely (a) questions for clarifications regarding class activities, (b) questions towards the topic and (c) questions to the teacher regarding personal and academic issues. Before the implementation of the research and teaching actions, students were nonresponsive to ask questions when they did not understand a part of the lesson. When learners did not understand a part of the class students started avoiding every task or conversation of the lesson. They would check their cellphone or do any other assignment. However, with the application of the project, students began asking for clarifications of the class activities to be able to participate in all the activities proposed. To illustrate, Figure 5 shows how students improved in this aspect.

Figure 5

Results of Students Asking Questions for Clarifications, Beginning and End of the Process



Based on the learning process about ‘global warning’, students asked questions during class discussions in terms of what they did not understand. For instance, concepts that they did not know their meaning of, to comprehend future activities of the lesson. The data evidenced that when students did not know a word or a term about the topic, they

would ask for its meaning. In contrast, in other lessons, students would prefer not to do the exercise or simply copy from each without wanting to learn from it. As reported in the journal when I showed them each fact about ‘global warning’, I did so, part by part and during the explanation of those concepts, students were able to ask “¿qué es c02?” “¿Qué es eso?” “Profe no entendí muy bien qué es land use”, then I would explain to them again with body movements”.⁴ (Journal entry, March 7th, 2023)

During most of the classes, students began to show interest in the preservice teacher’s academic and personal issues. Students started asking questions about my life situations, and thoughts. In addition, learners asked questions approaching their doubts about the class tasks, e.g., students written reflections, a student was interested in knowing if I read them all. To illustrate, here is an excerpt of what was reported in the journal.

[...] I told them to take out a sheet of paper and answer all the questions of the written reflection. One student asked me ¿profe, este es de hoy? [...] Student A asked me, ¿profe y usted los lee todos? and I answered Yes, of course, and Student B said “Ay no que pereza⁵” [...] (Journal entry, March 14th, 2023)

Consequently, the change in behavior from the part of the students revealed an improvement in their behavioral engagement with them because they started asking questions, which were three types of questions, throughout the classes. This data confirms what is stated by Fredrick et al. (2004) regarding students’ actions in class that exemplify how they are involved in academic tasks by asking questions. The questions posed by

⁴ what is C02? what is that? Teacher, I did not understand very good, what is land use?

⁵ Teacher, is this one for today? [...] do you read all of them? [...] oh no, that is boring. (My translation)

students along the process demonstrated an involvement towards various aspects of the EFL lessons.

Contributing to Class Discussions

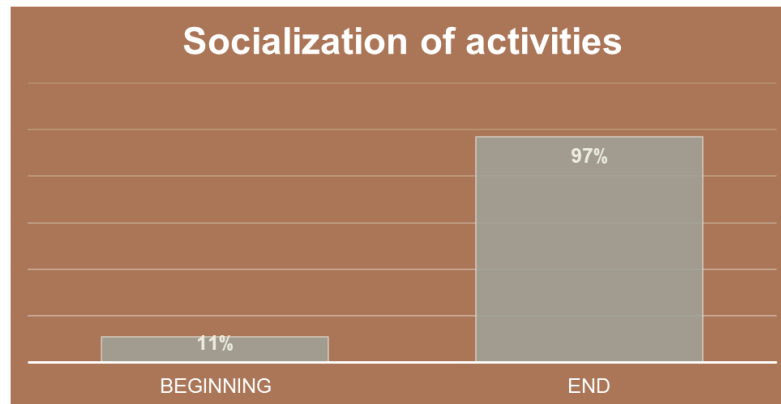
The second action that improved students' night school students' behavioral engagement was that there were more students who started contributing to class discussions. They began to socialize the activities and answering teachers' questions with the use of their mother tongue, Spanish, and an attempt to use English.

During most of the whole group activities, which were done after developing an individual activity, students shared what they did in the individual activity by giving their opinion about the situation, with the intention of dialoguing about it. There was a significant number of opinions and thoughts from the students, which was an improvement compared to their behavior from the previous term lessons, where grammar exercises were the core and there were no conversations around topics in English. Data unveiled that students do contribute to class discussion when they socialize their results, their ideas, and their opinions of the activity. Likewise, there were moments where students celebrated an intervention of others. This can be evidenced from a class discussion taken place and recorded in the journal.

“After that, due to the time, after 15 mins, we began the presentations, I was going to choose randomly, but the group of student A said that they would do it. He read everything in the poster in English. He based himself in the reading and everything was in English. Student B would shout “esooooo” (Journal entry, March 14th, 2023)

Figure 6

Results of Students Socializing Activities at the Beginning and End of the Process



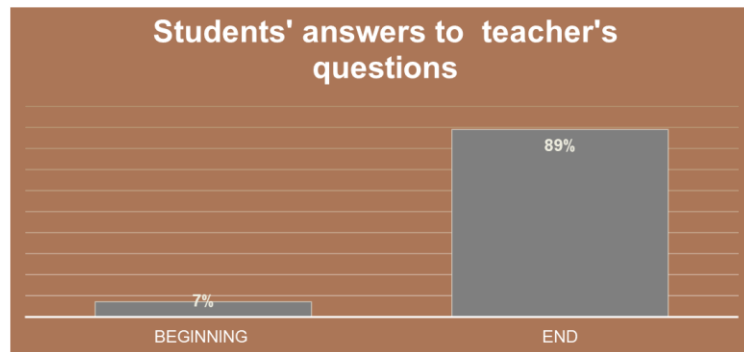
During the lessons from the previous term, when the teacher demanded students' questions about the topic, normally they would stay in silence, contrary to what data revealed when implementing PBL. Students began answering any type of questions, and even if they answered 'no', that was a noticeable change in students' behavior. This made an environment where students also became part of the class based on the knowledge and confidence, they had about the problem scenario. It was not only a teacher centered class, but also student-centered class. There were more dialogues during the class and good involvement of the activities, as reported in the journal entry.

[...] Student A: por qué?
 Teacher: student B, why was it easy?
 Student B: ya sabemos algunas palabras algunas definiciones.
 Teacher: any more comments?
 Student C: no [...] ⁶ (Journal entry, April 18th, 2023)

Figure 7

Results of Students Asking Questions at the Beginning and End of the Process

⁶ Student A: why? Student B: We knew some words and son definitions. (My translation)

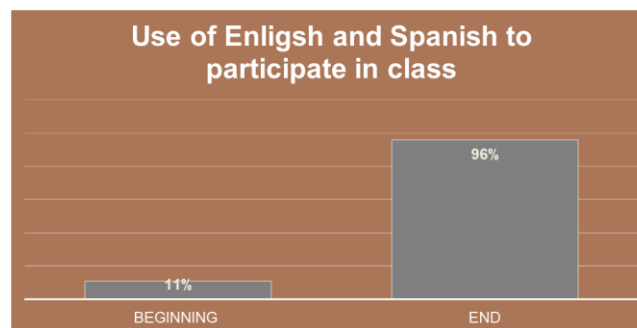


In the activities done, most of their interventions were in Spanish and English. They would give their opinions, thoughts, and answers in Spanish with the intention of participating on the activities and sometimes with expressions and words in English that were from the topic. This was a change obtained in the class because there were spaces of conversation, looking for solutions, analyzing actions and listening to others, students showed interest by answering in Spanish or English, as reported in the journal.

[...] Student A: Bueno la primera, the problem is contamination of water, la segunda The problem is 'global warming'. What is solution de 'global warning', no salir a pasear. ⁷ (Journal Entry, April 18th, 2023)

Figure 8

Results of Students Using English and Spanish. Beginning and End of the Process



⁷ Ok the first one, the problem is contamination of water, the second one, the problem is global warming. what is the solutions of global warming, to not go out on trips.

To sum up, Fredrick et al. (2004), state that students are involved in academic tasks when they are contributing to class discussions. With this said, night school students did improve their behavioral engagement, data demonstrated how they were involved in the class by contributing to the class discussions from the beginning of the project compared to the end. With this, students began having conversation in the EFL classroom and not just copying information as it was done in previous classes that were centered on grammar.

Conclusions and Implications

To conclude, Problem-Based Learning permitted students to improve their conduct and involvement of learning academic task in the EFL class. Students' behavioral engagement was fostered by PBL in terms of students following instructions, asking questions, and contributing to class discussions. Even though it began with students not doing these actions, throughout the classes these conducts were done with more frequency, they did all the activities proposed, stopped making disruptive comments, stopped concentrating in other activities. Secondly, they socialized the activities done and began to show interest in answering the teachers' question. Students did it using their mother tongue and English to contribute to class discussion. Also, they normally asked questions to clarify instructions or concepts of what was taught in classes, like the creation of posters and writings activities.

The implications of this project refer to, one, the content to be used when working with Problem-Based Learning. It was demonstrated that when classes have real life problems or connect to the student's context as it is intended with PBL (Hmelo-silver,

2004) it does foster student to engage to the classroom. Second, students became aware of two of the characteristics of PBL, self-directed learning and working collaboratively.

Before the implementation of the actions plan, students were not interested in the activities proposed, they would work in groups and just one person would do all the work. In contrast to the results after the implementation, where all the group work activities were done by all the members of the group. At the beginning they needed an example of what each person could do, but after the third group activity, they got together and distributed all the tasks between each other. In addition, self-directed learning was reinforced with the written reflections implemented in each class, because it promoted students to reflect and were aware of their learning process.

As a suggestion for teachers when implementing the PBL 6-step cycle would be if the process could be done with more time. With the intention of students being able to gather knowledge of the facts of the problem scenario and improving their language acquisition skills.

For further studies, knowing that students' context and that most of them are adults the problem scenario can be about 'mental health' and 'social problems' such as women as the head of the household, consumption of drugs, and birth control use because most of the women who are in this schooling are already mothers when they are still teenagers.

Reflection

The five and a half years that I have been in university, can be divided into four stages: my life in the university, my academic experience, my research process, and my teaching process. These four stages have formed a totally different person from the one who began studying in August of 2017.

To begin, I will put together my life at the university and my academic experience. I can say that this process has been a formation and transformation in beliefs on how to be a language teacher. In this period, I had the chance to grow beyond my expectations in terms of knowledge in teaching thanks to my classmates, teachers, readings, and experiences. I can say that all the lessons that were given to us had an impact on me. I noticed that as a teacher, I must know my students in aspects such as their way of learning, their background, and their interest to be able to take a decision and implement it. Also, I have learned to allow students to be part of the class, even if we are teaching a language and advances must be evident, we shall allow them to build confidence and become better human beings for the society, which is what matters most as a teacher, not a grade.

To continue, my practicum and research process has been an enormous learning experience that has given me knowledge on how to implement a research project and a pedagogical method. The research project helped me understand the importance of doing this process to improve classroom environments and strategies as a teacher. I did it in a context that I can say is very similar to my life. It was in a night school context where most of the students study to have better work conditions, but they need to survive in society, so they have to do it in a special schedule. That is the mirror of my life. To do my practicum, I needed

to do it in a different schedule, so night school context was perfect for me. As I mentioned, in this context, most of the students work, most of them are teenagers and adults, some with difficult backgrounds, so I decided that this project should be done with Problem-Based Learning to influence students' behavior. Even though I was the person who implemented the project, this had many who contributed to make it happen, my advisors, my students, my classmates, and cooperating teacher. It was a truly nice and unforgettable experience that helped me confirm that I took a good decision to study this.

To conclude, I must say that this process has been a life changer for me as a teacher. My knowledge has improved, and all the information I have learned has been very meaningful for me, even though I know as a teacher, I must be in constant learning, this process has initiated the passion I have for teaching.

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