

Graphic Organizers as a Metacognitive Strategy to Foment EFL Writing Production in a Group of 10th Graders

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Abstract

The present study investigated the benefit of Graphic Organizers as a metacognitive strategy to develop EFL students' writing production through the implementation of Project-Based Learning. The population was a group of 10th graders from a public school in Bogotá, data was collected for the project during five classes. The project consisted in having the students choose the countries they liked the most, five countries were selected, and each country was the topic of the classes. In this space, three research methods were employed in different moments of the study: at the beginning, students filled a diagnostic questionnaire; then classes were recorded to analyze the students' attitudes and reactions towards the activities, including written reports that they were assigned each class about what they understood and enjoyed the most from what was discussed about each country (these were collected as our artifacts). Students who applied the Graphic Organizers when writing their reports demonstrated a better structure of their ideas, and more complex texts than the ones who didn't use the Graphic Organizers. Additionally, this was related to the fact that the students with more organized reports were the ones who participated more and were more involved in the different tasks. The study also revealed that Graphic Organizers foment writing in students creating structures and strong arguments that lead to meaningful learning. The pedagogical implications of this mean that teachers get to be directly involved in metacognitive strategies, which sheds light on the different perspectives of teaching English in such educational contexts.

Keywords: Graphic Organizers, writing production, pedagogical implications, Project-Based learning, metacognitive strategy

Resumen

El presente estudio investigó el beneficio de los organizadores gráficos como una estrategia metacognitiva para desarrollar la producción de escritura de los estudiantes de inglés, como lengua extranjera a través de la implementación del aprendizaje basado en proyectos. La población fue un grupo de 10 alumnos de un colegio público de Bogotá, donde desarrollamos el proyecto en cinco clases virtuales. El proyecto consistió en que los estudiantes eligieron los países que más les gustaban, se seleccionaron cinco de ellos y cada país fue el tema de las clases. Durante este período, se desarrollaron tres métodos de investigación en diferentes momentos del estudio; al inicio los estudiantes llenaron un Cuestionario de Diagnóstico, luego se grabaron las clases para analizar la actitud y reacción de los estudiantes hacia las actividades, incluyendo los informes escritos que se les asignó cada clase sobre lo que entendieron y disfrutaron más de la información discutida sobre los países, que fueron recogidos como nuestros artefactos. Los estudiantes que aplicaron los organizadores gráficos, al escribir sus informes demostraron una mejor estructura de sus ideas y textos más complejos que los que no utilizaron los organizadores gráficos. Adicionalmente, esto estuvo relacionado con el hecho de que los estudiantes con escritos más organizados fueron los que más participaron y se involucraron más en las diferentes tareas. El estudio reveló que los organizadores gráficos fomentan la escritura en los estudiantes creando estructuras y argumentos sólidos para el aprendizaje significativo con implicaciones pedagógicas que permiten a los docentes involucrarse en la estrategia metacognitiva para comprender diferentes perspectivas de la enseñanza del inglés en estos contextos educativos.

Palabras clave: Organizadores gráficos, producción de escritura, implicaciones pedagógicas, aprendizaje basado en proyectos, estrategia metacognitiva.

Contents

Introduction	5
Statement of the Problem	5
Research question	7
Objective	7
Rationale	8
Literature Review	9
Writing Production	9
Metacognition and Metacognitive Strategies	10
Project-Based Learning (PBL)	12
Research Design.....	14
Type of study	14
Population.....	15
Ethical Considerations	15
Instruments.....	16
Instructional Design	17
Results	20
Advantages of using Graphic Organizers.....	20
Table 1	22
Table 2.....	24
Table 3	24
Table 4	26
Table 5	27
Disadvantages when using Graphic Organizers.....	28
Pedagogical Implications	31
Conclusions	35
Appendix 1.....	38
Appendix 2.....	41
References	46

Introduction

In the 1970s, psychologist John Flavell introduced the concept of metacognition by defining it as the active monitoring and aware regulation of one's own cognitive processes (Iwai, 2011, p.151). In simpler words, this means that metacognition involves the processes of planning, tracking, and assessing understanding or performance. That is the reason why metacognition has become an increasingly important foundation to be included in the process of learning English as a foreign language. Considering this, Walsh (2010) determines that writing is important because it's used extensively in higher education and in the workplace. If students don't know how to express themselves in writing, they won't be able to communicate well with professors, employers, peers, or just about anyone else. Therefore, the development of writing production goes beyond the completion of an academic task.

In particular, this study investigates how Graphic Organizers as a metacognitive strategy improve writing production in students of English as a Foreign Language (EFL), through the implementation of Project-Based Learning. As an overview of the proposal, in the first chapter, we introduce the context, the population and the problem we identified, as well as the relation between metacognition and writing production and the strategy we want to apply. In chapter 2 we include our literature review, in which we present the theoretical base for our topic and the derived teaching methodology. The target in chapter 3 is to present all the methodological components of the research. This is followed by the collected data and results, based on the reaction of the students, which is explained in chapter 4. Finally, chapter 5 summarizes the whole proposal as we answer the research question stated in chapter 1.

Statement of the Problem

According to El Espectador (Redacción Educación, 2016), 47% of students in Bogotá are not able to accomplish an average level in writing production. In fact, writing is a complex skill that causes problems for the majority of students since it implies using a set of mental processes to create ideas and to express previous knowledge. Additionally, Colombian students have been educated under a system in which writing skills do not receive the necessary importance to develop EFL. Nevertheless, nowadays, the majority of teachers and students know the significant impact of having good writing production in order to avoid problems in the academic field in the future, so improving written production has become a fundamental learning objective.

That said, the main purpose of this segment is to expose the difficulties that our selected population is having in regard to EFL writing production. In this section, we first refer to the importance of this skill in EFL contexts, followed by how metacognition and the use of metacognitive strategies can be applied to develop students' writing production. Lastly, we mention Graphic Organizers and Project-Based Learning as the metacognitive tool and the teaching methodology we selected in order to overcome our research objective.

Writing production is one of the four main areas of EFL, particularly –among students– it is considered one of the most important and challenging. Tianqiong (2017) states that producing a coherent piece of writing implies internalizing what one has learned and, based on that, writing something new. To achieve this, students required extensive knowledge and awareness of cognitive processes, as well as strategies for planning, production, and revision. Thus, writing production brings about an improvement in global comprehension and knowledge of English language learning.

Our population is composed of 35 students from a public school in Bogotá. We found that this group of 10th graders has issues at the moment of organizing their ideas when trying to write in English, which is affecting their writing production in general. However, we noticed their interest in being able to improve this skill. Students present a problem when organizing their ideas before writing. In order to address this issue, we propose metacognition as a strategy that allows them to organize their ideas, in order for them to write better in English.

The concept of metacognition, as taken from Flavell (Iwai, 2011, p.151), refers to knowledge about cognition, which in turn is composed of *metacognitive knowledge* and *metacognitive experiences*. Metacognitive knowledge is the stored information in all learners' brain, which is the bases of their goals, tasks, and actions; while metacognitive experiences are the exact moment when students are conscious of their knowledge. In the same way, metacognitive strategies are directed to monitor all these kinds of processes, which can help students to improve their writing production. More specifically, metacognitive strategies focused on writing production are related to how students analyze their own writing processes in terms of their learning goals. These strategies involve thinking about planning, monitoring, and self-evaluating what has been written. By developing the skills of planning, monitoring, and evaluating, the student manages, directs, regulates and guides the writing production (Goctu, 2017, p.85). Additionally, these skills will also help students to reach their learning goals by motivating them to become writers who are able to apply their skills not only inside the classroom but in real-life situations.

Of the many metacognitive strategies for writing production, we consider Graphic Organizers as one the most simple and useful tools for building knowledge and organizing information with regards to problem-solving, decision-making and studying for writing production. For a more precise definition, we take into account what Ellis (2004) claims: “A Graphic Organizer (GO) is simply a graphical representation of text concepts. It is an instructional tool that can help students to organize, structure the information and concepts to relate to the other concepts. Besides, the spatial arrangement of GOs allows the students to identify the missing information or absent connections in one’s strategic thinking”. Hence, Graphic Organizers provide a foundation for an explicit, organized way of visually expressing the relationship between new and existing knowledge and profiling the connections between them (Ellis & Howard, 2005; Kim, Vaughn, Wanzek, & Wei, 2004). As these authors have demonstrated, Graphic Organizers can be implemented to build knowledge and structure ideas and, as a metacognitive strategy, Graphic Organizers can have a positive impact on students’ EFL writing production (as we aim to show).

To implement such a strategy, the methodology that best suits our study is Project-Based Learning since it allows us to judge EFL skills as tied to writing production. According to Thomas (2000), Project-Based Learning is a model that organizes learning around challenging questions or problems, which involve students in design, problem-solving, decision making, or investigative activities. This allows students to work autonomously and culminate in realistic products or presentations. More so, when students get involved in real-world activities, the learning process gains a higher significance. Specifically, we wish to incorporate the use of Graphic Organizers as a metacognitive strategy that may aid in the writing process that underlines the whole project.

Research question

What are the effects of applying Graphic Organizers as a metacognitive strategy to develop EFL students’ writing production within a Project-Based Learning framework?

Objective

To inquire the effects of applying Graphic Organizers as a metacognitive strategy used for the writing production of EFL students within a Project-Based Learning framework.

Rationale

In today's world, learning English as a foreign language has become more than just a personal interest or a travel requirement. Actually, the fast changes experienced day to day have forced most people to adapt to the circumstances around them. In that way, knowing just our native language is not an option anymore, now it is becoming more and more necessary – whether for study, for work or for business– to develop the four main skills (speaking, reading, writing and listening) not only in our mother tongue but also in a foreign one.

Focusing on our specific context, most public schools in Bogotá teach English by giving more attention to grammar and vocabulary than the rest of the competencies. Even if this approach has changed over time, the primary interest is still a general education of each skill. This has caused some issues with students' skill performance, for example regarding writing production: many students have difficulties organizing and exposing their ideas.

With this in mind, our research purports to foster EFL writing production in a group of 10th graders through the use of Graphic Organizers as a metacognitive strategy within a Project-Based Learning framework. Throughout this section, apart from arguing why it is necessary to promote writing production using metacognitive strategies in our educational context, we are going to emphasize the importance of this study for us not only as future teachers but also as students, based on our previous experiences learning English at school, including the impact on the English Language Teachers and the ELT Community overall.

Regarding this, we consider that with the use of EFL learning and teaching strategies for writing production we can encourage students to use their cognitive skills in real-life contexts as well. As Graham (2015) stated, writing is an extremely versatile tool that can be used to accomplish a variety of goals. In fact, when students are writing in English, they are required to use an extensive knowledge of words, expressions, phrases and grammatical structures to express ideas. Moreover, to successfully achieve this process of expressing ideas and opinions by writing, students must have a sense of coherence and cohesion. Considering this, we want the students to be able to organize their thoughts in a coherent way in any EFL situation they can confront along their academic or professional life.

We conceived this project while reflecting on our own English learning process at school: most of the classes were focused on grammar and vocabulary, meanwhile communicative skills such as speaking or writing were set aside. As a consequence, many of us had conflicts starting college education, where specialized reading and writing skills are required *both* in our native language and in EFL. Thus, an important motivator in structuring

this research is the similarity between our past experience as students and the current situation of our selected population.

In the same way, we hope that this research will contribute to the application of metacognitive strategies among the English Language Teachers (ELT) Community. It should be fundamental for all teachers to help students become aware of the knowledge they are acquiring so they may become owners of their own learning process. To achieve this, the implementation of metacognitive strategies is a helpful tool, since they guide students through the stages of planning, monitoring, producing and assessing the different activities and tasks they do in class, while teachers provide support to this writing process giving accurate feedback. To accomplish this goal in its fullest, a necessary training of the ELT Community in how to apply metacognitive strategies in class is required.

Literature Review

There are a lot of investigations in the educational field around how EFL should be taught. In reference to writing production as one of the four main skills, authors such as Walsh (2010), Tianqiong (2017), and Goctu (2017), have found that some students are struggling with the organization of their ideas and their previous knowledge to capture them into a coherent piece of writing. Thus, the purpose of this literature review is to explore in-depth writing production, metacognition and Project-Based Learning as the most important theoretical constructs of our research. In order to do so, we first mention writing production and its importance in our EFL context; then we explore the concept of metacognition and metacognitive strategies; finally, we write about Project-Based Learning as our selected teaching methodology.

Writing Production

Developing good writing skills is an important element of learning a new language; the more texts a learner writes, the better is his comprehension and production. According to Graham and Hall (2015), writing about what is read or presented in class helps young learners to gain a deeper understanding of the topic. In addition, Ondrusek (2012) states that writing is a very important process, since it is the vehicle most graduate programs embrace. It is the way to evaluate how well students integrate new knowledge and prior ideas. Ondrusek (2012) also

mentions that graduate programs can identify the progress of a student by simply asking him to answer a question writing a paragraph. Therefore, to improve writing production is crucial to reach a good level of language proficiency.

However, there are some difficulties that emerge from the process of learning how to write EFL. Miller, McCardle and Connell (2018) claim that adolescents and young adults face different challenges than young learners when they are managing to learn how to express their ideas correctly in a written form. For the authors, these kinds of learners tend to create shorter and disorganized texts containing a great number of spelling, punctuation and grammatical mistakes. Accordingly, both teachers and students must be aware of this challenging stage to work together to achieve the best results.

Another important aspect to have in mind with regards to writing production is the assessment. Miller, McCardle, Connell (2018) maintain that evaluation is a key issue for writing across all ages (p.5). Therefore, aspects such as the quality of grammar structures and the use of rubrics are undoubtedly needed to identify the progress of students' learning process. Although others might think it is just a matter of tracking and documenting assessment for writing production that should provide the information about what and when is the best moment to make an intervention in the learning process (Miller, McCardle, Connell, 2018).

Due to the importance of the assessment, teachers may find a real need in their students for metacognitive experiences of learning. In order to improve writing skills in a much easier way, it is necessary to include some metacognitive aspects. According to Chen (2010): “metacognitive experiences in writing refers to cognitive and emotional experiences which occur during the writing process”. Cognitive-wise, writing helps students with a self-questioning activity. For instance, students can ask themselves questions like “Am I really clear about the topic? Is my train of thought clear?” (Chen, 2010). Additionally, the writing competences can be strengthened by bringing students’ passion and desire to the activities asking them to write about what they like the most. Therefore, a combination of writing production and metacognitive thinking could be implemented in EFL classes as an attempt to reach better results.

Metacognition and Metacognitive Strategies

It is well known that John Flavell is considered responsible for popularizing metacognition in the 1970s; however, other researchers such as Brown (1978) and Wang, Haertel, and Walberg (1990), have been working on this topic as well. After this, there was an

open door for more investigations and further considerations of metacognition applied not only to education but also to psychology and linguistics, among other fields. Thus, the goal of this section is to pair the importance of using metacognition, and metacognitive strategies with the difficulties that students are presenting regarding their EFL writing production. To do so, we are going to discuss in a summarized way what metacognition is and what are some of the metacognitive strategies that may come in handy for students' writing skills. Finally, there are some considerations for teachers to apply these strategies in the classroom and the importance of their role in this application.

Metacognition and the development of students' learning skills are related to each other due to the way in which the human brain works. According to Vandergrift and Goh (2012), metacognition, or the act of thinking about thinking, refers to the ability of learners to control their thoughts and to regulate their own learning. In this sense, metacognitive strategies are skills, approaches, and thinking actions students use to control their cognition and learning process (Chen, 2010, p.1). Metacognition in writing production refers to the control we implement when we decide to write something. As we make decisions, our brain is regulating its own actions. Therefore, what students need to do is not to memorize words, which is the aspect in which teachers focus the most on, but to understand how and when it is appropriate to use each word.

Metacognition strategies in the classroom are useful tools for students to be aware of their knowledge and their learning process. As stated in Díaz (2013), these strategies have been found to be directly responsible for the execution of a writing task, which means that the relation between the application of metacognition and writing production include strategies for planning, monitoring, and regulating students' learning processes. One example of this, according to Larson (2009), is when students set their goals before starting to study while checking what they know about the topic and their doubts about it, which works as the planning and the monitoring stages. By using these strategies properly, students become aware of what they already learned and what they need to improve their learning process.

Teachers' role in the instruction of metacognition is also a key factor during students' process. Veenman (2006) shows how teachers' lack of knowledge about metacognition results in students not receiving feedback accurately, which at the same time affects their improvement in the learning process. Even when teachers are willing to invest effort in the integration of metacognition within their lessons: they need the appropriate guidance and tools for implementing this as part of their classes, to make students aware of their metacognitive

strategies and their usefulness. Metacognition is successfully applied in the classroom when and only when teachers are correctly trained on this topic.

Project-Based Learning (PBL)

As stated above, we are implementing Project-Based Learning as a classroom methodology. It was John Dewey who initially promoted the pedagogical idea of "learning by doing". Reconsidering Dewey's educational philosophy, projects stimulate young children and students to learn from life, as long as they are encouraged to find answers and learn about a subject in the context of complex, multifaceted, and realistic problems (Dewey, 1897). The educational field has advanced this idea of teaching and learning into a methodology known as Project-Based Learning. Thus, we must analyze the benefits and impacts of Project-Based Learning on EFL students as a model that organizes learning around *doing*.

Ellis (2005) argues that many well-established language acquisition theories can also account for language development through a Project-Based Learning framework. Language is most effectively acquired through meaningful interaction. Because of that, Project-Based Learning is a model that focuses on activities that attempt to produce learning products through Project Works. In terms of language, Project-Based Learning can help EFL students to develop their writing production and communicative competence and gain confidence, co-operation, imagination, independence, and self-discipline. Damayanti, Martha, & Gunatama (2014) consider Project-Based Learning as a model that can be applied in the writing learning process because it is centered on activities for learners that will show the product at the end of the lesson. Thanks to that, Project-Based Learning integrates students' knowledge, attitude, and skills in the writing process. Hence Bell (2010) claims that Project-Based Learning helps students to inquire more often. Students drive their learning through inquiry, as well as work collaboratively to create projects that reflect their knowledge. The active participation of students during the Project-Based Learning process promotes, among other things, writing production.

There is some previous research that has proved the effectiveness of this method as a pedagogical strategy. Project-Based Learning avoids traditional learning because it is student-centered and collaborative in the process of knowledge construction. According to Maurer and Neuhold (2012), Project-Based Learning implies that learners play an active role in planning, monitoring and evaluating the learning process. Lin (2015) states that Project-Based Learning can foster students' ability to learn and use vocabulary in the writing context. Leong and Patrick

(2009) conducted research that tried to gauge the power of Project-Based Learning and found that students are generally enthusiastic and interested in such assignments.

Project-Based Learning is rooted in the progressive education movement, which advocates for more student-centered and experiential approaches to education that support “deeper learning” through active exploration of real-world problems and challenges. For Pellegrino and Hilton (2012), many aspects of Project-Based Learning models involve developing competencies, such as communication, metacognitive skills, and self-regulation skills. Besides, an important benefit is that the student becomes a critic in finding solutions to the real problem. In Project-Based Learning, by using appropriate learning resources and processes, students generate ideas to write and work cooperatively. In other words, after discussing a problem, they can solve their problems and get significant feedback.

All in all, Project-Based Learning connects learning at school with reality. In this way, Project-Based Learning provides collaborative opportunities to construct knowledge which in turn increases problem-solving skills. Project-Based Learning is an individual or group activity that goes on over a while, resulting in a product, presentation, or performance. Glazer (2001) suggests that this method can help students feel more comfortable with their comprehension of a subject because it goes through each step separately, so that comes easier. However, one of the weaknesses is the lack of prerequisite knowledge in terms of writing. Students may require new information to create a solution.

All these studies are fundamental to support the purpose of our research. Making changes to the educational system, or at least trying to contribute to the improvement of it, is one of the main goals among teachers. Particularly in Bogotá, we need to help EFL students to become critical-thinking citizens who can organize and express their ideas by arguing accurately not only in academic environments but also in professional and daily life as well. Further investigation in this area may help with a significant impact to develop writing production in EFL students' language learning.

Research Design

Educational research has been a very useful tool not only for teachers and students, but for the ELT community as a whole. Regarding Creswell's work on research methodologies, one method that began to gain more attention in the education field is Action Research. For Creswell (2012), Action Research is an informal process of research focused on the improvement of the practice in education through researchers studying their own issues in a school or a similar educational setting. Considering this, the purpose of this chapter is to expose how we carried out the design of our project and its characteristics. In this section, we are going to talk about the type of study we are developing, the population we selected, and the instruments and procedures in order to collect the required data.

Type of study

Our research employs a qualitative methodology. According to Creswell (2014), such approach is apt for exploring and understanding the behavior of a group of people that is part of a human or social problem, its focus involves creating questions and procedures to obtain useful data for the researcher to develop appropriate interpretations. Considering this, our goal is to contribute to the improvement of students' EFL writing production through the use of the metacognitive strategy of Graphic Organizers in a Project-Based Learning environment. We conducted our research in a collaborative way with the students through the application of qualitative instruments. For this reason, it was crucial for us to have this definition clear in mind in order to choose the most suitable approach.

More specifically, we undertook this project with the tools of Action Research. This is a method that, as Burns (2018) explains, involves a combination of action and research that means collecting data systematically about actions, ideas, and practices as they occur naturally in daily life. Thus, it is important to mention a four-step model designed by Mills (as cited in Creswell, 2012, p. 580), shown in Figure 1, in which he specifies that it is designed for teachers-researchers to study and reflect on their practices.

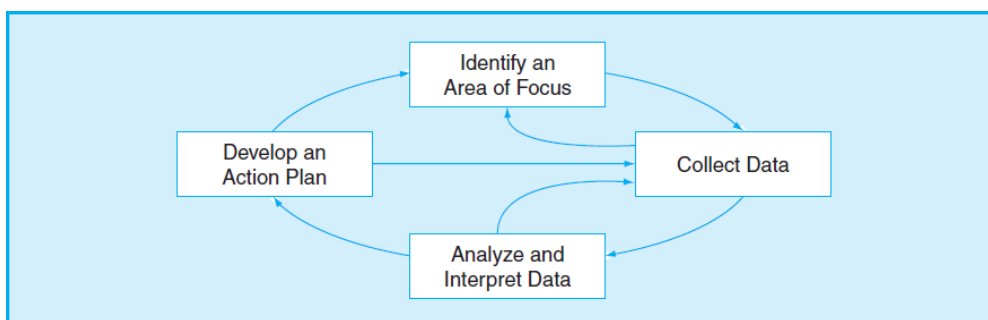


Figure 1. Dialectic Action Research Spiral. Mills (2011).

In this graphic, the first thing that we noticed was that the four stages are not only followed by each other, but they are also connected with the *Collect Data* stage (Creswell, 2012, p.581). Based on this, the spiral works by identifying an area of focus through the revision of literature, and the definition of this area; then, the collection of data comes by using qualitative instruments. This is followed by the analysis and the interpretation of the collected data, which contextualizes the findings in literature and connects them with personal experiences (identifying themes, behaviors and so on). At the end, the last stage is for the teacher-researchers to create an action plan, including recommendations and actions, and an exposition of findings and resources needed to conduct the action plan.

Population

The participants selected are a group of 10th graders from a public school in Bogotá. This school is located in the south of the city, its educational program includes students from 1st grade up to 11th grade. In particular, our 10th grade classroom is composed of 37 students between the ages of 16 and 18. We decided to choose this population due to the fact that they are about to finish high school and are preparing for college, so we wanted to help them to overcome their problems in writing production, given that this is one of the most important skills when entering college.

Ethical Considerations

We sent out consent letters intended for the school and the students' parents with the purpose of letting them know what the research is about, what the role of the students will be and what are the instruments that will be used (See Appendix 1). All this information is essential to ensure the correct application of our research with the consent of the parts involved

and the welfare of the students. Specifically, we designed consent letters addressed to three different population: the first one was to the administration of the school in which we developed our research; the second one was the students' parents, who were informed about the procedures we would develop in the classes, explaining that it did not represent any type of risk for their children; and finally, another one for the students, showing why were we interest in working with them, and what the benefits would be of being involved in our research.

As teacher-researchers, there is something fundamentally different we have to think about, and it is the fact that in front of the students we are not only teachers or researchers: we can assume some other roles depending on the purpose and procedures of the project, which can lead to ethical dilemmas. Glesne (2011) claims that aspects of ethical research codes are culturally based, since people think and act based on what they have observed around them as being "right" or "wrong". According to that, researchers can assume an *exploiter role* by using what the participants are providing to enrich the project, but feelings of guilt may arise because of how little they are receiving back. Also, researchers can assume a *reformer role*, in which the researcher tries to change what they find as wrong or unjust. Beyond that, there is an *advocate role*, or assuming a position in a situation they unexpectedly find during the project. These considerations are essential in order to establish which is the role and the relation we want to maintain with the students and also to prevent ethical dilemmas by taking the correct decisions during unexpected situations.

Instruments

For the stage to *Identify an Area of Focus* there was a diagnostic questionnaire that was carried out during the first class. Defined by Creswell (2012), a questionnaire is a form used in a survey design that participants in a study complete and return to the researcher, in this case the teachers. There are three types of questionnaires, with closed, opened and semi-closed questions.

We decided to create our instrument based on closed and semi-closed questions given our need for both specific answers and the students' personal point of view. They were asked questions related to the English classes, their perceived English level, as well as their practices when writing in English (see Appendix 2). This diagnostic questionnaire helped us to establish a clear picture of how aware the students are of their own processes and their acquired knowledge.

This stage is followed by the *Collecting Data* process, in which we used three instruments. The first one was some questionnaires, different from the one mentioned on the previous section, applied on the first and the last class. The second one was the artifacts we collected, which include the Graphic Organizers and some written reports by the students. Finally, the third one was video recordings, which document the behavior and activities of the participants during the research project (in our case, it was accomplished through video calls). The results from the three instruments will provide us with a clear vision of the students' processes and the possible answer to our research question.

The third phase is the *Analysis and Interpretation of Data*, which was planned with the use of triangulation and coding methods. These are different ways of categorizing data, the first one consists of using two or more methods to analyze and compare the findings in order to gain more reliable knowledge for the research project, which gives a higher confidence in the results (Bryman & Bell cited in Graue, 2015, p.9). Coding –as defined by Stuckey (2015)– refers to carefully reading data and connecting it with the research question codes are usually used to retrieve data that is related in meaning so the teacher-researcher can find segments that are similar to one another. By applying these methods to our project, we can analyze the information obtained from the questionnaires and the field notes to compare points such as the English level we perceive the students are in and the one they believe they are in, as well as the difficulty they find in writing in English and what they show on the artifacts such as the Graphic Organizers used in the reports. By doing this analysis, we will be able to develop an appropriate action plan to help our students with their difficulty in writing production.

Instructional Design

For teaching writing to EFL learners, there are three popular pedagogical approaches: Product Based, Process Based and Genre Based. We selected Process Based as our pedagogical approach since it encourages learners to intentionally improve their writing skills, which also promotes creativity when they have to write their own compositions (Selvaraj, & Aziz, 2019, p.456). A Process Based approach focuses on how the students reach the final production, instead of the production as such. Students are thus required to be aware of their strengths and what they need to improve, as well as how they are going to do it, according to the feedback given by teachers and other students.

Based on Steele's model (2004) for Process Based Learning, we adapted its eight steps to be used alongside Graphic Organizers, our selected metacognitive strategy. Thus, the first

stage is *brainstorming*, where students write down their ideas about a topic using a graphic organizer, by classifying them into advantages and disadvantages. Stage two is for the students to *plan* and *structure* their ideas into notes, which also includes choosing the most useful ones. The third step involves *organizing* in a new graphic the ideas the students selected, this according to the order they are going to put them in their compositions. The next stage is when the students write their *first draft*, and in stage five they *exchange papers* to receive feedback from their partners, as this will be very useful for stage six, where they *edit* and improve their drafts based upon those recommendations. The last two stages are when students write their *final paper* and the teacher *evaluates* them and gives the appropriate feedback to each one of the students. Even though this model requires a lot of time, we found it suitable to our purpose to help students with the organization of their ideas when writing in English.

To find out the impact Project-Based Learning has in writing activities, it is necessary for this research to be combined with writing in an EFL context. This will also give us insight into the outcomes and effects of applying Project-Based Learning in relation to students' attitudes and effectiveness in the writing process. The students discussed the problems that might arise from the implementation of writing-centered classes. In virtue of this, students got ideas to construct their writing in a group or individually.

Taking into account that our pedagogical approach is Project-Based Learning, we designed a project for students to carry out during several lessons. This project is called "Around the World in Five Days" and it is based on students' likes and interests. A questionnaire was applied in the first lesson, asking students about the country they like the most or which they want to visit and some of the reasons about their choice (see Appendix 2). We analyzed students' answers and selected 5 countries, each one corresponding to a lesson. In this way, we planned to catch students' attention and motivation to develop this project by letting them explore their interests in class.

We designed this project thinking about a way to connect both our metacognitive strategy and our pedagogical method with the purpose of developing EFL students' writing production. After analyzing different topics for 10th grade, we found out that planning classes around countries offers a lot of information that can be used in a variety of activities and games. Therefore, following the eight stages of the class previously explained at the beginning of this section, the students received instructions about what they had to write during the project.

The idea was to write a short report of 2 pages maximum about the information of the country explored during the class, for this the students had to organize their ideas and choose the most relevant information using a Graphic Organizer. Each class they kept a folder with

the report about the country along with the Graphic Organizer they used after receiving the feedback from our part. Those Graphic Organizers and the students' reports were coded into data later analyzed as our artifacts. As a final task for the project, we explained the structure of an expository essay and the students had to choose the country they liked the most to write an essay about, using the strategies from the previous classes. With this proposal we wanted students to overcome the challenging task of writing in English by reinforcing what they learned during the activities and by making them aware of their own process as well.

These activities were distributed along the lesson plans, whose design was selected according to the students' needs. The format of the lesson plans includes a section for information about the class such as duration, topic, a learning and a teaching goal. This format is divided into 5 moments: warm up, presentation, practice, production and evaluation. We decided to apply this type of lesson to our project, given that in our practicums we noticed it gives the students the opportunity to have a better understanding and practice of the topic through different activities. The section of warm up is very useful to catch students' attention and have them motivated from the beginning, which also works as a little introduction for the class. The presentation, practice and production stages are the basics of a lesson plan since they are crucial on the quality of the input and how the students are going to receive it. Lastly, the evaluation stage is necessary for the students to receive feedback over their productions and for the teachers to assess the class as a whole. This format allowed students to improve their writing production by having different moments to learn and test their skills.

We want to conclude this section by recalling the relation of what we have described here with our research objective. Our decisions in this research were based on the aims we have with our students and with our learning process as teacher-researchers as well, that is why we designed this project with the theoretical support of Action Research as a qualitative methodology, along with Process Based EFL teaching, and Project-Based Learning to improve students' writing production. At the same time, this support was very helpful during the ten classes, since we were able to work in a real context with the students, and also, we understood what else was needed from our part to help them with their learning processes. Thus, we established a coherent relation between the strategies planned and our research objective

Results

According to Graue (2015), when analyzing qualitative data, the researcher deals with meanings and not with numbers, which is more difficult to manage since there are no explicit rules for qualitative data as there are for quantitative ones. It is necessary for researchers to implement appropriate methodologies that help them find meaningful information within the collected data. That said, in the analytical processes carried out during this chapter we found out that students in general liked the activities and that they thought useful the usage of Graphic Organizers for their writing skills, however there were some communication and participation difficulties. First, we address the advantages that using Graphic Organizers offered to instruction. Second, we consider the disadvantages encountered when applying Graphic Organizers in the classes. Finally, we explore the pedagogical considerations.

In order to analyze the data collected from the students, we applied two data analysis techniques for each one of our instruments to help us understand the information. For the diagnostic questionnaire, and with the help of the graphics created by the questionnaire form, we drew upon our personal experiences along with the implementation of questioning to search for relevant pieces of information that could reveal connections in the data and the reasons for the students' responses. After that, classes were recorded with the students and we obtained important insights and contextualization about their thoughts towards the classes by looking at their language and emotions, to associate them with their actions. Finally, we took students' writing productions as artifacts, from them we made comparisons among those productions to get findings at a more dimensional level, which also led us to find a negative case bringing alternative results and perspectives to our research. Once the information was gathered and better understood through the techniques mentioned, we were able to proceed with a comparative analysis of those details.

Advantages of using Graphic Organizers

Writing in English can be considered a challenging task, even native speakers have difficulties with coherence and cohesion of the paragraphs. However, its importance in students' academic success and learning process is due to the fact that it expands vocabulary and promotes the development of other language skills such as listening and speaking (Mulianing, 2018). Graphic Organizers help students organize ideas and apply thinking skills to the content in a more organized way. Thereby, different Graphic Organizers can add another

level to learning that is helpful for the students by demonstrating the relationship between facts, ideas, and concepts. According to Sam (2013), a Graphic Organizer is a diagram which represents a relationship directed by a sequence of events which can aid the learning process. For this analysis, the metacognitive strategy is taken into account because students do not use it in their classes as the diagnostic questionnaire tells us. For Harris, Santangelo, & Graham (2010), research on writing shows that using metacognitive strategies develops the quality of writing because it encompasses planning, drafting, monitoring, and evaluating processes in pre-, during-, and post-writing.

During the classes, the students showed that they did not know this metacognitive process; but based on the teachers' guidance they used the Graphic Organizers while they entered through each of the stages mentioned in the previous study to write their report with a greater understanding of the subject. Magogwe, 2013; Mekala, Shabitha, & Ponmani (2016) mention that learners who use metacognitive strategies in writing focus more on linguistic elements, content, knowledge of task requirements, the personal learning process, text, accuracy, and discourse features.

These findings can be compared to the benefits we encountered when applying the Graphic Organizers as a metacognition strategy in the writing process. The use of Graphic Organizers seemed to be the appropriate teaching tool to help students' learning process be meaningful. It increased creativity and provided flexibility in thinking and helped the students perceive the information more completely. Through the first implementation of the Graphic Organizers, students filled in the boxes to the report with all the information concerning country explanation. Some of them used colors and some images to make a difference in ideas. Moreover, they clarify their thoughts by creating new ideas and developing memory and understanding (Krasnic, 2011). In terms of EFL writing production, Graphic Organizers increase student engagement –through an active involvement with their own writing– and in this way contribute to their learning process. Consequently, using Graphic Organizers helps students to visualize and internalize the general ideas they are learning, which leads to a deeper understanding of what they are writing. For instance, Graphic Organizers offer the space to see separately topic sentences, supporting sentences, and concluding sentences. Starting from that, complete paragraphs can be created with the extra information, with this the students can give examples and details.

Within the classes, students showed interest in filling the structure offered by the Graphic Organizers. We observed that through this interest in using it, students paid attention to the information actively because they asked questions about the topic to complete it. Their

participation is essential to guide knowledge and understanding since they are required to collect ideas and understand them to write a final report. The benefits of the Graphic Organizers are evident during the class, because students created texts with solid paragraph structure and with the information requested. For instance, students used an introduction, two paragraphs for supporting details, and a conclusion contained in the graph structure that they did not use before this exercise according to the diagnostic survey. The reports demonstrated the use of these writing stages because, in the first stage of the class, students had to fill out and submit the Graphic Organizers. Then, they had to follow them to create the text using richer text. Table 1 shows that from the first week to the next, the use of the Graphic Organizers helped to increase the use of adjectives, verbs, and especially the use of a paragraph structure.

Table 1

Use of words, adjectives, verbs, and paragraphs in English using the Graphic Organizers.

<i>Week 1</i>	<i>Week 2</i>
<i>First use of the Graphic Organizers</i>	
4 adjectives per paragraph.	7 adjectives per paragraph
3 verbs per paragraph	6 verbs per paragraphs
2 connectors	4 connectors
3 compound nouns per paragraph	7 compound nouns per paragraphs
17 students used only two paragraphs.	17 students used three paragraphs requested for a
5 students don't use paragraph structure	report

Table 1 is an example of GOs increasing vocabulary, the use of adjectives, verbs, and compound words for the English writing process during the classes. According to McKnight (2010), Graphic Organizers are accepted as important and effective educational tools because they organize ideas and knowledge and facilitate comprehension of new information. We found this to be the case while conducting our research. For example, during the first class using Graphic Organizers, students began to use more complex structures in terms of paragraphs and sentence construction. In a diagnostic exercise, students used a few words such as adjectives, verbs, connectors, and compound nouns in terms of writing; then –with Graphic Organizers– they demonstrated the use of compound sentences and the structure of the paragraphs. In the

second week, students wrote more adjectives, verbs, connectors, and compound words in their reports.

1- These are some things that I like to write about Canada. French and English
2- are Canada's two official languages, and I want to live there in near future.
3- There are attractive cities like Montreal and Toronto. On the other hand, I
4- would like to go see MLS league matches in the field of sports, it has been one
5- of my dreams since I was a child to travel to this country and see Niagara
6- Falls. Therefore, Canada is known for its many lakes. There are about three
7- million lakes in Canada. The most important thing is that Canada is the first
8- country in the world to adopt a policy of multiculturalism, embracing diversity
9- and pluralism. Because of that, I want to live in a place like this where respect
10- is everywhere. To conclude, it must be very beautiful That feeling that conveys
11- being in a place like this, I would also like to live there because of the
12- economic sphere and the great help that the government offers, I would
13- certainly choose to live in this wonderful country with such amazing features.

Excerpt 1: writing report fragment

(Santiago Ovalle, student, artifact 2, fragment taken from the report)

Excerpt 1 is an example of a student that has to capture ideas of what they have learned, and this leads them to look up vocabulary to create a text with coherence and an even more complex level full of ideas and knowledge following the Graphic Organizers. The student added connectors, adjectives, and new words to make sense of the paragraph that he proposes in the example. As can be seen in line 2, the student used information from the class to create a compound sentence with the correct conjunction. In line 6, we can see how the student uses the "therefore" connector appropriately to link ideas that he learned. The connectors are evident in lines 6,9,10 for the cohesion of the report. In line 13, adjectives are constant to express arguments. All the information of excerpt 1 was presented in Graphic Organizers. In this way, students learn English while writing a report from their perspective.

An additional benefit is that Graphic Organizers help students differentiate between main ideas and supporting details and, because of that, there is an understanding of text organization. Thanks to Graphic Organizers, students learned to identify the most relevant information. thus, showing how Graphic Organizers can simplify the writing process for EFL learners. There are different Graphic Organizers available, so students must learn to use one according to the report to obtain learning achievements. Consequently, the students showed results where the organization of paragraphs is evidenced by giving an order to what was learned in class to achieve a text of greater complexity: richer vocabulary, written ability, and development of English skills. For instance, after checking the reports at the end of the class,

some students followed the structure as the Graphic Organizers stated, and complex texts appeared with ideas that they had not handled in English before.

Table 2. Report using GOs.

<i>22 participants</i>	<i>Paragraph structure/Report</i>
17 students	Used the Graphic Organizers
14 students	Followed the paragraph structure of the Graphic Organizers and wrote a report
5 students	Didn't use Graphic Organizers/No paragraph structure

As can be seen in Table 2, the use of the Graphic Organizers had a positive impact on most of the students. In this way, 17 students understood the instructions and created a report, but of those only 14 had a paragraph structure akin to the Graphic Organizer. Yet the result was a complete report full of ideas, facts, and coherence.

Table 3 explores the Planning-Monitoring-Evaluation Cycle that (including the metacognitive cycle) and has been implemented in all classes to achieve a more meaningful understanding of the activities.

Table 3. Explore the Planning-Monitoring-Evaluation Cycle

22 participants/ 22 responses

<i>Frequently asked questions during class.</i>	<i>Type of metacognitive cycle</i>
Q1 - What do I need to learn?	Planning
Q2 -How am I going to write?	Planning
Q3-What concepts do I understand well?	Monitoring
Q4- How am I doing at learning this?	Monitoring
Q5-How can I make this writing more personally relevant to me?	Monitoring
Q6-Did I learn the material and to write effectively?	Evaluation
Q7-How will what I have learned help me in my next courses?	Evaluation

Table 3 is an example of the metacognitive process used in class to develop strategy, planning, monitoring, and evaluation. We asked questions during class about the metacognitive cycle with a questionnaire. These questions were asked in three instances of the class to make the metacognitive process evident, and the students can fully understand the writing process with the corresponding Graphic Organizer.

From the students' perspective, the response from using this metacognitive process is positive: they generate answers and understand the meaning of what is going to be written in the reports. Students who have this cycle not only have the chance to employ self-regulation for writing skills, but they can also improve their writing skills by composing a well-structured text. However, five students decided to write a report without Graphic Organizers, in their texts the paragraph structure is not evident.

As a consequence, Graphic Organizers have shown that students who use them organize their ideas systematically. Also, students demonstrate an active understanding of the topic thanks to the narrative structure offered by the Graphic Organizers. Students who use Graphic Organizers see the need to give order to everything they have understood to create elaborate texts and keep in mind the concept of coherence and cohesion in what they write. Thus, these students showed that using Graphic Organizers does not make it difficult for them to write since the order of ideas is set. They only look for a way to write with correct grammar and appropriate vocabulary making use of other English skills. With these advantages, they were able to create texts with complex structure, creative ideas, and –ultimately– improve their English.

During the next sessions, constant supervision was required to create new reports for the last topics. Students were afraid to report what they had read and learnt, so we had to emphasize the correct use of the Graphic Organizers. Indeed, they were strongly motivated to create ideas by using Graphic Organizers, and as a result they started to organize the information much better. In session 3 –through the implementation of Graphic Organizers– students were able to better identify the main ideas from the class materials. They were able to create more complex reports with all the information that the Graphic Organizers required. There was an increase in words with a well-created sentence structure in contrast to past sessions. From the observations, students were more motivated and showed a better attitude towards the class due to the use of Graphic Organizers. By using Graphic Organizers, they started to look confidently and independently for more vocabulary.

Table 4 is an example of the increase of new vocabulary and compound sentences in session 3.

Table 4. Findings from session 3.

<i>22 Participants</i>	<i>New vocabulary</i>	<i>Compounds sentences</i>
Group 1	4 words	5
Group 2	6 words	3
Group 3	7 words	4
Group 4	5 words	5

Table 4 indicates a notable increase in vocabulary and sentence structure. It is important to take this into account because students started to identify and learn more vocabulary in order to create compound sentences due to the structure that the Graphic Organizer offers. Students were divided into groups to socialize the topic and fill out the Graphic Organizer to create a report. We asked them to write the new vocabulary in the Graphic Organizer box and submit it. This activity showed that when filling out the Graphic Organizer they socialized more and had a coherent speech, having prior knowledge, and applying new ideas. The reports demonstrated coherent compound sentences, more vocabulary, and even better paragraph structure than previous classes. Excerpt 2 shows compound sentences of students as well as new vocabulary. Indeed, the structure of paragraphs improved compared to the last session.

Excerpt 2: New vocabulary for compound sentences

CS1- This country is the sixth-most populous country in Europe, and the fourth-most populous country in the European... Union.
CS2 -This country is a place where many people can study, but a visa and a permit are required to live there.
CS3 -This country is one of the richest in the world, so it offers a great variety of museums with important works.

(Group 2, students, artifact 3, fragments with compound sentences (CS) taken from the report)

Excerpt 2 is an example of the improvement in sentence structure. In CS1 and CS2 examples, students look for connectors or conjunctions to join the independent clauses they had obtained and learned in class. In CS3, students used vocabulary from the chart of the Graphic Organizer and include new or unknown words to create the sentence.

During sessions 4 and 5, students started to participate more since we presented the Graphic Organizers and the new countries for the topic. The Graphic Organizer implies a coherent order to communicate ideas, not only for writing but also for students to see it as the possibility of ordering prior knowledge and then expressing new ideas. In this way, students strengthen EFL speaking and carry a specific order to their speech. We noticed this improvement in class performance since we provided Graphic Organizers at the beginning of the session and asked to fill them out during class. Students began to express their opinions with the coherence offered by the graph. The use of this metacognitive strategy encouraged students to practice skills other than writing: improvements in communication were also evidenced.

Table 5 shows the benefit provided by Graphic Organizers to write *during* class. It also reflects a comparison with the first class to highlight improvements and findings.

Table 5. Findings in comparison.

<i>Participants</i>	<i>Findings recorded</i>
Session 1 (no implementation of Graphic Organizers)	<p>They had problems understanding instructions virtually.</p> <p>They only wrote simple ideas and participated with few comments.</p> <p>They do not know the structure of the paragraphs.</p> <p>They are not motivated to write in English.</p>
Session 4 (implementation of Graphic Organizers since the beginning of the class)	<p>They participate actively from the beginning of the class.</p> <p>They know the paragraph structure to write a report.</p> <p>They are motivated to fill the Graphic Organizer.</p> <p>They recognize the importance of improving their English skills to write better.</p>

As seen in Table 5, students began asking questions about the topic to fill the Graphic Organizer with huge interest in session 4. The class was very dynamic as they learned about

the selected country or topic. The structure of paragraphs became more evident during session 4. In contrast to the first class, students were interested in writing as they know that Graphic Organizer will give them guidance and ease. Students generated a complete report at the end of the class with increased cohesion, order, and clarity observed in argumentation and new vocabulary. They recognize the importance of improving their English skills to write better. All in all, participants had a positive impact. Some students had difficulty completing the report. For this reason, session 5 had a feedback exercise to determine all the advantages and disadvantages that we will discuss later. As evidenced in table 3, the feedback section was an opportunity to check the progress made within the metacognitive process: students reported the importance of writing in English, as well as increasing skills.

Disadvantages when using Graphic Organizers

Ideally, the purpose of using Graphic Organizers is to assist students in their writing production by putting together useful ideas and information and converting them into coherent paragraphs. Delrose (2011) states that a Graphic Organizer has to present the information in a fluid, understandable manner so it is not visually distracting: it should not contain too much information, it should have clear labels, and a visual representation of the hierarchy of concepts. However, there are significant aspects to consider when working with Graphic Organizers. We encountered two main difficulties when incorporating this tool with our group of students: difficult communication and little participation.

Adapting the application of our lesson plans to virtual classes was not easy to overcome, it obliged us to look for new perspectives to design more striking activities for the students. In the first classes, during the video calls with the students we faced the uncertainty of having around 35 students connected, but just a few of them participating when asking questions or giving instructions. This impasse in communication generated difficulties when developing the written activities with the Graphic Organizers.

Excerpt 3: Communication issues with the students

Researcher 1: *“Well guys, now that you saw the videos, I’m going to share with you a document with the Graphic Organizers, each one of you have to download a copy so you can work in your own document”*

Researcher 2: *“Yes guys, please don’t use the document we share all at the same time, just download a copy so you don’t get confused with other’s work”*

Male student: *“Profe, yo no veo ningunos gráficos...”*

Teacher: *“Veo unas letras en el documento, ¿quién las escribió?”*

Researcher 2: *“Someone deleted the graphics, and there are many people writing in the same document”*

Researcher 1: *“Let’s explain in Spanish. Chicos recuerden que les mencionamos que debían descargar su propia copia, no trabajar todos en el mismo documento, voy a compartírselos nuevamente”*

Male student: *“Profe es que empezaron a escribir todos en el documento y borraron cosas”*

(First class video recording, lines 27-33)

As evidenced in the transcript, we had to explain both in Spanish and English so they could work better with the Graphic Organizers since the lack of constant communication slowed the progress of the writing activities. In these activities the participation increased notoriously, the use of the Graphic Organizers resulted clear enough just for a few students but the rest of them didn’t understand the instructions given nor had they used these writing tools often, according to what they answered in the diagnostic questionnaire applied. As a result, we had to search for different methodologies and activities for them to understand more the usage of Graphic Organizers while integrating them in the classes such as samples of graphics full of information. We asked students to give details to fill some gaps together. We also asked some students to read the instruction aloud and explain examples for the whole class.

Regarding the analysis of the artifacts, there were interesting findings when making comparisons between students’ paragraphs and their behavior during those first classes. One of the activities sought to use previous knowledge: we asked the students to watch two short videos about one of the country most of them selected for the project, and then we presented some slides with questions for them to share what they liked or understood; after that, they had to use the Graphic Organizer and write a short report about what they learnt. During the two first activities, the students were not very active but –in the written task– almost 80% of them wrote their report, which is clear evidence of their preferences when expressing their thoughts. However, when checking the reports at the end of the class, some students followed the structure as the Graphic Organizer stated, only part of them were participating more in the activities proposed, and we noticed that many of them wrote just a short paragraph:

Excerpt 4: Students’ first attempts to write a report, a negative case

Inglaterra is a country very diversid that has always been one of the best countries in the world, but why? UK has an excellent education, an incredible story embodied in its architecture and it is perfect to live.

(JennyMendez, student, written artifact 1)

Something that caught our attention was that two students wrote their paragraphs in Spanish, as follows:

Inglaterra es un país lleno de culturas, por su magnitud y sus diferentes islas, maneja mucho la diversidad, además de las excelentes oportunidades que tiene para estudiantes.

(KarolGutierrez, student, written artifact 1)

This was our *negative case*, that is, the exception to the interaction or response of the rest of the students being analyzed (Strauss, 2014, p. 85). This made us think about the different possibilities and reasons for these students to write in a different way. From the second class onwards, we were able to interact more with the students and they felt more comfortable with our project. These activities and the students' response to them were the key aspect to take into account when planning the following classes.

That said, having found these disadvantages when applying the Graphic Organizers was a key aspect for our management of the rest of the project. The disadvantages we encountered during the classes were not seen as a negative situation, instead we used them as a reference to analyze what we had planned for our classes and then adapted and designed different content for the students to participate more and take advantage of the activities to their own learning process and interests. With this in mind, we applied different strategies with the students and changed the dynamic of the classes to a more appropriate one for the virtual modality. We divided the students into small groups creating small workrooms. In this way, we guided the students to fill the charts to create reports under our supervision while we contributed information such as vocabulary, grammar, and materials. That it was easier for them to develop the activities proposed.

Pedagogical Implications

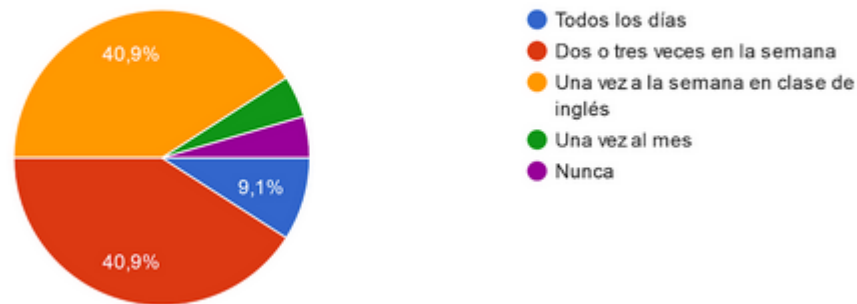
Applying the results and findings of this project to our own learning process as teachers is one of the main contributions we can get. Although there are many teaching strategies, methods and resources discovered and created along the years, we have to start looking for the most appropriate ones according to how we want to develop our classes and the context we are going to work with. Based on that, this section will expose the pedagogical considerations around the findings (especially the ones that occurred during the classes).

After finding some advantages and disadvantages when using Graphic Organizers, we were able to understand different perspectives of teaching EFL in these educational contexts. From the advantages, we noticed that students get more attached to the classes and the writing process when the material is applied in activities with topics they are interested in. So instead of only giving them the document with the Graphic Organizers, we involved students in situations where they realized they needed to learn how to use it, in this case when we were showing them fun facts and useful information about the countries they previously chose, they had to use the Graphic Organizer format to organize their main ideas. When it was time to write their reports, it was easier for them to convert those ideas into paragraphs. Therefore, the application of this metacognitive strategy along with appropriate activities and input made us aware of the importance of always using material in context.

As to the disadvantages, the implications we found were mainly directed to the communication with the students through the virtual classes. When giving instructions to the students about what to do with the Graphic Organizers and their purpose, we were not totally sure if they had understood what they were doing. A short number of students answered, but at the moment of writing the reports we realized that our indication had not been enough. In this way, we had to repeat everything again in both Spanish and English because they were not familiar with the Graphic Organizers nor with writing in English for that matter (as they stated in our Diagnostic Questionnaire, explained in Figure 2).

Figure 2: Diagnostic Questionnaire. Students' frequency when writing in English, question 15

¿Con qué frecuencia escribes en inglés?

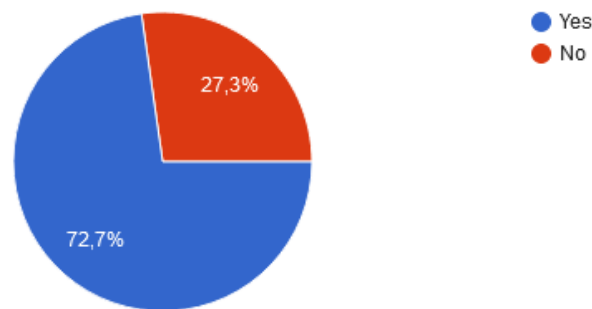


According to the graphic, 40.9% of the students apply their English writing skills just during their English lessons as activities or evaluations, while another 40.9% of them write two or three times in the week (which can be related to the fact that some of them felt more comfortable writing in English than some other students). Considering this, we established the objectives and instructions of the class from the very beginning, we encouraged them to ask questions at any moment by calling some of them directly and we also brought activities easier to control virtually so we could see what they were doing. Thus, little by little they were feeling more interested in the activities. For example, when we asked them to read some slides we were presenting, many of them started to participate in a voluntary way. After this we understood even more the importance of communication and giving clear instructions from the beginning so the students can develop their activities successfully.

Finally, regarding the students' attitude and thoughts about the project, we carried out a feedback questionnaire for them to share their opinion. The first question was related to the impact of the project in the student's writing process, the purpose was to know how many of them found it helpful or irrelevant (the results are reflected below in Figure 3).

Figure 3. Feedback Questionnaire. Students' opinion towards the application of GOs, question 1.

Do you consider it was useful the application of graphic organizers to your writing process?



The graphic indicates that 72,7% of the students found the application of Graphic Organizers helpful for their writing process, while 27,3% of them did not. We can plausibly speculate that the percentage of students who did not find the project useful were the ones who during the classes were not very attentive to the activities and explanations. Indeed, as we mentioned before, the virtuality made it more difficult to keep all students interested in the activities, the participation was mainly from the same group of students or the ones we called randomly. Moreover, from the students who found the activities useful we took some of their reasons to this question, they were as follows:

Excerpt 5: Feedback Questionnaire. Students' reasons for why they found the project useful for their writing process, question 2.

"Because there are many graphics, and I can choose one to practice"

"Because I didn't know how to start, and the organizers helped me"

"Because they help me when I don't know what to write"

These are some of the most common reasons provided by the students, many of them are around the organization of ideas, what and how to write, the practice of the writing process and skills. During this feedback session, the students also shared their opinion about the application and the classes, some of them stated that it would be better for them to practice having more classes in which we teach them to use Graphic Organizers in real life situations too (such as assignments in the university, job tasks and so on). These recommendations were very useful for us since we can apply them for future cases in our own classes according to the

students' needs; additionally, we learnt that students become metacognitive aware when they are able to apply their knowledge in a context that is familiar for them or based on their interests, which is also fundamental to consider in real life situations.

To sum up, having the possibility to apply Graphic Organizers to the benefit of students' writing production gave us a lot of different perspectives regarding the scopes of our project. We found students that we were able to provide guidance to, as well as some others that had a level of English enough to construct complex sentences and convert it into paragraphs. In the same way, there were some students who were not very receptive to the activities and the usage of Graphic Organizers, but it was fundamental for us to learn more about how to analyze students' context and needs through significant questions to better design our lessons and activities. Another important aspect is that the students were able to express their opinion about their own learning process and this was a clue to understand their diverse responses to our proposal. At the end, even if we were not able to impact all students in a positive way, at least they have learned about the usage of Graphic Organizers in writing production.

Conclusions

Along this project, we worked with different theories and teaching methodologies that allowed us to adapt our own strategies in order to help students overcome their difficulties in terms of EFL writing production skills. Although we encountered the challenges of virtual classes during this pandemic situation, we managed to develop activities that called the students' attention and motivated them to use Graphic Organizers in order to better organize the ideas obtained from those activities, so they were able to write reports in a more complex way. After this process, we encountered some important points to answer our research question from the perspective of the advantages and disadvantages of using Graphic Organizers. In this final section we will discuss how each one of our categories respond to the initial research question, also we will include the pedagogical implications of having carried out this research project and its contribution to our career as teacher-researchers.

According to our experience, we found that a writing-based project that goes hand in hand with metacognitive strategies can encourage students to better comprehend what they read, then organize the information and create a complex text.

The first category –the advantages of using graphic organizers– has been evident throughout this project. Applied to writing, metacognition developed in students an ability to find particular strategies for problem-solving processes and involve a set of intellectual operations associated with the knowledge, control, and regulation of the cognitive mechanisms that intervene in a collecting, evaluating, and producing information. In other words, the students learned how to think and act appropriately in an EFL context.

A successful result of Graphic Organizers as a metacognitive strategy to develop EFL students' writing production depends on the student's motivation, development, and experiences in the classes. Students were able to generate compound sentences that included a complex structure with plenty of adjectives and correct verb forms. Indeed, the implementation of Graphic Organizers was effective for students to become aware of how to classify specific ideas to create a report with the corresponding paragraph structure.

For instance, students now know the distinction between main ideas and supporting details because of the use of Graphic Organizers. Therefore, students showed interest in filling the structure offered by the Graphic Organizers. The main benefit of using Graphic Organizers is that participants organize their ideas due to the structure it offers. The students created reports where compound sentences, the organization of the paragraphs, new vocabulary, coherence, and cohesion was evident. Implementation groups were motivated to fill the Graphic

Organizers. They participated actively from the beginning of the classes. In this specific EFL context, students recognize the importance of improving their English skills to write better in any context.

Moving forward to the second category –the disadvantages of using Graphic Organizers– we look at two main points. The first point and the most significant for us was to understand that for the students to be able to work with Graphic Organizers they need to understand its usage, purpose and relation with students' writing skills from the beginning. This is a fundamental aspect to familiarize students with the tool they will be working with: if they do not feel familiar with it, their writing process will be affected. In our classes we taught the students the types of Graphic Organizers and how to use them to improve their skills; we also had to involve them in activities where they needed to take the main ideas of videos or readings in order to write them in the graphics and from which they started to write their own reports. Thus, the benefit of these tools always depends on how we introduce them to the students, otherwise its purpose will be lost.

The second point is related to the importance of selecting the most appropriate activities and teaching tools for the students. Since we had to adapt our lesson plans to the virtual classes, it was difficult for us to capture the students' attention and keep them motivated on what we were doing, so we discovered that if we wanted them to succeed on the project, we needed to seek for activities more student-paced than teacher-paced. We asked them to investigate things they liked and present them during the classes and we constantly asked questions for them to participate and make sure we were on the same page. We learned that every project or activity must be carried out with the most appropriate tools based on the students' context and learning environment in order to provide the input we want for them. Additionally, if we are working with virtual classes, it requires a little bit more of effort and creativity to find activities that can make our classes more interactive with the students.

Our last category –the pedagogical implications of our research– involves two perspectives. To begin with, we analyzed the students' response to our activities, which was not very positive in the first classes due to the virtual modality. It was a little bit difficult for us to gain students' confidence until we started to be more relaxed during the classes: we gave students the opportunity to talk about things they liked or something that happened during their day, even if it was not related to the class, but this was a very good activity to create a fun atmosphere and to listen to them, so they felt more comfortable with us. After applying this, we noticed that students started to participate more because they felt free to ask questions and even make jokes with us. All in all, we learnt something very important at the moment of

meeting a new group of students, and it is to listen to them so they can trust us and that way we create a closer relationship with them.

The second perspective is more related to the project per se and the reasons why students found the application of Graphic Organizers to their writing process. In the feedback questionnaire we applied, students stated that using Graphic Organizers was helpful for them because the most difficult thing was to know what to write and how to start. So, if they prepared and organized their ideas before passing to the text, it would be easier for them to find where to start writing and the purpose or topic that each paragraph will encompass, that way they redacted more complex reports. Some other reasons they provided were related to the variety of organizers that they can use, so they were able to choose the one that was more accurate to their needs and discover which organizer worked better for the type of report they would like to write. Thus, students developed a habit of independent writing knowing that they have many resources available to look for before starting to write something.

During the research, it was evident that the students demonstrated progress in behavior and attitude towards the project. Students claimed from the beginning of the classes that writing in English is complicated for them due to a lack of activities in EFL. During the classes, they demonstrated in their reports the ability to create complete texts where the motivation is reliable because the graphic organizers gave a simple structure to organize ideas, theory, and write what they planned. In the final feedback session, the students mentioned how important it was for them to use the Graphic Organizers to write coherently. In addition, they perceived the need to comprehend how to write correctly, with the proper strategy of organizing ideas, writing for preference is plausible. The psychosocial factors were fundamental to understand the dynamics of the classes to follow the needs of the students and focus the writing on these factors. Moreover, the students wrote reports with a significant order of ideas. At the end of the investigation, it is crucial to remark the benefit of Graphic Organizers for students to develop written skills to classify ideas and express them in a coherent form in EFL contexts. For this reason, it was essential to comprehend the participants and their level of English, and to analyze their behavior and dimensions. Therefore, the advantages found with the use of Graphic Organizers allow us to establish that they are significant for the written competence because they give students clarity in their ideas which in turn helps them with writing a more ordered text. Likewise, students acquire skills to promote EFL while there is a connection with the writing process. Students are aware of their learning process with the implementation of the Graphic Organizers, the classes are meaningful, and they apply what they learned in response to where EFL skills are required.

Appendix 1

Consent letter to the school

Bogotá, 14 de mayo de 2020

Directora del Colegio.

Estimada directora:

Es un gusto saludarlos el día de hoy para comunicarles que estamos en nuestra fase de diseño y recolección de datos de nuestro proyecto de grado, el cual nos gustaría implementar en su prestigiosa institución. Para este efecto, nosotros en nuestra calidad de estudiantes de noveno semestre de la Universidad El Bosque en proceso de formación docente, estaríamos observando clases, realizando cuestionarios de diagnóstico, generando reportes y evidencia de nuestra investigación. Esto consta de 10 sesiones de 1 hora y media, pensadas para estudiantes de grado 10º, si ustedes lo desean y solicitan, podemos enviar el material y el contenido en un folder para su análisis donde los estudiantes participarán en una serie de actividades, incluyendo cuestionarios, escritos, debates y demás aportando a su aprendizaje.

De esta forma, queremos solicitar respetuosamente el permiso para implementar nuestro proyecto en la institución, incluyendo la grabación de cada clase, en caso de que sea aprobado por su parte.

Agradecemos su amable atención,

Cordialmente,

Laura Fontecha, Daniel Merchán y Jeisson Mendoza.

Universidad El Bosque

Licenciatura en Bilingüismo con Énfasis en la Enseñanza del Inglés

Consent letter to the students

Bogotá, 14 de mayo de 2020

Estimados estudiantes,

Reciban un cordial saludo. Nos dirigimos a ustedes en nuestra calidad de estudiantes de noveno semestre de la Universidad El Bosque en proceso de formación docente dado que nos encontramos desarrollando nuestro proyecto de grado con el fin de fomentar la producción escrita de estudiantes de inglés como lengua extranjera.

Por este medio solicitamos su consentimiento para participar en el desarrollo de nuestro proyecto, el cual se llevará a cabo durante 10 clases de 1 hora y media en las que realizaremos diferentes actividades como cuestionarios, debates, escritos y demás. Todo esto con el propósito de aportar significativamente a su proceso de aprendizaje del inglés por medio de estrategias que involucren sus gustos e intereses.

Agradecemos su atención, quedamos atentos a su respuesta.

Cordialmente,

Laura Fontecha, Daniel Merchán y Jeisson Mendoza.

Universidad El Bosque

Licenciatura en Bilingüismo con Énfasis en la Enseñanza del Inglés

Consent letter to the students' parents

Bogotá, 14 de mayo de 2020.

Estimados padres de familia,

Nos dirigimos a ustedes en nuestra calidad de estudiantes de noveno semestre de la Universidad El Bosque en proceso de formación docente y nos encontramos desarrollando nuestro proyecto de grado con el fin de fomentar la producción escrita de estudiantes de inglés como lengua extranjera a través de organizadores gráficos como estrategia metacognitiva.

Por este medio les solicitamos amablemente su permiso para que su hijo(a) forme parte de una serie de cuestionarios, debates, escritos y demás actividades que estarán inmersas en diez sesiones donde se recogerán observaciones para el desarrollo de nuestro proyecto con los resultados obtenidos.

Cabe aclarar que el desarrollo de este proyecto no representa ningún riesgo para los estudiantes, por el contrario, deseamos aportarle muchos beneficios a su aprendizaje del inglés mediante diferentes estrategias de enseñanza.

Agradecemos su amable atención, quedamos atentos a su respuesta.

Cordialmente,


Laura Fontecha, Daniel Merchán y Jeisson Mendoza.

Universidad El Bosque

Licenciatura en Bilingüismo con Énfasis en la Enseñanza del Inglés

Appendix 2

Diagnostic Questionnaire



Diagnostic Questionnaire

A continuación encontrarás una serie de preguntas que nos ayudarán a conocer un poco mas sobre ti

***Obligatorio**

¿Cuántos años tienes? *

☐ 15 - 16 años
☐ 17 - 18 años
☐ 19 años en adelante

¿En qué nivel de inglés consideras que te encuentras? *

Elige ▼

¿Cuentas con computador propio y conexión a internet? *

Tu respuesta

¿Por qué crees que se te dificulta dicha competencia? *

Tu respuesta

¿De qué manera se te facilita más aprender inglés? *

☐ Visual
☐ Auditivo
☐ Escrita
☐ Por repetición
☐ Otro:

¿Cuál de las siguientes herramientas usas para organizar tus ideas cuando te piden hacer un texto escrito? Puedes marcar mas de una opción *

☐ Mapa mental
☐ Mapa conceptual
☐ Plantillas
☐ Lluvia de ideas
☐ Organigramas
☐ Cuadros sinópticos
☐ Mapa de ideas
☐ Líneas de tiempo
☐ Rueda de atributos
☐ Otro:

En la siguiente escala de 1 a 5, ¿como calificarías tu aprendizaje del idioma inglés durante los previos años? *

Muy malo Malo Regular Bueno Excelente

Tu respuesta ☐ ☐ ☐ ☐ ☐

¿Cuales son las razones a tu respuesta anterior? *

Tu respuesta

¿Consideras importante aprender inglés? *

Elige ▼

¿Por qué? *

Tu respuesta

¿Cuál de las siguientes competencias se te dificulta más en inglés? *

☐ Lectura
☐ Escucha
☐ Habla
☐ Escritura
☐ Gramática

¿Con qué frecuencia escribes en inglés? *

☐ Todos los días
☐ Dos o tres veces en la semana
☐ Una vez a la semana en clase de inglés
☐ Una vez al mes
☐ Nunca

¿Cuando escribes en inglés, sobre qué escribes? *

Tu respuesta

Selecciona las opciones que consideres que son más importantes al momento de escribir en ingles. *

☐ Comunicar ideas.
☐ Argumentar puntos de vista.
☐ Conectar pensamientos.
☐ Sintetizar
☐ Lectura previa para organizar ideas.
☐ Usar gráficas, plantillas para organizar párrafos.
☐ Establecer lo que se quiere comunicar.
☐ Evaluar cómo y hasta qué punto se consigue el objetivo a comunicar.
☐ Otro:

En una escala de 1 a 5, ¿que tanto te gusta escribir en inglés? Teniendo en cuenta que 5 es el puntaje más alto. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

¿Podrías justificar tu respuesta? *

Tu respuesta

¿Qué actividades de mejora utilizas para incrementar tu habilidad al momento de escribir en inglés? *

Tu respuesta

¿Cuánto tiempo inviertes a la semana en practicar inglés fuera del plantel estudiantil? *

Elige

¿Qué actividades haces para practicar inglés? *

Tu respuesta

¿Podrías justificar tu respuesta? *

Tu respuesta

Quando se realiza una actividad en inglés, te preguntas ¿Que ha resultado mas facil, más difícil, más novedoso ? Selecciona una opción. *

☐ Es muy importante reconocer estos aspectos.

☐ No es importante para mi.

☐ El docente es quien establece la pregunta.

☐ Otro: _____

¿Cuales son las razones a tu respuesta anterior? *

Tu respuesta

Quando se realiza una actividad en inglés, ¿Se establece una meta clara de lo que se va a trabajar en la clase por parte del docente? *

Elige

En tus clases de inglés, ¿con cuál actividad, juego, taller o herramienta crees que has avanzado en tu aprendizaje en inglés? *

Tu respuesta

Las clases anteriores de inglés me han servido mucho para desarrollar mis habilidades en el idioma *

	Muy en desacuerdo	En desacuerdo	Algunas veces	De acuerdo	Muy de acuerdo
Tu respuesta	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

¿Cuales son las razones de tu respuesta? *

Tu respuesta

Quando se realiza una actividad en inglés, reflexionas sobre ¿De qué manera se puede mejorar en las habilidades del idioma ? *

Elige

¿Por qué? *

Tu respuesta

Quando se realiza una actividad en inglés, te preguntas ¿Para qué me ha servido esta actividad o clase? *

Elige

¿Podrías justificar tu respuesta ? *

Tu respuesta

¿Cómo suelen evaluar tu proceso de inglés en clases? *

Tu respuesta

¿Qué piensas de ese tipo de evaluación? *

Tu respuesta

Class Topic Questionnaire



Class Topic Questionnaire

Let's see what do you want to learn about...

***Obligatorio**

Which is your favorite country/city? *

Tu respuesta _____

Why do you like it? *

Tu respuesta _____

What do you like to learn about that country/city? Choose maximum 3 options *

- ☐ Culture
- ☐ History
- ☐ Interesting places
- ☐ Fun Facts
- ☐ Gastronomy
- ☐ Education
- ☐ Otro: _____

If you were in that country/city, what do you like to do there? *

Tu respuesta _____

Feedback Questionnaire

What is your feedback?

We want to read your opinion about the activities

***Obligatorio**

Do you consider it was useful the application of graphic organizers to your writing process? *

☐ Yes

☐ No

Why? *

Tu respuesta

What did you like about the activities and clases? *

Tu respuesta

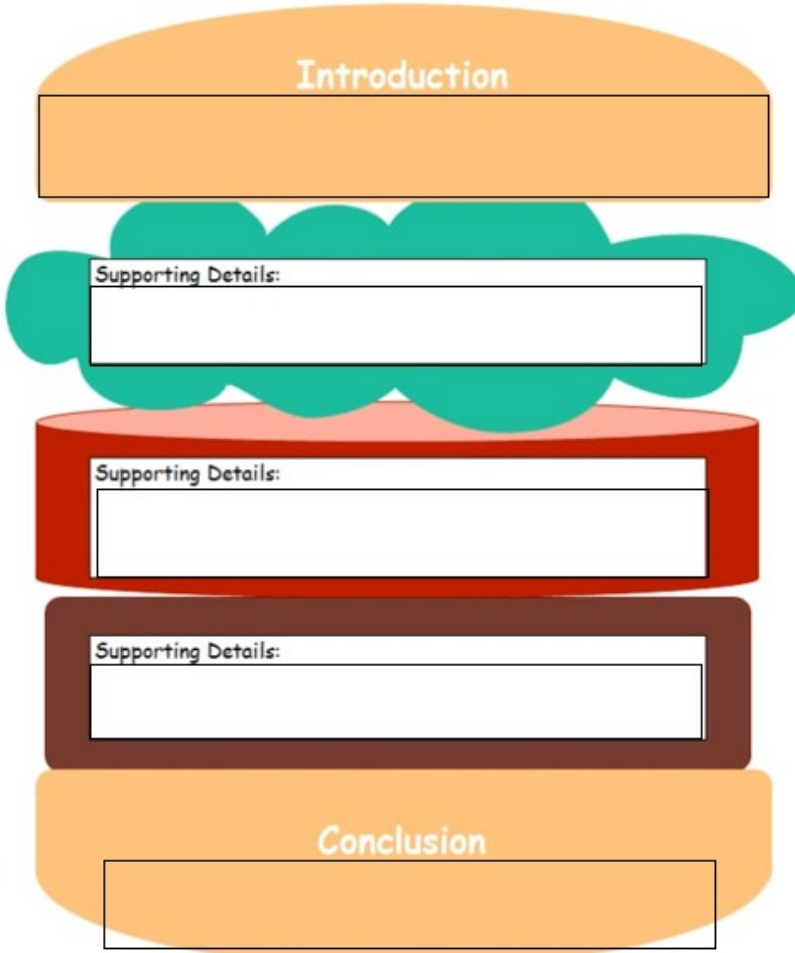
What do we need to improve? *

Tu respuesta

Graphic Organizer example

 UNIVERSIDAD EL BOSQUE	Facultad de Educación Licenciatura en Bilingüismo	Docentes: Laura Fontecha Jeisson Mendoza Daniel Merchán
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In the following images you will find different types of graphic organizers for you to use it before writing your report. You can use any of them, the idea is to organize your ideas and convert it into paragraphs, write using your own style!



Introduction

Supporting Details:

Supporting Details:

Supporting Details:

Conclusion

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