Maestría en Lingüística Aplicada y Educación bilingüe



fundación universitaria JUAN N. CORPAS

Educación y Salud de Calidad con Sentido Social

Tesis de grado



OCTALYSIS FRAMEWORK: A FAVORABLE ENVIRONMENT TO INCREASE SUCCESSFUL PRACTICES IN ENGLISH AS A FOREIGN LANGUAGE (EFL) CLASSROOMS

Maestrante

Diana Carolina Medina Gómez

Asesor

PhD Candidate: Blanca Lucia Cely Betancourt

FUNDACIÓN UNIVERSITARIA JUAN N. CORPAS

FACULTAD DE CIENCIAS SOCIALES

Maestría en Lingüística Aplicada y Educación Bilingüe



OCTALYSIS FRAMEWORK: A FAVORABLE ENVIRONMENT TO INCREASE SUCCESSFUL PRACTICES IN ENGLISH AS A FOREIGN LANGUAGE (EFL) CLASSROOMS

Grupo de investigación CIBELES,

Línea de investigación Didácticas, Saberes y Disciplinas

Diana Carolina Medina Gómez

Asesor

PhD Candidate: Blanca Lucia Cely Betancourt

FUNDACIÓN UNIVERSITARIA JUAN N. CORPAS FACULTAD DE CIENCIAS SOCIALES

Maestría en Lingüística Aplicada y Educación Bilingüe

Acknowledgements

I would like to express my deepest gratitude to my professor Blanca Lucia Cely Betancourt for her important assistance and valuable contributions. This endeavor would not have been possible without Professor German Rolando Vargas Rodriguez, who generously provided knowledge and expertise. Additionally, I would like to thank Fundacion Universitaria Juan N. Corpas, who has given me the tools to achieve the best in my research.

I am also grateful to my classmate and cohort member, Lida Yasmin Vargas Hernandez, for her help and moral support. Thanks, should also go to the study participants and their families who impacted and inspired me.

Lastly, I would like to thank my family: my supportive father, my caring mother, and my incredible sisters for their support; what is more, especially my spouse, for his late-night feedback sessions and unconditional love. Their trust in me has kept me strong and motivated during this process. I would also like to thank God because "I can do all things through Christ who strengthens me."

Dedication

This dissertation is dedicated to the memory of Graciela Puentes Flores, my beloved grandmother. She has always been my inspiration and she was always there celebrating my academic achievements. This is the first time she would be unable to see my graduation.

This is for her.

TABLE OF CONTENTS

INTRODUCTION	3
CHAPTER I: STATEMENT OF THE PROBLEM	6
1.1 Description of the Context of Research	6
1.2 Research Justification	9
1.3 Statement of the problem	14
1.4 Research Problem	14
1.4 Research Question	
1.5 Objectives	17
CHAPTER II: REFERENTIAL FRAMEWORK THAT CONDUCTS THE INVESTIGATION	19
2.1 Theoretical Framework	19
2.1.1 Games as a core driver to successful learning processes.	20
2.1.2 Gamification as an effective strategy to develop cooperative work	22
2.1.3 Gamification Vs Game-based learning	23
2.1.4 Gamification: Octalysis Framework	25
2.2 Background Framework	
CHAPTER III: METHODOLOGICAL DESIGN	
3.1 Research Approach	
3.2 Research Design	41
3.3 Population and sampling	
3.5 Ethical considerations	46
3.5 Data collection instruments	47
3.5.1 Semi-structure interview:	47
3.5.2 Survey	50
3.5.3 Field diary	50
3.5.4 Focus group	51
3.5.5. Octalysis tool	52
CHAPTER IV: INTERVENTION DESIGN	53
CHAPTER V: RESULTS	60
5.1 Learning motivation and engagement	63
5.2 Social interaction improvement	72
5.3 English communicative skills improvement	

CHAPTER VI: DISCUSSION AND CONCLUSIONS	
6.1 Discussion	
6.2 Conclusion	
6.3 Further Research	
References	94
ANNEXES	
Annex N. 1 School authorization	
Annex N. 2 Informed consent	
Annex N. 3 Survey N°1	
Annex N. 4 Survey N°2	
Annex N. 5 interview N°1	
Annex N. 6 interview N°2	
Annex N. 7 Field notes	107
Annex N. 8 Likert scale: Octalysis tool	

TABLE OF FIGURES

Figure 1. Octalysis Framework. Core Drivers	29
Figure 1. Octalysis Framework. Core Drivers Figure 2. Octalysis Framework: Brain Sides	30
Figure 3. Octalysis Framework. White hat and black hat	31
Figure 4. Action research stages	43
ة Figure 5. Students from Colegio Rosario de Santo Domingo school/students from 7° grade	45
Figure 6. Octalysis tool	53
Figure 7. Research objective and data collection instruments	
Figure 8. Emergent categories	63
Figure 9. Gamified experience webpage: Narrative	64
Figure 10. Gamified experience webpage: agreements	68
Figure 11. Students' points and levels	69
Figure 12. Interview excerpt	71
Figure 13. Gamified experience avatars	
Figure 14. Writing exercise	84
Figure 15. Reading graphic organizer	85
Figure 16. Octalysis scale	86
Figure 17. <i>Gamified experience octagon</i>	87
Table 1. Previous studies	33
Table 2. Gamified experience lesson plan	58

Abstract

Gamification has become a concept that is permeating the new classroom dynamics. Children from today will learn through different ways in which games and technology are the means. This study shows the contributions of gamification to the specific educational processes of teaching English as a foreign language by using the Octalysis Framework method in fourth-grade students at Colegio Rosario de Santo Domingo. To find the outcomes of this study a qualitative paradigm will be used, and an action-research approach will lead the research. The investigation methods of the study will be semi-structured interviews, interaction workshops, field journals, ethnographic and participatory observations, start and exit workshops, and focus groups. These techniques will help to understand better the teaching-learning processes from the teachers' and students' points of view.

Results will show that gamified settings improve students' performance during their class lessons and pupils will be successful while learning a foreign language. Data collected showed that the implementation of Octalysis in teaching English as a foreign language not only improves communicative competencies in the target language, but also social relations among participants, creating a peaceable and a more relaxed learning environment. Finally, this strategy was proven to greatly increase motivation and engagement in the learning process.

keywords English foreign language, gamification, Octalysis Framework

Resumen

La gamificación se ha convertido en un concepto que está permeando en la nueva dinámica de las aulas. Los niños de hoy en día están dispuestos a aprender a través de diferentes formas en las que los juegos y la tecnología son el medio. El propósito de este estudio es mostrar los aportes de la gamificación a los procesos educativos específicos de la enseñanza del inglés como lengua extranjera

utilizando el método del *Octalysis Framework* en estudiantes de cuarto grado del Colegio Rosario de Santo Domingo. Para hallar los resultados de este estudio se utilizará un paradigma cualitativo, y un enfoque de investigación-acción dirigirá la investigación. Los métodos de investigación del estudio serán las entrevistas semiestructuradas, los talleres de interacción, los diarios de campo, las observaciones etnográficas y participativas, los talleres de inicio y salida y los grupos focales. Estas técnicas ayudarán a tener una mejor comprensión de los procesos de enseñanza-aprendizaje desde el punto de vista de los profesores y de los alumnos. Los posibles resultados demostrarán que los entornos gamificados mejorarán el rendimiento de los estudiantes durante sus clases y, finalmente, los alumnos tendrán éxito durante su proceso de aprendizaje de una lengua extranjera.

Los datos recogidos demostraron que la aplicación de la Octalysis en la enseñanza del inglés como lengua extranjera no sólo mejora las competencias comunicativas en la lengua meta, sino también las relaciones sociales entre los participantes, creando un ambiente de aprendizaje apacible y más relajado. Por último, se demostró que esta estrategia aumenta en gran medida la motivación y el compromiso en el proceso de aprendizaje.

Palabras clave inglés como lengua extranjera, gamificación, Octalysis Framework

INTRODUCTION

Gamification as a learning technique transfers the mechanics of games to the educational-professional field to achieve better results, whether to better engage certain knowledge, improve a skill, or reward specific actions, among many other objectives. Researchers show that the game model works because it manages to motivate learners, develop a greater commitment from people, encourage learners, develops a greater commitment from people, and encourages the desire to improve. This type of learning is gaining ground in training methodologies due to its lively nature, which facilitates the incorporation of knowledge in a more enjoyable way, generating a positive experience for the user.

Most of the population enjoys performing games from an early age. The most important advantage of people that start with gaming is the building of central and social abilities and permits the development of cognitive capabilities, (Sulistyaningtyas & Fauziah, 2018). Recent gaming studies show that some structures in the brain, in charge of our concentration and other mental operations, can be strengthened through gaming (Sharma et al.,2021). It is also remarkable to notice that children and adolescents can devote hours to playing a video game, even are losing it. Through the games, they learn how to be independent and deal with some demanding situations. Moreover, they learn how to do collaborative work (Lamrani & Abdelwahed, 2020).

Gamification can be the strategy that allows teachers to use game elements in academic settings to increase the motivation of the learning process. Gamification occurs when we tap into the human motivations that drive us to make decisions and perform activities. It was precisely human motivations that let Chow (2014) create the innovative gamification design framework: Octalysis, an octagonshaped model with eight basic motivations.

Chou (2014) created Octalysis as a new framework that helps people understand human nature and how they can be motivated to do their best to accomplish their goals. The main objective of this framework is to give eight stimuli that will lead to successful gamified experiences. These motivators are meaning, empowerment, social influence, unpredictability, avoidance, scarcity, ownership, and accomplishment.

This paper aims to show the benefits of gamification in the learning process; to address gamification as an effective cooperative strategy. It is also necessary to recognize the differences between game-based learning and gamification and finally to present the Octalysis Framework as a novel and effective strategy in the learning process from the point of view of the learning process.

Although Octalysis Framework I was created over a decade ago, it has not been explored in Colombia. Little research has been done on this subject, so its benefits are unknown. It is hoped that this article will make significant contributions to foreign language teaching by implementing strategies that will enhance motivation and interest in students, such as the Octalysis Framework.

Findings show that the implementation of Octalysis in teaching English as a foreign language not only contributes to the improvement of communicative

competencies in the target language, but also the improvement of social relations among participants, creating a peaceful and a more relaxed learning environment. Finally, this strategy was proven to greatly increase motivation and commitment to the learning process.

This document is composed of six chapters. The first chapter presents the research problem that gave rise to this research project, the justification and the question that motivated the researcher to conduct this research process. It also presents the arguments about the importance of carrying out this research, the general objective, and the research objectives.

In the second chapter, there is a theoretical review of the literature that allowed us to better understand the topic to be investigated, as well as the previous research developed in this area. The third chapter thoroughly presents the methodological approach and the research design, including method, data collection process, population, contexts, and data collection instruments. Chapter four presents the detailed description of the methodological intervention, bearing in mind that this is action research. In chapter five, I present accurately the finding because of the analysis in the applied instruments. Finally, chapter six presents the final discussion that originates from the theory, the results of previous research in contrast to the results of this study, as well as the conclusions and ideas for further research on the same topic.

CHAPTER I: STATEMENT OF THE PROBLEM

This chapter begins with a contextualization of the research problem that gave rise to this research, a description of the national context regarding bilingualism is presented. The motives or reasons that led to this research are presented in detail, followed by the problem statement. Finally, the research question that motivates this study as well as the objectives are presented.

1.1 Description of the Context of Research

Being bilingual in Colombia has been one of the main objectives of the education ministry. Since the 1800s it has been a policy to include the importance of learning a foreign language. In the beginning, acquiring another language was based on the school's location. Thus, it would have been possible in some schools to learn Spanish, Latin, Greek, French, English, or the Indigenous language (Bonilla & Tejada, 2016). Moving through this timeline in the seventies and eighties, English was established as one of the most important languages for children to learn. Up to 1989, the British community reported a survey about English language teaching and learning, these results exhibited some guidelines for government concern. It was only in 1991 with the political constitution that there was an open recognition of all the Indigenous languages, and Colombia was recognized as a multilingual and cultural nation (de Mejia, 2011).

After this recognition, the Ministry of Education created the general law of education of 1994 which established the acquisition of English and proficiency in communicative skills at a desired level. In 2004, we finally had the national bilingualism program which adopted the Common European Framework to measure the learners' competitiveness. The new vision in the 2015 Colombia Very Well program was to modify and reflect on the horizon and technological tools that improve the process. "Colombia Very Well" had an investment budget of 1.3 billion Colombian pesos to increases the infrastructure students need to strengthen their English level (Gómez, 2017). Nowadays, Colombia Bilingüe in 2015- 2025 is the new plan. Within this program, there is a review of these Colombian variables and new textbooks and materials that are meeting the Common European Framework standards and encourage teachers to have some strategies for implementing this policy (Bonilla & Tejada, 2016).

Nevertheless, we continue having difficulties achieving the main objective, which is having English as a foreign language. But being bilingual continues to be part of the most important objectives in education. To meet those expectations, the increase of bilingual schools has been enormous during these years.

According to the British Council in Shepherd and Ainsworth (2018), the main reason students mention as a motivator for learning English is that the language is a requirement for high school education, professional issues, or job applications (Shepherd & Ainsworth, 2018). These persuaders are remarkable if our students are forced to learn another language. Students may have this extrinsic motivation, but there is no inner motivator that leads them to perform better in their language acquisition.

Despite all the initiatives developed in Colombia to promote bilingualism, the results in terms of bilingualism are not positive. The language proficiency in Colombian students is low according to the state exam (ICFES), arguing that a slight sample of the students might be considered bilingual. By the end of 2012, 90% of students who graduated from high school obtained a mark in their exam according to the standard, consequently, Colombia has been classified in the category of "Very low level" of proficiency (Sanchez, 2013).

Governmental authorities have taken initiatives to improve foreign language learners' abilities with different programs, budgets, and strategies. It is significant to establish that there has been some progress. In 2022, Colombia has gotten better results increasing some points and locating itself in position seventy-seven among 111 countries measured (EF: Education First, 2022), Colombia went from a very low to a low level.

Hence, in the bilingual education programs applied in Colombian schools to improve the students' foreign language learning process, it is remarkable to observe the different approaches professionals in the area have proposed to accomplish the goal. There is a clear interest and concern for improvements to guarantee a better teaching and learning process, especially in English.

In this context, foreign language teachers are called upon to reflect on the processes of teaching and learning English and to adjust in our pedagogical practices to contribute to improving teaching English as a foreign language to contribute to and support the initiatives of the national government to achieve a bilingual population, given the demands of the globalized world and the requirements of future citizens.

All these processes should start from an early age, which requires good teaching practices that foster motivation and interest among students to improve and develop communication skills to enable them to communicate accurately in real-life contexts when required. To fully motivate students, it is essential to innovate in the EFL classes, novel strategies usually attract students' attention and even more so when they are related to the inclusion of modern technologies.

1.2 Research Justification

As was previously exposed, the need for innovation in teaching practices causes educators to look for new pedagogical tools which can enhance students learning, gamification is based on the idea of using game elements to design learning experiences, this approach ends up in proposals that are attractive and motivating for students (Cornella, Estebanell, & Brusi, 2020). Gamification has shown the possibility of better outcomes for kids because it strengthens four important skills in students: attention, engagement, feedback, and consolidation (Lamrani & Abdelwahed, 2018). Thus, the practical benefits of using gamified experiences provide students with better environments and give teachers opportunities for better results from the learning process.

English teachers as protagonists and in charge of leading the process of teaching English as a foreign language and contributing to the proposals and initiatives of the country in the field of bilingualism, must be in constant reflection and knowledge of new standards and methodologies and be updated on proposals that are carried out in other countries with similar needs and proposals and adapt them to their own context. These considerations were crucial in the motivation to conduct this research.

Considering the benefits of gamification in the EFL classroom, according to the results of previous research carried out in countries such as Portugal, South Africa, Ecuador, and Indonesia, among others. It was noticed that Octalysis Framework is an innovative way to increase students' motivation and improve their performance in their communicative competencies in English as a foreign language.

Octalysis Framework is a human-centered framework that pretends to motivate people to be successful. This framework was designed by You-kai Chou in 2014. Its proposal is based on an octagon-shaped formula integrating eight core drivers. These core drivers are epic meaning, accomplishment, empowerment, ownership, social influence, scarcity, unpredictability, and avoidance. Each of these drivers will lead the user to adopt a pattern or behavior toward the game (Chou, 2014). According to its interaction, the gamified experience can be effective or not.

The octagon shape of this strategy also has a reason to be drawn like that. The Octalysis Framework is divided into the right and left brain, to connect to the way the brain actually works, organizing in the left part the drivers related to analysis and logic, meanwhile, in the right side refers to the ones related to creation and dynamism. The correct balance between the two sides guarantees motivation. Additionally, this octagon is divided into the core drivers from the top and the ones at the bottom. The ones located in the upper part of the octagon are the motivators that provoke positive emotion, on the contrary, the ones at the bottom are connected to negative emotions (Chou, 2014).

In the first place, we have benefits for the students due to the improvement of motivation through gamified experiences. Students are willing to learn even from subjects that can be challenging for them and have significant lessons that consolidate lasting learning goals. Therefore, researching gamification and its new tactics such as the Octalysis framework contributes to the development of the field giving better approaches as well as benefits to different users.

On the other hand, it also contributes to the English as a Foreign Language (EFL) teachers because they might have the opportunity to get involved in this methodology unknown so far in Colombia resulting in an improvement of their teaching practices in the classroom and better learning environments.

This research has helped to comprehend the benefits regarding students' performances when classes are mediated by using the Octalysis Framework as an innovative manner to apply gamification in educational settings- This research also contributed to adjusting the traditional classes to include much more dynamic teaching and to make students enjoy the classes while learning English.

Most of the population seems to enjoy playing games from an early age. One of the most important advantages for people when gaming is the strengthening ability to build central and social abilities which permits the development of cognitive functions, (Sulistyaningtyas & Fauziah, 2018). Recent gaming studies show that some structures in the brain, in charge of our concentration and other mental operations, can be supported through gaming (Sharma et al.,2021). It is also noteworthy to notice that children and adolescents can dedicate hours to playing a video game, even if they are losing it. Through the games, they learn how to be independent and how to deal with demanding situations. Moreover, they learn how to do collaborative work (Lamrani & Abdelwahed, 2020).

As a learning method, gamification uses game mechanics for different purposes to enhance experiences that are significantly like those experienced when playing games. In the educational field, it has been used to achieve better scholarly performances, whether to have better engagement or understanding of certain knowledge, improve a skill, or reward positive actions, among other objectives. This methodology is gaining interest in the didactic ground in training methodologies due to its active nature, which enables the assimilation of knowledge more pleasantly, generating a positive experience for the user.

Gamification can be the strategy that allows teachers to use game elements in academic settings to increase the motivation of the learning process. Gamification occurs when we tap into the human motivations that drive us to make decisions and perform activities. It was precisely human motivations that let Yu-kai Chow (2014) create the innovative gamification design framework: Octalysis, an octagon-shaped model with eight core drivers which lead to motivators.

Chou (2014) created Octalysis as a new framework to understand human nature and how they can be motivated so they can do their best to accomplish their goals. The main objective of this framework is to understand the interaction among eight stimuli that will conduct successful gamified experiences. These drivers are meaning, empowerment, social influence, unpredictability, avoidance, scarcity, ownership, and accomplishment.

This research aimed to implement the Octalysis Framework method as a strategy of gamification to increase motivation in seventh-grade students at Colegio Rosario de Santo Domingo and show the benefits of it in the learning process. Likewise, it is necessary to recognize the differences between gamebased learning and gamification and finally to present the Octalysis Framework as an innovative and effective strategy in the learning process from the point of view of the learning process.

Although Octalysis Framework was created over a decade ago, it has not been explored in Colombia. Slight research has been done on this subject, so its benefits are unknown. It is hoped that this research makes significant contributions to foreign language teaching by implementing strategies that will enhance motivation and interest in students, such as the Octalysis Framework. As will be seriously emphasized in the results section of this paper, the benefits of this

implementation not only benefit the students, who learn more playfully, but also the teachers because it allows them to enjoy the experience of teaching in a new way.

1.3 Statement of the problem

As mentioned above, Colombia is a country that has aimed to have a bilingual population, but the results obtained have not been satisfactory. Therefore, innovative methodologies are needed to capture the students' attention and involve them in a creative, innovative, and lively way.

The investigation problem that provided the starting point for conducting this research focused on the need to prepare the Colombian population in communicative skills in English as a foreign language; the demotivation of students in English classes, especially during the period of the epidemic due to the Covid-19 and the lack of knowledge of some successful methodologies in the teaching of English that have been applied in other countries and not yet in Colombia, such as the Octalysis as a branch of gamification.

1.4 Research Problem

During these pandemic years, we have noticed an increase in the lack of students' motivation to accomplish their academic goals because of several reasons, such as readiness, punctuality, uncooperative, and overreactions, among others. Although most of the scholars are supposed to be technological natives and do like to learn using ICTs, I have seen that many students have felt uninvolved in some of the classes they were having during the virtual time. These

observations lead us to think that some programs and didactics should be evaluated because even though most of these students like the technology, they know how to use technology and they know how to decode technology, they are not feeling motivated to do so, here is where gamification comes in.

Motivation is one of the variables that impact the field (Gopalan, Abu Bakar, Abdul Nasir, Alwi, & Che Mat, 2017). Thus, gamification has opened a door to increase these motivators that foster language learning. Gamification is to be considered an integration of game elements and interaction in activities that are not considered games, for example, a lesson in the classroom (Angelova, Kiryakova, & Yordanova, 2014). This initial perception considers the gamification scenario as a manner to promote in students the sense of participation and responsibility in their processes, thus, the experience is more significant and language skills are developed in a more efficient way (Chaves Yuste, 2019).

Having this methodology as an emergent approach to learning it is significant to also understand gamification as the "use of game design elements in non-game contexts" (Deterning, Khaled, & Dixon, 2011). Gamification has arisen several strategies and methodologies to apply this concept in the classroom, but it is necessary to go deeper and find how strategies such as the Octalysis Framework, can respond to the needs of having appealing classes for students. Getting involved in new strategies that result in lasting and meaningful processes when learning a language is significant. Some of the elements that the Octalysis Framework suggests applying in gamification technique are competence, cooperation, and narrative, thus, gamification centers its attention on human motivation, which means that gamification is focused on human nature because it considers factors such as feelings, emotions, insecurities, etc.; factors which will lead the behavior of a person toward a specific activity (Chou, 2014). For many years, people have debated the importance of motivational settings to increase better performance in young language learners. At first glance, it may seem that gamification has become the perfect tool to catch students' attention and have evidence of better outcomes when using this strategy.

Although considerable progress has been made in Colombia in the inclusion of gamification in foreign language teaching, there have not been researchers that have evidenced how to apply Octalysis Frameworks in educational settings in Colombia. There is a gap in the literature that should be considered. Researchers have shown that game models work because they tend to motivate learners, generating greater commitment from people and encouraging the desire to improve in different abilities.

The Octalysis model has been implemented in different educational settings around the world. In countries such as Portugal, South Africa, Ecuador, Indonesia, among others, it has revealed positive and meaningful results for students' performances and teachers' practices providing better learning environments to interact with a foreign language.

As will be mentioned in the next chapter in detail, the Octalysis platform has been implemented with great success in other countries, for this reason, it was considered important to implement it in Colombia in order to know the results taking into account the differences in the educational contexts and with the clarity that in one way or another, they are contexts in which English is also taught as a foreign language, These deliberations allowed me to establish the research question that illuminates this whole project, the general objectives that I proposed and the specific objectives in order to subsequently define a research methodology and arrive at the final results.

1.4 Research Question

In response to this problem, action research was developed to obtain some findings about the benefits of the Octalysis Framework in didactic processes of learning English in seven graders at a school in Bogota.

The dissertation presented was conducted by the question addressed in this research: What are the contributions of gamification to the specific didactic processes of teaching English as a foreign language based on the Octalysis Framework method in seventh-grade students at Colegio Rosario de Santo Domingo?

1.5 Objectives

To have meaningful information, it will raise awareness of gamification's impact in educational settings and how teachers could update their practice and have better students' performance when motivation is attended properly.

This study describes the contributions of gamification to the specific didactic processes of teaching English as a foreign language from the Octalysis Framework method in fourth-grade students at Colegio Rosario de Santo Domingo. The objectives of this research are the ones described below:

General Objective

 To implement an Octalysis Framework as a strategy of gamification to increase motivation in seventh-grade students at Colegio Rosario de Santo Domingo

Specific objectives

- To design a gamified experience based on the principles of the Octalysis
 Framework as a strategy of gamification for teaching English as a foreign language to seventh-grade students.
- To implement a gamified experience using the principles of the Octalysis
 Framework to increase students' motivation.
- To analyze the effect of the Octalysis Framework principles on a didactic practice in teaching English as a foreign language to seventh-grade students at Colegio Rosario de Santo Domingo.

Undoubtedly, this research makes significant contributions to the process of teaching foreign languages, given that it is a strategy that has not yet been explored in Colombia, or at least, there was no found literature about its

implementation. The next chapter presents detailed information about gamification and the Octalysis framework to have a clearer context about the genesis that drives this research.

CHAPTER II: REFERENTIAL FRAMEWORK THAT CONDUCTS THE INVESTIGATION

This chapter presents in a detailed way the theoretical constructs that guide this research, referring to the use of games in education, later the strategies such as game-based learning, and gamification in education focusing on showing the strategies of Octalysis Framework with its components. Subsequently, previous studies found on the implementation of this methodology with results found in each of the investigations are shown and that were of great contribution to developing this investigation and were the starting point to call attention and awaken the motivation of the author of this investigation.

2.1 Theoretical Framework

During the child development process, games have become a significant part of this growth. Through games, infants start having improvements in different skills such as cognitive, emotional, motor, psychosocial, and certainly linguistic ones (Cetin Dag, Turkkan, Kacar, & Dag, 2021). Through the review of a theoretical framework, games will be explained as a successful strategy used with students in their learning process, moreover, gamification will be discussed as and design to develop cooperative work which is essential when developing social linguistic skills. A parallel between gamification and game-based learning will enlighten the understanding of these two approaches. Finally, the theoretical approaches towards the Octalysis Framework and its impact on educational fields.

2.1.1 Games as a core driver to successful learning processes.

Recent studies have shown that games with the use of technologies for information and communication foster, stimulate, and develop learning, in fact, it does not only develop academic skills, but it is proven that human and social skills are developed using games (Melo Herrera, 2020).

Most of the time the use of traditional methods provokes a lack of interest and demotivation creating disruptive and misbehaving behaviors such as eating, yelling, fighting, etc., (Carrillo Ojeda, Garcia Herrera, Ávila Mediavilla, & Erazo Álvarez, 2020), Teachers experience this situation in the classroom and they can lead the process behind and prevent students to improve their learning, thus, the need to find strategies in which pupils feel engaged to their learning process is significant. Consequently, game usage results from an educational branch, a new school, which emphasizes that students have an active role in developing their skills.

The use of games increases the use of active methodologies that raise interest and motivation in students leading to a successful learning experience. Games are used as a practical, fun, and creative tool to capture students' attention and motivation (Carrillo et al., 2020). In fact, games foster students to be participative in their processes and approach to knowledge basically because of

the sense of belonging games provide, allowing the learner to have active participation and conduct their own processes.

In addition, research has shown that using games and didactic material improves students' motivation and the relationship between pupils, educators, and the learning process. Teachers have said that using games during their lessons gives students confidence, which increases their interest in education and improves their cognitive processes (Melo, 2020). By using games, students can successfully develop the expression of emotions, they feel positive, happy. spontaneous, and creative, and these feelings will make students more motivated and connected to the game for a longer period. Thus, games encourage a full educational process by increasing learning opportunities and socioemotional skills development. Nevertheless, some characteristics in games must be considered when using games. Melo (2020) has found that to have successful practices games should include fun, which basically maintains students attached to the game; physical activity, which permits students to connect in a motor response increasing excitement; and finally learning, which is the main goal of the game, the game should provide a reward and learning should be the target when using games in the classroom.

Gaming has been used in the classrooms during the first stages of life, giving a sense of using games as a free time trial just for fun or entertainment, but it is now seen that implementing games in the school lesson will promote cognitive and social skills (Carrillo et al., 2020).

Given the circumstances, it is a huge advantage to have the opportunity to use games in the classroom because they will help teachers provide students with chances to get better cognitively and develop better thinking skills such as solving problems, which will create better outcomes human beings.

2.1.2 Gamification as an effective strategy to develop cooperative work

In 2010, the digital media industry started using the term "gamification". Although there is an extensive discussion about the word, in education we established gamification as the use of game mechanics in non-gaming settings (Deterning et al., 2011). Researchers suggest from 2012 to 2018 there was an increase in research related to gamification in education; thus, it is noticeable the interest of educators in innovation in their classrooms (Silva, et al., 2020). After gamification started getting popular the application of this term for educational purposes led to different advantages and disadvantages it might have. A study conducted by Mazhar (2019) confirms some advantages of gamification in the writing process with seventh-grade students. The study's conclusions claim that there was an improvement in students' ability to produce creative writing by using collaborative work and positive motivation when using gamified settings.

Gamification is also important when implementing a STEM (Science, Technology, Engineering, Math) approach. Hursen and Bas (2019) state that using gamification motivation in science class showed better results. The motivating factor permits students to have better scores related to the subjects and they feel willing to take part more actively and work cooperatively. Gamification is not only used in indoor classes but also used in classes such as physical education. Using game mechanics in the physical education class will help pupils have a positive feeling towards the class because they will feel motivated thanks to the possibility of being challenged, having fun, having social interaction, and learning (Fernandez, et al., 2019).

Many studies discussed the importance that gamified environments are taking in education. It is significant to continue with the research to draw more accurate findings in applying this method.

2.1.3 Gamification Vs Game-based learning

When thinking about strategies to increase motivation in students, teachers used to think about games because it is known that games are important for students' development and increase the positivity and fun in a specific activity (Alpar, 2013). Thus, many studies have centered their attention on the methodologies that include games. Consequently, gamification and Game-Based Learning (GBL) emerged as advantages in learning processes.

Al-Azaw, et al., (2016) argue the importance of including games in the lessons, among other advantages, to increase pupils' motivation by challenging them and providing feedback. Moreover, stimulates interest in activities that might be "boring." Nevertheless, researchers show the differences between gamification and GBL methodologies. The comparative study concludes that gamification takes the complete learning experience and turns it into a game using its mechanics. At the same time, GBL will work on a particular learning objective by using a specific game (AI-Azaw, et al., 2016). Researchers suggest that some of the benefits of gamification are the low cost of development and the achievability of making the content of a learning process more attractive or significant using game mechanics (AI-Azaw, et al., 2016)

Nistor and Iacob (2018), reflect on characteristics related to gamification and GBL. A strong similarity between these approaches is using games to enhance the learning experience. They consider features to create some differences.

Game-based learning focused on using games to meet learning outcomes; the learning comes from playing the game; can be accomplished using commercial or education-oriented games; promotes critical thinking and problem-solving; can be performed with digital or non-digital games; might involve simulations to allow students to experience the learning (p. 309).

Meanwhile, gamification is considered to use game mechanics by

Adding elements inspired by games to your course; applying game mechanics to a non-game environment to encourage behavior; typically incorporating badges, awards, and achievements; experience points may be used as a substitute for traditional grades; could provide students with choice in learning path (p. 309)." (Nistor & Lacob, 2018).

Although differences are clearly established, authors also argue the benefits of including these types of methodologies to have students willing to learn in positive environments.

2.1.4 Gamification: Octalysis Framework

Back in the 2000's game designers started using games as a strategy to attract, excite and give joy to users in the real world. Gamification is a current term that has had an impact on different fields, such as economics, marketing, industry, etc. But it was not just until 2003, that Nick Pelling started using the word gamification. Basically, Pelling argues that gamification came as an answer to the spreading of the game culture and how it has been a powerful tool in different settings from the actual game. Later in 2010, Deterning gives a more precise definition of gamification. Deterning says that gamification is the use of game design in a non-game context; this definition complements the one given by Zicherman and Cunningham in 2011 which states that the process of using game thinking and mechanics to engage users is gamification. Finally, Burke adds purpose to the gamification definition by saying that gamification's purpose is to design behaviors, develop skills or engage users.

At this time, gamification was seen from different perspectives and fields. Still, it was in 2012 that Kapp (in Cornellà et al., 2020) attached gamification to the educational field by defining gamification as "a careful and measured application of game to solve problems and foster learning applying adequate game elements", (p. 10). Thus, gamification started to be used and some features became key to considering a gamified action.

The first characteristic of gamification is fun. Having the fun factor in a situation will attract the users in a way that they will spend more time interacting and becoming better in the game.

Motivation is another characteristic related to gamification. Here it is important to discuss where motivation comes from. Although there are a lot of theories related to motivation as the force which led human behavior, for this discussion, two theories related to motivation will be discussed: expectancy theory and the needs theory.

Vrooms' expectancy theory argues the relationship between effort and the outcome of a specific task. The more effort a person makes to achieve the reward the more motivated he/she will be, hence, the prediction to obtain better performances due to the effort will make expectancy increase and finally raise the level of motivation (Parijat & Bagga, 2014). The expectancy theory relies on three main variables: expectancy, which is the relation between performance and effort, instrumentality which relates performance and rewards, and valence, which is reward and personal goals. Based on the interaction of these variables, we can have powerful motivation, moderate motivation, weak motivation, weak avoidance, moderate avoidance, and string avoidance (Parijat & Bagga, 2014).

McClelland's needs theory proposes three drivers which keep motivation: achievement, which is the human need of standing out concerning standards; affiliation, which describes the need to have close and sympathetic relationships with others; and power, which is one's desire to influence on others (Valdosta & Hall, 2012).

The third feature related to gamification is narrative, which gives the users a story that provides purpose and a route to follow and makes the gamers feel a sense of belonging.

Emotions are another characteristic in gamified settings. Game elements should be able to raise people's emotions, such as curiosity, joy, surprise, pride, and even love. With emotions, it will be easier to keep the individual focused.

The sense of progress is another characteristic of gamification. The evolution which happens when there is a balance between the challenge and the skills gives feedback on moving forward and seeing the advances through the game.

Finally, diversity is a significant part of gamification. Games understand that, like a classroom, every gamer is different from every child. Thus, diversity gamification guarantees differentiation through different paths such as achievement, exploration, socialization, and imposition (Cornellà et al., 2020).

As a result of the understanding of these features and motivation as a human fact, it is the starting point for Chou in 2014 to develop a framework based

on a geometrical figure and provide eight cores that drive a successful gamification process. This approach is called the Octalysis Framework and its eight-core drivers are:

- Epic meaning: This driver is the one that explains the sense of being a hero. It creates a scenario where the user is called to overcome a challenge.
- Development and accomplishment: This core driver refers to the sense of growth and the need to continuously strengthen and develop. Development and accomplishment are seen as game elements such as points, badges, leaderboards, etc.
- Empowerment of creativity and feedback: This driver gives the opportunity to solve challenges through different options. Try different paths that will give instant feedback.
- 4. Ownership and possession: This core driver allows controlling or owning a thing to some degree in the game.
- 5. Social influence and relatedness: It is related to the human need to belong and interact socially. Actions such as fellowship, mentorship, alliance, and competition are examples of this core being used.
- 6. Scarcity and impatience: It is when the user wants something just because it is weird, exclusive, difficult to keep, or lacks availability.
- 7. Unpredictability and curiosity: This driver is related to the unknown, it is engaging to have the idea of not knowing what is going to happen.
- Loss and avoidance: It is the motivation of avoiding something negative to happen. These negative scenarios can be losing points, time limits, life takeout, etc. (Chou, 2014).

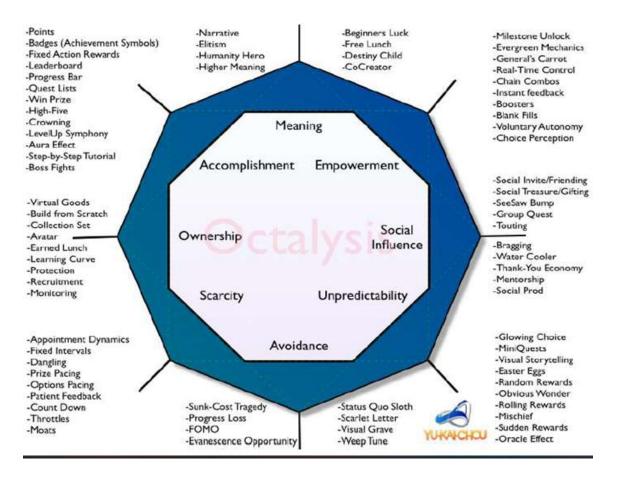
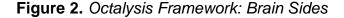
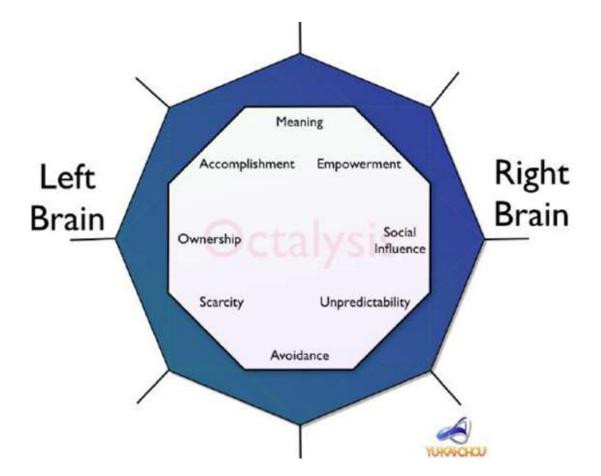


Figure 1. Octalysis Framework. Core Drivers

Note: This image summarizes the eight driver cores from the framework Adapted from Yu-kai Chou: Gamification & Behavioral Design, 2014

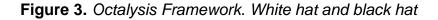
In addition to these core drivers, they are drawn and divided into an octagon for two specific purposes. The first one is to divide the core into left and right. Basically, they are divided in that manner, inspired by the left and right brain attributes. The left brain or the core which is located on the left side are more analytical, logical, and with a high sense of ownership, this is why in the left-brain extrinsic motivation is significant and elements such as points, badges, and milestones are key, once they get the reward, motivation decreases (Chou, 2014). On the other side, the right brain, or the core drivers located on the right side of the octagon refers to the ones related to creativity, social approach, and dynamics; thus, intrinsic motivation leads this part. Activities such as sharing with others, finding new paths to achieve a goal, and having a sense of unpredictability will maintain motivation (Chou, 2014).

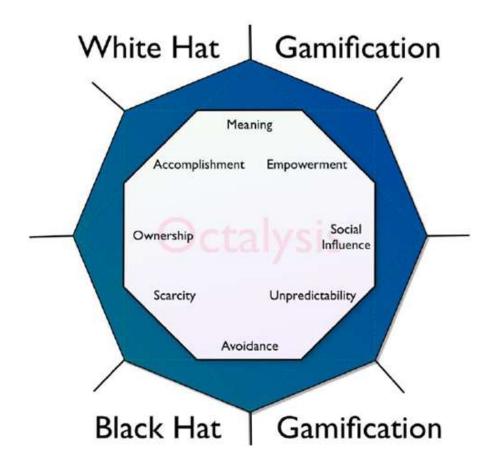




Note: the figure shows the brain sides Octalysis Framework: Brains (Chou, 2014)

The second purpose is to divide the octagon into top and bottom. The top is identified as the white hat. Core drivers located on the top, or in the white hat, are the ones that led us to feel positive emotions such as satisfaction and power, meanwhile, at the bottom of the octagon the core drivers are placed in what is called the black hat which are the core drivers related to rising feeling such as obsession, anxiety, and addiction (Chou, 2014).





Note: This model reviews the white and black hat simile. Adapted from Yu-kai Chou: Gamification & Behavioral Design, 2014¹

Depending on the purpose of the gamified setting the core drivers will be excelling differently considering their characteristics and placement. Many studies have discussed the differences between GBL and gamification, concluding specific

¹ (https://yukaichou.com/gamification-examples/octalysis-complete-gamification-framework/).

components or factors that make them unique; however, it is remarkable to see how important it is to consider technology and alternative approaches to innovate in teaching and learning practices. In educational fields, it will be interesting to see how this Octalysis Framework works considering its specific characteristics to have it as a tool to measure the impact of gamified setting in the students' learning process in the classroom.

2.2 Background Framework

Considering the above theoretical framework, a review is now made of previous research that has been conducted in this field. A scoping review was effectuated to better understand the literature, which found gaps in the literature. An exhaustive database search was implemented, including the research topic, publication date, and country. Many articles were found on the implementation of game-based learning and gamification in Colombia and various countries worldwide. However, when searching much more closely on the Octalysis Framework, no records of this implementation were found in Colombia. For this reason, the previous studies taken in this research correspond to international research.

There were found more than 281.000 articles in six databases (ERIC, SringerOpen, Dialnet, Redalyc.org, SciELO, and ResearchGate) addressing the topic related to gamification or game-based learning and nineteen articles that included the Octalysis Framework. Finally, it was selected nine articles. As previously mentioned, the implementation of Octalysis is recent in education, so it was not easy to find previous research on this topic. The intention was to review previous studies on implementation of strategy strategies rather than more

traditional strategies such as game-based learning or gamification.

The articles reported research in Europe, Asia, and Africa, only one study was found in Latin America. This indicates that it is an absolutely novelty strategy to be explored in the new continent and the specific case of Colombia. The selected articles are presented in Table N1.

Article	Author(s)	Country	Year	Findings
Evaluation of student core drives on e- learning during the covid-19 with Octalysis gamification framework	Fitri Marisa, Sharifah Sakinah Syed Ahmad, Zeratul Izzah Mohd Yusoh, Anastasia L Maukar, Ronald David Marcus & Anang Aris Widodo	Indonesia	2020	"The results of this study recommend that gamification is needed to increase student learning motivation in order to improve learning outcomes" (Fitri, et.al, 2020)
The gamification Octalysis framework within the primary English teaching process: the quest for a transformative classroom	Suzette Oliveira & Mário Cruz	South Africa	2018	"The project's main results show that the gamification approach can foster the development of transformative skills" (Oliveira & Cruz, 2018)
Funcionalidades de la gamificación: Classcraft y Moodle en el marco de Octalysis	Sánchez- Pacheco, Carlos Luis	Ecuador	2020	"This article discusses two learning management systems, Classcraft and Moodle, under the lens of the Octalysis framework. Even though the two platforms provide various elements of the game, which combined with each other seek to increase the motivation of the students" (Sánchez- Pacheco, 2020)

 Table 1. Previous studies

Article	Author(s)	Country	Year	Findings
Octalysis gamification framework for enhancing students' engagement in language learning	Trihartita Sulispera & Michael Recard	Indonesia	2021	"The result of this study showed that the applied Octalysis gamification frameworks can improve students' engagement" (Sulispera & Recard, 2021)
"All Hands-on Deck": Octalysis Framework in Primary English Language Learning	Marta Fortunato, Ana Raquel Simões & António Augusto de Freitas Gonçalves Moreira	Portugal	2022	"Results revealed that pupils were motivated and engaged in performing reading and writing tasks, having improved their reading and writing skills, and also promoted the development of social and cognitive soft skills" (Fortunato, Moreira, & Simões, 2022)
The implementation of gamification concept inside online classroom activities to promote students' engagement	Feryan Christ Jonathan & Michael Recard	Indonesia	2021	"The researcher received positive feedback regarding the game. It results into a more engaging environment in the learning activities" (Jonathan & Recard, 2021)
Initial design and testing of multiplayer cooperative game to support physical activity in schools	Solomon Sunday Oyelere, Simon Malmström Berghem, Robert Brännström, Stina Rutberg, Teemu H. Laine & Anna- Karin Lindqvist	Ι	2022	"The analysis of the user experience questionnaire indicated that most children found the game easy to play, motivating, engaging, interactive, fun, cooperative, competitive, and visually appealing. Furthermore, most children agreed that the game helped them to be physically active and strongly agreed that they enjoyed performing the physical activities in the game" (Berghem, y otros, 2022)
Reflection on the Octalysis framework as a design and evaluation tool	Philip Weber, Thomas Ludwig & Laura Grönewald	Germany	2022	"The results further reveal that the framework itself can be helpful in the creation and evaluation of concepts, especially when extensive user research is not possible (e.g., due to time constraints)." (Weber, Ludwig, & Grönewald, 2022)

Article	Author(s)	Country	Year	Findings
Del enfoque comunicativo experiencial a la gamificación en la clase de ELE- aplicaciones prácticas del modelo Octalysis	Mario Domingo Cruz & Marta Saracho Arnaiz	Portugal	2020	The gamified materials prepared considering the Octalysis framework seem to be suitable to be used with EFLL (English as a Foreign Language Learner). Since students are motivated to learn, generating their own outcomes. The results show that students value the design of tasks based on the active, communicative, and experiential approach using the Octalysis framework because they feel part of the process. (Cruz & Saracho Arnaiz, 2020)

Note: The table presents a summary of research studies conducted related to the Octalysis Framework

Gamification has recently become a fascinating subject that inspires researchers to conduct studies to validate its impact and how to use this tool correctly for learners' benefit. In this section, research studies will be discussed to enlighten the path to realizing the successful gamification processes using the Octalysis Framework and the discussion around its achievement and recommendations.

Most of the researchers related to gamification and Octalysis Framework have given positive outcomes profiling the Octalysis Framework as a strategy to optimize gamified settings.

Suzette Oliveira & Mário Cruz (2018) conducted research to reflect on the Octalysis Framework and how it can be applied in primary English teaching contexts. This qualitative research was applied to a group of seventh-grade English learners. The outcomes of this study suggest that gamification has a stimulating and motivating factor that involves kinaesthetically solving problems and creative tasks (Oliveira & Cruz, 2018). Moreover, the use of the Octalysis Framework as a gamification tool allows a better comprehension of story elements in storytelling activities (Oliveira & Cruz, 2018), thus, students will have better performances and improve their understanding. At the end of the study, the authors argue that gamified activities can be useful in stimulating students' critical thinking skills and creativity (Oliveira & Cruz, 2018).

Similarly, Fitri, et al. (2020), claim that gamification has enormous benefits in e-learning systems if taken as seriously as possible. This study took as a basis the studies which support gamification to increase students' motivation, thus the researchers developed the study using a gamification Octalysis Framework to examine the role of gamification in the learning process and quantify students' motivation in online learning tasks (Fitri, et al., 2020). Conclusions from the study suggest that the Octalysis Framework provides the potential to increase the intrinsic motivation in the students as well as keeping interested, also, the use of gamify elements such as points, badges, and levels increases motivation by showing students' progress through achievement, besides, the use of gamification helps to increase creativity but it needs to be better developed in the lesson because it tends to be not very relevant for teachers (Fitri, et al., 2020).

Furthermore, the Octalysis Framework, as used in the study, increases motivation by using competition and cooperation as core drivers, but it is necessary to study more about it to use this strategy to have a better impact. The Octalysis Framework makes available a choice of mechanism to explore learning models that can generate and enhance learning optimally (Fitri, et al., 2020).

Likewise, a study conducted in 2021 by Sulispera & Recard in a private school during a month at the beginning of the school year has seen the paybacks using gamification in the classroom. The researcher implemented the gamification Octalysis Framework for students who were considered to have low English skills. Although the Octalysis Framework uses eight, only four have been implemented for this study due to the classroom condition, the material delivered, and the teaching tools used during the research time (Sulispera & Recard, 2021).

This paper concludes that the students were naturally activated to compete with others because the social Influence and relatedness core drives within them as part of their human nature, besides, the unpredictability factor in gamified settings encourage the students to reflect outstandingly to solve the problem to keep on or develop their level during the game, this type of activities develop their thinking skills. Moreover, these activities motivate students to transform positively and become positive examples to others (Sulispera & Recard, 2021). In the end, this study concludes that.

The implementation of gamification Octalysis Framework towards English learning was one of the solutions. The applied Octalysis gamification framework core drivers during this study were Social Influence & Relatedness, Epic Meaning & Calling, Unpredictability & Curiosity, and Development & Accomplishment. Those four Core Drives can help the

students to be more engaged behaviorally, cognitively, and emotionally (p.121)

This research also highlights the importance for teachers to understand students' needs before implementing gamification because in that way it would be easier to ensure successful practices (Sulispera & Recard, 2021).

Additionally, Fortunato, Moreira, & Simões (2022), conducted research to examine how the Octalysis Framework fosters reading and writing in English as a foreign language activity toward successful outcomes in third-grade students. Researchers suggest that using the Octalysis Framework allows the design of student-centered activities giving them challenges to achieve better. Students, not only develop their academic skills but also could strengthen abilities such as social and cognitive ones, besides keeping a high motivation towards the lesson activities (Fortunato, Moreira, & Simões, 2022).

To sum up, researchers have found academic, cognitive, and social advantages of using gamification and the Octalysis Framework in classes, nevertheless, in Colombia, there is a need to continue searching about this topic to innovate education. The information found in the previous studies provided an important starting point for carrying out this research and contributing to the field of foreign language teaching. English teachers know that an optimal strategy to favor the learning process of students is motivation. The studies found agree that the Octalysis Framework greatly enhances students' motivation and therefore their learning process and contributes to other skills.

CHAPTER III: METHODOLOGICAL DESIGN

Gamification is one of the methodologies used in the classroom which led to different questions and problematic issues; thus, this research will be settled as applied research due to the intention of solving a practical problem in a specific situation. Conclusions will be driven to explain the causes and consequences of applying game mechanics to the classroom. Numerous pieces of research discuss the advantages of gamification in education. Still, it is necessary to continue evaluating the theories related to the Octalysis Framework through deductive means.

This section explains the methodological design that was preferred with its characteristics, such as the research approach and research design. Similarly, a description of the population and sample of the study will be discussed. Finally, the ethical considerations and data collection instruments used to achieve the findings.

3.1 Research Approach

This research study is framed into the qualitative paradigm because it is based on a discussion on using the Octalysis Framework as a pedagogical tool to improve motivation and provide better environments for the learners to continue their process. Qualitative research is conducted with some features to take into consideration; first, qualitative research is to understand the experiences that a population has had, second, the main instrument to collect and analyze the information is the researcher, third, the gathered data creates explanation of the phenomena as concepts, theories, or hypotheses. Finally, a rich narrative will be developed to fill the literature gap (Abdullah Kamal, 2019). Thus, having the teacher's experience as a source, and having the educator as a researcher, qualitative paradigm enlightened the path for better understanding innovative educational approaches such as gamification and the Octalysis Framework.

Gamification is a tool linked to behavior, and it is in that way that results in performances can be seen. Due to the nature of explaining, measuring, and interpreting a social phenomenon, this research was based on the qualitative paradigm (Calero, 2000). To interpret the phenomena through the analysis and giving meaning to different outcomes is what is significant (Picasso & de Gracia, 2021), thus patterns of using the Octalysis Framework give ideas of how well the gamification approach can be applied.

Considering that one of the objectives of this research was towards the process of learning a foreign language, it is significant to understand that in applied linguistics, qualitative studies pursue the understanding of language, language learning, or use in contexts (Paltridge & Phakiti, 2015). Therefore, understanding how gamification using the Octalysis Framework helps in a foreign language learning process is key to going beyond the new strategies to be applied in a social setting such as the classroom.

When generating knowledge, Lincoln (1994) suggests that the qualitative paradigm has three commitments to generate new relationships with the participants.

1. To listen, understand and give voice to the participants as well as the researcher having a point of view from the research.

2. To promote measurable actions as an outcome of the study, thus there is a real effect of the research and not the mere findings.

3. The qualitative researcher should have a vision and purpose of fostering social justice. (Anadón, 2008).

Thus, understanding the importance of the study of gamification research helps to understand better students' needs at the current time.

3.2 Research Design

This research pretends to help teachers have and use gamification elements to create effective practices for increasing an accurate environment to enhance the learning of English as a foreign language, and finally, give students the confidence to show their knowledge throughout the process.

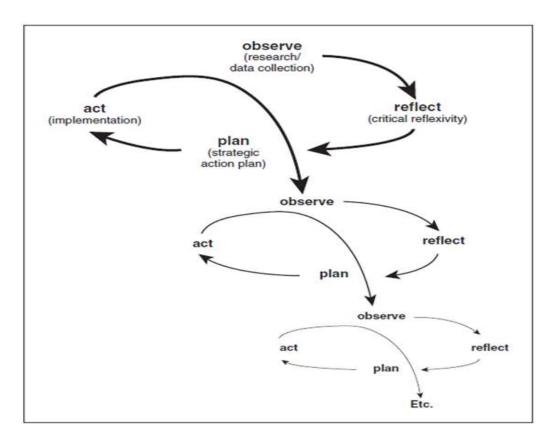
Action research is directed by teachers and principals on children in schools and classrooms. It uses qualitative methods to define the phenomena and understand the effects of some educational interventions for acting and having a positive effect or an educational change in the specific school environment studied (Mills, 2003). The process of action research involves four important stages: identify an area of focus, collect data, analyze, and interpret data and develop an action plan (Mills, 2003).

Action research is a process that needs three important moments: action, evaluation, and reflection, therefore, educational practitioners could improve their practices by gathering evidence and thinking about them (O'Leary, 2004). The insightful stage of action research is crucial to develop knowledge by reflecting on the experiences that might be useful in the future. This type of research results in participatory insights, and for that reason several models have emerged that give validity and credibility to this type of inquiry. Most of the models proposed to fulfill the requirements of a research study follow this pattern:

- Planning
- Take action
- Observation
- Reflect
- Act, observe and reflect again (O'Leary, 2004).

For the aim of this paper, the model proposed by Zina O'Leary (2004) was followed. This model suggests the importance of understanding and improving action application. These actions are based on continuous feedback practice that is seen as a pragmatic learning method to transform. The objective is to perfect methods, data, and interpretation to obtain reliable outcomes (O'Leary, 2004).

Subsequently, as shown in Figure N.4, the cycles involve some variation in observation, reflection, planning, and action.



Note: the figure shows the Cycles in action research according to O'Leary, (2004)

The phases of this model address the constant cycle of unceasing assessment. During the first phase: *observation*, it provides a first glance at a problematic situation which gives data to setting a goal, leading to a question, or arising an interest. In the second stage, which is reflected, it is the moment to be formal, informal, or introspective to disseminate and analyze what is documented in the *observation stage* and establish the next step. Thus, in the third phase, *planning*, the researcher is focused on thinking and organizing the strategies to be applied to solve the inquiries proposed. Finally, in the *act stage*, the implementation of the plan is applied, and it is essential to conduct the intervention in a way that can be observable and provide new observations to analyze and start the process again (O'Leary, 2004).

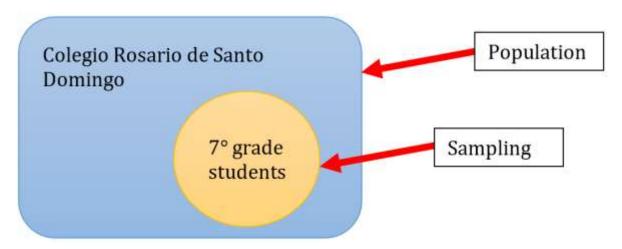
According to O'Leary, in the implementation of this action research, observation is present at all stages. This implementation strategy invites the teacher to be in constant reflection on what is observed. This process was rigorously carried out during the entire process of implementing the Octalysis Framework. This implied that during the implementation, special attention was maintained on all the students' actions, their reactions, their behaviors, and records were kept in the field diary.

During the implementation of the activities designed according to the Octalysis Framework, this action research model was relevant and appropriate because it allows teachers to be very attentive to the outcome of students and to keep in permanent reflection on his own teaching performance and evaluate what went well, what can be improved and what can be maintained to achieve an optimal evaluation process by reflective teaching.

3.3 Population and sampling

Qualitative investigation focuses on obtaining samples of small groups from natural and authentic environments (Picasso & de Gracia, 2021). For this research non-probability sampling techniques were used due to the subjective judgment of the researcher or evaluator to select units from the population for inclusion in the sample. Thus, for the purpose of this research, students from Colegio Rosario del Rosario de Santo Domingo were taken as the population, meanwhile, students from seventh grade were the sampling considered for this inquiry.

Figure 5. Students from Colegio Rosario de Santo Domingo school/students from 7° grade



Note: a graphic representation of population and sampling used.

Population

Students attend a private, catholic school in Chapinero, Bogota in Colombia. This school has educated people for more than 60 years and belongs to a Colombian religious community. Pupils are taking English as a foreign language and Content Language Integrated Learning (CLIL) subjects such as science, technology, physical education, and arts with an hour intensity of 15 hours per week.

Students belong to middle income families, from strata 3 to 5, most of the families follow catholic rules and values that is why they select this school, as a good option for their children's education. The school used to be feminine so most of the population are mainly girl, the school at this moment has approximately 850

students and infrastructure is for a large school which offers open campus and technological resources to provide current education, all levels of education are offered, from kindergarten to high school. These schoolchildren are in a bilingual process; that is why scholars are immersed in intensive English classes emphasizing communicative approach and content language integrated learning (CLIL) to build their English as a foreign language. The school certifies students with a level of English according to the Common European Framework due to the Cambridge English language assessment approval. Therefore, according to the ministry of education, it is a Colombian bilingual school.

Sampling

Due to the needs of this research, a convenience sampling for selecting the units was used, considering that the participants are selected to be included in the sample simply because it is the easiest to access within the population. This research study included a population of sixty-six students from middle school in seventh grade who are divided into three groups. The sampling for this paper included a group of twenty students who were selected randomly from the groups. These children are between 11 to 12 years old are their parents signed a consent of acceptance to participate in the research. Students are under the program to certificate their English; now of the research, they were certified as A2 users by the flyers Cambridge exam for young children. Therefore, the researcher showed interest in this population of sampling because of the previous interaction that aroused interest in improving the teaching and learning practices.

3.5 Ethical considerations

For this research it is significant for the researcher to have an ethical perspective that is close to their personal ethical position (Mills, 2003). Similarly, this paper considered the Belmont report with its three ethical principles: respect for persons, beneficence, and justice (Health, 2023). All participants were previously consulted and received detailed information on aspects such as research time-lapse, research objective, type of activities, issues to work with, applied methodology, and researcher.

Informed consent shapes the research and the results by being a form of dialogue with the participants, therefore, looking for permission the researcher must be clear (Mills, 2003). For the right process of data collection of this study, ethical considerations started by sending the consent form (See Appendix, Consent Form) to the parents of the twenty students from group 704 at Colegio Rosario de Santo Domingo in which all the parents authorized their children to take part in this research study.

3.5 Data collection instruments

Primary data will be collected through the process. This study aims to have the researcher collect information through semi-structured interviews, field diaries, start and exit interviews, focus groups, and the Likert scale.

3.5.1 Semi-structure interview: interviews are used to obtain the subjective insights of the participant, opinions, motivations, experiences, etc. semi-structured interviews are characterized by open questions that may lead to other questions generating subcategories from the interaction (Busetto, Wick, & Gumbinger, 2020).

For this research, the interviews showed the participants' perception of the English class dynamic before and after applying the Octalysis Framework. After obtaining the interviewees' thoughts, categorizing is used to analyze the outcomes gathered in the collected data. This research method permits the researcher to identify the various categories of analysis, leading to a better understanding of the outcomes (Lambert, 2019). In the analysis process, it is important to highlight the categories that arise in the construction of the understanding; thus, a code is created, and it helps to point out the key information that in a moment will construct the theory (Charmaza & Thornberg, 2021). The color code is a good strategy to point out the code, then the concept, and finally the category. Using this instrument, the researcher analyzed the impact of gamified experiences in a specific population group.

The interview allowed the researcher to develop the third objective of this research: To analyze the effect of the principles of the Octalysis Framework in a didactic practice in teaching English as a foreign language to seventh-grade students at Colegio Rosario de Santo Domingo.

As it was mentioned, the interview was applied before and after the intervention, these are the questions that guided the interview:

BEFORE

¿Cuántos años llevan en el colegio?"

- ¿Cuantos llevan aprendiendo inglés?"
- ¿Crees que la clase de inglés es innovadora y te ayuda a estar motivado?
- ¿Qué tipos de elementos se usan en la clase de inglés para ver tu progreso?
- ¿en la clase de inglés que sentidos utilizan?
- ¿en la clase como utilizan la parte social para aprender inglés?
- ¿Qué los frustra, que los desmotiva en la clase de inglés?
- ¿Los elementos desmotivadores están presentes en todas las clases o en algunas clases?
- ¿qué les gusta de la clase de inglés?

AFTER

- ¿Como les pareció la narrativa del juego?
- ¿Qué elementos motivadores hay dentro de la estrategia?
- ¿Cómo se sienten al respecto de tener puntos y niveles?
- ¿de qué manera participaste en la construcción de la clase?
- ¿Cómo fue para ustedes la socialización durante la experiencia?
- ¿qué impacto ha tenido la experiencia del juego en la utilización del inglés en clase?
- ¿Cuál es tu opinión frente a la generación de expectativa durante el juego?
- ¿Cómo influyo la expectativa en tu motivación?
- en términos de motivación, ¿Qué sentimientos surgieron en las actividades donde hubo perdidas?
- ¿Qué paso con su nivel de inglés durante la experiencia?"

3.5.2 Survey: it is understood to examine and/ or make an overview of a population (O'Leary,2004). Descriptive surveys are to provide the researcher with a big picture of the phenomena in a population (O'Leary,2004). Just like that, the surveys provide a snapshot of the student's motivations towards an English class and their perceptions of the classes, which helped the researcher understand the strengths and weaknesses when using or not a gamified experience made a comparative reflection.

The survey allowed confirming the findings obtained in the interview and field diary. The survey in this research was especially useful because it allowed us to know the results more objectively and compare them with the results obtained with the other instruments applied. The survey and the interviews were carried out at separate times so that the veracity of the answers could be contrasted, and the results were more transparent for the data analysis. The survey consisted of eight questions related to the Octalysis core drivers. The survey inquired about the impact of these core drivers as motivators for learning. See annexes N. 1 and 2 (Survey)

3.5.3 Field diary: field notes are written records of participant observers which make be anecdotal records as part of a systematic assessment (Mills, 2003). The researcher sketched a class mediated by the Octalysis Framework in a gamified experience. The notes gave an overview of the interaction between the participants and the eight cores that were used in each session. From this information, data showed a better understanding of a gamified experience.

The field diary allowed for a methodological process in which the participants' experience was recorded. Luna-Gijón et al., (2022), defined it as an instrument for collecting information, which is similar to a particular version of the notebook, but with a broader spectrum of use and methodically organized concerning the information to be obtained, such as content analysis, observation, and personal reflection, to then organize, analyze and interpret the information being collected.

In this way, the research was systematized, and field dairy made it easier to improve, enrich and transform information to know the reality of what was being done, and to go deeper into new facts in the situation, it permitted to give sequence to a process of research and intervention, and to have data for later evaluation. Luna-Gijón et al., (2022).

3.5.4 Focus group: it is used to understand the area of focus especially when the interaction may lead to a shared understanding that portrays the phenomena for the researcher (Mills, 2003). Observing a specific group allowed us to have manageable information that pictures using the Octalysis Framework with participants from the same features. The data collected from this instrument will help characterize this new methodology's applicability to a scholar population that may have the same issue of action.

The information obtained in the focus groups was more robust and allowed us to explore participants' unconscious or often unspoken preferences. Focus groups also reflected a globalized and interconnected audience's opinions and

preferences. This required greater awareness on the part of participants, making them feel welcome to share their true opinions during the research process.

The results of focus group research are considered robust because participants were genuinely engaged in the study and the researchers were skilled to lead them, the result could clarify the fundamental issues of the research, and results could be constructed with results found in the other data collection instruments.

Participants could interact, influence, and be influenced, providing practical insight into their experience. As a researcher, I could listen to each person's tone and observe their body language to better understand their feelings about a particular topic and each question. The questions that lead the focus group were:

- How would you describe your English class?
- In terms of motivation, how would you describe your experience in a gamified lesson?
- Which elements from the gamified experience impact you the most?

3.5.5. Octalysis tool: it is an instrument that measures several statements whether they strongly agree, agree, undecided, disagree, or strongly disagree. With the information collected the researcher may infer and create a narrative from the findings (Mills, 2003). It was significant to draw the actual octagon that came out from the current experience and analyze the interaction, the impact and the use of the cores and give a positive or negative feedback for the gamified experience. This Likert scale provided the values to use in the Octalysis tool which comes from the official Octalysis official webpage and helped the researcher to create the octagon shape form the gamified experience and based on this figure identified how successful the gamification was.

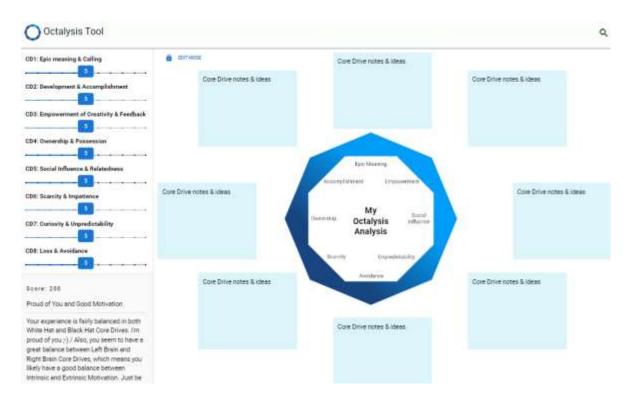


Figure 6. Octalysis tool

Note: The figure shows the Octalysis tool. By using this instrument and the public tool a can be found at ²

CHAPTER IV: INTERVENTION DESIGN

In this chapter will be discussing the concepts which frame the intervention design.

After that, the instructional design will be presented to show the use of the eight core

² <u>https://yukaichou.com/octalysis-tool/</u>

drivers of the Octalysis Framework in the gamified experience. Thus, the concepts presented are curriculum, learning, language, and EFL classroom.

Curriculum

The curriculum is defined as systematic and intentional competencies such as knowledge, skills, and attitudes that learners should acquire through methodological learning experiences in distinctive settings (IBE-UNESCO, 2023). Although this definition remarks on the importance of individual development, a wider perspective should be considered when discussing curriculum. Therefore, for the needs of this project curriculum is:

All the selected, organized, integrative, innovative, and evaluative educational experiences provided to learners consciously or unconsciously under the school authority in order to achieve the designated learning outcomes which are achieved as a result of growth, maturation and learning meant to be best utilized for life in a changing society. (Mutale Mulenga, 2018, p. 20).

As a result, a group of different strategies help the individual to have educational and assessed experiences that allow them to give their best in every possible skill. Ultimately, developing these abilities permits the being to be a significant part of a changing society.

Learning

The learning process permits us to use different experiences to acquire a set of skills or knowledge. This is a process which involves every capability that an individual may develop. Different approaches have given different viewpoints of what learning is and how it involves the learners. One of the most known is the behaviorist approach. This one establishes that the learners are passive actors; there is a passive absorption of knowledge. Besides, it promotes learning processes based on repetition and positive reinforcement (GSI Teaching & Resource Center, 2016).

On the other hand, cognitive constructivism argues the importance of active assimilation and accommodation of innovative information to existing cognitive structures. This approach empowers the importance of adding the latest information by the learners' exploration and discoveries (GSI Teaching & Resource Center, 2016). Finally, social constructivism states that learning is a collective assimilation and accommodation of new information mediated by the incorporation of scholars into a knowledge society (GSI Teaching & Resource Center, 2016).

Therefore, for the assertiveness of this research project, learning was conceived within the social constructivist approach considering the process of learning a foreign language as a social construction which needs the interaction among the students in the classroom. Thus, interaction will be considered essential during the learning processes in the lessons proposed by the researcher during data collection.

Language

When thinking about language, it is usual to picture a set of words, grammatical structures, symbols and even nationalities. A considerable number of

academics have given closer definitions to what language means. Language is a manner to construct culture, community, and empathy. That is why UNESCO promotes the right for every person to learn in their own language due to the significant connection to improve learning opportunities and better socio-emotional development (UNESCO, 2023). For this research study, language was seen as the method used by the students to think, talk and communicate their ideas, in that way, language shapes the speakers' worldview and cognitive processes that permit them to interact with others (Mwakapina, 2021).

Intervention design

The instructional intervention of this research project was divided in five sessions which pointed to understand the contributions of gamification to the specific didactic processes of teaching of English as a foreign language based on the Octalysis Framework method. Each one of these cycles and lesson plans applied (See Table 2) The didactic unit was planned based on the Octalysis Framework principles to assess the use of them in a gamified experience for middle school's students. The different elements included are below.

Lesson plan: For the lesson plan students worked on narratives about the past, so that, the objective was for students to read, write, listen, and speak by using past tenses correctly, this is a topic students showed struggles. Thus, the gamified experience was created using a web page designed by the research using a free

webpage designer Wix.com. in this web pages all the elements from the Octalysis Framework were applied³.

Students: Participants personalize their own avatar by coloring a given character randomly. They also created a demon slayer ID card to collect the points obtained. There was a total of 20 students during the gamified experience.

Points: Colored dots were used to color-code the XP (experience) points; thus, neon was fifteen points, purple was five points, gold was 1 point, and pink took 1 point out. In the web page, students had the opportunity to see the amount of point achievable per mission and the behaviors that led them to get extra points.

Narrative: the narrative used for the gamified experience was based on an anime called demon slayer which has been interesting for most of the participants. For the narrative, characters from the anime directed a specific English skill to be developed. The narrative was modified in terms of usage to include students and the teacher in the story.

Missions: the description of the missions was posted on the webpage. Each mission was focused on one language skill: listening speaking, reading, and writing. Each mission was attached to the characters skills for students to assimilate the ability to be worked. Missions were giving experience points for the accomplishment of each one of them.

³ Considering this step, the link for the webpage used with the participants is <u>https://dmedina1946.wixsite.com/learning-english-dem</u>

Behaviors: Students were informed on what behaviors they were expected to have during the session. These agreements were: talk only in English during the whole class; help your partner with any doubt; behave nicely during the week; participate in the cooperative activities; use full structures when talking. These agreements are published in how to play from the webpage designed by the researcher.

Level: students knew about the levels and how to obtain points to achieve this level. The following were the ones used for this project: LEVEL 1. Beginner demon slayer (0 points); LEVEL 2. Rookie (30 points); LEVEL 3. Junior demon slayer (60 points); LEVEL 4. Amateur demon slayer (100 points); LEVEL 5. Professional demon slayer (200 points)

All the previous elements allowed the researchers to set the best scenario to apply the Octalysis Framework. Resulting from this proposal, the following chart summarizes the lesson plan applied to the participants during the gamified experience:

GAMIFIED EXPERIENCE: DEMON SLAYER				
Session and Mission	Language Objective	Activities	Core Drivers	
Session 1 Meaning	Students review past tenses structures as well as phrasal verbs	 Warm up: Students will watch a short Demon Slayer chapter and discuss what they think about it. Development: The teacher will introduce the gamified experience narrative explaining intro/Rules and levels/ Missions. Students will create their slayer avatar. Students work in differences between past simple/ past continuous/ present perfect. Students will use some phrasal verbs and practice past tenses structures. Assessment: Students will work in groups to check their understanding and write one question about something they need to ask next class. 	Epic meaning Accomplishment Empowerment Ownership Social influence Scarcity Unpredictability Avoidance	

Table 2. G	Gamified ex	perience l	lesson p	olan
------------	-------------	------------	----------	------

GAMIFIED EXPERIENCE: DEMON SLAYER						
Session and Mission	Language Objective	Activities	Core Drivers			
Session 2 Mission 1: Water Hashira	Students write a blog entry by using past tense structures	 Warm up: Students and the teacher will solve the questions from the previous lesson. The teacher will introduce the new mission and the leading hashira. Development: Students will complete Carmen's blog entry worksheet to practice past tenses structures. Students will complete the table categorizing conjugated verbs according to the tense used. Students will answer some exercises about replacing structure without changing meanings. Assessment: Students will pretend to be the water hashira and write a blog entry by groups 	Epic meaning Accomplishment Empowerment Ownership Social influence Scarcity Unpredictability Avoidance			
Session 3 Mission 2: Insect Hashira	Students extract from the text principal and supporting ideas by creating a spider web graphic organizer	 Warm up: The teacher will introduce the second hashira. Development: <u>Pre-reading</u> read and find the key words. Match: Many students just didn't take the idea = the idea did not become popular for the students <i>Czechs simply weren't as well off as young Germans</i>= to be well off means to have a lot of money, to be prosperous. <i>Revenue</i>= this is the money a business receives. Looking for numbers: students will differentiate numbers for quantities, to order and for dates. Reading Students will read and answer some reading comprehension questions by using two strategies. Post-Reading Students will create a spider web about the reading identifying the principal ideas from the paragraphs. Assessment: Students will have peer work on their work 	Epic meaning Accomplishment Empowerment Ownership Social influence Scarcity Unpredictability Avoidance			
Session 4 Mission 3: Sound Hashira	Students listen for details in current issues conversations	Warm up: The teacher will introduce the sound hashira. Development: - Students will be having their listening practice by having a scape room using @genially https://view.genial.ly/64177a805b14250019525796/interactive-content-sound-harisha - Solve a worksheet based on the listening exercise	Epic meaning Accomplishment Empowerment Ownership Social influence Scarcity Unpredictability Avoidance			
Session 5 Final Mission: Defeat the demon Muzan Kubutsuji	Students use past tenses in oral production	 Warm up: Students will see some pictures of activities and demon slayers characters and match the character to his/her favorite activity. Development: Preparation: students will watch a video of a conversation and classify the sentences used for talking about experiences in general and the ones use for talking about the weekend Check your understanding: Students will answer true or false, reordering, multiple selection exercise regarding the conversation. Assessment: Prepare your talk: students create a dialogue answering à How was your last weekend? What did you get up to? 	Epic meaning Accomplishment Empowerment Ownership Social influence Scarcity Unpredictability Avoidance			

Note: Lesson plan applied by using the Octalysis Framework principles

The purpose of this intervention was to observe the interaction of the Octalysis drive cores in the development of the lesson and the contributions it made to students' performance in their learning process. At the end, the gathered data obtained after the application of this pedagogical intervention were coded and analyzed to create categories to answer the research questions and objectives of this research. The results and analysis of the categories will be discussed in the next chapter.

CHAPTER V: RESULTS

As discussed in the introduction, this dissertation debates the contributions of gamification to the specific didactic processes of teaching English as a foreign language based on the Octalysis Framework method in the seventh-grade students at Colegio Rosario de Santo Domingo. Through the development of this chapter, data analysis and findings are displayed. To begin with, the techniques for data analysis are described; including the approach and the perspective used in this research study. Furthermore, the categories of analysis and the required data samples are exhibited to support the findings from this research.

To conclude, a discussion of the outcomes is included. It is important to mention that the elements in this section account for the reliability, validity, and triangulation of the data gathered throughout the pedagogical intervention.

The researcher applied the core drivers during five sessions in which they were giving information; those core drivers were: epic meaning, accomplishment,

empowerment, ownership, social influence, scarcity, unpredictability, and avoidance. The findings led to three categories to analyze by the results of this inquiry.

Although all the Octalysis Framework cores are focused on providing the user with a gamified experience that fulfills the motiving factors of human nature, the researcher analyzed the impact of each driver in the emergent category which applies the best according to the gathered results.

The data triangulation strategy was used to analyze this research's qualitative data. The triangulation strategy helps the researcher enhance the validity and credibility of findings and mitigate the presence of any research biases in this research. To find and explain the contributions of gamification to the specific didactic processes of teaching English as a foreign language based on the Octalysis Framework method in seventh-grade students at Colegio Rosario de Santo Domingo, it was analyzed data from a sample of twenty middle school students over a period of one month. Four data collection instruments were implemented (Semi-structure interview, Survey, Field diary, Focus group, and Octalysis tool). Triangulation was used for a more holistic perspective on the specific research question, it was also helpful for enhancing the credibility and validity of the data collected.

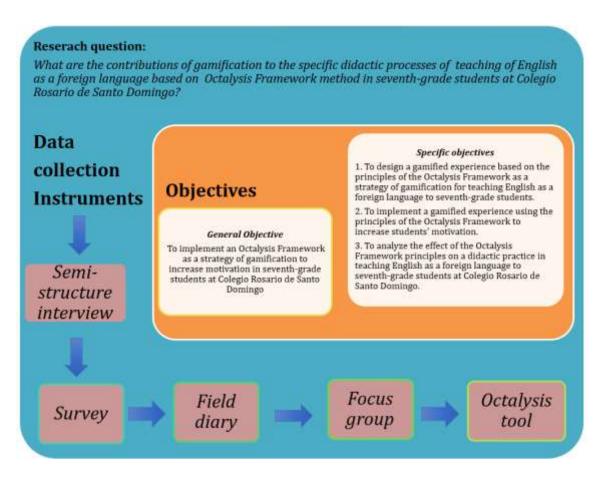


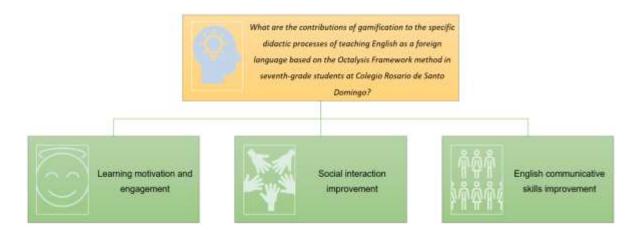
Figure 7. Research objective and data collection instruments

Note: the figure shows the research question that guided this research, the objectives, and the data collection instruments.

After analyzing the data collected in each research instrument using the Atlas IT tool,

emerging categories were obtained and will be presented below.

Figure 8. Emergent categories



Note: the figure shows the categories given by the data gathered in the research project

The emergent categories displayed summarize the more significant results supported by the findings, First, Octalysis Framework has demonstrated to increase the learning motivation and engagement in students, second. There is an improvement in the social interaction skills and finally, the English communicative skills become stringer. These emergent categories will be discussed below.

5.1 Learning motivation and engagement

This category corresponds to implementing three core drivers: epic meaning, empowerment, and accomplishment, which strengthen engaging and motivating situations for pupils to learn a language. The use of games fosters, stimulates, and develops learning, including human and social skills (Melo Herrera, 2020) which gives students a safe setting to learn a subject. As discussed in Chapter 2, epic meaning is related to the sense of being the chosen one and provides the user with a feeling he or she is doing something greater for themselves or others, and empowerment, promotes the use of the ability to find game strategies to achieve the goals (Chou, 2014).

Subsequently, data showed, as considered as the epic meaning, the narrative of the gamified experience provides a setting in which students felt confident trying to understand the story and how they would be the protagonist in their process. Selecting an anime that is on fashion caught the attention of the teens and most of them seemed to be interested in taking part in the project.

Nevertheless, some of them seemed to be unconnected to the call to be the chosen one, this made the researcher reflect on their connection to the task. When students knew that they were part of the story and the teacher presented the different characters, figure 6, students were enthusiastic and motivated. This was seen in their willingness to participate and finish the activities.



Figure 9. Gamified experience webpage: Narrative

Note: Narrative used based on the manga and anime series Demon Slayer by Koyoharu Gotouge. Adapted from Demon Slayer: Kimetsu No Yaiba (https://demonslayer-anime.com/) Although the activities had been used for different sessions of class, students continued to be extremely interested in getting more points to be the best ones. They are committed to showing the advance of their character. This motivated students to keep records of their work. For the gamified experience, it is important to have frequent reminders of the narrative and the calling to keep the motivation and attention lasting longer, it gives the students a sense of being part of the game. The students' attitude toward the gamified experience demonstrated that they believed they were the ones; this is significant because it maintains motivation and they are willing to get until the end. The teacher needs to provide every time reminders for the students to continue believing that they are the chosen ones to keep the gamified experience. During the gamification process, it was observed that students are motivated by this practice:

"When students saw the video's thumbnail, some of the students started gasping in positive surprise."

[Field note, session 1. March 21/2023]

"Teacher started the class by remembering the students that they are demon slayers getting their techniques stronger. Students are connected and they like to be called like that."

[Field note, session 4. March 28/2023]

For the participants it was significant to be part of the narrative. Results showed that students were attached to the gamified experience by the calling as by having the feeling of being a character from the story, moreover, the teacher, taking part in the story also provides the students with a positive relationship with the teacher which augmented their interest in the class. When the participants were asked about the motivators in the class, they clearly mentioned the narrative of the gamification exercise.

"**Participant 10:** "los niveles. la historia, el ser un personaje del juego, los puntos, la plataforma, los talleres"

Participant 16: Como la profe es musan ella nos decía que si hacíamos algo en español le dábamos puntos a ella entonces a mí me parecía chistoso en parte y me motivaba a no hacer o decir nada en español, también me motivaban los puntos y cuando nos toca actuar.

Participant 18: La temática de las actividades y en si de la historia, ya que es muy divertido estar aprendiendo ingles de una forma más entretenida como lo es con Demon Slayer, la historia de Muzan y de todos los Hashiras, realmente es motivante aprender así."

[Students' survey N°2]

On the same path, empowerment was increasing motivation through boosters and strategies. Students who have a booster to complete the activity feel more powerful and willing to achieve the goal. During the sessions, the teachers provided immediate feedback as a booster and some clues that helped the students succeed in every mission.

Participant 2:

[Cuando no entiendo algo pregunto y la profe me ayuda en lo que no entendía, y eso me ayuda a mejorar o a entender lo que antes no sabía muy bien]

Participant 5:

[Los trabajos en grupo, si alguien me preguntaba algo sobre los temas, yo respondía la pregunta con lo que sabia, y de paso repasaba yo, por si se me olvidaba].

Participant 17:

[Los elementos o actividades te permiten participar en la construcción de la clase inglés son la participación las acciones que tomemos ya que estas nos llevarán por un camino diferente]

[Students' survey N°2]

Participants felt more confident, and they were taking advantage of this opportunity. It is remarkable to see that students are understanding what is being taught based on how they ask questions to the teacher. The teacher's explanations as the boosters in the game provide students a sense of getting better and stronger by understanding the instructions, thus, students felt more comfortable and more motivated to achieve the objective. Also, using points for motivation when using a foreign language boost students' willingness to speak in English and eventually, they continue doing it without the points needed.

"Teacher decided to select the first seven students to get the points in the phrasal verbs exercise."

[Field note, session 1. March 22/2023]

"The teacher passed to each group and give feedback to the groups so they can have better scores, it is only one opportunity."

[Field note, session 1. March 24/2023]

The core driver used as a visible game mechanic is the accomplishment, which refers to the steps, the process, and the recognition of this process. This core is evidenced in using leaderboards, crowning, and boss fights, among others (Chou, 2014).

The findings showed the importance of the teacher's role. She dedicated suitable time to explain to the students the levels, points, and roles. Students were interested in understanding the rules, even the ones who were not attentive to the opening narrative. For students, it was clear to understand the game's intention and how they were going to succeed during the missions proposed for the lessons.

Figure 10. Gamified experience webpage: agreements



Note: the image shows the extract which evidences the use of points and levels as part of the game mechanics. From https://dmedina1946.wixsite.com/learning-english-dem

Results showed that the steps and the processes are significant for students. They wanted to be sure to understand how their process was going to be measured, to question activities and instructions gave them the confidence to continue in the activity.

Participant 14: "los puntos, el simple hecho de querer subir y subir de nivel."

Participant 15: "En las clases utilizamos puntos para subir de nivel usando puntos de colores que tenían diferente valor. Usamos la página de Demon Slayer para saber en qué nivel íbamos y cuantos puntos nos hacían falta para avanzar."

[Students' survey N°2]

Students were willing to continue improving their level, they were constantly on the way to being on the leaderboard and improving their skills. As observed in Figure 8, having levels helped students to see their progress, thus, the accomplishment core is a significant motivator because it makes visual the students' evolution, and they feel positive feelings when getting better which is going to end in a positive connection between the pupil and what is being taught.



Figure 11. Students' points and levels

Note: Artifact showing a participant ID card where point are levels are registered.

Students proved to be genuinely concerned about maintaining and increasing their level and trying to collect their points. Although this is part of the experience, it is especially important for the teacher to avoid leading the gamified experiences only to the accomplishment because this core is in the left brain which is related to extrinsic motivation.

Participant 5:

[a mí me parece que los trabajos en grupo y también los puntos hacen que nos motivemos porque así con más actitud hacemos las cosas]

[Students' interview N°2]

Participant 5:

[Para mí, un elemento motivador, eran los puntos que la profe nos daba en las actividades de Demon Slayer, además que nos motivaba a hacerlo todo bien]

"Participant 9:

[pues me motivo fue esforzarse para ganar los puntos y mejorar el nivel ya que significa que lo estás haciendo bien]

[Students' survey N°2]

"Students were working in the lab, and they had the opportunity to explore the webpage created by the teacher and they were reviewing levels and how to collect the points, they did this without being asked for."

[Field note, session 4. March 28/2023]

"Students counted the numbers of points and were excited to see their advances and how they were achieving the levels. The teacher gave 5 points to the students who finish first, but some of them did not get the answers correctly. Some of the were anxious to get the points because they were close to achieving the next level."

[Field note, session 5. April 11/2023]

As shown by the evidence, points, and levels perform a vital role in students' motivation. When participants were asked about the principal motivators during the gamified experience 80% of the population agreed on the points as one of the strongest stimuli for the sessions.

Figure 12. Interview excerpt

3. ¿Que elementos motivadores utilizan en la clase de inglés? (0 punto)

			F	Respuestas i	más reci	ientes	
20			"Lo que me motiva son la	os puntos por	que me a	yudan a que participe más p	
Respue	stas		"Lo que nos motiva o por lo menos a mi son los puntos, ya que intento hacer.				
		"La temática de las actividades y en si de la historia, ya que es muy divertido					
16 encuestados (80%) res				ulatafa		Distintes possibles	
	mentos n		ores historia	platafo		Distintas pegatinas	
	mentos n profe		ores historia	Los	Inglés	simple echo	
ele	mentos n	notivado	ores historia	Los	Inglés Pagina	simple echo	

Note: the image shows a cloud word which portrays scholars' motivators toward the gamified experience. From students' survey N°2

To conclude, it was possible to infer the significant contributions of the epic meaning and empowerment driver cores from the Octalysis Framework to foster the leaning process on the students by increasing their motivation toward the class.

5.2 Social interaction improvement

The main idea for using game mechanics in educational settings is called gamification, and this methodology has shown positive results (Nistor & Iacob, 2018). For this emergent category, the results showed the use of scarcity avoidance, and unpredictability to increase improve social interaction. Thus, for the focus of this study, three core drivers were specifically used for the researcher to observe the social interaction in the classroom during the gamified experience.

The first drive core which was giving the game mechanic to the experience was scarcity. This driver is connected to the sense of obtaining something that is exclusive or limited during the game, it needs an extra effort for the gamer to get this item (Chou, 2014).

During the application of the gamified experience, the student relates this driver as the one that promotes competition, this is an important motivator during the gamified experience, this driver must be led carefully, so a positive and respectful competition provides constructive experiences. Evidence of the use of this driver core was the time limit. It provoked in students a feeling of competition, which is necessary to activate during gaming. Students were enthusiastic and more participative in the class. **Participant 17:** "Los elementos existen en la clase que incluyen mi esfuerzo son los trabajos en grupo y las actividades en contrarreloj."

[Students' survey N°2]

"The teacher explained the 3 activities for the class. The one that five the more points. The teacher presented a video that would be used as a prompt to do the activities for the activities. The teacher presented the video only once. When students lined up to get the points, they were competing and pushing their friends to be the first ones because there was only one moment to get the points. This activity activates competition and students seemed to be motivated. Most of the students went and tried to participate, only 3 students were seated at that moment."

[Field note, session 5. April 11/2023]

During the activities where competition was at disposal, students' behavior tended to be respectful, not only to the game rules but they were empathetic with their classmates, creating a tolerance atmosphere that allowed them to develop positive management of emotions such as frustration.

Participant 4:

[perder los puntos se siente tristeza obviamente, pero yo creo que ayuda un poquito a la motivación para superarse a uno mismo]

[Students' interview N°2]

73

Subsequently, avoidance is the core driver related to the gamer's idea to prevent something negative from happening (Chou, 2014). When asked about the elements for the class that generate any emotion, respondents tended to say that losing points made them feel anxious, frustrated, and angry, among others.

Participant 2:

[pues yo nunca he perdido puntos, pero si he estado muy cerca de perderlos y uno siente un temor de perder el punto pues porque pues solo se puede perder un punto en este caso, y siento el temor detrás, por ejemplo, yo soy el segundo con más puntos, y perder los puntos se siente, así como muy mal porque ya es muy adelante, y perder todo, es... se siente mal]

[Students' survey N°2]

Moreover, participants agreed on using this negative emotion, which is a key factor during the session. Students argued that having these negative feelings raises their readiness to continue playing and becoming better.

Participant 7:

[Los puntos, pues cuando los ganaba me ponía muy feliz y sentía que lo estaba haciendo bien, pero cuando los perdía me sentía triste, pero me motivaba para mejorar]

Participant 18:

[Cuando no alcanzaba a tener la actividad lista y no ganaba puntos me generaba un poquito de rabia, pero sabía que a la próxima tenía que ser más rápida]

[Students' survey N°2]

Although most of the time the teacher encouraged positive points, the idea of losing points made students feel anxious and in a way motivated as shown in the previous interventions. It might be said that students used avoidance as a strong motivator, although it can be seen as a negative one, based on how the teacher presents it, it might increase students' motivation. Avoidance is a driver that may arise feeling such as fear or alarm, although these feelings are undesirable, during the gamified experience these emotions transform into protective ones and students enjoyed protecting their points and levels resulting in a way to continue motivating students.

To end the results regarding the core drivers related to game mechanics we have unpredictability. This core driver is related to expectation and the idea of not knowing what will happen (Chou, 2014). When students were asked about the impact this core has had on their experience during the gamification process, they agreed on the idea that unpredictability gave them a sense of suspense and the feeling of unknown things in the class which helped students to be attentive.

Participant 5:

75

[yo "creo que intentamos superarnos a nosotros mismos con el suspenso y eso, porque no sabemos qué va a pasar, pero intentamos como dar lo mejor para poder saber que va a pasar y que vamos a ganar]

Participant 1:

[pues la verdad es chévere, porque como que te motivas más para... como que, si no ganaste puntos esta vez como que te motivas para tener más puntos las siguientes misiones, el suspenso como que se relaciona con la motivación]

[Students' interview N°2]

Unpredictability seems to be one of the strongest core drivers in motivating students to continue playing in the gamified experience. Students expect the game to show something new, even with minute details like changing the role of the teacher, using TPR like clapping, voice intonation, students show interest in the class. Respondents were constantly talking about the elements that the teacher used to have the unpredictability factor, which proved the importance of maintaining this core driver effectively.

Participant 13:

[pues lo que más me generaba expectativa las misiones y los ataques que nos daba la profe porque los primeros como no sabíamos bien como nos atacaba ni cómo evitarlo.]

Participant 14:

[Cuando la profe ponía trampas o ataques me dio expectativa de querer saberlos y superarlos]

Participant 17:

[Los elementos que me generan expectativa son los ataques de Muzan, las próximas actividades y las misiones.]

[Students' survey N°2]

Unpredictability is a crucial core, it keeps the students motivated and attentive to see what's next, by not knowing what is going to happen, students are willing to connect to the gamified experience, besides, it helps to maintain students' attention and engagement. Unpredictability, surprises, and unexpected actions keep students attentive and increases participation in the class, this is significant to help the students to be focused during the lesson.

To sum up, scarcity, avoidance, and unpredictability core drivers are the ones that help the most to construct the gamified experience by following the Octalysis Framework and increases the positive social interaction among students and teacher. Having a balance among these drivers may guarantee a successful experience providing the users with satisfying results.

When using gamification as an educational strategy, interaction is a key part of the development of the classes. By establishing this, the core drivers discussed here: ownership and social influence raise as a category to understand the importance of these drivers to improve students' interaction and its relationship with the use of the foreign language in class.

Ownership is the core driver related to the possibility to feel that the user rules the game by creating avatars and personalizing a hero. It gives gamers a feeling of being in control (Chou, 2014).

One of the activities which attracted attention was avatar creation. This activity was the one that students celebrated the most. They were immersed in the task, and they have a special interest in personalizing their avatars. It was remarkably interesting to observe how they tried to portray their likes in the ID picture, and they felt positive about their heroes.

Figure 13. Gamified experience avatars



Note: avatars used at the beginning of the game. Each student selected one and personalized them. From Google images in the public domain

For students it was exciting to see their cards with the points, they make them feel sure, and in a way, they feel attached to their avatar.

78

When students were questioned about the elements that they felt more motivated, participants liked the idea of them playing a different role that is the students is an appealing factor that maintains the motivation and willingness to see what is coming next.

Participant 7:

[pues la mayoría de las actividades eran con integración y socialización, no sentíamos como si fuéramos nuestro personaje.]

[Students' survey N°2]

Participant 2:

[pues yo concuerdo en lo mismo ya que depende de nuestras acciones si decidimos avanzar y superar a todos o si nos quedamos en el mismo punto, y, aun así, aunque no nos sintamos que estamos construyendo la clase si participamos y mucho.]

[Students' interview N°2]

When students start creating strategies to compete with their classmates or get better in the gamification exercise, it increases their enthusiasm to feel part of the game. In that way, students start to own the experiences and keep their motivation high.

Social influence is the need to build a community toward a goal, feelings such as competition and envy are part of this social construction (Chou, 2014). To

be part of a group was a stimulus that attracted the attention of this population, they are extremely interested in working with others. Thus, social influence core driver is key to understanding students' motivation during the gamified experience.

Although getting the experience points is important, I may consider social influence to be a significant issue in students' motivation. Many of the students' actions are constructed by social interaction. They will behave in a way they have approval or confidence from their students' partners.

As seen in the findings, working in groups was a remarkable factor in building a community for the gamified experience and gave students a sense of belonging that led them to feel more comfortable and part of the game. Students responded that group work was an important part of them.

Participant 1:

[a mí me pareció bastante importante porque digamos que también en grupo uno habla en inglés y socializa en inglés y pues es chévere porque todos aprendemos juntos]

Participant 3:

[pues en los grupos la verdad, también ayuda como que tu no habías entendido un tema muy bien y como que te ayudan para entenderlo bien, además puedes estar con otras personas que nunca habías trabajado]

Participant 5:

[como dijo mi compañera pues en los grupos nos ayudamos todos o sea si uno no entiende algo el otro lo explica aparte podemos mejorar nuestro inglés entonces me parece que es muy buena idea los grupos.]

[Students' interview N°2]

Now of the creation of the groups, students tried to get together with the one who was having a closer relationship with them, but because of the class dynamic, they tried to monitor their behavior and language to finish the task assigned. Evidence showed that self-monitoring was a significant skill developed in the social influence core, students were trying to follow the rules and made their classmates follow the rules, they understood that working in groups helped them to accomplish the goal, using cooperative work, with their roles, give a sense of organization for the students.

Participant 4:

[a mí me parece chévere porque la dinámica de los roles de cada grupo ayuda a progresar el grupo.]

[Students' interview N°2]

One interesting finding showed that students were not attracted to the mission in which they had to work alone. Although students were focused and working hard, they finished the activity to get the points, they were not really engaged in the game mission, and by not having the opportunity to interact with others and construct meaning of the work, as soon as they get the point, they lost

interest. The motivation for the activity lasted an abbreviated time because the focus was on extrinsic motivation drivers (accomplishment).

[Today class was very individual, every student was working in the computer, and they were finishing the activities quietly, they must raise their hand to show the work or to ask questions.]

[Field note, session 4. April 28/2023]

Social influence seems to be one of the stronger drivers and one motivator that maintains the gamified experience successful. From this experience, the participants were actively participating in the class. Activities involving social interaction appear to increase students' motivation and confidence. It can even be said that social influence is a factor that beats extrinsic motivation (points) and encourages students to monitor their own process and their classmates.

To resolve this, ownership and social influence are core drivers that are significant to increase students' motivation. It is important to see the impact of these factors on educational practices.

5.3 English communicative skills improvement

The main objective when applying a gamified experience is to guarantee in students a successful outcome. As a result of the use of the application of the different core drivers, there was a notable change: at the beginning of the gamified experience, students were very conditionate to use the language, but meanwhile

82

the sessions passed, they were on task, they are more confident when speaking the language without being habituated.

Participant 4:

[pues con las actividades de Demon Slayer, la verdad siento que mis habilidades para hablar inglés, el listening, el speaking ha mejorado y bastante]

[Students' interview N°2]

Moreover, students also were conscious about their advances on listening abilities, due to the constant use of English and having a better use of the strategies, students have felt their listening skill to be stronger.

Participant 4:

[me gustó mucho y aparte yo siento que todo mundo está mejorando y digamos yo en el listening ya entiendo mucho más]

[Students' interview N°2]

Besides, due to the game mechanics and the competitiveness that has aroused during the lessons, students develop academic skills to improve their abilities and advance in the game levels. Students showed understanding of the grammar and vocabulary proposed for the lesson and it was easy for them to be aware of this improvement.

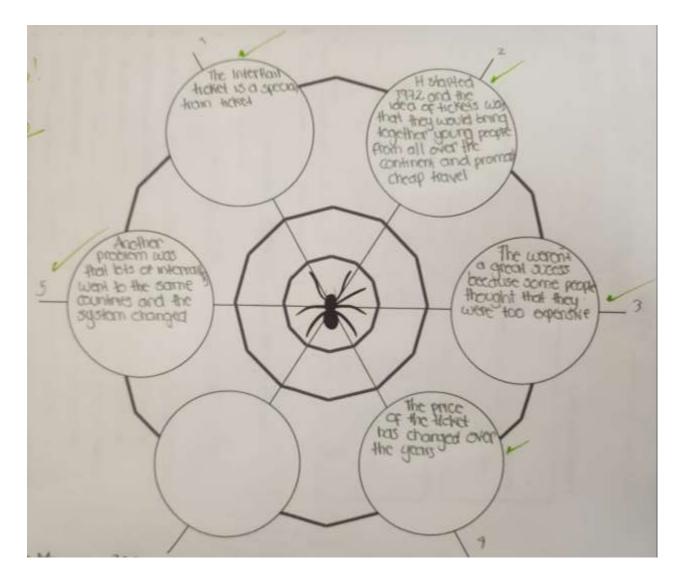
Figure 14. Writing exercise

Writing - The misterious man I am Manya girl with many secrets and today I cell tell you about the adventures that I had had. One morning I was playing in the park, a mysterious man told me that he had come to kill on eul sorcerer and them he ran away, Thad to have eat that's why I went home and didn't follow him Every morning 1000 to the nork if there is the mysterious man, ! Just today he is there, that's why I'm talking tohim, Past simple opost perfect present simple past opresent simple continouse @ present continouse

Note: Students artifact using color code to identify grammatical structures

Finally, during the gamified experience, pupils strengthened their reading skills and showed better abilities to extract information from a text. The interaction among students during the gamified experience allowed them to monitor their understanding and advances. During the reading exercises it was significant the social influence drive core.

Figure 15. Reading graphic organizer



Note: Students artifact using a graphic organizer to analyze a reading

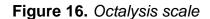
Thus, gamified experiences permit the students to be committed and allow them to improve their learning by using positive strategies such as the ones offered by the Octalysis Framework core drivers.

Octalysis Tool

The average process of the Likert scale calculation results of each core driver by using the responses of the 20 participants, provides the Octalysis test scale with data to have the octagon pattern form, which gave the researcher an evaluation of the gamified experience.

In Figure 16, it is observed the Octalysis scale is used in the official Octalysis website <u>https://yukaichou.com/octalysis-tool/</u> which is used to create the octagon to determine the features of the gamified experience. Values are seen in the figure for the one applied in this research.





Note: the figure shows the use of the Octalysis tool to create the octagon for the gamified experience. From https://yukaichou.com/octalysis-tool/

As a result of that, in figure 17, it is shown the final shape provide by the online tool.

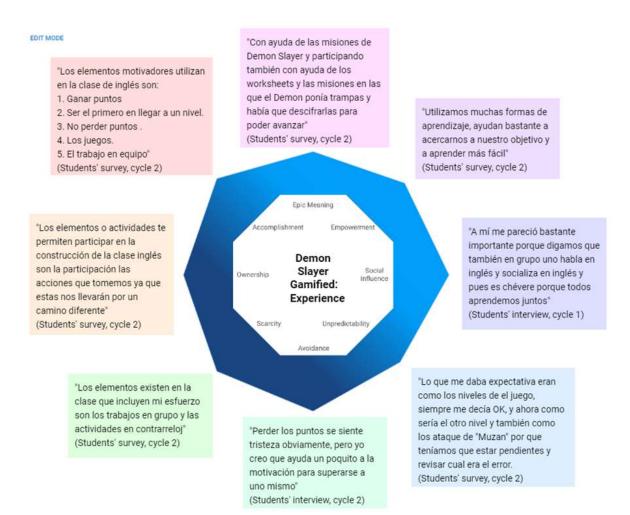


Figure 17. Gamified experience octagon

Note: after using the scale, this figure was shown. Descriptors are taken from students' surveys and interviews. From: <u>https://yukaichou.com/octalysis-tool/</u>

From the figure it can be said that the experience is reasonably balanced in both White Hat and Black Hat Core Drives. Also, there is a keen balance between Left Brain and Right Brain Core Drives, which means that the gamified experience applied for this research project has a good balance between intrinsic and extrinsic motivation. Nevertheless, there is a slight preference for the accomplishment core driver, which is a left-brain core driver, for that reason this experience needs to be carried out cautiously because extrinsic motivation constructed unsuccessfully may distress intrinsic motivation.

To sum up, the Octalysis Framework's contribution to the didactic teaching of English as a foreign language is remarkable. Evidence has shown that there is a significant and positive impact when using the core drivers in students' motivation and engagement towards learning. On the other hand, results have demonstrated that social interaction is a significant motivator for a successful gamified experience. Results demonstrated that through gamification, pupils are not only able to strengthen academic skills, but there is a positive experience to develop better interpersonal abilities which permit students to have better relationship with classmates and teacher. Finally, the combination of engagement, motivation and successful social interaction ends up in better academic performance. Findings reported the improvement of students' language skills due to the implementation of the Octalysis Framework.

CHAPTER VI: DISCUSSION AND CONCLUSIONS

6.1 Discussion

The purpose of this study was to better understand the contributions of gamification to the specific didactics processes of teaching English as a foreign language based on the Octalysis Framework method in seven grade students at Colegio Rosario de Santo Domingo. The results of this research provide supporting

evidence that there was an increase in students learning motivation and engagement, as well as an improvement in social interaction in the classroom. Finally, there was an improvement in the English communicative skills.

This pattern of results is consistent with the previous literature showing that the gamification method using the Octalysis Framework can encourage skills growth (Oliveira & Cruz, 2018). These results are consistent with the claim that established the use of game elements to increase the motivation of the students (Sánchez-Pacheco, 2020). The present results are consistent with Fitri et al.'s (2020) work that deals with the use gamification to improve student learning motivation to enhance learning effects. Thus, the present study has shown that using the Octalysis Framework as a gamification methodology increases students' motivation, improving cognitive and social skills and long-lasting learning processes. These results represent the first direct demonstration of the positive contributions of using this methodology in specific didactic processes.

This research findings highlight the use of game mechanics to increase motivation and develop better learning outcomes. The results strongly imply that driver cores from the Octalysis Framework are a map to guarantee positive results when using gamified experiences. It is interesting that engagement is strongly connected with gamification due to the idea of understanding human nature behavior as the Octalysis Framework proposed. In the researcher's view, the most compelling explanation for the present set of findings is that the experiential communicative approach of gamification facilitates and promotes students' learning of a foreign language. This idea is further supported by the finding that students

89

are engaged and committed to their own process. Finally, there was obtained evidence that social influence was one of the strongest core drivers when using Octalysis Framework. One interpretation of these findings is that as a social being, gamification considers this aspect and ensures the gamified experience by using social influence as a core driver to succeed in gamification. Taken together, these research findings indicate the importance of creating innovative ways to maintain motivation and keep students engaged in the lesson to achieve better academic outcomes.

It is remarkable to noticed that, although this study might be taken as one of the first conducted in Colombia regarding the Octalysis Framework, it agreed in the results to research done in different places worldwide. Cognitive, social skills and motivation improved and provided elements to have a successful learning process.

There are at least three potential limitations concerning the results of this study. The first limitation concerns generalizability due to the sample size and limited to a specific group of people. A second potential limitation is gathering data due to the school constraints based on the habeas data law. Finally sampling bias may conflict with these results. Although the present results clearly support the benefits of using Octalysis Framework in gamified experiences, it is appropriate to recognize several potential limitations.

Although this study supports the use of gamification in the classroom, the most important contribution may be that they raise a variety of intriguing questions for future study. In terms of future research, it would be useful to extend the current

findings by examining the impact of each core driver in terms of finding which is the most important and how to use this to have and specific outcome. If, as the present study suggests, the benefits of applying Octalysis Framework, then research is needed to explore profounder and strengthen the literature in Colombia regarding this topic.

Despite these limitations, the present study has augmented our insight into the relationship between gamified experiences and students' motivation. The researcher hopes that the current research will inspire further investigation of this critical area.

6.2 Conclusion

In this investigation, the aim was to assess the implementation of the Octalysis Framework as a strategy of gamification to increase motivation in a characterized population. This study has identified the benefits of applying gamification by using this methodology effectively. Action research provided a reflection process that permitted the identification of emergent categories that showed the impact of this framework in educational settings.

Therefore, to respond to the research question what are the contributions of gamification to the specific didactic processes of the teaching of English as a foreign language based on the Octalysis Framework method in seventh-grade students at Colegio Rosario de Santo Domingo? Data has shown that exists a positive impact on student's motivation when using gamification through this framework.

91

To design a gamified experience based on the principles of the Octalysis Framework as a strategy of gamification for teaching English as a foreign language to seventh-grade students to ensure that the use of game mechanics fulfill the natural need of human when gaming. The Octalysis Framework is humancentered, and this research demonstrated that by using this framework it is more likely to cover those human motivators.

On the other hand, data also showed that implementing a gamified experience using the principles of the Octalysis Framework increases students' motivation by focusing on developing social skills, which allows the learners to succeed in these experiences.

Furthermore, the analysis of the effect of the Octalysis Framework principles on a didactic practice in teaching English as a foreign language gives a clear glance at the importance of maintaining balance when applying the Octalysis Framework to provide students with intrinsic and extrinsic stimuli in a way that facilitates learning.

To conclude, the use of the Octalysis Framework with seventh-grade students was successful as demonstrated by the results. It gives a straightforward way to organize a gamified experience providing the learners with enough prompts that allow them to be engaged actively preserving their own process and helping the ones around them by building community.

6.3 Further Research

Octalysis Framework has shown in this research that its application in educational setting gives positive outcomes. Nonetheless, this research should be taken cautiously anticipated to the small sample size and the withdrawal of details regarding the participants' attributes.

Future research could further examine the differences between the core drivers and the importance of achieving a specific behavior. Besides, considering the lack of literature, research must be done to enlighten the path to better understand this framework usage in the classroom.

Due to the human-centered principle in which the Octalysis Framework is based, research could go deeper investigating the impact of this basis to modify students' behavior within the classroom.

References

- Abdullah Kamal, S. (2019). Research Paradigm and the Philosophical Foundations of a Qualitative Study. *PEOPLE: International Journal of Social Sciences*, 1386-1394.
- Al-Azaw, R., Al-Faliti, F., & Al-Blush, M. (2016). Educational gamification Vs. game based learning: Comparative study. *International Journal of Innovation, Management and Technology*, 132-136.
- Alpar, M. (2013). The importance of games in teaching foreign languages. *Academic journals: Educational research and reviews*, 1241-1254.
- Amir, B., & Ralph, P. (2014). Proposing a theory of gamification effectiveness. Researchgate, 1-3.
- Amutan, K. (2014). A review of B. F. Skinner's reinforcement theory of motivation. *Researchgate*, 680-688.
- Angelova, N., Kiryakova, G., & Yordanova, L. (2014). Gamification in education. Academia, 1-6.
- Anónimo. (2022, Noviembre 19). Desinformación en la pandemia. (Jazmin, Interviewer)
- Berghem, S., Oyelere, S., Brännström, R., Rutberg, S., Laine, T., & Lindqvist, A.-K. (2022). Initial design and testing of multiplayer cooperative game to support physical activity in schools. *Educational Sciences*, 2-20.
- Bonal, X., Tarabini, A., & Verger, A. (2015). Globalización y Educación: Textos fundamentales. *JOUR*, 220-262.
- Bonilla Carvajal, C., & Tejada Sanchez, I. (2016). Unanswered questions in Colombia's foreign language education policy. *PROFILE Issues in Teachers' Professional Development*, 185-201.
- Busetto, L., Wick, W., & Gumbinger, C. (2020). How to use and assess qualitative research methods. *Neurological Research and Practice*, 1-10.
- Carrillo Ojeda, M., Garcia Herrera, D., Ávila Mediavilla, C., & Erazo Álvarez, J. (2020). El juego como motivación en el proceso de enseñanza aprendizaje del niño. *Revista Arbitrada Interdisciplinaria KOINONIA*, 430-448.

- Carrió-Pastor, M., & Mestre Mestre, E. (2013). Motivation in Second Language Acquisition . *Procedia- Social and behavioral Sciences*, 240-244.
- Castaño Cedeño , M. (2020). Elementos que afectaron negativamente la ejecución y el desarrollo del Programa Nacional de Bilingüismo en Colombia. *Universidad Nacional Abierta y a Distancia UNAD*, 1-95.
- Cetin Dag, N., Turkkan, E., Kacar, A., & Dag, H. (2021). Children's only profession: Playing with toys. *North Clin Istanb*, 414-420.
- Chan, S., & Lo, N. (2022). Teachers' and Students' Perception of Gamification in Online Tertiary Education Classrooms During the Pandemic. *Springer Nature Singapore*, 200-216.
- Charmaza , K., & Thornberg, R. (2021). The pursuit of quality in grounded theory. *Qualitative research in psychology*, 305-327.
- Chaves Yuste, B. (2019). Revisión de experiencias de gamificación en la enseñanza de lenguas extranjeras. *ReiDoCrea*, 422-430.
- Chomsky, N. (2020). Aprendemos juntos 2030. (B. BBVA, Interviewer)
- Chou, Y.-K. (2014). Actionable gamification. Beyond, badges, and leaderships. Milpitas: Octalysis media.
- Clément, R., Dörnyei, Z., & Schmidt, R. (2001). Situating second language motivation. *Motivation and second language acquisition*, 1-30.
- Cohen, S. (2016). investigating the impact of gamification on student performance in a secondary science classroom. *Montana State University*, 1-74.
- Colley, J. (2015, Marzo 26). *What Should We Do With Our Classrooms?* Retrieved from What Should A Teacher's Reflection on Student Responses to Gamifying English Class for the First Time: edu-scenius.blogspot.com/2015/03/a-teachers-reflection-on-student.html
- Cornella, P., Estebanell, M., & Brusi, D. (2020). Gamificación y aprendizaje basado en juegos. Consideraciones generales y algunos ejemplos para la Enseñanza de la Geología. *Enseñanza de las Ciencias de la Tierra*, 5-19.

- Cruz, M., & Saracho Arnaiz, M. (2020). Del enfoque comunicativo experiencial a la gamificación en la clase de ELE- Aplicaciones prácticas del modelo octalysis. *Perfiles, factores y contextos en la enseñanza y el aprendizaje de ELE/EL2*, 259-272.
- de Mejia, A.-M. (2011). The national bilingual programme in Colombia: imposition or opportunity? *Apples – Journal of Applied Language Studies*, 7-17.
- Deterning, S., Khaled, R., & Dixon, D. (2011). Gamification: toward a definition. *Researchgate*, 12-15.
- Dey, M., & Sawalmeh, M. H. (2021). Psychological Processes in Language Learning and Teaching: Methods and Approaches of Psycholinguistics. *British Journal of Applied Linguistics*, 1-7.
- Dopke, S. (1991). Psycholinguistic Aspects of Bilingualism. Australia: Eric.
- EF: Education First. (2022). EF EPI Índice EF de nivel de inglés Una clasificación de 111 países y regiones en función de su nivel de inglés. *EF: Education First*, 1-21.
- Fernandez-Rio, J., de las Heras, E., Gonzalez, T., Trillo, V., & Palomares, J. (2019). Gamification and physical education. Viability and preliminary views from students and teachers. *Physical Education and Sport Pedagogy*, 509-524.
- Fitri, M., Sharifah, S., Zeratul, I., Anastasia, M., Ronald, M., & Anang, A. (2020). Evaluation of student core drives on e-Learning during the covid-19 with octalysis gamification framework. *International Journal of Advanced Computer Science and Applications*, 104-116.
- Fondo Monetario Internacional. (2000, Abril). La globalización: ¿Amenaza u oportunidad? Retrieved from https://www.imf.org/external/np/exr/ib/2000/esl/041200s.htm#VII
- Fortunato, M., Moreira, A., & Simões, A. (2022). "All Hands-on Deck": Octalysis framework in primary English language learning. *SISYPHUS Journal of education*, 225-243.
- Fortune, T. (2012). What research says about immersion. *Chinese language learning in the early grades: A handbook of resources and best practices for Mandarin immersion*, 9-13.
- Fowler, W., & Zavaleta Lemus, E. (2016). El pensamiento de Pierre Bourdieu: Apuntes para una mirada arqueológica. *Revista de Museología Kóot*, 117-135.

- Gimatdinova, F. (2018). Benefits of learning a foreign language at an early age . *Journal of International Social Research*, 132-137.
- Gimeno Gimeno, I. (2021). discriminación y desinformación en tiempos de pandemia: Un análisis crítico de las fake news en España durante COVID-19. *Universitat d'Alacant*, 1-143.
- Gómez Arango, A. (2016). Globalización y Desarrollo Económico, Colombia como caso de Estudio. *EAFIT. Journal of international law*, 33-67.
- Gomez Sara, M. M. (2017). Review and analysis of the Colombian foreign language bilingualism policies and plans. *HOW*, 139-156.
- Gopalan, V., Abu Bakar, J., Abdul Nasir, Z., Alwi, A., & Che Mat, R. (2017). A review of the motivation theories in learning. *AIP Conference Proceedings*, 1-7.
- Gordan, M., & Amutan, I. (2014). A Review of BF Skinners Reinforcement Theory of Motivation. International Journal of Research on Education Methodology, 680-688.
- Health, N. I. (2023, March). *Office of NIH History and Stetten Museum*. Retrieved from Department of Health, Education, and Welfare: https://history.nih.gov/display/history/Belmont+Report
- Hursen, C., & Bas, C. (2019). Use of Gamification Applications in Science Education. Paper, 4-23.
- Jonathan, F., & Recard, M. (2021). The implementation of gamification concept inside online classroom activities to promote students' engagement. *International Journal of Indonesian Education and Teaching*, 176-184.
- Lambert, M. (2019). Practical Research Methods in Education: An Early Researcher's Critical Guide. In M. Lambert, *Grounded theory* (pp. 132-141).
- Lamrani, R., & Abdelwahed, E. (2018). Game-based learning and Gamification to improve skills in early years education. *Computer Science and Information Systems*, 339-356.
- Lamrani, R., & Abdelwahed, E. (2020). Game-based learning and gamification to improve skills in early years education. *Computer Science and Information Systems*, 339-356.
- Luna-Gijón, Gerardo, Nava-Cuahutle, Anahí Abysai, & Martínez-Cantero, Diana Angélica. (2022). El diario de campo como herramienta formativa durante el proceso de aprendizaje en el

diseño de información. Zincografía, 6(11), 245-264. Epub 23 de mayo de 2022.https://doi.org/10.32870/zcr.v6i11.131

- Mazhar, B. (2019). Use of digital games in writing education: an action research on. *Researchgate*, 246-271.
- McLeod, S. (2018). Maslow's hierarchy of needs. Simply psicology, 1-16.
- Melo Herrera, M. (2020). Análisis de la concepción de docentes y estudiantes sobre el juego como. *Revista Latinoamericana de Estudios Educativos*, 251-274.
- Mills, G. E. (2003). Action research: a guide for the teacher researcher. New Jersey: Merril Prentice Hall.
- Mutale Mulenga, I. (2018). Conceptualization and Definition of a Curriculum. *Journal of Lexicography and Terminology*, 1-23
- Nistor, G., & Iacob, A. (2018). The advantages of gamification and game-based learning and their benefits in the development of education. *eLearning and Software for Education*, 308-312.
- O'Leary, Z. (2004). The essential guide to doing research. New Delhi: SAGE Publications.
- OCDE. (2019). Colombia Country Note PISA 2018 Results. Volumes I-III, 1-12.
- Oliveira, S., & Cruz, M. (2018). The gamification octalysis framework within the primary English teaching process: the quest for a transformative classroom. *Revista Lusófona de Educação*, 63-82.
- Paltridge, B., & Phakiti, A. (2015). *Research methods in applied linguistics- A practical resource.* London: Bloomsbury Publishing.
- Paredes García, F., & Sánchez-Prieto Borja, P. (2021). Lengua y discurso en torno a la COVID-19. *RIECS*, 91-110.
- Parijat, P., & Bagga, S. (2014). Victor Vroom's Expectancy Theory of Motivation An Evaluation. International Research Journal of Business and Management, 1-8.

- Partnerships, T. E. (2022, Noviembre 28). *Gamification in Education: What is it & How Can You Use It?* . Retrieved from https://www.trueeducationpartnerships.com/schools/gamification-in-education/
- Pereira Alves, M., Barbosa Mota, N., & Pereira Alves, L. (2020). The contribution of gamification strategies in emergency remote teaching of English language. *Revista Philologus*, 239-255.
- Purba, N. (2018). The role of psycholinguistics in language learning and teaching. *Tell Journal*, 47-54.
- Rincón Villamil, Ó. (2010). Análisis de la política educativa actual en Colombia desde la perspectiva teórica de Pierre Bourdieu. *Dialnet*, 33-48.
- Rizki, A. (2016). Benefits of early second language acquisition. *Indonesian journal of integrated English language teaching*, 19-30.
- Sanchez Jabba, A. (2013). Bilingüismo en Colombia. Economía y Región, 65-89.
- Sánchez-Pacheco, C. L. (2020). Funcionalidades de la gamificación: Classcraft y Moodle en el marco de Octalysis. Sociedad de Investigación Pedagógica Innovar, 31-40.
- Savage, B., & Hughes, H. (2014). How does short-term foreign language immersion stimulate language learning? . *Frontiers: the interdisciplinary journal of study abroad*, 103-120.
- Sharma, M. K., Biswas, A., & Anand , N. (2021). Video gaming and fluid intelligence. *Journal of Addiction and Recovery*, 1-3.
- Shepherd, E. (2018). *English impact. An evaluation of English language capability.* Bogota: British Council.
- Silva, R., Rodrigues, R., & Leal, C. (2020). Gamification in management education- a literature mapping. *Education and Information Technologies*, 1-33.
- Sulispera, T., & Recard, M. (2021). Octalysis gamification framework for enhacing students' engagement in language learning. *Dialektika: Jurnal Pendidikan Bahasa Inggris*, 103-128.
- Sulistyaningtyas, R., & Fauziah, P. (2018). The implementation of traditional games for early childhood education. *Education and Humanities Research*, 431-435.

- Tandon, R. (2017, Septiembre 9). 7 Frequently Asked Questions About Gamification . Retrieved from elearning Industry: https://elearningindustry.com/questions-about-gamification-7frequently-asked
- Valdosta, R., & Hall, A. (2012). The relationship between McClelland's theory of needs, feeling individually accountable, and informal accountability for others. *International Journal of management and marketing research*, 21-42.
- Weber, P., Ludwig, T., & Grönewald, L. (2022). Reflection on the Octalysis framework as a design and evaluation tool. *CEUR Workshop Proceedings*, 75-84.

ANNEXES

Annex N. 1 School authorization

Autorización para realizar estudios de investigación

8 de marzo de 2023 Sor Marta Lucia Correal Bermúdez O.P Rectora colegio Rosario de Santo Domingo Estimada Sor Marta Lucia

Le escribo cordialmente para solicitar permiso en realizar un estudio de investigación en su institución. Actualmente estoy inscrita en el programa de maestría en lingüística aplicada y bilingüismo de la Fundación Universitaria Juan N. Corpas y estoy en proceso de redactar mi tesis de maestría. El estudio se titula *gamificación en entornos escolares para el mejoramiento de la lengua extranjera* y tiene como objetivo indagar sobre la aplicación de estrategias gamificadas en el salón de clase para aumentar la motivación y el desempeño de los estudiantes de grado 702 en inglés.

Espero que la administración del colegio me permita recolectar la información necesaria a partir de encuestas, entrevistas y observaciones (videos y fotos) que seguirán los protocolos de habeas data

Los estudiantes interesados, que se ofrezcan como voluntarios para participar, recibirán un formulario de consentimiento para que lo firmen sus padres o tutores (se adjunta copia) y lo devuelvan al investigador principal al comienzo del proceso. Si se otorga la aprobación, los estudiantes participantes completarán las encuesta y entrevistas en un salón de clases u otro lugar tranquilo en el sitio escolar durante el receso escolar y los tiempos de clase de inglés sin afectar su currículo académico actual.

Su aprobación para realizar este estudio será muy apreciada.

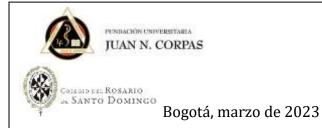
Si está de acuerdo, por favor firme a continuación y devuelva este correo reconociendo su consentimiento para que yo lleve a cabo este estudio en sus instalaciones.

Sinceramente,

Diana Carolina Medina Gómez Docente de inglés Maestrante en lingüística aplicada y bilingüismo

Annex N. 2 Informed consent

Consentimiento informado



Estimados padres de familia. Un fraternal saludo.

La presente comunicación es para hacerlos partícipes y solicitar su autorización para que su hijo o hija haga parte del proyecto de investigación que será conducido por la Docente Diana Carolina Medina Gómez, como parte de su proceso académico de la maestría en lingüística aplicada y bilingüismo en las instalaciones del Colegio Rosario de Santo Domingo. Con el fin de llevar este proyecto de investigación ser realizaran observaciones, y solo si esta explícitamente autorizado, el o la estudiante será entrevistado, fotografiado y/o filmado en ocasiones. La información y datos recolectados serán usado únicamente con fines académicos y no serán producto susceptible al área comercial y/o publicitaria

La participación en este proyecto investigativo es totalmente voluntaria, del mismo modo que al aceptar, usted podrá retirarse en cualquier momento sin que esto conlleve a algún prejuicio.

Cordialmente,

Diana C. Medina Gómez Maestrante y docente de inglés

Yo ______ identificado con cedula N° ______ de _____, residente en la ciudad de _____, autorizo si () no () expresamente la participación del estudiante del curso _____ en el proyecto de investigación.

firma

Annex N. 3 Survey N°1



Fundación Universitaria Juan N. Corpas Encuesta a estudiantes

Core 1

¿Crees que la clase de inglés es innovadora y te ayuda a estar todo el tiempo motivado?

Core 2

¿usan en tu clase elementos como obtención de puntos, niveles, insignias que muestren tu proceso? ¿Cuáles usan? ¿Cómo te sientes al respecto?

Core 3

¿sientes que en la clase de inglés tienes diferentes formas de acercarte a lo que estas aprendiendo? ¿usas tus sentidos para aprender? ¿Cómo?

Core 4

¿sientes que la clase de inglés te pertenece? Es decir, ¿participas en la construcción de la clase para mejorar tu aprendizaje?

Core 5

¿sientes que en la clase de ingles hay momentos de interacción y socialización? ¿Cómo se ve la aceptación social, la competencia, y la retroalimentación social?

Core 6

¿existe en la clase de inglés algún motivador (puntos, niveles, insignias) por el que te tengas que esforzar más que en los otros?

Core 7

¿en la clase de inglés hay actividades que te lleven a sentir, suspenso, expectativa, anticipación o curiosidad?

Core 8

¿en la clase de ingles hay actividades en las que sientas que pierdes algo de lo ganado (puntos, niveles, insignias)? ¿Qué sentimientos te trae cuando pierdes algo dentro de la dinámica de clase?

Annex N. 4 Survey N°2



Fundación Universitaria Juan N. Corpas Encuesta a estudiantes

Core 1

¿Cómo describirías la clase en términos de motivación?

Core 2

¿Qué elementos motivadores utilizan en la clase de inglés?

Core 3

¿Qué diferentes formas utilizas para acercarte a lo que estas aprendiendo?

Core 4

¿Qué elementos o actividades te permiten participar en la construcción de la clase inglés?

Core 5

¿De qué manera se evidencia la interacción y socialización en la clase de inglés?

Core 6

¿Qué elementos existen en la clase que incluyen tu esfuerzo?

Core 7

¿Qué elementos o actividades de la clase te generan expectativa?

Core 8

¿Qué elementos o actividades de la clase te generaron algún sentimiento? describe la situación

Annex N. 5 interview N°1



Fundación Universitaria Juan N. Corpas Entrevista a estudiantes

- 1. ¿Cuántos años llevan en el colegio?
- 2. ¿Cuántos llevan aprendiendo inglés?
- Epic meaning: ¿Crees que la clase de inglés es innovadora y te ayuda a estar motivado?
- 4. Accomplisment: ¿Qué tipos de elementos se usan en la clase de inglés para ver tu progreso?
- 5. *Empowerment:* ¿en la clase de inglés que sentidos utilizan?
- 6. Social Influence: ¿en la clase como utilizan la parte social para aprender inglés?
- 7. *Unpredictability:* ¿Qué los frustra, que los desmotiva en la clase de inglés?
- 8. *Motivation:* ¿Los elementos desmotivadores están presentes en todas las clases o en algunas clases?
- 9. *Motivation:* ¿qué les gusta de la clase de inglés?

Annex N. 6 interview N°2



Fundación Universitaria Juan N. Corpas Entrevista a estudiantes

- 1. *Meaning:* ¿Como les pareció la narrativa del juego?
- 2. Accomplishment: ¿Qué elementos motivadores hay dentro de la estrategia?
- 3. *Empowerment:* ¿Cómo se sienten al respecto de tener puntos y niveles?
- 4. *Ownership*: ¿de qué manera participaste en la construcción de la clase?
- 5. Social Influence: ¿Cómo fue para ustedes la socialización durante la experiencia?
- Motivation: ¿qué impacto ha tenido la experiencia del juego en la utilización del inglés en clase?
- Unpredictability: ¿Cuál es tu opinión frente a la generación de expectativa durante el juego?
- Unpredictability: ¿Cómo influyo la expectativa en tu motivación? de motivación
- 9. Avoidance: en términos ¿Qué sentimientos surgieron en las actividades donde hubo perdidas?
- 10. *Motivation:* ¿Qué paso con su nivel de inglés durante la experiencia?

		-			
Date: March 21/2023					
	Session: 1				
Length: 67 Mins	s approx.				
Activity: id card	, grammar review				
Core driver	Descriptive Notes	Reflective notes			
Meaning	 The teacher starts the class with a video related to the game that will be the core for the class. Teacher gives a task on the video. "what's the sentence in present perfect." When students saw the thumbnail of the video, some of the students started gasping in positive surprise. 3 students seem to be careless; they are not paying attention to video; they are not interested. Students look at the screen very attentive. Webpage is appealing for them 	Teacher provides a setting in which students feel confidence trying to understand the story and how they will be the protagonist on their process. Selecting an anime that is on fashion, called the attention of the kids and most of them seem to be interested in taking part of the project. Nevertheless, some of them seem to of feel the call to be the chosen one, they might not be connected to the task			
Accomplishment	 The teacher explains rules, roles and how to play. The teacher color codes the XP points and explains how to obtain or lose points. Students are very focused in the class trying to finish to get the points 	The teacher dedicates good time to explain to the students the level, points, and roles. For students was clear to understand the home intention and how they are going to succeed. Students seem to be very interested in understanding the rules, even the ones who were not attentive to the opening. Competition might be especially important.			
Empowerment					
Linpowerment					

Annex N. 7 Field notes

Ownership	 The teacher explains how to create their slayer id and choosing the avatars. Students' gaps in positive surprise when looking at the avatar pictures. They want to select their character. The students who seem to be bored with the video, are willing to work in their avatars, they seem to be interested now. Creating the avatar was a very exciting exercise for today. Students are focused on finishing the id card. They interact with the teacher in English 	This activity was the one that students celebrated the most. They were immersed in the task, and they have a special interest in personalizing their avatars. It was very interesting how they try to portray their like into the id picture, and they feel positive about their heroes	
Social influence	 Teacher separate groups into boys and girls, they are agreeing on their avatars, they are using English most of the time. Students select their role to achieve the grammar exercises mission. 	This group of students are pre- adolescents, so they are very interested in how to work with others. At the creation of the groups, they try to get together with the one who were close to them, but because of the class dynamic, they try to monitor their behavior and language and finish the task assigned.	
Scarcity			
Unpredictability			
Avoidance	 Students ask lots of questions to avoid mistakes in their Id card elaboration. They try to communicate the most in English to avoid losing points 	At the beginning, students were very conditionate to use the language, but after they were on task, they seem to be more confident when speaking the language	
Observations:			
 Time management is a very important issue, teachers use timers to control time. 3 activities were planned, 2 were done. 2 students were absent. Setting had proper technological and environmental resources 			

Date: March 22/2023 Session: 2

Length: 37 Mins approx.

Length: 37 Mins a Core driver	Descriptive Notes	Reflective notes	
	- The teacher started the class by checking the exercises from the previous class.		
Meaning	 Teachers corrected some issues about grammar and remembered the narrative of the gamified experience. The teacher shows the kids how the demons are "attacking" them by negative emotions. Teacher 	When students feel that they are part of the story and the teacher presents the different characters, students seem to be enthusiastic and motivated. This is seen in the willingness for them to participate and finish the activities	
	introduces a Hashira; students feel interested in getting to finish the activity		
Accomplishment	 Students go for clarification of the process to finish the phrasal verbs activities. The teacher gives the points to each exercise. In the reading exercise, students were trying to get the points. Impatience was a constant feeling 	The steps and the processes are very significant for students. They want to be sure to understand how their process is going to be measure, to questioning about activities instructions give them confidence	
Empowerment	- Teacher decided to select the first seven students to get the points in the phrasal verbs exercise	When students have a booster to complete the activity, they feel more powerful and willing to achieve the goal	

Ownership	- Teacher continues using the ID card to collect the points for each student's avatar	For students it is excited to see their cards with the points, they make them feel sure, and in a way, they feel attached to their avatar
Social influence	 Teachers used the sentence "remember demon slayer are brave" immediately a student raise the hand and others started to feel confident to show their answer. Students are interacting among them in English. Some students started speaking Spanish and one girl called their attention and remind them the rule of English use. Some students felt uncomfortable with the group they were assigned to. When working in groups, there was one group in which the students show the answers, and the rest copied, by they were trying to get the answer as the advanced student 	Many of the students' actions are constructed by social interaction. They will behave in a way they have approval or confidence. Students' partners. Although getting the experience points is important, I may consider the social influence to be a significant issue in students' motivation
Scarcity		
Unpredictability	 Use of timers in activities gives a sense of not knowing what is going to happen. Teacher created the groups by random 	To have the feeling of unknown things in the class, help students to be attentive
Avoidance	- In the phrasal verbs exercise teacher gave only one chance to raise the hand and give the correct answer to the	- Avoidance is a key factor during the session, although most of the time teacher encourages positive points, the idea of losing

		points make students feel anxious and in a way motivated
Observations:		
-	- 3 activities were planned for the mission, just 1 was done	

Date: March 24/2023 Session: 3 Length: Mins 65 approx.		
Core driver	Descriptive Notes	Reflective notes
Meaning	- Teacher introduces the new activity for the mission, students started to stretch up and get ready for what they must do	The students' attitude toward the gamified experience demonstrates that they do believe they are the ones, that is significant because this maintains motivation and they are willing to get until the end. It is important for the teacher to provide every time reminders for the students to continue believing that they are the chosen one to keep the gamified experience
Accomplishment	- Students are very connected to the class and how the points are going to be given, or how to get up in their level.	Students are very concerned about maintaining and increasing their level and trying to collect their points. Although this is part of the experience it is very important to the teacher to lead the experiences only to the accomplishment because this core is located to the left brain which is related to the extrinsic motivation

	- Teacher gives points to the students who finished homework, students regrets because they lost the points.	
	- After finishing the mission 2, students check their points and look for their level	
Empowerment	- The teacher passed to each group and give feedback to the groups so they can have better scores, it is only one opportunity	When students receive the booster, they feel more confident, and they are really taking advantage of this opportunity. It is remarkable to see that students are showing understanding of what is being taught based on how they ask questions to the teacher.

	- The speakers of each group had to read the story, that way they attacked the teacher (demon). Use of grammar and vocabulary are the ways students must defeat the teacher.	
Ownership		For students to have the idea of them to play a different role that being the students is an appealing factor that maintain the motivation and willingness to see what is coming next
	- Some of the speakers are empowered by their character and they give intonation and force in the narration.	
	- When the teacher is defeated, they seem to be happy	

Social influence	- When teacher introduces the activity ask the students to work in groups - While the teacher is explaining the activity, students start looking at each other to make the groups.	Self-monitoring is a significant skill developed in the social influence core, they are trying t follow the rules and make their classmates to follow the rules, they have understood that working in groups help them to accomplish the goal, using cooperative work, with their roles, give a sense of organization for the
	- When forming the groups, they started interacting in Spanish to make the groups, they were having some trouble to agree in the groups and teacher intervenes.	students

	- Although they were at the beginning speaking in Spanish, they started to monitor their use of English, they did this by themselves, no by teacher asking.	
Scarcity	- They are really engaged, and they are focused on their work, facilitators are willing to have everybody working, students monitor their performance.	

	- Teachers started using sentences: "don't do to speak Spanish please, on Monday we can finish, stop working, relax, you can play outside" students started getting confused.	
Unpredictability	- The teacher continued pushing the kids to stop the work and give wrong advice on how to advance on the assignment.	Unpredictability seems to be one of the strongest core drivers in motivating students to continue playing in the gamified experience. Students are expecting for the game to show something new, even with little details like changing the role of the teacher, using TPR like clapping, voice intonation, students show interest in the class.
	- Students realized she was playing the demon character, making them confused. The demon is attacking	

Avoidance	- Teacher started the class reminding the way students may lose points, students make sound in	For students it is very important to keep their points, when they are told to have point out they just change their behavior and try to fit into what they are expected to do.	
Observations:			
- Students are trying to speak English in the class to the teacher in English.			
- Session is connected to the previous one by checking students			
understanding and the work for the previous session.			
- Teacher explains the structure of the past tenses.			

Date: March 28/	2023	
Session: 4 Length: Mins ap	prox.	
Core driver	Descriptive Notes	Reflective notes
Meaning	- Teacher started the class by remembering the students that they are demon slayers getting their techniques stronger. Students seem to e connected and they like to be called like that	 Although the activities have been used for different sessions of class, students continue to be very interested in getting more points to be the best one. They are committed to show the advance of their character. This motivates students to keep record of their work
Accomplishment	- Students were working in the lab, and they had the opportunity to explore the webpage created by the teacher and they were reviewing levels and how to collect the points, they did	- Students are willing to continue improving their level, they are seeking constantly on the way to be in the leaderboard and improve their skills

	this without being asked for	
Empowerment	101	
Empowerment		
Ownership	The share second	
Social influence	- Today class was very individual, every student was working in the computer, and they were finishing the activities quietly, they must raise their hand to show the work or to ask questions.	 Although students were focused and working hard. They finished the activity to get the points, but they were not really engaged in the game mission, by not having the opportunity to interact with others and construct meaning of the work, as soon as they get the point, they lost interest. The motivation on the activity lasted short time because today the focus was on extrinsic motivations drivers.
Scarcity		
Unpredictability	 Teacher presented the new Hashira, the sound one which was related to listening skills, the teacher said that there was an escape room and that finishing that activity they will get 15 points, but when reading the instructions, they realized that the activities gave 25 points, so they will have to find the hidden activity that will give the missing 10 points. Some students found the activity easily, meanwhile others get anxious because they could not find them 	- Unpredictability is a crucial core, it keeps the students motivated and attentive to see what's next, by not knowing what is going to happen, students are willing to connect to the gamified experience
Avoidance	- Students were trying to get the second activity, for those who were struggling the teacher said, "the demons are attacking you" and they feel more motivate to prevent themselves to lose points	 Losing points is a strong motivator, although it can be seen as negative, depending on how the teacher present it, it will increase students' motivation
Observations:	-	

- The class was divided in two parts: in the first moment the teacher was in the classroom explaining the activity, after that, students and teacher went to the English laboratory to work on the mission

Date: April 11, 2 Session: 5 Length: 57 Mins		120
Core driver	Descriptive Notes	Reflective notes
Meaning	After the holidays for easter the teacher started the class recalling the rules and the level of the game. Teacher reviewed the missions and introduced the mission 5 for the class	For the gamified experience it is important to have frequent reminders on the narrative and the calling to keep the motivation and attention longer, it gives to the students a sense of being part of the game
Accomplishment	Students counted the numbers of points, and they were excited to see their advances and how they were achieving the levels. The teacher gave 5 points to the students who finish first, but some of them did not get the answers correctly. Some of the were anxious to get the points because they were close to achieve the next level	To have levels that help students to see their progress in a significant motivator because it makes visual students' evolution, and they feel positive feelings when getting better which is going to end in a positive connection between the pupil and what is being taught
Empowerment	The teacher presented the first activity, and it is 5 points only for the 7 first who finish first. Students had to classify some expressions; the teacher gives a clue which is a boost for them to go fast and well. The teacher gave points for spontaneous English speakers when they interact with classmates in English. Students had to finish a true/false exercise from a video, only 7 students could get the points. When the dialogue finished, they had to line up to be in the first 7. The teacher explained the 3 rd activity which consisted in creating a dialogue using past structures, the teacher revealed her attack as interventions in the dialogue. The first group that presented the dialogue seemed to be uncomfortable basically because they were not prepared to show their work. For the second groups it was easy for them to improvise, and they	The teacher explanations as the boosters in the game provide students a sense of getting better and stronger by understanding the instructions, thus, students feel more comfortable and more motivated to achieve the objective. Also, the use of points for motivation when using the foreign language boost student's willingness to speak in English and eventually they continue doing it without points needed

	were using the past tensed as they were told	
Ownership	Students are creating strategies to get points out from their classmates, when they listened to a classmate speaking in Spanish, they try to tell the teacher.	When students start creating strategies to compete with their classmates it is based on their willingness to feel part of the game. In that way students start to own the experiences and keep motivation high
Social influence	Students are constantly interaction in English, they seem to be more comfortable speaking and they are monitoring their classmates to have better use of the language. As a group, students and the teacher corrected the exercises and gave feedback on their questions and doubts. As a group students had to read the responses in a dialogue, they seem to have fun and some of them are not very accurate, but they are trying to do their best. For the improvisation exercise, the teacher gave them the opportunity to form their group, they selected the classmates who were closer to them. Students seem to be very engaged in this activity. They are using their English in the preparation of the activity in a very natural way, they are not pushed by the teacher. Students are especially encouraged to speak in English, and although they were very excited playing hot potato, it was very easy for them to express and put into words their emotions in the foreign language	Social influence seems to be one of the stronger drivers and one motivator that maintains the gamified experience successful. From this experience the participants were actively participating in the class. The activities which involved social interaction seem to increase students' motivation and confidence. Even, it can be said that social influence is a factor that beats the extrinsic motivation (points) and encourage students to monitor their own process and their classmates
Scarcity	The teacher explained the 3 activities for the class. The one that five the more points. The teacher presented a video that would be used as a prompt to do the activities for the activities. The teacher presented the video only once. When students lined up to get the points, they were competing and	The scarcity driver promotes competition, this is an important motivator during the gamified experience, this driver must be leaded carefully, so a positive and respectful competition provide constructive experiences

	pushing their friends to be the first	
	ones because there was only one	
	5	
	moment to get the points. This	
	activity activates competition and	
	students seemed to be motivated.	
	Most of the students went and tried	
	to participate, only 3 students were	
	seated at that moment.	
Unpredictability	The teacher talked about the	This is an important driver to
	serpent hashira and started	maintain students' attention and
	creating the expectation in the	engagement. Unpredictability
	students. This hashira has his	keeps students attentive and
	mouth covered so students	increases participation in the class.
	deduced that they would be	Surprises and unexpected actions
	working on the speaking skill. The	help the students to be focused
	teacher also mentioned that she	during the lesson
	would be using some attacks, but	
	she did not tell the students.	
	Students seem to be excited to see	
	what the challenge would be.	
	Some students did not get the	
	points so, the teachers selected	
	couples to play rock, paper scissors	
	to have a chance for the points,	
	students were surprised, and	
	participation increased.	
	For selecting the first group to	
	participate showing the dialogue,	
	the teacher amazed by playing hot	
	potato, students were at the	
	beginning confused on how to play	
Ausidance	but they were very engaged.	Arraidan as is a duithat
Avoidance	When the teacher was about to	Avoidance is a driver that may
	start the activity, some students	arise feeling such as fear or alarm,
	were trying to slow the teacher so	although these feeling are negative,
	they could play for the points and	during the gamified experience
	avoid losing them. For participating	these emotions transform into
	in the first activity students could	protective ones and students enjoy
	raise their hand only once, if they	protecting their point and levels
	do not have them correct, they	and this is a way to continue
	cannot get the points.	motivating students.
Observations: in t	the speaking exercise the teacher was	giving constant feedback

Annex N. 8 Likert scale: Octalysis tool



Fundación Universitaria Juan N. Corpas Likert Scale

Core 1

De 1 a 10, durante las sesiones de clase usando el juego Demon Slayer, ¿qué tan importante fue la narrativa (historia) para tu motivación ser el mejor Slayer?

1	2	3	4	5	6	7	8	9	10
Poco im	portante				Mu				oortante

Core 2

De 1 a 10, durante las sesiones de clase usando el juego Demon Slayer, ¿qué tan importante fue para tu motivación obtener los puntos para subir de nivel?

1	2	3	4	5	6	7	8	9	10
Poco im	portante							Muy imp	oortante

Core 3

De 1 a 10, durante las sesiones de clase usando el juego Demon Slayer, ¿Qué tan importante fue tener retroalimentación instantánea para obtener los puntos?

1	2	3	4	5	6	7	8	9	10
Muy im	portante				Poco impo				

Core 4

De 1 a 10, durante las sesiones de clase usando el juego Demon Slayer, ¿Qué tan libre te sentías para tomar decisiones en el juego?

1	2	3	4	5	6	7	8	9	10
Poco lib	Dece libre								Muy

Core 5

De 1 a 10, durante las sesiones de clase usando el juego Demon Slayer, ¿Qué tan importante fue trabajar en equipo para lograr la misión?

1	2	3	4	5	6	7	8	9	10	
Poco im	portante					Muy import				

Core 6

De 1 a 10, durante las sesiones de clase usando el juego Demon Slayer, ¿Qué tan importante fue el límite de tiempo para terminar las misiones?

1	2	3	4	5	6	7	8	9	10
Poco im	Poco importante							Muy imp	oortante

Core 7

De 1 a 10, durante las sesiones de clase usando el juego Demon Slayer, ¿Qué tan importante fue la expectativa y el misterio durante el juego?

1	2	3	4	5	6	7	8	9	10
Poco im	portante				Muy importe				

Core 8

De 1 a 10, durante las sesiones de clase usando el juego Demon Slayer, ¿Qué tan importante fue para tu motivación y concentración evitar perder los puntos que ganaste?

1	2	3	4	5	6	7	8	9	10
Poco importante					Muy importante				