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Implementing Octalysis Framework as A Gamified Tool to Increase Successful Practices in The EFL Classroom

Diana Carolina Medina-Gómez[1], Jonatan Steveson Camero Gutiérrez[2], Marta Osorio de Sarmiento[3], German Rolando Vargas[4], Blanca Lucia Cely Betancourt[5]

Abstract

Gamification has become a concept that is permeating the new classroom dynamics. Nowadays, children learn through different ways in which games and technology are combined. This qualitative study shows the contributions of gamification to the specific educational processes of teaching English as a foreign language (EFL) by using the Octalysis framework method in seventh-grade students at Colegio Rosario de Santo Domingo. We randomly selected a group of twenty students aged 11 to 12 years old to participate. To better understand and find the outcomes, the researchers conducted semi-structured interviews, interaction workshops, field journals, ethnographic and participatory observations, start and exit workshops, and focus groups. Results showed that gamified settings improve students' performance during their class lessons since they were successful during their process of learning a foreign language. The data collected showed that the implementation of Octalysis in the teaching of English as a foreign language not only improves communicative competence in the target language but also improves social relationships between participants, creating a more peaceful and relaxed learning environment. Finally, this strategy has been shown to increase motivation and engagement significantly in the language learning process.

Keywords: *English Foreign Language, Gamification, Octalysis Framework*

INTRODUCTION

The need for innovation in teaching English as a foreign language has been a concern of teachers. Teachers are constantly looking for pedagogical tools to increase student motivation, which is one of the variables that affect the learning process. (Gopalan, Abu Bakar, Abdul Nasir, Alwi, & Che Mat, 2017). Gamification has opened a door to increase motivation for language learning. Gamification integrates game elements and interaction into activities that are not typically considered games, such as a lesson in the classroom. (Angelova, Kiryakova, & Yordanova, 2014). Gamification can be a great tool to motivate students and help them take responsibility for their own learning. By incorporating game-like elements into the learning process, students can have a more engaging and enjoyable experience, which can lead to more efficient development of language skills. (Chaves Yuste, 2019).

Most people find pleasure in playing games since childhood. Gaming at the beginning fosters the development of central and social skills, enhancing cognitive capabilities, (Sulistyaningtyas & Fauziah, 2018). Recent studies on gaming show that gaming can strengthen some structures in the brain, especially those responsible for concentration and mental operations (Sharma et al.,2021). Children and adolescents spend hours playing video games, even if they are losing. Video games can be a great tool for developing valuable skills, such as

[1] *Bilingual teacher, with more than 15 years of experience providing excellent assistance to students and promoting the integral formation of each one of them. Specialist in bilingual education from Institution universitaria Colombo Americana and Magister in applied linguistics and bilingualism from Fundación Universitaria Juan N Corpas.Email: dianac-medina@juanncorpas.edu.co*

[2] *Research professor with a master's degree in advanced Theatre Studies from the University of La Rioja (Spain) and a Master's degree in Performing Arts from the Universidad Distrital Francisco José de Caldas - ASAB (Colombia). His projects focus on educational research management and interdisciplinary and transdisciplinary research-creation. Email: jonatan.camero@juanncorpas.edu.co*

[3] *Research teacher in educational management, pedagogy, didactics. Qualitative Research, Didactics for the teaching of English in bachelor's Degrees. Post-doctorate in Narrative and Science at the University of Cordoba Argentina, PhD in Education University of Granada Spain. Email: marta.osorio@juanncorpas.edu.co*

[4] *D. in Education, MA in History, currently works as Research Coordinator at the Faculty of Education and Social Sciences of the Juan N Corpas University Foundation. Email: german.vargas@juanncorpas.edu.co*

[5] *Associate Professor at the Corporación Universitaria Minuto de Dios-UNIMINUTO with a master's degree in applied Linguistics (Teaching English as a Foreign Language) from the University of Jaén in Spain. Doctoral candidate in Education. Email: bcely@uniminuto.edu*

independence, handling challenging situations, and collaboration. It's important to recognize the potential benefits that video games can offer in terms of personal growth and development. These skills undoubtedly demonstrate benefits for future endeavors. (Lamrani & Abdelwahed, 2020).

Gamification involves using game elements to create engaging learning experiences. This approach results in proposals that are appealing and inspiring for students. (Canals, Estebanell, & Brusi, 2020). Researchers have shown that gamification improves outcomes for children by strengthening four important skills: attention, engagement, feedback, and consolidation. (Lamrani & Abdelwahed, 2018). Thus, gamified experiences provide tangible advantages by fostering more conducive learning environments for students and enhancing learning outcomes for teachers.

The purpose of this this paper is to show the results of a qualitative study based on the Octalysis framework method in seventh grade students at Colegio Rosario de Santo Domingo in Bogotá. A group of twenty students aged between 11 and 12 were selected randomly as participants. Various methods were used, including semi-structured interviews, interaction workshops, field journals, ethnographic and participatory observations, start and exit workshops, and focus groups. The findings indicate that using Octalysis in teaching English as a foreign language improves communicative competencies and enhances social relations among participants, creating a peaceful and relaxed learning environment. Additionally, this strategy significantly increases motivation and commitment to the learning process.

The motivating factor enables students to achieve better scores in their subjects and encourages them to participate more actively and work cooperatively. (Fernandez et al., 2019). Teachers use gamification not only in indoor classes but also in classes, such as physical education. Incorporating game mechanics into physical education classes can foster a positive attitude among pupils. This is because they feel motivated by the opportunity to be challenged, have fun, interact socially, and learn (Fernandez et al., 2019).

Theoretical aspects

In 2010, the digital media industry began using the term 'gamification'. Experts have defined gamification in education as the incorporation of game mechanics in non-gaming settings (Deterning et al., 2011). From 2012 to 2018, there was a noticeable increase in research related to gamification in education, indicating educators' interest in innovation in their classrooms (Silva et al., 2020). After the rise in popularity of gamification, its application for educational purposes has led to various advantages and disadvantages. Gamification is also an important technique when implementing a STEM (Science, Technology, Engineering, Math) approach. Hursen and Bas (2019) state that using gamification motivation in science class showed better results.

Gamification Vs Game-based learning

Gamification and game-based learning (GBL) have emerged as advantageous in learning processes. Al-Azaw et al. (2016) argue for the importance of including games in lessons to increase student motivation by challenging them and providing feedback. Nistor and Iacob (2018) reflect on characteristics related to gamification and GBL. A strong similarity between these approaches is the use of 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 (Nistor & Lacob 2018, p. 309).

Meanwhile, gamification is considered using 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 (Nistor & Lacob 2018, p. 309).

It is important to mention that gamification and game-based learning promote engagement and sustained motivation in learning. The first approach utilizes games as an inspirational element, while the second focuses primarily on games to achieve learning outcomes. Although games have been introduced into education as a

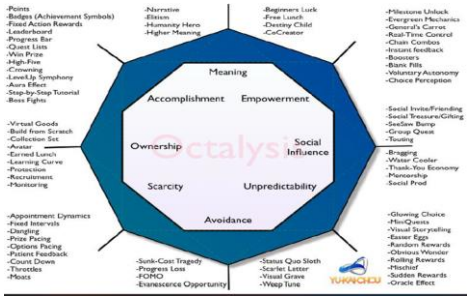
way of engaging students in their learning process and increasing their motivation to learn in a joyful and recreational way, these strategies have been configured in different ways over time. (Medina and Cely 2023).

Gamification: Octalysis Framework

In 2014, Chou developed the Octalysis framework, which is based on a geometrical figure and consists of eight core drivers that facilitate a successful gamification process: 1) Epic meaning: This section explains the concept of heroism and the user's call to overcome challenges. 2) Development and accomplishment refer to personal growth and the need for continuous improvement. 3) Empowerment of creativity and feedback provide opportunities to solve challenges through various options. 4) Ownership and possession provide the opportunity to control or own something to some extent in the game. 5) Social influence and relatedness: This driver is related to the human need to belong and have social interaction. 6) Scarcity and impatience: The user may desire something simply because it is rare. 7) Unpredictability and curiosity: This driver is related to the unknown. It can be engaging to not know what will happen. 8) Loss and avoidance: This refers to the motivation to avoid negative outcomes. These negative scenarios include failing points, time limits, life takeout, etc. (Chou, 2014). Figure 1 represents the eight cores.

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

The core drivers are divided into an octagon for two specific purposes: to separate the core into left and right, inspired by the attributes of the left and right brain. The brain is divided into two hemispheres, with the left hemisphere being responsible for analytical and logical thinking, while the right hemisphere is responsible for creativity and social interaction. Extrinsic motivation is significant in the left hemisphere, with elements such as points, badges, and milestones being key. However, once the reward is received, motivation decreases (Chou, 2014). Intrinsic motivation is the driving force behind the right hemisphere. According to Chou (2014), maintaining motivation can be achieved through activities such as sharing with others, finding new paths to achieve a goal, and embracing unpredictability.

Figure 2.

Octalysis Framework: Brain Sides

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

The second purpose of the study was to divide the octagon into two parts: the top and the bottom. The top part is identified as the white hat, and it contains the core drivers that lead to positive emotions such as satisfaction and power. On the other hand, the bottom part of the octagon is called the black hat, and it contains the core drivers related to negative emotions such as obsession, anxiety, and addiction (Chou, 2014).

Figure 3.

Octalysis Framework. White hat and black hat

Note: This model reviews the white and black hat simile. Adapted from Yu-kai Chou: Gamification & Behavioral Design, 2014[6]

Researchers have found that using gamification and the Octalysis framework in classes can provide academic, cognitive, and social advantages. Most studies related to gamification and the Octalysis framework have reported positive outcomes, profiling the Octalysis framework as a strategy to optimize gamified settings. A study conducted by Suzette Oliveira and Mário Cruz in 2018 reflects on the Octalysis framework and its application in primary English teaching contexts. The study suggests that gamification stimulates and motivates learners to solve problems and complete creative tasks kinesthetically (Oliveira & Cruz, 2018). Furthermore, the implementation of the Octalysis framework as a gamification tool enhances the comprehension of story elements in storytelling activities (Oliveira & Cruz, 2018). This can lead to improved student performance and understanding. The authors conclude that gamified activities have the potential to stimulate critical thinking skills and creativity in students (Oliveira & Cruz, 2018).

The Octalysis framework has the potential to increase students' intrinsic motivation and maintain their interest. The use of gamification elements, such as points, badges, and levels, can enhance motivation by demonstrating progress through achievements. Additionally, gamification can foster creativity. However, it needs to be better integrated into lessons, as it may not be very relevant for teachers (Fitri et al., 2020). Activities based on Octalysis framework 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)

The Octalysis framework enables the design of student-centered activities that challenge students to achieve better results. Besides developing academic skills, students can also strengthen social and cognitive abilities, while maintaining chief motivation towards lesson activities (Fortunato, Moreira, & Simões, 2022).

METHODOLOGY

This research study adopts a qualitative paradigm as it discusses the use of the Octalysis framework as a pedagogical tool to enhance motivation and create better learning environments. The research question that

[6] (https://yukaichou.com/gamification-examples/octalysis-complete-gamification-framework/).

guided this research is: *What are the contributions of gamification to teaching English as a foreign language using the Octalysis Framework method for seventh-grade students at Colegio Rosario de Santo Domingo?*

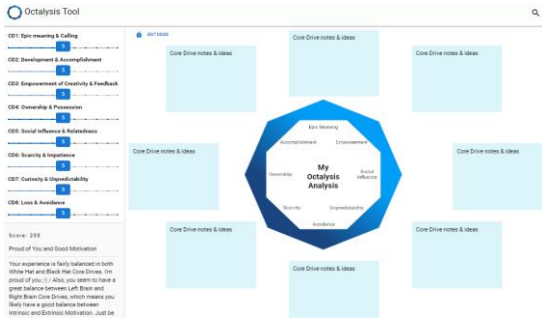
The study involved twenty seventh graders aged between 11 and 12 years old from Colegio Rosario del Rosario de Santo Domingo Bogotá. All students were certified as A2 users by the Flyers Cambridge exam for young children and belonged to middle-income families from strata 3 to 5. Prior to the study, participants were informed about the research objective, time-lapse, type of activities, issues to be addressed, applied methodology, and researcher. Informed consent is crucial in shaping research and its results as it establishes a dialogue with the participants. Therefore, researchers were clear when seeking permission (Mills, 2003).

Data was collected through semi-structured interviews, field diaries, start and exit interviews, focus groups, and the Likert scale. Semi-structure interview was used to obtain the subjective insights of the participant, opinions, motivations, experiences, etc. semi-structured interviews were characterized by open questions that may lead to other questions generating subcategories from the interaction (Busetto, Wick, & Gumbinger, 2020). Interviews showed the participants' perception of the English class dynamic before and after the application of the Octalysis framework.

The survey allowed to confirm the findings obtained in the interview and field diary and to know the results in a more objective way and to compare them with the results obtained with the other instruments applied. The field diary allowed for a methodological process in which the experience of the participants was recorded. Luna-Gijón et al., (2022). The focus groups allowed us to explore participants' unconscious or often unspoken preferences. Octalysis tool was used as 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).

Figure 4.

Octalysis tool



Note: The figure shows the Octalysis tool. By using this instrument and the public tool a can be found at [7]

To analyze the qualitative data of this research, the data triangulation strategy was used. The triangulation strategy helps researchers enhance the validity and credibility of findings and mitigate the presence of any research biases in this research (Charmaza & Thornberg, 2021). The color code is a good strategy to point out the code, then the concept, and finally the category. By using this instrument, the researcher analyzed the impact of gamified experiences in a specific group of the population.

RESULT AND FINDINGS

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.

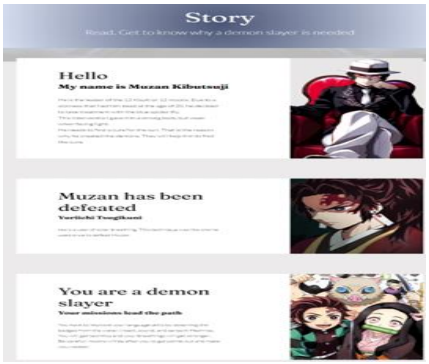
[7] https://yukaichou.com/Octalysis-tool/

Learning motivation and engagement

Using games can facilitate, encourage, and enhance learning, including the development of human and social skills (Melo Herrera, 2020). This creates a safe environment for students to learn a subject. Epic meaning is associated with the feeling of being chosen and provides users with a sense of doing something greater for themselves or others. Empowerment promotes the use of game strategies to achieve goals (Chou, 2014). Subsequently, the data showed that the narrative of the gamified experience provided a setting in which students felt confident in trying to understand the story and how they would be the protagonist in their own process.

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 distinct characters, students were enthusiastic and motivated. This was seen in their willingness to participate and finish the activities.

Figure 5. *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 were used in different class sessions, students remained highly motivated to earn more points and become the top performers. They were committed to demonstrating the growth of their character, which led them to keep records of their work. To maintain motivation and attention throughout the gamified experience, it is important to provide frequent reminders of the narrative and the call to action. This creates a sense of participation in the game. The students' attitude towards the gamified experience demonstrated that they believed they were the chosen ones. This is significant because it maintains motivation and keeps them engaged until the end. It is important for the teacher to provide reminders for the students to continue believing in themselves and their abilities to keep the gamified experience engaging.

One of the participants mentioned: "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 "(Participant 18)

[The theme of the activities and the story itself, since it is very fun to be learning English in a more entertaining way as it is with Demon Slayer, the history of Muzan and all the Hashiras, it is really motivating to learn this way]. (Participant 18)

Empowerment can increase motivation using boosters and strategies. When students have support to complete an activity, they feel more powerful and are more willing to achieve their goals. During the sessions, the teachers provided immediate feedback as a booster, as well as some clues that helped the students succeed in every mission. "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 2.

[When I don't understand something, I ask and the teacher helps me with what I didn't understand, and that helps me to improve or understand what I didn't know very well before.] (Participant 2)

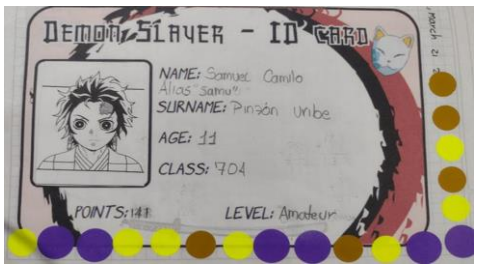
The findings showed the importance of the teacher's role. She dedicated a suitable time to explain to the students the levels, points, and roles. For students, it was clear to understand the game's intention and how they were going to succeed during the missions proposed for the lessons. Students were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

Figure 6. *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

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 7. Students' points and levels

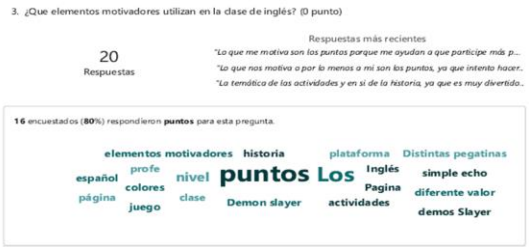


Note: Artifact showing a participant ID card where point are levels are registered.

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. "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" (participant 5)

[It seems to me that group work and the points motivate us because that way we do things with more attitude.]

Figure 8. *Interview excerpt.*



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.

1. Social interaction improvement

The study found that scarcity avoidance and unpredictability were effective in improving social interaction. Researchers specifically observed three core drivers of social interaction in the classroom during the gamified experience. The first core driver was scarcity, which was introduced through game mechanics. According to Chou (2014), this driver is associated with the desire to obtain exclusive or limited items during the game, requiring extra effort from the gamer. However, it is important to manage this driver carefully to ensure that competition remains positive and respectful, leading to constructive experiences.

In a gamified experience, students perceive this driver as promoting competition, which can be a significant motivator. The driver core was evidenced by the time limit, which provoked a sense of competition for students. This feeling is necessary to activate during gaming moments.

During activities where competition was present, students' behavior tended to be respectful not only towards the game rules but also towards their classmates. This created a tolerant atmosphere that allowed them to develop positive emotional management skills, such as dealing with frustration. "Perder los puntos se siente tristeza obviamente, pero yo creo que ayuda un poquito a la motivación para superarse a uno mismo" (Participan 4).

[Losing points obviously feels sad, but I think it helps a little to motivate you to improve yourself.] (participant 4).

Subsequently, the core driver behind the gamer's desire to prevent negative outcomes is avoidance (Chou, 2014). When asked about the elements in the game that elicit emotions, respondents reported feeling anxious, frustrated, and angry when losing points, among other negative emotions. Additionally, participants acknowledged the use of negative emotions as a key factor during the gaming session. The students argued that experiencing negative emotions increased their motivation to continue playing and improving.

While the teacher generally focused on positive reinforcement, the possibility of losing points caused anxiety in the students, which motivated them, as demonstrated in previous interventions. It could be argued that the students were motivated by avoidance, which is considered a negative motivator. However, depending on how the teacher presents it, it could potentially increase motivation. Unpredictability core driver is related to expectation as well as with the idea of not knowing what is going to 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. "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 5).

[I think we try to outdo ourselves with the suspense and stuff, because we don't know what's going to happen, but we try to kind of do our best, so we know what's going to happen and we're going to win].

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 minor details like changing the role of the teacher, using TPR (Total Physical Response) like clapping, voice intonation, students show interest in the lesson. Respondents constantly talked about the elements that the teacher used to have the unpredictability factor, proving the importance of keeping this core driver effective. Unpredictability keeps students motivated and attentive to see what's next. By not knowing what's going to happen, students are willing to connect with the gamified experience. It also helps to maintain student attention and engagement.

The core drivers of Scarcity, Avoidance and Unpredictability are the ones that most help to construct the gamified experience by following the Octalysis framework and increase the positive social interaction between students and teacher. A balance between these drivers can guarantee a successful experience that provides 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 activity 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 10. *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. 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.

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. 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. 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).

Many of the students' actions are constructed through social interaction. They will behave in a way that has the approval or trust of their peers. Although getting the experience points is important, researchers could see social influence as a significant issue in student motivation. As seen in the findings, working in groups was a notable factor in building a community for the gamified experience and gave students a sense of belonging that made them feel more comfortable and part of the game. Students responded that group work was an important part of them.

When the groups were formed, students tried to join the group with whom they had a closer relationship, but because of the class dynamics, they tried to monitor their behavior and language to complete the assigned task. Evidence showed that self-monitoring was an important skill developed in the social influence core, students tried to follow the rules and made their classmates follow the rules, they understood that working in groups helped them to achieve the goal, using cooperative work, with their roles, give a sense of organization for the students.

There was an interesting finding which showed that students were not attracted to the task where they had to work alone. Although the students were focused and worked 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 the meaning of the work, they lost interest as soon as they got the point. The motivation for the activity lasted for a shorter time because the focus was on extrinsic motivational drivers (Accomplishment).

Social influence was one of the stronger drivers and motivators that kept the gamified experience successful. Because of this experience, participants actively participated in the classroom. The activities that involve social interaction seem to increase students' motivation and confidence. It can even be said that social influence is a factor that surpasses extrinsic motivation (points) and encourages students to monitor their own process and classmates. To solve this problem, ownership and social influence are key factors that are important to increase students' motivation. It is important to see the impact of these factors on pedagogical practices.

2. English communicative skills improvement

At the beginning of the gamified experience, students were very conditioned to use the language, but meanwhile the sessions passed, they were on task; they are more confident when speaking the language without being habituated. "Pues con las actividades de Demon Slayer, la verdad siento que mis habilidades para hablar inglés, el listening, el speaking ha mejorado y bastante" (Participant 10)

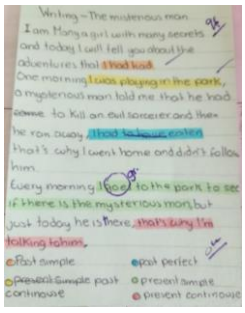
[Well, with Demon Slayer's activities, I really feel that my English speaking, listening, and speaking skills have improved a lot.]

Students also were conscious about their advances in listening abilities, because of the constant use of English and having a better use of the strategies, students have felt their listening skill to be stronger. "Me gustó mucho y aparte yo siento que todo mundo está mejorando y digamos yo en el *listening* ya entiendo mucho más". (participant 4)

[I liked it a lot and I also feel that everyone is improving and let's say that in listening I already understand a lot more.]

In addition, through the game mechanic and the competitiveness generated during the lesson, students develop academic skills to improve their skills and progress through the levels of the game. Pupils showed understanding of the grammar and vocabulary suggested for the lesson and it was easy for them to be aware of this improvement. One of the most tough skills to develop is writing. According to Betancourt (2015), the most important factors in teaching writing are motivation and a good amount of input during the first stage of the writing process. In this aspect, the students were motivated and dared to write, being aware of the grammatical structures.

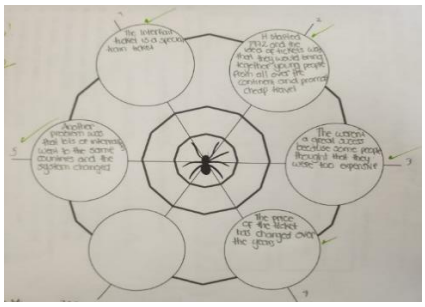
Figure 11. Writing exercise.



Note: Students' artifact using color code to identify grammatical structures

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

Figure 12. *Reading graphic organiser*



Note: Students' artifact using a graphic organiser to analyse a reading

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 13, it is observed the Octalysis scale is used in the official Octalysis website https://yukaichou.com/octalysis-tool/ which is used to create the octagon to determine the features of the gamified experience. For the one applied in this research, values are seen in the figure.

Figure 13. *Octalysis scale*

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 14, it is shown the final shape provide by the online tool.

Figure 14. *Gamified experience octagon*

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

It can be said that the experience is reasonably balanced in both White Hat and Black Hat Core Drives. There is also a good balance between the Left Brain and Right Brain Core Drives, which means that the gamified experience used for this research project has a good balance between intrinsic and extrinsic motivation. However, there is a slight preference for the achievement core driver, which is a left-brain core driver, so this experience needs to be implemented with caution, as unsuccessfully constructed extrinsic motivation may interfere with intrinsic motivation.

There was a significant and positive effect of using the core drivers on students' motivation and engagement in learning. Results showed that a significant motivator for a successful gamified experience is social interaction. The results showed that through gamification, students cannot only strengthen academic skills, but also there is a positive experience to develop better interpersonal skills, allowing students to have better relationships with classmates and teachers. Ultimately, the combination of engagement, motivation and successful social interaction leads to better academic performance.

The results reported the improvement of students' language skills because of the implementation of the Octalysis framework. Applying new pedagogies becomes a challenge for the teacher, as Cely Betancourt (2020) clarifies, the transition from a traditional society to one mediated by globalization and new technologies requires that learning another language becomes a daily habit. Gamification helps to learn a foreign language as a habit pleasantly.

CONCLUSION

This finding is in line with the previous literature, which shows that the gamification method using the Octalysis framework can promote the development of skills (Oliveira & Cruz, 2018). These results are consistent with the claim that established the use of game elements to increase student motivation (Sánchez-Pacheco, 2020). The present results are consistent with the work of Fitri et al. (2020), which deals with the use of gamification to increase the learning motivation of the students to improve the learning effects. Thus, the present study has shown that the use of the Octalysis framework as a gamification methodology increases students' motivation, which leads to the improvement of cognitive and social skills and long-lasting learning processes. These results represent the first direct evidence of the positive contributions of using this methodology in specific didactic processes.

Although the Octalysis framework was created more than a decade ago, it has not been studied in Colombia. Little research has been done on the subject, so its benefits are unknown. It is hoped that this article will contribute significantly to the field of foreign language teaching through the implementation of strategies that increase student motivation and interest, such as the Octalysis Framework. It is worth noting that, although this study could be considered one of the first to be carried out in Colombia using the Octalysis framework, the results are consistent with research carried out in different places around the world. Cognitive and social skills and motivation were improved and are elements of a successful learning process.

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