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MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS MENCIÓN ENSEÑANZA DE INGLÉS

TÍTULO DE LA MONOGRAFÍA

GAMIFICATION AS A PEDAGOGICAL STRATEGY TO ENHANCE STUDENTS' MOTIVATION

PREVIO A LA OBTENCIÓN DEL TÍTULO DE MAGÍSTER EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS MENCIÓN ENSEÑANZA DE INGLÉS.

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ADVISOR'S APPROVAL

In my role as Advisor of the research paper and title "GAMIFICATION AS A PEDAGOGICAL STRATEGY TO ENHANCE STUDENTS' MOTIVATION" prepared by LIC. HILLARY MARISSA TORRES RUIZ, an undergraduate student of the Pedagogy of National and Foreign Languages Major, at School of Educational Sciences and Languages at Universidad Estatal Península de Santa Elena, I declare that after oriented, studied and reviewed the project, I approve it in its entirety, because it meets the requirements and is sufficient for its submission to the evaluation of the academic tribunal.

Sincerely,

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En virtud de esta declaración, me responsabilizo del contenido, veracidad y alcance científico del trabajo de titulación.

Santa Elena, 20 de febrero de 2022

EL AUTOR



Lic. Hillary Marissa Torres Ruiz

DEDICATION

To my beloved son Juan Antonio, who is the most important person in my life and had taught me more about patience and love.

To my beloved husband Juan Antonio, who had supported me with love and care in every single step during the process of this Master program.

To my beloved parents, whose effort and work taught me that I could reach all the goals that I wanted.

To all the members of my family, who had been always happy for my outstanding achievements.

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I am deeply grateful to God who always takes care of me and my family. He is the creator of our world and the owner of our lives.

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Tema: Gamification as a pedagogical strategy to enhance students' motivation

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Resumen

La presente investigación se sustenta teóricamente en la revisión bibliografía y documental sobre la gamificación como estrategia pedagógica que permita incrementar la motivación de los estudiantes, frente al proceso educativo, para ello se recurrió a base de datos de revistas indexadas, artículos científicos, y proyecto de investigación que analizaban la temática. El trabajo toma en consideración los aportes teóricos de personalidades del campo educativo y de forma especial la teoría del flujo propuesta por Csikszentmihalyi & Nakamura, quienes establecen los parámetros para utilizar la estrategia de gamificación dentro del aula de clase virtual o presencial. En la investigación se concluye la necesidad de implementar estrategias de gamificación como forma de mejorar el aprendizaje del idioma inglés como segunda lengua en todas las instituciones y para ello recomienda insertarla dentro del meso y micro currículo institucional, para de esta forma mejorar el proceso metodológico de la enseñanza de esta importante área curricular.

Palabras clave: gamificación, motivación, aprendizaje



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TOPIC: Gamification as a pedagogical strategy to enhance students' motivation

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Abstract

The recent research paper is based on the bibliographic and documentary revision about gamification as pedagogical strategy to enhance students' motivation in the learning process, to carry out this investigation it was necessary to look for information in indexes magazines, scientific articles and research projects in which the topic already mentioned above was part of. This research paper takes into consideration the theoretical opinions of important characters who belong to the educational field and especially the Flow Theory developed by Csikszentmihalyi & Nakamura, who established the parameters to use this gamification strategy in person classes as well as virtual classes. In conclusion of this research paper, the necessity of implementing gamification as a pedagogical strategy as way to improve teaching English as a Second Language in all the institutions, as a consequence, it should be introduced in the meso and micro curriculum in order to improve the methodology used in this important area.

Keywords: gamification, motivation, learning

INTRODUCTION

At the frontier of new as teachers could find a wide range of methodologies, techniques and strategies which could be applied inside and outside the classroom to improve students' learning process according to the students' level, age and interests. This research includes two well-developed chapters which are divided in the following way: The first one deals with the problematic situation that in every single level of education students are facing that is the lack of motivation in an English as a Second Language class.

Regarding to this lack of students' motivation, it was necessary and compulsory to implement one of the most powerful and popular strategy called gamification. It is a well-known strategy that teachers have implemented in presence and online classes recently. Furthermore, methodology plays a relevant role when the research is carried out, for that reason, the research is descriptive because the phenomena is described in a specific way and the variables are explained in detail.

Nevertheless, chapter two covers the variables themselves which are students' motivation and gamification. It is important to remark that the benefits that gamification offers to students and teachers are important to consider at the moment of both teachers and students use the strategy already mentioned.

To conclude, the research shows high expectations because it covers topics that nowadays are popular in this technological educational world and offer help to teachers as well as students in order to enjoy the teaching and learning process.

CHAPTER I

Title

"Gamification as a pedagogical strategy to enhance students' motivation"

Presentation

Nowadays, motivation is one of the fundamental aspect to consider in the educational field. As teachers, it is necessary to keep a balance between the educational components in order to carry out a successful class. One of the main problem that students face when learning English is the teacher's methodology. Sometimes, teachers are not updated and they continue working with the old-fashioned strategies that students do not enjoy. Due to this reason, an interactive strategy called gamification comes to move students forward and learn English in a better way.

According to Mee et al., (2021) games are strategies that educators use to enhance students' learning outcomes in many areas like Maths, Science, Language Arts, etc. Games are also useful to increase students' skill acquisition and knowledge acquisition.

Pektas & Kepceoglu (2019) stated that gamification is an outstanding strategy to encourage learners to improve their behavior and at the same time increase their motivation, learning outcomes and the active engagement in a class while they are learning.

Objectives

To identify the most appropriate interactive activities based on gamification strategy in order to increase students' motivation.

To increase students' motivation through gamification in order to make the learning process more enjoyable.

Justification

It is relevant to emphasize that the importance of this research because it will help educators use the most appropriate games according to students' level, age and interests to increase students' motivation during the learning process. These interactive activities (games) will help students to face this common problem they have had since long time ago.

Taking into account that English is not the mother tongue of our country, for that reason students do not practice the English language in their daily lives, they find it difficult to keep engaging and motivating during these lessons.

Methodology

The methodology applied to carry out this research is descriptive and argumentative. On one hand, the research is descriptive because it in a systematic form describes the phenomena itself and the variables. It focuses more on what the problem statement is rather than the causes and consequences of it and it is necessary to support and give opinions about the problem that is being studied.

On the other hand, it is a qualitative research because according to the information that was collected, the researcher can draw conclusions and recommendations based on the topic.

CHAPTER II

Literature Review

There can be no doubt that the educational process was affected substantially by the COVID-19 pandemic, which induced a paradigmatic change in the way of generating students' knowledge and learning. Before this social phenomena, the educational systems around the world turned their attention to the virtuality and the use of interactive platforms which were the only mechanism that allowed to keep the educational service.

Nevertheless, some critical points appeared that affected in one way or another the methodological processes in virtual environments, in view of the inexperience of the majority of teachers in managing and the use of technological resources, as consequence of it students showed as receptive and passive learners. In this context, and with this problematic situation, gamification appeared as a learning strategy which allows students to increase their motivation through interactive games and at the same time it boosts the learners' skills and competences development.

For this reason, this research analyzes since the bibliographic point, the most important aspects of gamification and how it influences on students' motivation in front of the generation of meaningful knowledge.

Definition of Gamification since some authors' perspective

Within the recent research, it is fundamental to define the concept of gamification in order to get a general and clear vision about the problematic situation and understand the huge importance that gamification has inside the virtual learning that is applied nowadays.

According to Khairani, D (2020) gamification is a didactic process that is applied in the educational context, as a tool to generate learning in students, through the application of interactive games.

It is important to clarify that gamification cannot be considered as a simple game, it should be analyzed since the methodological and didactic perspective of game as a ludic activity which promotes the development of thinking skills in young learners and adolescents.

Fulton, J (2019) stated that gamification is a process which allow teachers and students bring the elements of the game itself to fields that are not only games, in this way educators can catch the learners' motivational aspects.

Additionally, to Fulton, J (2019) opinion, it is relevant to take into account that through the application of gamification strategy in virtual learning, it is possible to enhance students' motivation. Indeed, the learning process in the social and generational context considers the majority of young learners and teens belong to this famous generation called "digital natives".

Tan, L (2018) claimed that gamification is a pedagogical innovative strategy that allow teachers and students the use of digital interactive games in the educational context as a resource which supports the students' learning process. Furthermore, it is important to remark that gamification is a great strategy in this learning modality that let students generate knowledge with the use of interactive games such as Kahoot, Wordwall, Duolingo, etc.

Technology as a learning tool

Nowadays, within the technological and globalized society where we are developing, the educational system could not be apart from this reality, even when there is a big paradigmatic

change in the educational field after the COVID-19 pandemic. Besides, technological and communicative systems should be considered as strategies which allow teachers facilitate the teaching practice and support the students in order to improve the level of comprehension of the contents.

Ahmadi, M (2018) stated that the wide range of technological resources which are applied in the process of teaching English as a Second Language, let the educator manage the class in an easy way, at the same time students could have access to authentic and meaningful resources as well as generate learning for a long period of time.

Hence, it is important to point out since many years ago teaching English as a Second Language has had several difficulties, because of the lack of learners' motivation, for this reason, students most of times have a low level of learning performance. However, if technology is used as mechanism of motivation, students will be motivated through the use of social networks or the use of gamification as a mechanism to enhance motivation, which are interactive games that maximize the level of comprehension in English language.

Additionally, Ahmadi, M (2018) considered that the technological resources can develop linguistic skills in students, as consequence it turns into an effective tool to learn English as a Second Language, there comes the necessity to apply it in the learning process.

Furthermore, to expand a little bit more about the author's opinion, if technological resources were used in the learning process, the development of the macro linguistic skills of English language such as Speaking, Listening, Reading and Writing will be enhanced, the skills which are too necessary to develop in this competitive and global society at present.

Interactive games in the learning process

One of the main aims of the application of interactive games within the learning process is to become a student more active and participative, through the use of them students can build their own learning. It is relevant to emphasize in this point that introduce interactive games to the methodological process not only enhance motivation, also improve cooperative learning in such a way it allows the students' participation as well as teachers who provide feedback, which is a great tool to identify students' weaknesses and try to improve them to reach better meaningful knowledge.

According to Huang, Y (2019) in his article entitled "Exploring students' acceptance of educational computer games from the perspective of learning strategy" stated "computer interactive games have been widely employed to facilitate students' learning. Studies have pointed out that these games may improve students' learning effectiveness when they are equipped with appropriate learning strategies".

In the case of teaching English as a Second Language, it is considered that the subject should provide didactic tools and resources to students in order to enhance students' motivation and willingness to develop the linguistic skills and keep working on activities according to students' age, level and interests.

Furthermore, learner should consider the interactive game as the strategy through they can develop creativity, attention, problem solving, concentration and other abilities about the development of a human being. Due to this, since cognition interactive games could be defined as the mechanism that contribute to the intellectual development of human beings.

Types of interactive games (Gamification) used in English language teaching

Figure 1

Game Based Learning



https://i.ytimg.com/vi/W72DnmSZbr4/maxresdefault.jpg

The big changes that have taken place during the last decade have led the teaching and learning process adapt to the new educational paradigms, especially, to virtual learning environments, which allow the educational community the use of technological resources as mechanism of generation of knowledge. In this context, gamification as a pedagogical strategy could be applied within teaching English as a Second Language, one of the advantages of this strategy is that it increases students' motivation to learn the language and develop the linguistic competencies of it.

For all the reasons explained above, some mechanisms relate don gamification are showed in the research, which could be used as methodological and didactic tool in the teaching practice.

According to Reyes, D (2021) apart from the several possibilities that gamification offers, it is important to point out that these can be used in virtual learning environments, because these digital platforms and applications have tools to generate ludic and interactive activities oriented to reach an active student' role. There are some popular applications to teach English like the following:

Duolingo

This amazing platform has free access and it is used for millions and millions of people to learn a language online. It is presented like challenges that students must overcome to reach the next level. This platform helps students establish a direct relation with the system itself through the feedback that it provides, every single time the learner made a pronunciation or spelling mistake.

Kahoot

Putri, N (2019) claimed Kahoot, is an online interactive game which let students increase their motivation through research, creativity and collaboration of the members. The use of this popular application inside and outside the classroom has showed that after using it students play an active and participative role in the class, also the self-efficacy in the aims already placed and better students' performance.

Quizizz

According to Zhao, F (2019) this educational application integrates several players to the game, where class works are interactive and funny, they generate interest and motivation in the students. Something relevant about Quizizz is that in the application you can insert avatars,

songs, memes, etc., for these marvelous things it turns funny and appropriate to generate meaningful learning.

Benefits of Gamification in the learning process

Gamification in E-Learning

Figure 2



https://ambilms.com/wp-content/uploads/2020/12/gaming.png

The use of didactic resources in the learning process is so important in order to generate meaningful learning, due to that for applying gamification activities is a priority to prepare the lesson in advance in which the teacher needs to determine the aims and goals to reach with the use of interactive games.

Pujolá, J (2021) claimed that it is necessary to have a well-stsructured gamification instructional design in the application of gamification because it will allow the development of a

wide range of learning strategies and competencies in the English learning of English as a Second Language process.

Another aspect to take into account in the use of gamification as a didactic resource is the teacher's motivation to participate in the games, if students sees the model, he will take part inside the learning process and feel free to in front of the educational fact.

Pektas & Kepceoglu (2019) concluded that another benefit that gamification offers in the virtual learning environments is the development of critical thinking because if they take a long period of time trying to solve the problem, they will develop it. In spite of gamification offers that integral development to the students, in some cases the use of interactive games could make students feel curiosity and disappointment, as it occurs in videogames.

As a consequence, different studies have showed the benefits of gamification as didactic and pedagogical strategy, it allows students increase their motivation in the educational field.

Also, it engages the active students' participation in classes, as this table shows.

Table 1Benefits of gamification

Benefit	Frequency	
Increase of motivation	39	
Being funny	22	
Observation of students' Learning	21	
Permanence of Learning	14	
Time-saving	12	
Collaboration in groups	10	
Prevention of cheating	7	
Rivalry / competition	7	
Attractiveness of technology	5	
Consolidation of learning	3	

Gallegos, M (2021), in his research for Universidad Nacional del Chimborazo presented the benefits of using didactic interactive games in children and teenagers' learning, detailed here:

- The use of an interactive game within the learning process allows students to activate their minds, at the same time it engages the auditory and visual learning through neural connections which are relevant for the development of human beings.
- Thanks to interactive games, students can stimulate concentration and memory in order to reach the higher learning levels in the learning process.
- Break the traditional paradigm of teaching in which people were just able to be in
 presence classes, showing that learning could be generate from virtual learning
 environments and students are able to learn and produce according to their own pace.
- With the use of interactive games, learning becomes an entertaining and funny activity,
 opposing the passive concept of learning based on the traditional pedagogy.
- The use of interactive games helps family relationship because the members of the family could participate in the learning process.

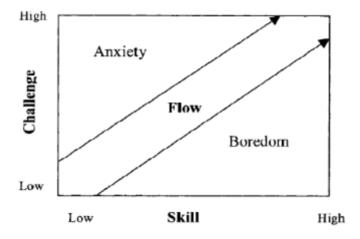
Virtual learning environments through gamification mechanisms

According to Reyes, D (2021) to apply a gamification mechanism in the learning process in order to generate interest and motivation on the subject, it is necessary to follow the "Flow Theory" that was proposed by Csikszentmihalyi & Nakamura (2009) who pointed out that all the activities which are made, should be a challenge for the students, also they need to establish feedback processes which allow students to redo the activity one and another time to practice.

For this reason, the activity should be always planned in order to enhance students' motivation in their development and do not make students feel bored, frustrated or anxious for the complexity of the activity, as you can observe see in this figure.

Figure 3

Flow Theory developed be Csikszentmihalyi & Nakamura (2009)



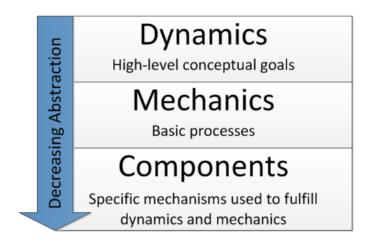
Source: https://www.researchgate.net/profile/Mahya-Saghravani/publication/321318455/figure/fig1/AS:565368512933889@1511805765631/Flow-Theory-Csikszentmihalyi-1988-1991-1993-cited-in-Hood-2007.png

The elements of gamification

One of the main characteristics of gamification consists in enriching activities with games which allow students and teachers get their aim, that means to make students learn through the use of ludic and interactive games. Due to this, Karl, M (2018) claimed the most important elements that educators should consider when they apply gamification activities which are detailed in the figure below.

Elements of Gamification

Figure 4



http://www.wholereason.com/wp-content/uploads/2015/05/dynamics.png

Because of these reasons, it is relevant to highlight that before using gamification, the components of the activity, the game instructions and the final aim should be set within the teaching English practice.

CHAPTER III

Conclusions

Once the information that was researched from different bibliographic references based on gamification and how it influences on students' motivation in the learning process, it could conclude:

- All the different authors who were cited in this research agree with the concept that gamification is a strategy which allows students to play an active role in the learning process.
- According to the literature review, gamification is an innovative strategy which makes technology part of the learning process, it is too necessary because nowadays virtual learning environments are so popular in many countries around the world.
- The research shows that the use of gamification in the educational process and virtual learning environments produce several benefits in the development of students' linguistic skills. It enhances critical thinking, problem solving and reasoning.
- The research shows that platforms such as Duolingo, Quizizz, Kahoot allow teachers and students to increase their motivation in learning English as a Second Language through the use of interactive activities.

Recommendations

Once the conclusions were analyzed and the theoretical analysis of gamification as a pedagogical strategy, it recommends:

- The educational institutions should introduce in the English curriculum gamification activities to enhance students' learning.
- It is relevant that interactive platforms like Moodle and Teams which are the most useful
 in the Ecuadorian educational system, use gamification activities to enhance cognitive
 development in students.
- Gamification activities should be planned according to the Flow Theory proposed by Csikszentmihalyi & Nakamura (2009), in order to reach the learning outcomes established within the teaching English language practice.
- It recommends that English teachers introduce gamification as a pedagogical strategy to turns the subject more attractive and funny for students and leave behind the traditional methodology.

Bibliographic References

Ahmadi, M. (2018). The Use of Technology in English Language Learning: A Literature Review. International Journal of Research in English Education (IJREE). Vol. 3.

http://dx.doi.org/10.29252/ijree.3.2.115

Fulton, J. (2019). Theory of Gamification – Motivation. William Howard Taft University Gallegos, M. (2021). Juegos didácticos interactivos como estrategia de aprendizaje para la enseñanza de lectoescritura en los estudiantes de 6º año paralelo "D" de egb de la UE "Miguel Ángel León Pontón" de la ciudad de Riobamba periodo 2020-2021. Universidad Nacional de Chimborazo.

Huang, Y. (2019). Exploring students' acceptance of educational computer games from the perspective of learning strategy. Australasian Journal of Educational Technology. Vol. 35 (3) Khairani, D., Sri, M., Slamet, S. (2020). The Effect of Gamification on Students' Motivation in Learning English. Leksika. Vol. 14. No. 22-28.

Mee, R., Seong, L., Yee, W., Abd, K., Tengku, S., Ismail, R., and Subba, Y. (2021). *A Conceptual Model of Analogue Gamification to Enhance Learners' Motivation and Attittude*. International Journal of Language Education. Vol. 5. pp. 40-50. Doi: https://doi.org/10.26858/ijole.v5i2.18229

Pektas, M. & Kepceoglu, I. (2019). What Do Prospective Teachers Think about Educational Gamification?. International Council of Association for Science Education. Vol. 30

Pujolà,, J.T. (2021). *Gamification: motivating language learning with gameful elements*. In T. Beaven & F. Rosell-Aguilar (Eds), Innovative language pedagogy report (pp. 109-114).

Research-publishing.net. https://doi.org/10.14705/rpnet.2021.50.1244

Putri, N. (2019). *Kahoot Application in English Language Teaching ELT Context: An Alternative Learning Startegy*. Elsya Journal of English Language Studies. Vol. 1. No.1 pp. 11-15. http://ojs.journal.unilak.ac.id/index.php/elsya

Tan, L. (2018). Meaningful Gamification and Students' Motivation: A Strategy for Scaffolding Reading Material. Online Learning, 22 (2), 141-155. doi:10.24059/olj.v22i2.1167

Zhao, F. (2019). *Using Quizizz to Integrate Fun Multiplayer Activity in the Accounting classroom*. International Journal of Higher Education. Vol. 8. No. 1. doi:10.5430/ijhe.v8n1p37

Annexes

CERTIFICADO SISTEMA ANTI PLAGIO

En calidad de tutor del Trabajo de Integración Curricular denominado "GAMIFICATION AS A PEDAGOGICAL STRATEGY TO ENHANCE STUDENTS' MOTIVATION" elaborado por el estudiante LIC. HILLARY MARISSA TORRES RUIZ de la Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros, de la Facultad de Ciencias de la Educación e Idiomas, de la Universidad Estatal Península de Santa Elena, me permito declarar que una vez analizado en el sistema anti plagio URKUND, luego de haber cumplido los requerimientos exigidos de valoración, el presente trabajo de investigación, se encuentra con 0% de la valoración permitida, por consiguiente se procede a emitir el informe.

Atentamente,

Only Marks

Lic. Andrés Rodríguez Caamaño, MSc. TUTOR



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