



Gamification, game-based learning: Innovative proposal in contexts of Covid_19 case Educational Unit Ancon

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Abstract

COVID-19 (SARS-CoV-2) is a negative phenomenon that has become a difficult scenario at the different educational levels. Before this negative element, gamification is a pedagogical proposal for the students of the Ancon Educational Unit, as a strategy of motivation in learning. The objective of the research is to create a set of gamified activities that help to enhance motivation in students, the research approach applied in this study is a qualitative methodology, a group of 60 young people participated, and the results were measured through phases and stages employing a game quiz in Gianelly. The search for information was carried out through Google Scholar, articles in indexed journals, books and newspapers, to find out the main role that gamification and gaming have played in times of pandemic, and the positive impact it has had. The benefits of gamification have become very interesting because it facilitates a new model of teaching and learning, also gamification allows students to study new content through the gaming environment, discover new information and earn points, badges or any bonus.

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KeyWords: Education, motivation Gamification, games, Gianelly, motivation, quiz.

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Introduction

The SARS-CoV-2 (COVID-19) has created an unexpected didactic context in Ecuador, where face-to-face classes were suspended at all academic levels, from this difficulty teachers, parents, zonal and district authorities and the whole community in general, generated insecurity and uncertainty to respond to the continuity of the educational process, where distance education became a reality, in response to the methodological quality of the Ecuadorian teacher. The public and private educational authorities are currently looking for ways to reestablish the traditional didactic activities, the scarcity of minimum health guarantees, and the few vaccinations heard in the media in this sector have influenced the innovation of new approaches to teach and learning using the technological tools available and the advantages of virtuality.

For many authors, virtual education was only for higher education centers, but not for preschool, elementary and high school education, but far from this reality, many teachers, principals, rectors, heads or area directors had to change methodologies, and adapt to the transformation and technological innovation of modern society and distance education, many lost their fear and dared to use didactic, useful, advantageous and motivating technological tools, to make viable the development of innovative materials for learning, to respond to the great challenge that the epidemic has caused, "Living in a digitized world is complicated" (Boyd, 2014).

One of the challenges that have been presented in this study is, which is linked to learning problems when it comes to researching the subject of scientific research students lack techniques to address a topic, due to the difficulties that come from the complex environment of the subject. In this sense, the goal is to apply the elements of gamification or playful games as an active learning tool, to leave behind the traditional paradigm where the teacher is the center of knowledge and the student is a simple receiver of the contents, it breaks with those limitations, the game is learning and allows constant feedback, which is achieved with this paradigm multiple incorporations of games for teaching

intermediate level, for example, a series of emotions when they are playing and others when they are interacting with those contents.

Authors such as Rodriguez et al. (2019) state that "Gamification can be a universal learning tool, which is evidenced by the multiple incorporations of games in teaching", this game-based technique encourages creativity and curiosity, and motivates students to learn because they are interacting in an environment of trust, all this scenario is conducive to this learning is very effective.

1.1 Brief History of Gamification

Gamification has always existed in history, for example when children are given carrot cream, they play with the spoon and the soup as if it were an airplane and if they drink it they are told bravo, recognition, positive reinforcement and suddenly they get a happy face, that is gamification, the difference is that now there are more games, even with technology through virtuality they are more effective, and the first gamification game in history is now mentioned.

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Table 1 Brief History Of Gamification

Ages	Gamification - games
2650 AC SENET Egipto	Senet , was a very popular game in ancient Egypt. Like the game of Ur, Senet was a kind of race on a board in which the winner was the player who could remove the pieces on the board the fastest. (Muñoz 2020) “El Juego Real de Ur 2600 A.C” Still exhibited in the British Museum (London), deciphered as board games, this game is played by two players, each with seven checkers (black and white, like the board of the game of checkers perhaps chess), and three tetrahedral dice were used (Muñoz 2020)
Before 2700 BC Mesopotamia	La Justa Medievales In the digital sports newspaper El Rivalinterior (2020), The Medieval Joust appears in the Middle Ages, it is single combat between two knights spliced on horseback with the spear, where they collided with each other, later this game was popularized as chivalry exercises, this game consisted of developing skills in the contenders in the handling of weapons (p.1)
Median Age	



XX Century	<p>The Scouting official site (2021) specifies that the group or movement of the Boy Scouts is a more modern type of game of the most contemporary era that can serve us for our classes appeared at the beginning of the twentieth century, a gamified system in values, it is a scheme of games designed to learn and implement the many skills that children and adolescents should know (p.1)</p>
Digital era XXI Century	<p>Already in the digital era, gamification is linked to technology, works such as those of Nick Pelling (2002) develop a work related to computers with elements of the video game in the world of computer programming, "a linking of elements of the video game in the world of computer programming" (Olivat, 2016, p.30).</p>
Current time	<p>Gamification tool in the classroom. According to the educational platform of the Movistar phone company Educare 2021 "Gamification wants to be very present in the classroom, we all know it" in this sense the platform establishes the 10 most used programs in education, Gianellys, Brainscape, knowre, Cerebriti, Minecraft, Pear Deck, Kahoot! Edmodo, Classcraft, ClassDojo (Educared, 2021).</p>

Source: Own elaboration

1.2 Current Gamification

In this digital era, teachers are obliged to innovate daily in the classroom with emerging methodologies that innovate the class with strategies that develop motivation and participation that favor the autonomous learning of students, the use of electronic devices such as smartphones of high and low range, as well as tablets and other portable devices in education today have developed a branch of knowledge and a positive impact on student performance.

Genially is a technological tool of the digital learning revolution with a new dimension in the creation of visual experiences, images with interactivity and animation in a very simple way, without the need-to-know programming, simply

by creating a free account or logging in with your Gmail email, apply a template and start designing your interactive game. According to González (2019), Gamification in the classroom "is an educational innovation strategy that in recent years has been adopted by thousands of innovative teachers who want to increase participation and motivation for learning in their students" (p.1).

From another point of view, Genially is a computer application that stands out in education so that the student has fun while learning. According to Peña (2021), he considers that Gianelly software "offers a great number of resources to apply gamification, a strategy to enhance learning and teaching".

1.3 Gamification in the classroom

"Gamification is a learning technique that transfers all the potential of games to the educational environment to improve students' results in class" (Unir, 2020).

The scarcity of innovative methodologies, the lack of motivation, the disinterest shown by students in the contents due to the ease of obtaining information, the addiction to video games, the traditional memoristic education and the insufficient connection that exists between the members of the educational units are elements that impede teaching and induce learning problems. In this sense, the goal is to apply the elements of gamification or games as a tool for active learning, changing the traditional paradigm where the teacher is the center of knowledge and the student is a simple receiver of the contents, it breaks with these limitations, the game is learning and allows constant feedback, which is achieved with this paradigm multiple incorporations of games for teaching middle level, for example, a series of emotions when they are playing and others when they are interacting with those contents.

Authors such as Rodriguez et al. (2019) state that "Gamification can be a universal learning tool, as evidenced by the multiple incorporations of games in teaching", this game-based technique encourages creativity and curiosity, and motivates students to learn because they are interacting in an environment of trust, all this



scenario favors that this learning is much more effective.

1.4 Studies on gamification

According to the Inter-American Development Bank (2019), research on gamification has increased significantly. According to Google Scholar, the number of articles published annually containing the words "gamification" and "education" increased from 140 in 2010 to 3,570 in 2014 and reached 9,570 in 2018 (The search for the words is done in the English language because most of the indexed articles are in this language), in a new search for publications on the subject in 2021, there is a total 60,500 publications, explored by Soledispa (2021).

According to the Observatory, the Institute for the Future of Education (2019), conducted an educational project related to gamification. By Professor Armando Zepeda, an expert on the subject, who clarifies the myths and realities around the subject, this conversation was joined by 150 teachers from various parts of the world with the same interest in knowing how to apply gamification for better use of learning. The following question was posed in the webinar: Have you implemented gamification? 47% of the respondents said that they plan to do so, 32% said that it was a positive educational experience, and 16% simply said no, and finally 5% answered yes but did not get the results they expected.

García (2019) argues that he obtained a positive relationship of 0.249 and a significance value of $p = 0.017 < 0.05$, concluding the existence of a direct relationship, determining that the greater the use of gamification there is greater the development of mathematical competencies, on the other hand, authors such as Illescas et al. 2020, consider that educators, when using gamification, improve the learning of mathematics and awaken motivation in students, however, they do not often apply it inadequately. This means that there is a certain degree of ignorance of the methodology, therefore the results are not as expected, other authors also consider that the use of gamification with tics tools has its disadvantages because many teachers lack training, also the institution does not have a good technological structure, in addition, not all students have an electronic

device, and broadband internet, according to Inter-American Development Bank (2019), all these drawbacks reduces intrinsic motivation, increases anxiety and motivational effects of short duration.

Innovation development

2.1 In the context of case

In the Ancon Educational Unit, the subject of scientific research is taught as part of the academic curriculum of the third year in the specialty Science of Good Educational Practices. It is a basic subject for any project that the institution wishes to develop, in addition to students mastering research methods and techniques in terms of research design, all these transversal competencies pursue a capacity for criticism, synthesis and analysis of data.

This study focuses on the context of the Ancon Educational Unit, a public entity governed by the state belonging to a rural locality of the Canton Santa Elena, students have been enrolled in a total of 60 young people who have different socio-cultural and economic levels, the pandemic has generated a negative impact that has affected the education of students, before this problem the mission of the institution and teachers is to find the best strategy to generate the necessary content to be known and assimilated. All these situations have an impact on a great social disadvantage as stated by (Lowenhaupt and Hopkins, 2020). To the diversity that already prevailed in this center, a great risk has been added in the form of COVID-19, which has aggravated the situations of inequality and exclusion derived from social and economic conditions among others (Gewerc and Zapata, 2019).

2.2 Design of the proposal

This study demonstrates that gamification is a didactic strategy to enhance learning and teaching, to eliminate boredom and lack of motivation in classes in the area of natural science in the subject of scientific research, implement it will support teachers and help students to develop skills and abilities that have not yet been exploited. Gamification is a phenomenon that is growing rapidly in some



countries, including ours, due to the number of programs that exist on the Internet with many applications in the educational field. "Such a tool consists of using game mechanics to enhance motivation, concentration or effort, creating an improvement in the teaching-learning process (García et al., 2017).

It is expected that the structures of the plan will be a fundamental tool for the teaching and learning process and that it will be executed in the following levels of study of the baccalaureate, and the area of Natural Sciences, in the discipline of scientific research. Below is the proposal:

Title: Design of a gamified proposal to achieve certain objectives through the Genially tool, applying several quiz tests.

2.3 General objective

To create a set of gamified activities that help to enhance the motivation of students studying at the Ancon Educational Unit.

Specific objectives

- Create a series of interactive quizzes that allow real-time feedback to be developed, improving student skills.
- Design gamified activities to facilitate the assimilation of complex concepts.
- Develop students' collaborative and cooperative skills of respect for each other and the technology, materials and play spaces.

Methodology

3.1 Materials and methods

For the evaluation of the theoretical part of the subject of scientific research, Gianelly has been used, an application that has several tools to gamify the subject of scientific research, which is quite practical, it is about learning through play as an innovative strategy through quiz through questions on research methodology, these questions contain a chain of concepts, and feedback techniques to choose topics, variables and research questions, that is, it makes learning active and participatory from the Gianelly technology tool.

3.2 Area of study: Description of activities

This study adopts a qualitative approach in a case study, in the Ancon Educational Unit, with 60

students enrolled in the school year 2021-2022, who is in the first, second and third years of high school, in a previous diagnosis that was made at the beginning of the school year where topics on the understanding of the contents of scientific research were discussed, the results were considered difficult to understand. This was determined by the teacher facilitator of the subject, who could see that there was great demotivation to learn, the problem and in the traditional evaluations the minimum score was 6/10, this is associated with two principles of demotivation, monotonous, non-participatory for not understanding the teaching methodology, on the other hand, the demotivation given by the development of the level of difficulty of the subject.

Escudero et al. (2008) establish that a case study is "A methodology of analysis and observation of specific situations with great depth, such as, for example, biographies of characters, history of institutions", for Martínez (1998), the case study "Is the search and interpretation of data and phenomena required in such a study, most of them were carried out by descriptive methods.

Three groups of students from different academic levels were selected for the second final test to check if the gamification strategy was suitable to work with high school students in scientific research classes, a total of 60 students from 14 to 17 years old were selected, all young people have an electronic device with basic capabilities to access the internet connection, and to respond to the activities proposed in the gamification.

3.3 Proposal planning

The teaching method used in the content planning is game-based learning with the tools of gamification in the educational scenario, relationship-progression, dynamics, reward-collaboration and the elements, mission-points, which help to improve the development of the didactic units and to stimulate the behavior of the students.

The topics that are addressed in the planning of the proposal were extracted from the text of scientific research, and this will be worked on one topic per week since the curricular curriculum establishes 2 hours of 40 minutes per



week.

The proposal is designed with three topics that will become three sessions, each one has a determined objective that is linked to the objective of the study, and each session is executed by activating the previous knowledge that the students have, to create new knowledge. The study is carried out several activities on the Gianelly platform in a gamified format as a strategy to achieve learning actively, through missions, rewards, challenges, applying evaluation tactics such as tests, Quiz notebook, Quiz interactive whiteboard, individual work, after the activities the student is stimulated by awarding them distinctive, such as points,

badges, prizes, rewards.

In the evaluation of all the sessions, the technological tool Gianelly was used, in all the educational phases, and at the same time to identify if it is necessary to make feedback. And finally, an analysis was made of the grades of the evaluated groups.

3.4 Temporalization

The implementation of the proposal is 3 weeks of 40 minutes, flexibility is applied in the implementation process as recommended by the LOEI, because it could take more or less time than determined.

Table 2 Session One Quiz Notebook

Session Number	one	Space: Virtual on-site
Specific Objective(s) of the Session	Involve students in the educational process to achieve game-based learning, gamification applied to scientific research, interactive feedback, Quiz test, notebook, etc.	
Content	Research approaches	
Activities	<p>Beginning:</p> <ul style="list-style-type: none"> State what the myths about scientific research are Express how good research is carried out. <p>Development:</p> <ul style="list-style-type: none"> Watch the video about the research and its approaches. https://www.youtube.com/watch?v=s_Is2MA0YkQ Answer the questions based on the observed video. What was the research process before? Execute the challenges created in the Geneally tool. https://view.genial.ly/614f4d1de677ea0d8a40ed11/interactive-content-quiz-libreta, Each correctly executed challenge is worth 5 points. <p>Closing:</p> <p>Work on page 34 part of the text research methodology by Hernández Sampieri, 2014.</p>	Time 40 minutes
Resources	Book, Internet, Gianelly Tool, WhatsApp Tool, Zoom, Computer, Cell Phone	
Evaluation	<p>It will be evaluated using the quiz tool Gianelly notebook</p> <p>Select the ideal concept of scientific research?</p> <p>a) It is a rigorous process in the acquisition of new knowledge.</p> <p>b) It is an interactive content format</p> <p>c) It is a vulgar research to attract the reader.</p>	

Source: Own elaboration



Table 3 Session Two, Animated Whiteboard Quiz

Session Number	Two	Space: Virtual on-site
Objectives of the session	Evaluating the unit of work quantitative approach through gamification, Quiz Animated Whiteboard.	Animated
Content	Quantitative approach	
Activities	<p>Beginning:</p> <ul style="list-style-type: none"> State the characteristics of the quantitative approach. Mention the basic concepts of the quantitative research approach Name the parts of the quantitative approach. <p>Development:</p> <ul style="list-style-type: none"> Watch the video about the research and its approaches. https://www.youtube.com/watch?v=ANJk2pT7RfQ Answer the questions based on the observed video. What was the research process before? <p>Execute the challenges created in the Geneally tool. https://view.genial.ly/614f437bada7860da81add3/interactive-content-enfoque-cuantitativo, Each correctly executed challenge is worth 5 points.</p> <p>Closing:</p> <p>Work on page 38, from the text <i>metodología de la investigación</i> by Hernández Sampieri 2014.</p>	Time 40 minutes
Resources	Book, Internet, Gianelly Tool, WhatsApp Tool, Zoom, Computer, Cell phone	
Evaluation	<p>It will be evaluated by means of the interactive Gianelly test tool</p> <p>Select the concept quantitative research?</p> <p>a) It uses data collection to test hypotheses based on numerical measurement and statistical analysis.</p> <p>b) It is an interactive content collection instrument.</p> <p>c) The subjective investigation of earth phenomena.</p>	

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Source: Own elaboration

Table 4 Session three, Quiz Florida Neon

Session Number	Tres	Space: Virtual on-site
Specific objective(s) of the proposal	Implement the Gianelly tool in the educational process to improve student motivation and participation.	
Objectives of the session	Recognize the main elements of scientific research, through gamification, Quiz Florida Neon.	
Content	Gamification in education	
Activities	<p>Beginning:</p> <ul style="list-style-type: none"> Observe research methods. State what the elements of quantitative and qualitative research are called. State how many types of research the quantitative and qualitative approach has. <p>Development</p> <p>Watch the video on example of quantitative method https://www.youtube.com/watch?v=733d0-zJIQM</p> <p>- Answer the questions based on the observed video.</p> <p>- Execute the challenges created in the geneally tool. https://view.genial.ly/614f815ce677ea0d8a40f14c/interactive-content-quiz-florida-neon, Each correctly completed challenge will allow you to obtain 5 points.</p>	Time 40 minutes



	Closing: Work on page 43 of the text metodología de la investigación by Hernández Sampieri 2014.
Resources	Book, Internet, Gianelly Tool, WhatsApp Tool, Zoom, Computer, Cell phone
Evaluation	It will be evaluated using the Gianelly tool with an interactive test. Select the concept of qualitative research? a) It is a dynamic and rigorous process for using numbers. b) It is an interactive content format c) It uses data collection and analysis in the process of interpretation.

Source: Own elaboration

3.5 Timeline

The order of the temporal proposal of the gamified activities has been carried out by established dates, developed in sessions of 40

minutes, and will be under the command of the classroom teacher, to improve the motivation and participation of the students through the new pedagogical proposal.

Table 5 Weekly Session Schedule

Sessions	Month - year: June / 2021														
	Week 1					Week 2					Week 3				
	L	M	M	J	V	L	M	M	J	V	L	M	M	J	V
Session 1		X													
Session 2						X									
Session 3												X			

Source: Own elaboration

Results

Three gamified activities were created in Gianelly for each group of students enrolled in high school, with the indications exhibited in class, the tests are in the program's cloud, the themes of the questions were appropriate to the topics taught in the three sessions, the quiz test is in the following link <https://genial.ly/es/>, you can enter with an email or by subscribing to the platform.

In the final session, the activity went smoothly, all students were able to answer the quiz test questions with their electronic devices. The students linked in parallel from their homes and answered the quiz test in the time established by the professional professor.

After taking the quiz test, the students captured their answers and sent them through the instant

messaging program WhatsApp for smartphones, with these samples the teacher-researcher designed an Excel to detail the results. In this way, the pedagogue does not need to correct the tests and then cross the statistics of each question, plus the final score of each student in each test, the total of correct and incorrect answers was also added. With all the information a grading table 1-5 session was designed according to how the score was established and the number of correct answers obtained by the student, in this process, the maximum grade of (10) was given, that is to say, each question was worth 2 points. The evidence of the grades of the first, second- and third-year groups can be found in the following link:

https://docs.google.com/spreadsheets/d/1jwa3I_q5JwQtaIPrBlZau1qGUlnx4hOH/edit#gid=2146340297.

Table 6 Final results and grades for the first year

STUDENT NAMES	0 correct	1-2 correct	3-4 correct	5 correct	correct	Incorrect	qualification
BORBOR DERLYS		2			2	3	4
CELI KAROL CHANCA Y				5	5	0	10
AILYN			4		4	1	8



CHILAN					
DANIELA		5	5	0	10
CLEMENTE					
LIZBETH		5	5	0	10
DEL PEZO					
MEROLYN	4		4	1	8
LARA RUBI		5	5	0	10
MACIAS					
CHRISTOPHER		5	5	0	10
NAVARRETE					
BIANCA	4		4	1	8
ORMAZA					
DARLA	4		4	1	8
PARRALES					
ADRIAN	4		4	1	8
PARRALES					
ODALYS		5	5	0	10
PICO KELLY	4		4	1	8
RENDON					
NAOMY		5	5	0	10
REYES ALISSON		5	5	0	10
ROSALES					
MAITE		5	5	1	10
SANTANA					
SHIRLEY		5	5	0	10
TÓMALA LUIS	4		4	1	8
TOMALA					
KEYLA		5	5	0	10
TOMALA JOSE	4		4	1	8

Source: Own elaboration

Table 7 Final results and grades for the second year

STUDENT NAMES	0 correct	1-2 correct	3-4 correct	5 correct	correct	Incorrect	qualification
BERNABE DIANA				5	5	0	10
BORBOR LESLY				5	5	0	10
BORBOR AMY			4		4	1	8
FERNANDEZ HENRY				5	5	0	10
GUAMAN MARCO			4		4	1	8
LOPEZ JOSEPH			4		4	1	8
MORALES ANDERSON				5	5	0	10
MORALES JEAN				5	5	0	10
MORAN JOSTIN			4		4	1	8
ORDOÑEZ CAMILA			4		4	1	8
PARRALES ALEX			4		4	1	8
PILLIGUA GENESIS				5	5	0	10
REYES ALISON			4		4	1	8
RIOS MARIANGEL				5	5	0	10
RODRIGUEZ ALLISON				5	5	0	10



RODRIGUEZ AARON		5	5	1	10
SALAZAR GENESSIS		5	5	0	10
TOMALA DANIELA	4		4	1	8
TOMALA FIORELLA		5	5	0	10
ZAMBRANO STEFANO		5	5	0	10

Source: Own elaboration

Table 8 Final results and grades for the third year

STUDENT NAMES	0 correct	1-2 correct	3-4 correct	5 correct	correct	Incorrect	qualification
AGUAYO ANDREA				5	5	0	10
ARREAGA NATHALY				5	5	0	10
BORBOR ANDREA				5	5	0	10
CLEMENTE ABRAHAM				5	5	0	10
CRUZ JONATHAN				5	5	0	10
ESTRADA KARLA			4		4	1	8
LOOR GENESSIS				5	5	0	10
MONTENEGRO GENESIS				5	5	0	10
ORDOÑEZ ANA				5	5	0	10
ORDOÑEZ SCARLETT				5	5	0	10
ORTEGA ABEL			4		4	1	8
PANCHANA LUCY				5	5	0	10
QUIMI ANGELES				5	5	0	10
SANCHEZ WLADIMIR				5	5	0	10
SANCHEZ DOMENICA				5	5	0	10
SANTISTEVAN NIURKA				5	5	1	10
SUAREZ EMILY				5	5	0	10
TOMALA GABRIELA			4		4	1	8
TOMALA ANDREA		2			2	3	4
VILLON BRIGTSY				5	5	0	10

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Source: Own elaboration

Discussions

5.1 Discussions

As for the gamification proposal, it was focused on the content outlines of the curricular planning of the subject of scientific research. The most valuable points that would be summarized in the conclusions would be as follows.

Table 9 Average of the three groups

First Year	Second Year	Third Year	Average
8.9	9.2	9.43	9.18

Source: Own elaboration

Table 9 shows that the scores of the groups are very good with a very acceptable overall average with the quiz tests of 91.18, all students were able to take the tests that were simple because they were only giving feedback to the class through a game.

5.2 Advantages

The didactic proposal encouraged the development of teaching processes that were very significant for student learning, the proposed activities contributed to a debate among teachers in their pedagogical work, with a vision oriented to innovation. In the legal representatives or parents and family, there was feedback on the advantages of gamified playful



activities as a strategy to help in the educational processes of their children.

It should be noted that gamification is an important element that introduces the full potential of games to the educational environment, for the development of student training in class and allows learning to be fun and natural. It proposes a chain of interesting, participative, fun, relaxing or motivating activities that have sometimes been limited. The implementation of gamified activity is a didactic methodology that improves students' teaching skills and abilities.

The public and private educational units must take risks and bet on academic innovation, break paradigms that cause harm to education, must initiate new teaching approaches, taking into account that many contents are monotonous, boring and traditional, and do not include the needs of the current situation and interests of students. In the new pedagogical innovation, the educational trilogy must work together with parents, teachers and authorities. Sincerely recognize that concrete actions must be taken to improve student learning through gamification strategies that facilitate dynamic and attractive areas. The qualities of students increase when all those involved in education are empowered over the drawbacks and the education of young people is reciprocally respected.

Gamification has been proven to be a learning technique to be used in the educational context as part of their academic praxis. Therefore, teachers should reflect, question themselves about their role, and when they can choose an appropriate methodology, in this way, collaborate with the education of schoolchildren, supporting them in the development of skills that will help them to face their social environment, establishing in the educational establishment a responsibility with the training of students.

The implementation of gamified games in different educational spaces becomes effective when real didactic training are included, to transform student practices that promote the participation and motivation of young people as main actors and favor the development of unnecessary skills to refine learning processes.

Gamified activities, properly established, become a positive tactic that can be associated individually or in groups. Gamification does not discriminate or exclude, on the contrary, it accepts the individual because it recognizes the potentiality and talent, materialized through timely discovery.

5.3 Inconveniences

Some teachers observed that when they tried to introduce the use of gamification in their classes, certain behavioral problems arose, and because the rhythm of the classes was delayed because some students did not like teaching with games, as everything has an exception, they felt annoyed and bored. It must be assumed that not all young people have the defined qualities to work under these methodologies. If this circumstance happens, it is necessary to insist on the importance and the necessity to practice the execution of group distributions.

Future lines of research

For future research, it is recommended to carry out a more ambitious intervention on learning with playful games, including all higher educational grades and where all curricular disciplines are integrated, and involving the educational trilogy of the learning community: families, teachers and students. Secondly, another prospect would be the direct link and the need to deepen in related work with the academic preparation of the teacher in these educational aspects, since teachers who are inserted for the first time in their classroom, have no experience with the application of playful learning with technological tools that promote gamification, therefore, do not develop the basic structures, and do not arouse the interest of students.

Design a website with gamification tools, which allow for systematically evaluating student participation, according to the implementation of an educational platform. It would be very interesting to present these models that allow the enhancement of gamified activities, so useful to design them successfully in the Ancon Educational Institution.

Conclusion

The results obtained on the proposal of gamified



activities can be used in new contexts, but at the same educational level, for example in basic subjects such as mathematics, language and communication, history and at other higher levels, this experiment has great value in difficult times, the pandemic that is creating new ways of conceiving education and that change at all educational levels.

Exclusively, the education of the diversified cycle is a challenge to be able to attend to all the students from the virtual education as the biggest challenge in the educational stages. Therefore, it is necessary to insist that gamification can be an advantageous methodological approach to favor virtual face-to-face education and increase participation and motivation.

Another advantage is that the students of this technological era are considered digital natives, they were born with a device, they have better skills than teachers in the manipulation and use of the tools and applications they have, and they are also experts in the management of the different educational environments offered by computer science.

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