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REVISTA KRONOS



Educational escape room as a gamification strategy for improving oral skills in the English language

Jonathan Suntaxi Llumiquinga | iD Pontificia Universidad Católica del Ecuador, sede Ibarra (Ecuador)

ABSTRACT Modern education tends to be more flexible and with a variety of strategies that permit learners to develop and propel their language skills. In this regard, the implementation of educational escape rooms are necessary to be accord with these days' demands. The present study aims to identify the functionality and applicability of some games in schools and in different settings that support the improvement of the students' communicative skills. In this way, a mixed-method with a control and experimental group that includes qualitative and quantitative data, observation and a survey permit to understand the students' needs and their perceptions regarding the use of games to enhance their language skills. In addition, it shows the importance to relate and match accurately the language topics with specific games. The most important results show that students are eager to learn by playing and the significance of working in different environments that permit students to change their traditional learning. It is also essential to include that even though traditional games are appealing for young learners, the use of technology and internet connection turned into a powerful tool of motivation and engagement for students. As a conclusion, it was evidenced that modifying the teaching way produces high commitment among students and their curiosity influences to develop positive interaction and communicative skills.

KEY WORDS Games, communication, education.

FECHA DE RECEPCIÓN 11/05/2022

FECHA DE APROBACIÓN 24/07/2022

Escape room educativo como estrategia de gamificación para mejorar las habilidades orales en el idioma inglés

RESUMEN La educación moderna tiende a ser más flexible y con una variedad de estrategias que permiten a los alumnos desarrollar e impulsar sus habilidades lingüísticas. En este sentido, la implementación de salas de escape educativas es necesaria para estar acorde con las demandas de estos días. El presente estudio tiene como objetivo identificar la funcionalidad y aplicabilidad de algunos juegos en las escuelas y en diferentes escenarios que ayuden a mejorar las habilidades comunicativas de los estudiantes. De esta manera, un método mixto, con un grupo de control y experimental que incluye datos cualitativos y cuantitativos, la observación y una encuesta, permiten comprender las necesidades de los estudiantes y sus percepciones sobre el uso de juegos para mejorar sus habilidades lingüísticas. Además, muestra la importancia de relacionar y unir con precisión los temas del lenguaje con juegos específicos. Los resultados más importantes muestran que los estudiantes tienen muchas ganas de aprender jugando y la importancia de trabajar en diferentes entornos que les permitan cambiar su aprendizaje tradicional. También es fundamental incluir que, si bien los juegos tradicionales

son atractivos para los jóvenes estudiantes, el uso de la tecnología y la conexión a Internet se convirtieron en una poderosa herramienta de motivación y compromiso para los estudiantes. Como conclusión, se evidenció que modificar la forma de enseñanza produce un alto compromiso en los estudiantes y su curiosidad influye para desarrollar habilidades comunicativas y de interacción positivas.

PALABRAS CLAVE Juegos, comunicación, educación.

INTRODUCTION

The need for innovation and the implementation of significant strategies that permit students to enjoy their learning and take advantage of their natural skills has motivated teachers and researchers to look for creative and interactive activities that can be able to match games and communication. In this sense, educational escape rooms are considered as innovative strategies that aim to motivate students to enjoy their learning. The present study is important for education and EFL community because educational escape rooms not only promote engaging learning and linguistic improvement but also support the development of social skills such as problem solving, effective communication and productive interaction.

Moreover, it is important to recall that a big problem in education takes place due to traditional strategies and outdated activities, since teacher's lack of training and inexperience can cause boredom in students and their learning could end with no relevant outcomes. In a previous study, Urbieto and Peñalver (2019) highlight the importance of working in different environments and using games in order to motivate students and create better learning outcomes. By a similar point of view, Moura and Santos (2019) state that teachers need to be well prepared to develop innovative strategies and their creativity should be according to the students' needs because nowadays, scape rooms promote modern and active learning in children, adolescents and even in adult students. In this concern, this research brings out relevance to identify and verify if changing spaces and using a variety of games in different settings can in fact, enhance the students' oral skills, since the development of oral communication competence is crucial in students of English as a foreign language, as well as they need to be encouraged to participate actively by using some games in their learning process. That is why, it is necessary to prove with clear and real examples that using scape rooms in schools make fun and easier the teaching-learning process.

Furthermore, it is essential to highlight that the application of some specific games contribute greatly to scaffold the teaching learning process and encourage students to develop and enhance their communicative skills by solving puzzles and looking for clues to get their target. Among the objectives of the study, it is necessary to set up educational escape room as a gamification strategy for the development of English language communication skills. As a consequence, the present research is applied in young students who belong to fifth grades of a private school in Quito observation and a survey are tools that permit to follow and monitor both the control and experimental group, each one with 34 students.

In addition, it is worth mentioning that all of the intervention classes started by telling a short story related to the topic that the students were learning, in this sense, the first class introduced the topic comparative adjectives and the game «Simon says» was played in the theater, the second intervention class contained simple past tense and the games that supported this activity used flash cards and hint cards, it had to be played in the school yards, class number three referred to irregular verbs and the game bingo was played in the coliseum, the last game that supported this study is called Kahoot and used an interactive platform that allowed students to play in real time, this game helped to develop the topic famous places around the world. Additionally, all of the intervention classes that were designed with escape rooms strategies and different games came up with interesting findings such as students' involvement, encouragement, language skills improvement, oral

communication competences, interpersonal and active participation, reasoning and critical thinking. Those findings are relevant and decisive because «Simon say», the use of flash cards and hint cards, bingo game, and the interactive platform Kahoot demonstrate and prove that they are effective and support the language development in an enjoyable way, leaving out the traditional and outdated teaching learning system.

It is crucial to include that this research provides clear evidence that educational escape room as a gamification strategy for improving oral skills in the English language was effective and contributed to the oral communication improvement. In addition, the students showed engagement and the outcomes are positive because this kind of strategy also improves motivation in learners and demonstrates that looking for various activities, in fact supports the students learning skills.

Consequently, the findings and results that are part of this research are positive and heavily inspiring in the educational field, because it was evidenced that the young learners not only displayed improvement in their learning and oral communicative skills but it was also demonstrated that the educational system needs to be updated with the preparation of teachers and their predisposition to create new teaching alternatives that favor the development of cognitive and affective skills of English as a foreign language students.

LITERARY REVIEW

GAMIFICATION

Gamification refers to the appropriate use of different kinds of games with a specific purpose. In this concern, Dicheva *et al.* (2015) argue that gamification in education is related to the application of games in a learning environment. In this case, the learning objectives should be directed to solve and improve the student's educative needs. Furthermore, Cruz (2019) believes that gamification encourages students to fulfill their activities with enthusiasm and joy. By the same token, Williamson (2009) affirms that the use of computer games in schools and high schools allow teachers and students to get real involvement and the outcomes are satisfactory, since adequate resources can end in debates that increase critical skills and communicative competence.

COMMUNICATIVE SKILLS

The development of communicative skills is a need that ought to be applied not only in classrooms but also at homes, and teachers are in charge of looking for relevant activities that help to boost communication. Some-Guiebre (2020) believes that the more interaction students have, the more their speaking skills will improve. In addition, Egan *et al.* (2021) consider that escape rooms scaffold the improvement of communicative skills and leadership in all kinds of students.

EDUCATIONAL ESCAPE ROOMS

DEFINITION

Educational escape rooms are considered as a modern way of implementing teaching strategies in a creative environment; in this regard, López-Pernas *et al.* (2019) state that educational escape rooms are defined as interactive action games that are practiced in different environments and provoke several benefits in students. In addition, the correct use of this strategy supports other social skills like the improvement of communication, leadership among students.

PURPOSE

The use of gamification in schools has helped students to be engaged and encouraged to fulfill their tasks, in this way, Eukel and Morrell (2021) claim that the purpose of educational escape rooms is to improve the learning process through games and meaningful interaction. In addition, Nicholson (2018) stands out that educational escape rooms aims to solve puzzles and discover hidden clues that permit to improve learning and communicative competences.

BENEFITS

Ang *et al.* (2020) coincide that escape rooms strategy motivates students to enhance their problem solving skills and critical thinking, motivation and communicative competences. Moreover, Veldkamp *et al.* (2020) highlight that teachers can create and design material that promotes the students' learning in an active and applicable way, which involves the use of oral communication skills effectively. Papadopoulos and Tenta (2021) assert that implementing escape rooms in educative processes, develop students' experiences in a funny way and their learning become more relevant and appealing, since they have the opportunity to learn by playing in different parts of the school and also in online environments. On the other hand, Martens and Crawford (2019) argue that escape room activities arouse the students' curiosity and in fact, their creativity also is stimulated. Furthermore, Taraldsen *et al.* (2020) highlight that educational escape rooms has brought out positive outcomes that are the result of an organized process, in which teachers are responsible of setting rules and adequate environments that permit students have fun and enjoy their learning while playing.

MAIN FEATURES

There are some characteristics that make escape rooms different from conventional games. In this concern, Fotaris & Mastoras (2019) conclude that main features of educational escape rooms are the following:

- It is drawn on game based learning approach
- It is useful in both online and face to face classroom games
- Promotes collaborative work
- Propels social interaction (interpersonal and communicative skills development)

OTHER APPROACHES THAT SUPPORT EDUCATIONAL ESCAPE ROOMS

There are some basic approaches that are connected and have contributed to the implementation of educational escape rooms.

First of all, it should be mentioned game based learning as the main approach that has contribute to the language improvement. Pho & Dinscore (2015) claim that Game-based learning is related to the use of game elements that have become part of the learning process, since the classroom activities are designed to be played and support the language improvement.

Another interesting approach that can be used with excellent outcomes is storytelling, since it helps to develop communication and creativity. Gunawardena & Brown (2021) assert that making stories is a creative way of developing experiences, which propel values and assertive communication. At this point, is important to highlight that the success of storytelling depends on the teacher's creativity, originality and imagination, which can adapt

to the escape rooms implementation. Moreover, Mokhtar *et al.* (2011) mention and conclude that storytelling supports the enhancement of reading and speaking skills in schools.

In addition, the use of communicative approach is a crucial factor that enable escape rooms to be successful. Jabeen (2014) claims that the students' ability to communicate effectively is a key to get their goal fulfilled. As a consequence, the students will be able to give and receive true and accurate information.

METHOD

The sample for this study was taken from students who are part of 5th Basic Education grade at a private bilingual school in Quito-Ecuador. In this regard, 35 students from fifth «A» belonged to the control group and 35 students from 5th «B» belonged to the experimental group. The students' selection was random because both groups have similar English level (A1) and they study the same topics.

Four intervention classes with different pedagogical strategies took place to identify the applicability and effectiveness of escape room activities in a class period. Moreover, a mix method survey was applied at the end of the interventions to know about the students' perceptions regarding the use of games inside and outside the classroom. In this regard, quantitative and qualitative data helped to obtain accurate outcomes in the current study.

A three-line charts that contained the scale of excellent, good, poor, and number of students with their respective percentages were used to collect data. Moreover, four charts with the categories of communication, interaction, cooperative work and engagement were analyzed independently, the number of students were converted into percentages to verify their accuracy and a detailed analysis gave meaningful information about the data collected and the effectiveness of the games and settings. As a summary another chart with the number of students' games preferences was tabulated, it contained the name of the game, the number of students and the percentage to valid the information.

RESULTS

After the implementation of some games in four classes with different topics, it was evidenced that the students who belonged to the experimental group felt motivated, engaged and developed their communicative skills, while the control group showed difficulty and boredom to complete the tasks sitting on their chairs. It is also important to recall that some parameters such as communication, interaction, cooperative work and engagement were used to identify the effectiveness of the escape room strategy and analyze the outcomes (see Table 1).

First of all, students were told a short story and then to pick some cards that contained clues to reveal the hidden message and after that, they headed to the theater and had to give the order by using the game «Simon says». As it is observed, regarding comparative adjectives, the experimental group used the game «Simon says» to complete the activity and 35 students that represent 100% had an excellent communication, were engaged and interacted totally in the activity by using cooperative work to fulfill the task. Hasbi *et al.* (2022) claim that the use of games in classrooms provoke effective interaction and the students get positively engaged, the authors also include that games are powerful tools for developing vocabulary (see Table 2).

This lesson took place at the yards, and pictures in flash cards and hint cards were used to enhance simple past activities development and communicative skills, in this case, the students had to guess the image and practiced aloud the given activity in the backyard. As it is observed in the table, most of the students used accurate communication and were engaged

with the activity. Moreover, all of the learners displayed full interaction and the cooperative learning strategies were also successful. In this regard, Konomi (2014) stands out that flash cards are the most popular and useful visual materials that support the students' learning process, especially when teacher want to reinforce vocabulary and verbs (see Table 3).

Regarding irregular verbs, a short video was introduced and the students played the game bingo in the coliseum, it was really useful with some modifications, since the learners had to guess the hidden picture and relate with some clues that were located in the room, it is important to note that learning verbs seems hard for some students. In this concern, all of the students that represent 100% looked really involved and their communication was effective, this game permitted to evidence positive interaction. On the other hand, the application of cooperative work needed to be reinforced because 5 students that represent 14.29% showed some kind of discomfort. Tietze (2007) asserts that bingo games promote the development of student's interaction and communicative skills (see Table 4).

The last game was different from the previous games, it was Kahoot, which is an interactive platform where students have the opportunity to play in real time by using their electronics and internet connection. It supported the development of vocabulary for amazing places around the world and the students also had to predict missing words and used clues to discover the hidden name. As it is observed, the elements of communication, interaction and engagement were fully applied by all the learners, Cooperative work did not occur because every student played on their own. It is important to recall that it does not affect as long as the students feel motivated and display enthusiasm and acquire meaningful learning. Medina and Hurtado (2017) highlight the importance of include technology in everyday lessons, the authors also mention that the platform kahoot is a source of motivation and helps to develop vocabulary in students. In addition, Vidergor (2021) claims that digital escape rooms look more appealing and foment commitment with students who are willing to achieve their tasks (see Table 5).

It was necessary to use a comparative chart in order to identify the predominant game. In this case, firstly, a chart to compare escape rooms without the support of technology shows that the preference is relative close. However, 13 students that represent 38.24 showed their preference for «Bingo» games. After adding the technological interactive platform, the results changed dramatically, since the majority of the students' preferences went to Kahoot with a percentage of 94.12, and only two students with a percentage of 5.88 mentioned that Bingo is the game they like the most, Simon says and the use of flash cards were not mentioned in the survey.

To sum up, the percentage of game acceptance is far different; it could be because they love playing online games with the support of technology. It is also important to highlight that all of the learners show high involvement with the application of escape rooms for their educational development.

DISCUSSION

The outcomes obtained from students who belong to 5th grades A and B are encouraging, since it is demonstrated that they prefer to use various games and different environments for their language acquisition. Even though, the word escape rooms is not much familiar for educators, it is pivotal to know that the basis of this strategy is the application of games with concepts and new topics, breaking the walls of traditional settings.

Furthermore, it was evidenced that there is a great acceptance and difference between the uses of traditional games versus interactive technological games. It is also necessary to include that there could be a little disadvantage for the students who don't have good internet connection. In this regard, Mudure-Iacob (2021) presents similar benefits with

Table 1. Number of students who played «Simon says» with puzzles in order to reinforce comparative adjectives

Simon says	Excellent		Good		Poor	
	N.º	%	N.º	%	N.º	%
Communication	34	100				
Interaction	34	100				
Cooperative work	34	100				
Engagement	34	100				

Table 2. Students who used flash cards and hint cards to work with simple past activities

Flash cards / hint cards	Excellent		Good		Poor	
	N.º	%	N.º	%	N.º	%
Communication	31	91,18				
Interaction	34	100				
Cooperative work	34	100				
Engagement	31	91,18				

Table 3. The students played bingo to identify irregular verbs and their past tense

Bingo	Excellent		Good		Poor	
	N.º	%	N.º	%	N.º	%
Communication	34	100				
Interaction	34	100				
Cooperative work	30	88,24				
Engagement	34	100				

Table 4. The learners used the interactive platform Kahoot!

Kahoot!	Excellent		Good		Poor	
	N.º	%	N.º	%	N.º	%
Communication	34	100				
Interaction	34	100				
Cooperative work	0	0				
Engagement	34	100				

Table 5. Comparative chart. Number of students' games preference

Games	N.º	%	Games	N.º	%
Simon says	9	26,47	Simon says	0	0
Flash cards	12	35,29	Flash cards	0	0
Bingo	13	38,24	Bingo	2	5,88
			Kahoot!	32	94,12
Total	34	100		34	100