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Impact of Game-based learning on oral production into the English as a Foreign Language (EFL) classroom in second graders

El impacto del aprendizaje basado en juegos en la producción oral en el aula de inglés como lengua extranjera en estudiantes de segundo grado

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ABSTRACT

This research aims to determine whether Game-Based Learning (GBL) improves the English language proficiency of students in the realms of vocabulary, fluency, and accuracy. An experimental design was employed, featuring two groups of second-grade students within a trilingual (Spanish, English, French) school located in Machala, Ecuador. Group A engaged in English lessons delivered through Game-Based Learning methodologies, while Group B received conventional instruction. The pedagogical repertoire of Group A included games such as "Snakes and Ladders," "Twister," and "Killing Flies." Pre- and post-tests were administered to measure linguistic competence, and student surveys and teacher observations were utilized to gather additional data during the implementation. The findings suggest that Game-Based Learning is an effective approach to improving the linguistic skills of young learners. A statistically significant divergence was observed between the two cohorts. Notably, Group A exhibited a marked enhancement, particularly in fluency and vocabulary, where the students manifested an improvement rate of +6.8% and +2.7% respectively, when contrasting with the outcomes witnessed in Group B. Game-Based Learning represents a significant pedagogical approach in the teaching of the English language, warranting further academic research into its effectiveness and optimal implementation in diverse elementary educational settings.

Keywords: method, game, learning, proficiency, motivation

RESUMEN

La investigación tiene como objetivo determinar si el Aprendizaje Basado en Juegos (ABJ) mejora la competencia en inglés de los estudiantes en vocabulario, fluidez y precisión. Se utilizó un diseño experimental con dos grupos de estudiantes de segundo grado en una escuela trilingüe (español, inglés, francés) en Machala-Ecuador. El grupo A recibió sus clases de inglés utilizando el aprendizaje basados en juegos, mientras que el grupo B recibió instrucción tradicional. EL grupo A practicó juegos como "Snakes and Ladders", "Twister" and "Killing Flies" Se administraron pre y post-pruebas para medir la competencia lingüística, y se utilizaron encuestas de estudiantes y observaciones del docente para recopilar datos adicionales durante la implementación. Los hallazgos sugieren que el aprendizaje basado en juegos es un enfoque efectivo para mejorar las habilidades lingüísticas de los jóvenes aprendices. Se observó una diferencia estadísticamente significativa entre los dos grupos. El Grupo A mostró una mejora, especialmente en fluidez y vocabulario, donde los estudiantes tuvieron una tasa de mejora del +6.8% y +2.7% respectivamente en comparación con los resultados observados en el Grupo B. El aprendizaje basado en juegos representa un enfoque pedagógico significativo en la enseñanza del idioma inglés, justificando una mayor investigación académica sobre su eficacia e implementación óptima en diversos entornos educativos de primaria.

Palabras clave: método, juego, aprendizaje, competencia, motivación

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INTRODUCTION

Learning a second language (L2) demands a cognitive challenge for students as they immerse themselves in a linguistic system distinct from their native tongue (L1). This language acquisition process extends beyond memorizing vocabulary, grammar, and phonetics to embrace cultural nuances embedded within idiomatic expressions and other communicative forms. Moreover, L2 Learning fosters the development of crucial soft skills, such as collaboration, leadership, flexible thinking, and effective communication, allowing learners to address problems from diverse perspectives (Chenxu, 2022). L2 acquisition is, therefore, not merely a matter of rote memorization but a holistic endeavor that enhances hard and soft skills.

This study seeks to determine whether Game-Based Learning (GBL) improves the English language proficiency of students in the realms of vocabulary, fluency, and accuracy. For many years, traditional language learning methods have often lacked the intrinsic motivation necessary to spark genuine interest and engagement, especially in young learners. Students may be compelled to learn without experiencing the joy and excitement that should accompany the process. Effective strategies for fostering oral production include positive role models, enjoyable activities, frequent repetition, incorporating physical movement, encouraging participation -without pressure to speak- consistent praise for effort, and a teacher who genuinely enjoys the learning process.

The Ecuadorian English Language National Curriculum (2016) emphasizes engaging and enjoyable English language learning materials, moving away from traditional rote memorization of grammar rules and vocabulary lists. This curriculum promotes tailoring activities to students' interests to boost motivation and language acquisition. English language teachers are encouraged to act as facilitators, empowering students to explore topics relevant to their interests. Early primary school is considered the ideal time to cultivate oral production, as young learners are naturally inclined to imitate and participate in teaching scenarios where games can be part of their daily interaction to learn English as a foreign language.

Game-Based Learning (GBL)

This approach has become more popular in recent years, especially for promoting learning in children. Alotaibi (2024) defines GBL as a tool that integrates games into the learning process, developing greater engagement, motivation, and enjoyment among learners. Within early childhood education, this game-based pedagogical approach presents an opportunity to advance cognitive, social, and emotional development.

Littlewood, as cited in Kaur & Aziz (2020), claimed that Game-Based Learning provides an effective solution to the challenges of teaching oral proficiency. The incorporation of games into language instruction brings positive outcomes. Teachers can create engaging and authentic learning

experiences that motivate learners to use English in real-world contexts rather than solely focusing on grammatical structures.

A necessary pedagogical paradigm shift towards leveraging fundamental human learning styles like exploration and play has foregrounded Game-Based Learning as a promising instructional strategy. Grace (2019), as cited in Adipat et. al (2021), argues that this approach effectively bridges student engagement preferences with sound pedagogy. Game-Based Learning provides educators with an engaging tool to enhance student satisfaction and ultimately improve academic outcomes by harnessing the intrinsic motivation associated with play.

Game-based learning remarks sustaining engagement in L2 acquisition, specifically in young learners. This engagement benefits young learners and their limited attention spans, which Idris et al. (2020) considered between 10 and 20 minutes. Therefore, this approach is against traditional grammar instruction due to complexity and memorization.

Educators can facilitate implicit language acquisition, mirroring L1 development by integrating playful activities (Adipat et al., 2021; Grace, 2019). The elements of fun and competitiveness inherent in games can effectively counteract waning interest and bolster motivation.

Positive impacts of GBL on EFL learners

Implementing games in the EFL class positively influences second language acquisition in three main ways: social, cognitive, and neurological.

Interactivity as Social Impact

The author Kucher (2021) argues that games that offer meaningful interactions maintain high rates of Kucher (2021) argues that games that offer meaningful interactions maintain high rates of attentiveness in learners and positively boost their performance on evaluations compared to traditional project-based instruction. This interactivity between a player and the content can be further expanded by including inter-player interactions, which can foster collaborative Learning and even facilitate friendly competition among small groups of students.

Moreover, Game-Based Learning is increasingly recognized as an optimal method for cultivating essential problem-solving skills for societal adaptation, particularly for digitally influenced millennial learners who favor engaging and interactive environments (Yunus & Hua, 2021).

Cognitive

Cognitive psychologists frequently assert that involving students in solving authentic, real-world problems can positively impact their learning outcomes (Kucher, 2021). This concept means that the teacher is the one who creates games with a pedagogical objective and must prioritize problem-solving when devising the game in question. Whether a digital or physical game has an educational purpose, it must be mentalized to challenge the mind to solve it. Gee (2005), as cited in

Kucher (2021), mentioned that an effective Game-Based Learning environment should present learners with a series of demanding problems that they must persistently solve to the point where their solutions become practically natural.

A reasonable interpretation posits that the effectiveness of Game-Based Learning (GBL) hinges on specific characteristics of the educational game itself. First, interactivity is crucial, as the game should induce a change in the player. Second, it must operate within a framework of established and mutually understood rules and boundaries. Third, clearly defined objectives and goals are necessary to cultivate player motivation. Lastly, the game needs a quantifiable metric for tracking progress and a discernible conclusion (Delgado, 2022).

Neurology

The literature on neuroscience Game-Based Learning (GBL) is limited; however, games outside of the neuroscience field have been shown to have positive educational outcomes such as increased application of physiology concepts and potentially diagnostic ability in a clinical setting and improved test performance.

Near-infrared spectroscopy, used to examine brain activity in different studies, shows varied brain activity during different game genres, potentially due to task difficulty and user factors. However, single-channel analysis indicates significant left frontal activation. Notably, game-based activities elicited more prominent prefrontal activation than non-game-based ones, suggesting greater attentional engagement in gamified contexts.

Game-based Learning's reward mechanisms may heighten attention and prefrontal cortex activity (Kober et al., 2020). Game elements, like points and feedback, stimulate the orbitofrontal cortex, which is linked to reward processing (Krath et al., 2021; Zainuddin et al., as cited in Krath et al., 2021). This reward processing, associated with prefrontal activation, suggests that game elements enhance Learning by increasing motivation and engagement, making Game-Based Learning an effective educational approach.

Oral production

Oral production in a second language is inextricably linked to a learner's ability to communicate effectively and confidently, which is why one key factor is the motivation teachers arouse in their students. Teachers are responsible for motivating and creating a comfortable atmosphere inside the classroom that inspires learners to engage actively and reach their full potential in oral language proficiency.

Communicative language teaching

Communicative Language Teaching (CLT) is a set of principles guiding language teaching goals, learning processes, effective classroom activities, and teachers and students with their specific roles (Richards, 2006). To meet its objectives, teachers shift to facilitating and monitoring while

accepting students' errors as part of learning—building their confidence and using mistakes as metalinguistic tools (Delgado, 2022). Unlike earlier methods, CLT emphasizes student collaboration and agency, moving away from the individualist approach of traditional teaching. Learners are encouraged to take responsibility for their progress, engaging in pair or group work that fosters comfort and communication (Delgado, 2022). This emphasis on interaction and collaborative tasks within CLT directly fosters opportunities for authentic oral production, allowing students to actively practice and refine their spoken language skills in meaningful communicative contexts.

In conclusion of this analysis, second language (L2) acquisition presents a cognitive challenge involving linguistic systems and cultural nuances while simultaneously fostering soft skills like flexible thinking and communication (Chenxu, 2022). Recognizing the limitations of traditional, often unengaging methods, the national curriculum (2016) advocates for student-centered, enjoyable English language learning. This need to promote a motivational class environment may be achieved by implementing Game-based Learning to enhance oral production.

METHODOLOGY

Context

This study was conducted at a private school in Machala, Ecuador. The school's name is Principito & Marcel Laniado de Wind, and it comprises approximately 468 students in general basic education.

The school has an IBO program certificate and offers the Primary Years Programme (PYP), the Middle School Program (MYP), and the Diploma Program (PD). This IB curriculum promotes the learning of foreign languages such as English, French, and Mandarin Chinese, which together cover 60% of the school program. The English language comprises 47.5%, the French language covers 7.5%, and Mandarin Chinese has 5% of the foreign language program.

Research approach and method

The researchers considered an experimental design for this study. According to Creswell (2012), this type of research can be used to assess the effects of an intervention or treatment by measuring outcomes before and after its implementation. This design involved measuring the participants' vocabulary knowledge before and after a period of instruction incorporating GBL activities and their accuracy and fluency while participating in the games.

Technique and instruments to collect information

The researchers and the teacher involved in this study used specific tools to get the findings, such as a focus group, observation, and a questionnaire. The author used a structured approach involving pre-tests, post-tests, and focus group discussions to refer to research questions. These tools gather, analyze, and interpret data, ensuring the research remains credible, valid, and reliable.

According to De Vaus (2001), in social studies, pre-and post-tests measure students' knowledge, understanding, and skills before and after a specific instructional period or intervention. In this study, the pre-and post-tests were crucial in evaluating the effectiveness of Game-Based Learning on students' oral production skills, especially their accuracy, fluency, and vocabulary.

Additionally, observation is a process where an observer, often an administrator or instructional coach, spends time in a classroom to collect data and provide feedback on teaching and learning practices (De Vaus, 2001). Finally, focus groups allowed for collecting in-depth qualitative data through participant-group interactions. As Billups (2019) notes, focus groups provide a platform for research-driven discussion that centers on the key areas of interest.

This study followed ethical principles throughout the research process. The researchers gave each legal custodian of the participants considered for this study an informed consent form to guarantee the anonymity and confidentiality of the data collected so that it could be used solely for this research.

Participants

Students from Second grade were considered for this study. This level had two classes: A and B. Second-grade class A students were considered the experimental group, while second-grade class B students were part of the control group. This group had 43 students altogether: 22 in Class A and 21 in Class B. This study responded to a convenience sample. Creswell (2012) determines that convenience sampling is a non-probability sampling method where participants are selected because they are readily available and accessible to the researcher; therefore, the experimental group was selected due to their academic performance to measure the impact of Game-Based Learning.

Material Design

The researchers initially used a printed version of an evaluation worksheet as a pre-test and post-test to measure their accuracy, fluency, and vocabulary. This instrument consisted of a set of tasks that comprised the identification and utilization of acquired vocabulary, the ability to employ it accurately within systematized game structures, and the ease and fluency of its application. These aspects were assessed through rubrics and observation checklists.

Following a spiral curriculum that promotes content and form structure that growth in every academic year, the content given in class for the experimental group was modified by including Game Based Learning. Having this idea in mind, the researchers designed a three-week group intervention and modified the lesson plans for the group to intervene. Basically, the adaptations were addressed using Game-Based Learning to include games such as slides and ladders, slap the fly, and twister as part of the instruction.

The game Snakes and Ladders was included to reinforce vocabulary accuracy. Players take turns rolling a die to play Snakes and Ladders, moving their piece accordingly and landing on either

the bottom of a ladder or the head of a snake (sliding down) to be the first to reach square 100. (Explain how to use it for your project) The game Snakes and Ladders is used as a tool to reinforce the correct use of vocabulary, and students can progress through the game by rolling a die and aiming to reach square 100 while navigating ladders (ascending) and snakes (descending). The squares on the board incorporate the vocabulary that is required to be learned, entailing the students to land on a square to use the vocabulary related to the communicative structures taught. The game enhances accuracy, fluency, and vocabulary acquisition by necessitating contextualized language production during gameplay.

Likewise, the game Slap the Fly was used to recall vocabulary. To prepare this game for class, the teacher researcher had to write a list of vocabulary words on a whiteboard or large paper, spaced out clearly. Then, she divided her class into two or more teams and provided the students with enough fly swatters for each team or individual player. During the game, each team had to select a representative to come to the front; then, the teacher gave a clue, definition, synonym, or example sentence related to one of the vocabulary words, so students raced to slap the correct word with their fly swatter. The first student to correctly slap the word earns a point for their team. After that, students would continue with different words and clues until the game ends.

Finally, the last game implemented was Twister. This game aimed to boost the accuracy in forming sentences using the new vocabulary. There are many advantages of playing Twister in class, like combining mental skills with physical ones and boosting the connection between these areas, being conscious of their capabilities in combination with the new knowledge, which motivates them to keep learning. Twister was adapted for language learning. Circles on the Twister mat contained target vocabulary. When instructed to place two body parts on specific colors, players could only proceed if they accurately constructed a sentence using action verbs from the vocabulary, incorporating the modal verbs "can" or "cannot." This integration aimed to improve vocabulary acquisition, fluency, and grammatical accuracy within kinesthetic and engaging content.

RESULTS AND DISCUSSION

Table 1
Pre-test and post-test results from Group A

SKILL	PRE-TEST	POST-TEST	IMPROVEMENT%
Fluency	86,8%	93,6%	6,8%
Accuracy	90,9%	92,7%	1,8%
Vocabulary	86,8%	89,5%	2,7%

Note: Elaborated by García and Castillo (2024)

The results in Table 1 show significant improvement, especially in fluency. The effectiveness of GBL is demonstrated through the rates of 6,8% in this aspect during the games, learners also gained self-confidence in communication. The games encouraged repeated practice and provided opportunities for students to express themselves freely, leading to significant advances in fluency due to their engaging nature. Another relevant outcome was to find that accuracy also showed progress, with 1,8% improvement. The observed result in this aspect resulted from the GBL approach, which promoted the development of accurate language use through interactive and engaging activities that gives occasions for repeated training and instant feedback. The last aspect measured was vocabulary which shows 2.7% growth. It was notable to see the lexicon usage, especially the prompt words managed to express abilities that learners were able to apply in complete thoughts.

The findings are aligned with those previously reported that the integration of play into learning environments can effectively cater to children's natural inclination towards play-based engagement. Educational games offer the right approach, as they allow learning to occur implicitly, without the learner being consciously aware of the instructional aspect. This conclusion agrees with research highlighting the significant impact of practical application on knowledge acquisition.

Table 2
Pre-Test and Post-Test Results from Group B

SKILL	PRE-TEST	POST-TEST	IMPROVEMENT%
Fluency	89%	85,7%	-3,3%
Accuracy	88%	89,5%	1,5%
Vocabulary	97,1%	92,3	-4,8%

Note: Elaborated by García and Castillo (2024)

Furthermore, while Group B demonstrated a -4,8% decrease in vocabulary acquisition, the constant pressure to communicate exclusively in English, coupled with a potential lack of intrinsic motivation to achieve fluency within this constrained environment, may have inadvertently hindered students' natural fluency and confidence in oral expression. The repetitive nature of English-only instruction may have created anxiety and inhibited the natural flow of communication, potentially affecting their overall oral performance, which is seen in the bar graphs depicting fluency and vocabulary percentages.

Table 3
Pre-Test and Post-Test Results from Group A and B

GROUP	PRE-TEST	POST-TEST	IMPROVEMENT RATE
Group A (GBL)	88%	91,9%	+3,9%
Group B (TM)	91,3%	89,1%	-2,2%

Note: Elaborated by García and Castillo (2024)

Group A, which utilized game-based learning, demonstrated a significant improvement in their test scores, increasing from 88% in the pre-test to 91.9% in the post-test, resulting in a positive 3.9% improvement. This suggests that the engaging and interactive nature of game-based learning effectively enhanced their understanding and retention of the material. The interactive elements and competitive spirit fostered by games likely motivated students to actively participate and strive for higher achievement.

In contrast, Group B, which employed traditional teaching methods, showed a slight decline in their scores, decreasing from 91.3% in the pre-test to 89.1% in the post-test, resulting in a negative 2.2% improvement. This suggests that while traditional methods can be effective, they may not have been as engaging or motivating for this particular group of students. The lack of interactive elements and the potential for passive learning may have contributed to the slight decline in their performance.

Table 4

Student survey from Group A and B

	TBM GROUP A	DM GROUP B
QUESTIONS	STUDENTS	STUDENTS
Q1: Motivation and engagement	81,8%	42,8%
Q2: Attention span	82,9%	38%
Q3: Class participation	86,3%	46,4%
Q4: Accuracy pronunciation and grammar	79,5%	45,2%
Q5: Vocabulary	87,5%	41,6%

Note: Elaborated by García and Castillo (2024)

The outcomes show that TBM Group A significantly outperformed DM Group B across all five indicators. The differences range from +34.3% to +45.9%, suggesting a strong positive impact of TBM (Task-Based Methodology) on student perceptions. These differences are more visible in Vocabulary (Q5) which shows the largest gap (+45.9%), indicating that TBM may better support vocabulary acquisition. The nearly 40-point gap suggests that TBM lessons were more stimulating, meaningful, and goal-oriented. Task-based learning likely provided students with real-world relevance and autonomy, leading to higher intrinsic motivation. In contrast, the DM group likely experienced more passive learning (e.g., grammar rules first, then examples), which may have felt less interactive or engaging. The second highest value is attention Span (Q2) which also has a large difference (+44.9%), suggesting TBM keeps learners more focused. This 45-point difference indicates TBM lessons were more mentally engaging and included varied, hands-on activities and games that helped sustain focus.

In TBM, students are usually involved in active problem-solving or communicative tasks, which demand sustained attention; moreover, praising students is part of the formative reward after giving feedback. On the contrary, DM's emphasis on structure and form may have led to cognitive overload or boredom, especially among students who learn better through doing rather than listening. Motivation and engagement (+39%) and class participation (+39.9%) show that TBM likely fosters a more dynamic and interactive learning environment. shows that TBM fosters an environment where students are more willing to take part, likely due to collaborative tasks and peer interaction. Participation is essential in language learning and TBM encourages authentic communication, which naturally increases speaking turns and involvement. In addition, TBM provokes incidental learning and meaningful use of language to more durable gains in accuracy. In TBM, students might self-correct or receive feedback during tasks, reinforcing grammar/pronunciation in context.

The data suggests that TBM builds confidence and willingness to communicate and encourages transferable skills (speaking, vocabulary use, real-time accuracy). The Task-Based Method (TBM) aligns with constructivist principles (learning through doing, collaboration, and context), which these results strongly support.

Table 5

Teacher observations in groups A and B

	TBM GROUP A	DM GROUP B
QUESTIONS	TEACHER	TEACHER
Q1: Motivation and engagement	86,3%	40,4%
Q2: Attention span	88,6%	46,4%
Q3: Class participation	95,4%	46,4%
Q4: Accuracy pronunciation and grammar	88,6%	47,6%
Q5: Vocabulary	90,9%	54,7%

Note: Elaborated by García and Castillo (2024)

Analysis

The data shows that the TBM Group A group had significantly higher percentages in motivation, engagement, and class participation. This increase suggests that task-based activities may provoke a more dynamic environment, eliciting learners to language immersion. Data also demonstrates that attention span is stronger in this group, which involves students in more interactive and goal-oriented tasks design in a task-based learning class. These results support the implementation of communicative, learner-centered strategies in the English language class. Moreover, this observation-based evidence strongly supports further implementation and study of TBM for improved learner outcomes.

On the other hand, the outcomes from the DM Group B indicates that traditional English language classes focused on deductive method yielded significantly lower results which ultimately indicates that teacher-centered approaches may not be as effective in sustaining motivation or promoting active language use, especially among learners who benefit from experiential and communicative activities through games.

The data suggests that game-based learning had a significant positive impact on student engagement, motivation, and learning outcomes in Group A. In contrast, traditional methods appeared to be less effective in engaging students and promoting active learning in Group B, which may have resulted in lower levels of achievement in key areas like attention span, class participation, and language accuracy. The study indicated that Game-Based Learning approaches significantly improved second graders' vocabulary acquisition, fluency, and accuracy in the EFL classroom. Our data is consistent with previous findings by Adipat et al. (2021), which state that Game-Based Learning methodologies facilitate increased student engagement and provide a more robust framework for active participation in the educational process.

The results of this study matched previous observations made by Adipat et al. (2021), which emphasizes that Game-Based Learning transforms educators into active participants and facilitators within the learning process, unlike traditional teaching methods, which often involve passive students who may struggle to stay engaged, this approach fosters greater interaction and involvement. This strategy is a departure from traditional pedagogy, where teachers disseminate information to passive and often disengaged students.

This study reinforces the conclusions of the earlier work by Adipat et al. (2021), claiming that the design of effective Game-Based Learning activities hinges on the ability to maintain student engagement. The creation of gameplay cycles is a key principle in this design, and it can be repeated without leading to boredom. The design of the Game-Based is aligned with the principle learning activities employed in this research with second-grade students to improve oral production. Additionally, the results of both student surveys and teacher interviews validate the importance of GBL activities as a key design factor in the learning process. Both teachers and students agreed on how motivating and challenging it is to be able to learn in a playful environment where there is not the pressure of being graded but rather one that applauds mistakes as a means to achieve an end without dismissing the process, critical for fostering sustained engagement and maximizing the learning potential of game-based educational tools.

Adipat et al. (2021) suggest that thanks to the inherent nature of games, where repeated tries are often required to improve, they promote a more positive perception of failure in Game-Based Learning compared to traditional academic environments. This repeated-attempt structure can instill in students the idea that challenges are surmountable. In an educative context, to maximize their

effectiveness, educational games must be designed to elicit desirable student behaviors through carefully crafted interactions and feedback mechanisms that cultivate positive emotional and cognitive responses during repeated gameplay. These observations are in accordance with the findings of this study supported by observations from the second-grade teacher, who noted that students engaged in Game-Based Learning activities demonstrated a greater willingness to embrace challenges and persist through errors until achieving success. Indeed, the teacher observed that students were more receptive to feedback within the game context, as this feedback facilitated continued engagement and improved performance throughout the activity.

The results agreed with the established literature published by Tavares (2022), who states that Game-Based Learning has proven superior to traditional teaching methods, particularly when it comes to vocabulary retention. A study followed by Khan et al. (2003) cited in Ling & Abdul Aziz (2022) encompassing five phases and a review of 16 articles published between 2014 and 2022 concludes that Game-Based Learning offers an advantageous and viable approach to vocabulary instruction. Their study asserted that it facilitates the development of a mental lexicon, enabling spontaneous word retrieval during expression. Beyond just retaining new words, games also boost motivation, foster meaningful learning, and encourage the development of critical thinking, decision-making skills, and overall academic performance articulating any notion. Traditional vocabulary instruction, relying on methods like chalk and talk, presents difficulties. Research indicates that this approach can be ineffective, often leading to student demotivation and poor retention of learned vocabulary (Ling & Abdul Aziz, 2022). This aligns with the results of Group B, who learned the vocabulary through the traditional method and showed a lower level in new vocabulary acquisition. This contrasts with Group A, who were taught through Game-Based Learning and showed an increase in their acquisition of new words throughout playing games. These results lead us to consider the significant role of motivation generated by game-based learning, which enables students to activate their long-term memory and retain a greater amount of information, in this case, vocabulary.

The observations and surveys support Ahmed et al. (2022) study, which stated that while games can be beneficial in language learning by lowering student anxiety and fostering authentic communication, their use in formal EFL classrooms remains limited. A key obstacle is the lack of widespread acceptance among EFL instructors regarding the value of games as a teaching tool. What can be evidenced in the second-grade classroom, since having finished their instruction in the early years, they are deprived of receiving playful instruction from the teachers, so it would be convenient to instruct them in the creation of game-based learning activities in order to see results in performance and improvement in fluency, accuracy, and acquisition of vocabulary and the motivation that they tried to play a fundamental mental at a biological and emotional level to achieve the objectives set.

The researchers' observations corroborated what the CEFR (2001) stated about oral production, saying that in this case, students can have short and simple conversations, asking and answering questions. Having the opportunity to repeat if necessary and do it slowly, correcting themselves to understand and be understood, which leads us to the data of this study that indicate the effectiveness of Game-Based Learning as a bridge to improved vocabulary acquisition and accuracy, with fluency showing the most significant gains, followed by vocabulary, and lastly accuracy, representing the observed order of improvement. Our findings show how the second grader's students of group A ignored the intrinsic fear that exists when experiencing something new, breaking that barrier through motivation, which is connected to the acquisition of vocabulary, which in turn allows students to have the primary tool to be able to structure their thoughts within simple sentences, being guided with the structure and basis provided in the activity designed as a game to gain accuracy, which in turn after the already mentioned trial and error and the intrinsic constancy that the game generates, it allowed students to acquire it naturally within what is considered fluency at this level of learning, not from a repetitive environment, but from emotion, activating the prefrontal cortex as stated in Kober et. al (2020) increasing expectation and the knowledge acquired.

Contribution to Scientific Knowledge

This study advances scientific understanding by demonstrating the incorporation of Game-Based Learning into their classrooms, providing valuable insights and contributing significantly to the existing body of literature on effective teaching practices for primary school students.

Limitations

According to the teacher who implemented the games, one limitation of this study was the design of the educational games, which proved challenging to implement with larger groups. Students often experienced longer waits for their turns.

Besides, the teacher that the games reported the need for increased disciplinary control due to the competitive nature of the activities, which caused heightened excitement and potential disruptions.

CONCLUSIONS

These findings have important outcomes for educators who want to incorporate Game-Based Learning as a tool into their classrooms. They provide valuable appreciation and contributions to the literature on effective teaching practices that already exist.

The use of Game-Based Learning activities facilitated improved vocabulary acquisition, fluency, and accuracy among second-grade students. Statistical analysis of student and teacher survey data further substantiated these positive outcomes. Using the reward produced by the games in the prefrontal cortex to provoke motivation, according to studies, is directly related to long-term information retention.

By contrast, the traditional method used in schools proved to be unsuccessful in allowing second-grader students to achieve or even maintain their standard performance levels in fluency, accuracy, and vocabulary acquisition. Indeed, statistical analysis revealed a decline in student proficiency across these measures.

Students that took part in GBL activities demonstrated significantly higher levels of participation, motivation, and confidence. There is an opportunity through GBL activities to clarify and connect new topics to familiar games and natural interaction played a crucial role in enhancing their engagement, contributing to notable improvements in fluency, accuracy, and vocabulary acquisition.

Authors' Contribution

García Macías Viviana. Conceptualization, Design of the educational games, Formalization of the Analysis, Methodology, Data collection, Investigation, Supervision, Initial Draft Creation, and Review and Editing of the Manuscript.

Castillo Noriega Martha. Conceptualization, Formalization of the Analysis, Methodology, Investigation, Supervision, Initial Draft Creation, and Review and Editing of the Manuscript.

Informed Consent: The researchers established communication with the institution for the informed consent to conduct the study.

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