UNIVERSIDAD BOLIVARIANA DEL ECUADOR

TRABAJO DE TITULACIÓN

UNIVERSIDAD BOLIVARIANA DE ECUADOR

MAESTRÍA EN PEDAGOGÍA DEL INGLÉS COMO LENGUA EXTRNAJERA

TRABAJO DE TITULACIÓN

PREVIO A LA OBTENCIÓN DEL TÍTULO DE
MAGÍSTER EN PEDAGOGÍA DEL INGLÉS COMO LENGUA EXTRNAJERA

TEMA

Baamboozle/GoNoodle integrated quiz to improve motivation in EFL students

Autor/es:

THALIA DAYANARA BARAHONA CORAL

Tutor/a:

PhD. (a) Johnny Campoverde López

ECUADOR

2026

DEDICATORY

I dedicate this work primarily to my family, for their unconditional support, patience, and constant encouragement throughout this process. Thank you for believing in me even in the most difficult moments.

To my mother, who is my greatest inspiration and the driving force that motivates me to move forward every day, for giving me the strength and the reason to never give up.

ACKNOWLEDGMENT

I express my sincere gratitude to my family for their love, understanding, and continuous support throughout this process.

In a very special way, I would like to thank my tutor PhD (a) Johnny Campoverde López, who was a fundamental pillar in the development of this research. Thank you for your patience, dedication, and commitment, for providing your time, guidance, and knowledge. Your constant support made the completion of this work possible, as without your guidance and assistance, achieving this goal would not have been possible.

RESUMEN

La presente investigación aborda la problemática de la baja motivación y escasa participación de los estudiantes en el aprendizaje del inglés como lengua extranjera (EFL), particularmente en contextos educativos públicos con limitaciones de tiempo y recursos. En este sentido, el estudio se desarrolló en la Escuela de Educación Básica Tarquino Idrobo, en la ciudad de Quito, con estudiantes de sexto grado, quienes evidencian dificultades en el compromiso conductual, emocional y cognitivo durante las clases de inglés. El propósito principal de la investigación fue determinar el impacto de la integración de plataformas digitales gamificadas (Bamboozle) y basadas en movimiento (GoNoodle) en la motivación y el rendimiento académico de los estudiantes. El estudio se fundamenta teóricamente en la Teoría de la Autodeterminación (Deci & Ryan, 2000), el modelo motivacional de Dörnyei (2001) y la hipótesis del input de Krashen (1982), los cuales destacan la importancia de ambientes de aprendizaje interactivos, significativos y libres de ansiedad. Metodológicamente, se adoptó un enfoque mixto, combinando técnicas cuantitativas (pretest y postest, encuestas tipo Likert) y cualitativas (observación y entrevistas), aplicadas a una muestra de 40 estudiantes. Los resultados evidenciaron un incremento significativo en la participación activa, el interés por el aprendizaje del idioma y la retención de vocabulario, lo que confirma la efectividad de las estrategias implementadas. Como propuesta, se diseñó una estrategia didáctica basada en la integración sistemática de herramientas digitales interactivas, orientada a fortalecer la motivación estudiantil. En conclusión, el uso de plataformas gamificadas contribuye de manera positiva al desarrollo de un entorno educativo dinámico, favoreciendo el aprendizaje significativo del idioma inglés en contextos con limitaciones estructurales.

Palabras clave: motivación, gamificación, aprendizaje de inglés, plataformas digitales, EFL.

ABSTRACT

This research addresses the issue of low motivation and limited student engagement in learning English as a Foreign Language (EFL), particularly in public educational contexts with restricted time and resources. The study was conducted at Escuela de Educación Básica Tarquino Idrobo in Quito, involving sixth-grade students who showed difficulties in behavioral, emotional, and cognitive engagement during English classes. The main objective was to determine the impact of integrating gamified digital platforms (Bamboozle) and movement-based tools (GoNoodle) on students' motivation and academic performance. The study is theoretically grounded in Self-Determination Theory (Deci & Ryan, 2000), Dörnyei's motivational framework (2001), and Krashen's Input Hypothesis (1982), which emphasize the importance of interactive, meaningful, and low-anxiety learning environments. A mixed-methods approach was employed, combining quantitative techniques (pre-tests, post-tests, and Likert-scale surveys) and qualitative methods (classroom observations and interviews), applied to a sample of 40 students. The results revealed a significant increase in active participation, interest in learning English, and vocabulary retention, confirming the effectiveness of the implemented strategies. As a proposal, a didactic strategy based on the systematic integration of interactive digital tools was designed to enhance student motivation. In conclusion, gamified platforms positively contribute to the creation of dynamic learning environments, promoting meaningful English language acquisition in resource-limited settings.

Keywords: motivation, gamification, English learning, digital platforms, EFL

ÍNDICE GENERAL

LISTADO DE ANEXOS

INTRODUCTION

The teaching of English as a Foreign Language (EFL) has become a fundamental priority in contemporary education due to globalization and the increasing need for communicative competence in international contexts. However, despite its relevance, many educational systems continue to rely on traditional, teacher-centered approaches that limit student participation and reduce engagement. This issue is particularly evident among younger learners, especially those belonging to Generation Alpha, who are accustomed to interactive and technology-driven environments. As Dörnyei (2001) explains, motivation plays a central role in second language acquisition, influencing both persistence and achievement in the learning process. Therefore, rethinking instructional strategies is essential to align them with current educational realities.

In the Ecuadorian public education system, these challenges are intensified by structural limitations such as reduced instructional time, limited access to digital resources, and post-pandemic learning gaps. At Escuela de Educación Básica Tarquino Idrobo in Quito, sixth-grade students receive only three hours of English instruction per week, which is insufficient for sustained language development. Furthermore, the lack of innovative methodologies often leads to passive learning environments that fail to stimulate interest or active participation. According to Mayer (2001), meaningful learning occurs when students actively engage with multimedia content, suggesting that integrating digital tools can significantly enhance educational outcomes.

The necessity of this research arises from the persistent lack of motivation observed in EFL classrooms, which directly affects students' academic performance and language acquisition. Traditional instructional practices frequently emphasize memorization and repetitive exercises, neglecting the emotional and cognitive dimensions of learning. This approach not only limits student engagement but also increases anxiety, which, according to Krashen (1982), acts as a barrier to effective language acquisition by raising the affective filter. Consequently, students become less willing to participate and more likely to disengage from the learning process.

Additionally, the rapid advancement of technology has transformed the way students interact

with information, making it essential for educational practices to evolve accordingly. Digital platforms that incorporate elements of gamification and physical activity offer an innovative solution to this problem by promoting active participation and intrinsic motivation. Deci and Ryan (2000) argue that motivation is enhanced when learners experience autonomy, competence, and relatedness within their learning environment. Therefore, the integration of tools such as Bamboozle and GoNoodle represents a strategic response to the need for more engaging and student-centered pedagogical approaches in EFL contexts.

The current educational landscape reveals a persistent decline in student motivation within English as a Foreign Language (EFL) classrooms, particularly in public school contexts where instructional practices remain predominantly traditional. Students often exhibit low participation, limited interest, and minimal engagement during language learning activities, which directly affects their ability to develop communicative competence. According to Mercer and Dörnyei (2020), learner engagement is a multidimensional construct that significantly influences academic success and is closely linked to emotional and psychological factors within the classroom environment. This highlights the urgency of addressing motivational deficiencies through innovative pedagogical approaches.

In the specific context of sixth-grade students in Ecuadorian public institutions, this issue is exacerbated by limited instructional hours, insufficient technological integration, and the lingering effects of post-pandemic educational disruptions. Learners frequently perceive English as a difficult and unengaging subject, which reduces their willingness to participate actively. As noted by Reschly and Christenson (2012), disengagement is often a result of instructional environments that fail to connect with students' interests and learning preferences. Therefore, identifying effective strategies to enhance motivation is essential for improving both engagement and learning outcomes.

This study is delimited to the analysis of motivational processes in EFL learning through the integration of digital tools, specifically Bamboozle and GoNoodle, within a defined educational context. The research focuses exclusively on sixth-grade students from a public school in Quito, Ecuador, allowing for a contextualized understanding of how these tools influence engagement and learning. By narrowing the scope to this specific group, the study ensures a more accurate evaluation of the intervention's effectiveness within real classroom conditions.

Furthermore, the research is aligned with contemporary lines of educational innovation, particularly those related to digital pedagogy and gamification. As highlighted by Kapp (2012), gamification involves the application of game-based elements in non-game contexts to enhance user engagement and motivation. In this sense, the study contributes to the field of language education by exploring how such strategies can be adapted to resource-limited environments, providing valuable insights for both educators and policymakers.

The object of this research is the pedagogical process of integrating gamified and movement-based digital platforms into the EFL classroom to enhance student motivation. This involves examining how these tools influence different dimensions of engagement, including behavioral participation, emotional involvement, and cognitive effort. By focusing on this process, the study seeks to identify the mechanisms through which digital interventions can transform traditional teaching practices.

Additionally, the research aims to explore the interaction between technological tools and learner-centered methodologies, emphasizing the importance of creating dynamic and inclusive learning environments. According to Reeve (2012), student engagement is fostered when teachers adopt supportive instructional practices that encourage autonomy and active participation. Therefore, this study investigates how digital platforms can serve as facilitators of such practices within the EFL context.

The general objective of this research is to determine the impact of integrating gamified (Bamboozle) and movement-based (GoNoodle) platforms on the motivation and engagement of sixth-grade students learning English as a Foreign Language. This objective reflects the need to evaluate innovative instructional strategies that respond to the evolving demands of modern education.

By achieving this objective, the study aims to provide empirical evidence on the effectiveness of digital tools in enhancing student participation and improving learning outcomes. As suggested by Hattie (2009), the effectiveness of educational interventions depends on their ability to influence student engagement and achievement. Therefore, this research contributes to the identification of teaching practices that can significantly improve the quality of EFL instruction.

The research is guided by the hypothesis that the systematic integration of gamified and movement-based digital platforms significantly enhances students' intrinsic motivation and

engagement in EFL learning. This assumption is based on the premise that interactive and dynamic learning environments promote deeper involvement and reduce learning-related anxiety. According to Ryan and Deci (2020), intrinsic motivation is strengthened when learners experience meaningful and enjoyable learning activities.

In addition to the hypothesis, the study is structured around key scientific questions that explore the relationship between digital tools and student motivation. These questions examine how gamification influences behavioral engagement, how movement-based activities affect emotional responses, and to what extent these tools improve academic performance. By addressing these questions, the research seeks to provide a comprehensive understanding of the impact of innovative teaching strategies in EFL contexts.

The research is structured around a set of clearly defined variables that guide the analysis. The independent variable is the integration of gamified and movement-based digital platforms, operationalized through dimensions such as frequency of use, level of interactivity, and usability. The dependent variable is student motivation in EFL learning, which includes behavioral, emotional, and cognitive dimensions, as well as measurable academic outcomes.

In addition, extraneous variables such as socioeconomic conditions, prior knowledge, and instructional time are considered to ensure the validity of the results. According to Creswell and Creswell (2018), identifying and controlling extraneous variables is essential for maintaining the rigor of research design. Therefore, this study incorporates these factors into its analytical framework to provide a more accurate interpretation of the findings.

The specific objectives of this research are designed to address different dimensions of student motivation and learning outcomes. First, the study aims to analyze the impact of digital platforms on students' behavioral engagement by measuring participation and interaction during classroom activities. Second, it seeks to evaluate emotional engagement by observing students' attitudes, interest, and enjoyment during the learning process.

Additionally, the research aims to assess cognitive engagement by examining students' persistence and effort in completing tasks, as well as their ability to retain and apply vocabulary. Finally, it intends to determine the overall academic impact of the intervention by comparing pre- and post-test results. According to Fredricks, Blumenfeld, and Paris (2004), these dimensions are essential for understanding student engagement as a comprehensive construct.

This study employs a combination of theoretical, empirical, and statistical methods to ensure a comprehensive analysis of the research problem. Theoretical methods include analysis-synthesis, inductive-deductive reasoning, and systemic approaches, which allow for the conceptual understanding of motivation and learning processes. These methods provide the foundation for interpreting the relationships between variables. Empirical methods involve the collection of data through instruments such as surveys, tests, classroom observations, and interviews. Additionally, statistical methods are used to analyze quantitative data, particularly in comparing pre- and post-intervention results. According to Field (2013), statistical analysis is essential for identifying significant differences and validating research findings, ensuring the reliability of the conclusions.

The population of this study consists of sixth-grade students enrolled in a public educational institution in Quito, Ecuador. This population represents a relevant group for analyzing motivation in EFL learning, as students at this level are in a critical stage of language development. The total population includes approximately 120 students distributed across multiple classes. From this population, a sample of 40 students was selected using a non-probabilistic sampling method, allowing for a focused and manageable analysis. According to Etikan, Musa, and Alkassim (2016), non-probability sampling is appropriate in educational research when the objective is to explore specific contexts in depth. This approach ensures that the selected participants provide meaningful insights into the research problem.

This research is classified as applied, as it seeks to provide practical solutions to a real educational problem. It is also descriptive and explanatory, as it aims to analyze the characteristics of student motivation and explain the effects of digital interventions on learning outcomes. The study follows a mixed-methods approach, combining quantitative and qualitative data to achieve a comprehensive understanding.

The use of a mixed-methods design allows for data triangulation, enhancing the validity and reliability of the findings. According to Tashakkori and Teddlie (2010), integrating qualitative and quantitative approaches provides a more complete perspective on complex research problems. Therefore, this methodological choice strengthens the overall quality of the study.

The main contributions of this research are both theoretical and practical. From a theoretical perspective, the study expands existing knowledge on motivation in EFL learning by incorporating digital tools as key variables. It provides empirical evidence on how gamification and movement-

based activities influence different dimensions of engagement. From a practical standpoint, the research offers a structured pedagogical strategy that can be implemented in similar educational contexts. This contribution is particularly valuable for teachers seeking innovative methods to enhance student motivation. According to Laurillard (2012), effective teaching strategies must be adaptable and grounded in evidence-based practices, which this study aims to provide.

The importance of this research lies in its potential to address a critical issue within the educational system: the lack of student motivation in language learning. This problem has significant implications for academic achievement and future opportunities, particularly in contexts where English proficiency is increasingly required. As noted by UNESCO (2021), improving the quality of education is essential for promoting social equity and development.

The novelty of the study is reflected in the combined use of gamified and movement-based platforms to address multiple dimensions of motivation. Its scientific relevance lies in its contribution to contemporary discussions on digital education and student engagement. By providing context-specific evidence, the research supports the development of innovative teaching practices aligned with current educational trends.

This thesis is organized into three main chapters that reflect the logical progression of the research process. Chapter 1 presents the theoretical framework, including the analysis of key concepts related to motivation, gamification, and EFL learning. This chapter establishes the conceptual foundation of the study. Chapter 2 describes the methodology, including the research design, variables, instruments, and data analysis procedures. Chapter 3 focuses on the presentation and validation of the proposed pedagogical strategy, including the analysis of results. Finally, the study concludes with general conclusions and recommendations that highlight the implications of the findings for educational practice.

CHAPTER 1: THEORETICAL FRAMEWORK

1.1 Gamification in EFL Learning

Game-Based Learning and Motivation

Gamification has emerged as a powerful pedagogical strategy that incorporates game mechanics into non-game educational contexts to enhance learner motivation and engagement. In

language learning environments, gamification provides structured challenges, rewards, and immediate feedback, which contribute to increased student participation. According to Deterding et al. (2011), gamification is defined as the use of game design elements in non-game contexts, emphasizing its role in shaping user behavior. This approach is particularly relevant in EFL settings, where motivation often determines the success of language acquisition. By integrating playful elements into instruction, learners are more likely to engage actively with the content.

Recent studies highlight that gamification fosters intrinsic motivation by creating meaningful and enjoyable learning experiences. For instance, Hamari, Koivisto, and Sarsa (2014) found that gamified environments significantly improve user engagement and persistence in learning tasks. In the context of EFL, this translates into increased participation and improved retention of vocabulary and structures. Moreover, the use of platforms like Bamboozle aligns with these findings, as they provide competitive and collaborative learning opportunities. This reinforces the idea that motivation is not only a psychological factor but also a result of well-designed instructional strategies.

From a critical perspective, it is important to recognize that gamification is not inherently effective unless it is pedagogically grounded. Simply adding game elements without aligning them with learning objectives may result in superficial engagement. As Landers (2014) argues, the effectiveness of gamification depends on its integration with instructional design principles. Therefore, this research adopts a structured approach to gamification, ensuring that each activity contributes meaningfully to language learning outcomes while maintaining student interest.

Digital Platforms and Interactivity

Digital platforms play a crucial role in transforming traditional classrooms into interactive learning environments. Tools such as Bamboozle enable teachers to create dynamic quizzes that encourage collaboration, competition, and immediate feedback. According to Bond et al. (2020), digital technologies significantly enhance student engagement by promoting active participation and interaction. This is particularly important in EFL contexts, where communication and practice are essential for language development.

The integration of interactive platforms also supports multimodal learning, allowing students to process information through visual, auditory, and kinesthetic channels. Research by Moreno and

Mayer (2007) demonstrates that multimedia learning environments improve comprehension and retention when properly designed. In this sense, digital tools not only increase engagement but also facilitate deeper cognitive processing. This is especially beneficial for young learners, who tend to respond positively to visually stimulating and interactive content.

However, the implementation of digital platforms must consider contextual limitations, such as access to technology and teacher training. As Selwyn (2016) points out, the effectiveness of educational technology depends on how it is used rather than the technology itself. From the researcher's perspective, this highlights the importance of adapting digital tools to the specific needs and constraints of the educational environment. Therefore, this study emphasizes the strategic use of platforms like Bamboozle to maximize their pedagogical potential.

1.2. Movement-Based Learning (GoNoodle)

Physical Activity and Cognitive Engagement

Movement-based learning integrates physical activity into the educational process, promoting both cognitive and emotional engagement. Platforms such as GoNoodle combine music, movement, and learning, creating an environment that stimulates multiple areas of the brain. According to Ratey (2008), physical activity enhances brain function by increasing blood flow and supporting neural connectivity, which directly impacts learning capacity. This suggests that incorporating movement into EFL instruction can improve both attention and retention.

Empirical evidence supports the positive relationship between physical activity and academic performance. For example, Donnelly et al. (2016) found that students who engage in regular physical activity demonstrate improved cognitive function and classroom behavior. In the context of language learning, this translates into greater focus and willingness to participate. Movement-based activities also help reduce stress and anxiety, creating a more relaxed learning environment that facilitates language acquisition.

From a critical standpoint, the integration of movement in academic settings requires careful planning to ensure that it aligns with learning objectives. While physical activity can enhance engagement, it should not distract from the instructional content. As Tomporowski et al. (2015) argue, the effectiveness of movement-based learning depends on its cognitive relevance. Therefore,

this research emphasizes purposeful movement activities that reinforce language learning rather than serving as mere entertainment.

Emotional Engagement through Music and Movement

Emotional engagement is a key factor in successful language learning, as it influences students' attitudes and willingness to participate. Music and movement-based platforms such as GoNoodle create a positive and enjoyable learning atmosphere, which can significantly enhance motivation. According to Juslin and Västfjäll (2008), music has a profound impact on emotional responses, making it a powerful tool for influencing mood and engagement in educational contexts.

In EFL classrooms, emotional engagement is particularly important because language learning often involves overcoming fear and anxiety. Research by MacIntyre and Gregersen (2012) highlights that positive emotions can broaden learners' cognitive resources and increase their openness to new experiences. By incorporating music and movement, teachers can create a supportive environment that encourages risk-taking and active participation. This aligns with the goal of reducing the affective barriers associated with language learning.

From the researcher's perspective, emotional engagement should be considered a central component of instructional design rather than a secondary outcome. While traditional approaches often neglect the emotional dimension of learning, this study emphasizes its importance in fostering motivation and engagement. Therefore, the integration of platforms like GoNoodle represents a holistic approach that addresses both cognitive and emotional aspects of EFL learning.

1.3 Motivation in EFL Learning

Behavioral Engagement

Behavioral engagement refers to students' active participation in learning activities, including attention, effort, and persistence. In EFL contexts, this dimension is crucial because language acquisition requires continuous practice and interaction. According to Skinner, Furrer, Marchand, and Kindermann (2008), behavioral engagement is a strong predictor of academic success, as it reflects students' involvement in the learning process.

Gamified and interactive learning environments have been shown to increase behavioral

engagement by making learning more enjoyable and meaningful. Research by Schunk, Meece, and Pintrich (2014) indicates that students are more likely to participate actively when they perceive tasks as interesting and achievable. In this sense, digital tools play a significant role in promoting sustained engagement and reducing disengagement.

From a critical perspective, it is important to ensure that behavioral engagement is not superficial but reflects genuine learning. Simply increasing participation does not guarantee meaningful understanding. Therefore, this study emphasizes the quality of engagement, focusing on how digital tools can promote deeper involvement in language learning tasks.

Emotional Engagement

Emotional engagement involves students' feelings, attitudes, and interest in the learning process. Positive emotional experiences can enhance motivation and facilitate learning, while negative emotions can hinder progress. According to Pekrun (2014), emotions play a central role in academic achievement, influencing both cognitive processes and behavioral outcomes.

In EFL learning, emotional engagement is particularly relevant due to the challenges associated with acquiring a new language. Students often experience anxiety, which can reduce participation and confidence. However, interactive and enjoyable learning environments can help mitigate these effects. Research by Li, Jiang, and Dewaele (2018) shows that positive classroom emotions are associated with higher levels of engagement and better learning outcomes.

The researcher adopts the position that emotional engagement should be intentionally cultivated through instructional design. By integrating gamified and movement-based activities, teachers can create a supportive environment that enhances students' emotional connection to learning. This approach recognizes that effective education must address both cognitive and affective dimensions.

Cognitive Engagement

Cognitive engagement refers to the level of mental effort and investment students dedicate to learning tasks. It involves strategies such as critical thinking, problem-solving, and self-regulation. According to Greene (2015), cognitive engagement is essential for deep learning, as it enables students to process information meaningfully and apply it in different contexts.

Digital tools can enhance cognitive engagement by providing interactive and challenging activities that require active problem-solving. For example, gamified platforms encourage students to think critically and make decisions, which supports language development. Additionally, multimedia content can facilitate understanding by presenting information in diverse formats.

From a critical standpoint, cognitive engagement must be supported by appropriate instructional scaffolding. Without guidance, students may struggle to process complex information effectively. Therefore, this research emphasizes the role of the teacher in facilitating meaningful learning experiences, ensuring that digital tools are used to promote deeper cognitive involvement.

1.4. Academic Outcomes in EFL Learning

Learning Achievement and Performance

Academic outcomes in EFL contexts are commonly measured through students' ability to demonstrate progress in language skills, particularly in vocabulary acquisition, comprehension, and communicative use. Learning achievement reflects not only the mastery of content but also the effectiveness of instructional strategies employed in the classroom. According to Biggs and Tang (2011), effective learning outcomes are closely linked to constructive alignment between teaching activities, assessment methods, and intended learning objectives. This suggests that the integration of innovative methodologies, such as gamification and interactive tools, can significantly influence students' academic performance.

Recent research indicates that the use of digital and gamified platforms positively impacts students' academic achievement by increasing engagement and providing immediate feedback. For instance, Clark and Mayer (2016) emphasize that well-designed e-learning environments enhance knowledge retention and performance by combining multimedia elements with interactive tasks. In EFL settings, this translates into improved language proficiency, particularly when students are actively involved in the learning process. Furthermore, continuous feedback provided by digital tools allows learners to identify and correct their mistakes, fostering a more effective learning cycle.

From a critical perspective, academic achievement should not be viewed solely as a result of technological integration but as a product of pedagogical coherence. While digital tools can enhance learning, their effectiveness depends on how they are implemented within the curriculum. As Hattie

and Yates (2014) argue, visible learning occurs when teaching strategies are deliberately aligned with cognitive processes and student needs. Therefore, this study adopts an approach that combines digital innovation with pedagogical rigor to ensure meaningful academic outcomes.

Assessment and Feedback in Digital Learning Environments

Assessment plays a crucial role in measuring academic outcomes and guiding the learning process. In digital learning environments, assessment is often continuous and formative, allowing students to receive immediate feedback on their performance. According to Nicol and Macfarlane-Dick (2006), effective feedback supports self-regulated learning by helping students understand their strengths and areas for improvement. This is particularly relevant in EFL contexts, where ongoing practice and correction are essential for language development.

Gamified platforms such as Bamboozle offer interactive assessment opportunities that differ significantly from traditional testing methods. These tools provide instant results, which can enhance motivation and encourage students to engage more actively with the content. Additionally, digital assessments often incorporate elements of competition and collaboration, which can further increase student involvement. Research by Shute (2008) highlights that formative feedback delivered in real time can significantly improve learning outcomes by reinforcing correct responses and addressing misconceptions promptly.

However, it is important to critically evaluate the quality of assessment in digital environments. Not all forms of feedback are equally effective, and poorly designed assessments may fail to support meaningful learning. From the researcher's perspective, effective assessment should be aligned with learning objectives and provide actionable insights for students. Therefore, this study emphasizes the use of structured and purposeful digital assessment strategies to enhance academic performance in EFL learning.

1.5. Vocabulary Retention and Language Application

Vocabulary Acquisition and Retention

Vocabulary acquisition is a fundamental component of language learning, as it provides the foundation for communication and comprehension. Retention of vocabulary depends on repeated

exposure, meaningful use, and cognitive processing of new words. According to Nation (2013), effective vocabulary learning requires both intentional and incidental learning processes, which involve active engagement with language in various contexts. This highlights the importance of using diverse instructional strategies to reinforce vocabulary acquisition.

Digital and gamified tools have been shown to enhance vocabulary retention by providing repeated practice in engaging formats. Research by Webb and Nation (2017) suggests that spaced repetition and interactive activities significantly improve long-term retention of vocabulary. Platforms like Bamboozle allow students to encounter vocabulary multiple times through quizzes and games, reinforcing learning through repetition and contextual use. This approach aligns with cognitive theories that emphasize the role of active engagement in memory retention.

From a critical standpoint, vocabulary learning should go beyond memorization and focus on meaningful application. Simply recalling words is not sufficient for language proficiency; students must be able to use vocabulary in context. As Schmitt (2010) argues, effective vocabulary instruction involves integrating words into communicative activities that promote deeper understanding. Therefore, this study emphasizes the importance of combining gamified practice with contextualized language use to achieve lasting learning outcomes.

Language Application and Communicative Competence

Language application refers to the ability to use acquired vocabulary and structures in real communicative situations. This dimension is essential for developing communicative competence, which involves not only linguistic knowledge but also the ability to use language appropriately in different contexts. According to Canale and Swain (1980), communicative competence includes grammatical, sociolinguistic, and strategic components, all of which are necessary for effective communication.

Interactive and gamified learning environments provide opportunities for students to apply language in meaningful ways. Activities that involve collaboration, problem-solving, and real-time responses encourage students to use language actively rather than passively. Research by Richards (2006) indicates that communicative approaches to language teaching are more effective in developing practical language skills than traditional methods focused on rote learning. This supports

the integration of digital tools that promote active language use.

From the researcher's perspective, language application should be a central goal of EFL instruction. While many traditional approaches prioritize accuracy over communication, this study advocates for a balanced approach that values both. By incorporating digital platforms that encourage interaction and participation, students can develop the confidence and skills needed to use English effectively in real-life situations.

Cognitive Processes in Vocabulary Learning

Cognitive processes play a crucial role in vocabulary learning, as they determine how information is encoded, stored, and retrieved. Effective learning strategies involve attention, rehearsal, and meaningful association, which facilitate long-term retention. According to Baddeley (2000), working memory is essential for processing new information, and instructional strategies should be designed to optimize cognitive load. This highlights the importance of using methods that support efficient information processing.

Gamified and multimedia learning environments can enhance cognitive processes by providing varied and stimulating inputs that capture students' attention. Research by Sweller, Ayres, and Kalyuga (2011) on cognitive load theory suggests that well-designed instructional materials can improve learning by reducing unnecessary cognitive demands. In this context, digital tools that present information in clear and interactive formats can support more effective learning.

Critically, it is essential to ensure that cognitive engagement is not overwhelmed by excessive stimuli. While digital tools offer many advantages, they can also introduce distractions if not properly managed. From the researcher's perspective, the key is to balance interactivity with cognitive clarity, ensuring that learning activities remain focused and purposeful. Therefore, this study emphasizes the careful design of digital interventions to support cognitive processes in vocabulary learning.

1.6 Student Engagement in Digital Learning

Active Participation

Active participation is a fundamental component of effective learning, particularly in EFL

contexts where interaction is essential for language development. It refers to the extent to which students are involved in classroom activities, including answering questions, collaborating with peers, and engaging in tasks. According to Fredricks, Filsecker, and Lawson (2016), active participation is closely linked to academic success, as it reflects students' willingness to invest effort in learning activities. In digital learning environments, participation can be enhanced through interactive tools that encourage immediate responses and collaboration.

Gamified platforms such as Bamboozle provide structured opportunities for active participation by incorporating elements such as competition, rewards, and instant feedback. These features motivate students to engage more frequently and enthusiastically in classroom activities. Research by Martin and Bolliger (2018) indicates that interactive technologies significantly increase student participation by creating more dynamic and engaging learning environments. This is particularly relevant for younger learners, who tend to respond positively to visually stimulating and interactive content.

From a critical perspective, active participation should not be measured solely by frequency but also by the quality of engagement. Students may participate frequently without demonstrating meaningful understanding of the content. Therefore, this study emphasizes the importance of designing activities that promote both participation and comprehension, ensuring that engagement leads to meaningful learning outcomes rather than superficial involvement.

Student Attention and Focus

Attention and focus are essential for effective learning, as they determine the extent to which students can process and retain information. In traditional classrooms, maintaining student attention can be challenging, particularly when instructional methods are repetitive or lack interactivity. According to Posner and Rothbart (2007), attention is a limited cognitive resource that must be actively managed to support learning processes. This highlights the need for instructional strategies that capture and sustain students' attention.

Digital tools and gamified environments have the potential to enhance attention by providing engaging and interactive content. Research by Chen and Wu (2015) demonstrates that multimedia learning environments can improve attention and comprehension by combining visual and auditory

stimuli. In EFL contexts, this can lead to better retention of vocabulary and language structures, as students are more likely to remain focused during activities. However, excessive use of digital stimuli may also lead to cognitive overload, reducing the effectiveness of learning. From the researcher's perspective, it is crucial to balance interactivity with clarity, ensuring that digital tools support rather than distract from learning objectives. Therefore, this study emphasizes the strategic use of technology to maintain student attention while promoting meaningful engagement.

1.7 Self-Regulated Learning

Autonomy in Learning

Autonomy in learning is recognized as a fundamental component of self-regulated learning, particularly in language education contexts where independent practice is essential for skill development. Autonomous learners are characterized by their ability to set goals, select strategies, and evaluate their own progress. According to Benson (2011), learner autonomy involves the capacity to take control of one's own learning, which is crucial in EFL settings where exposure to the target language is often limited. This perspective highlights the importance of fostering independence in learners to enhance language acquisition.

Digital environments play a significant role in promoting autonomy by providing flexible and interactive learning opportunities. Platforms that incorporate gamification allow students to navigate tasks independently, make decisions, and receive immediate feedback. Research by Little (2007) suggests that autonomy is closely linked to motivation, as learners who feel in control of their learning are more likely to engage actively with the content. In this sense, digital tools can empower students to take responsibility for their learning process.

Furthermore, the development of autonomy is closely associated with metacognitive awareness, which enables learners to reflect on their learning strategies and outcomes. According to Oxford (2017), metacognition supports effective language learning by helping students identify strengths and weaknesses in their performance. This reinforces the idea that autonomy is not only about independence but also about strategic thinking and self-awareness.

From a critical perspective, autonomy should not be interpreted as the absence of teacher guidance. Instead, it requires a balanced approach in which teachers provide support while

encouraging independent learning. The researcher assumes that structured autonomy, supported by digital tools and guided instruction, is the most effective way to promote self-regulated learning in EFL contexts.

Persistence and Effort

Persistence is a key factor in successful learning, particularly in language acquisition, which requires continuous practice and sustained effort over time. Students who demonstrate persistence are more likely to overcome challenges and achieve higher levels of proficiency. According to Credé, Tynan, and Harms (2017), perseverance is strongly associated with academic performance, as it reflects students' ability to remain committed to their learning goals despite difficulties.

Gamified learning environments can significantly enhance persistence by making tasks more engaging and rewarding. The use of points, levels, and progress indicators provides students with a sense of achievement, encouraging them to continue participating in learning activities. Research by Mekler et al. (2017) indicates that gamification can increase task persistence by enhancing users' intrinsic motivation and sense of competence.

In addition, persistence is closely linked to students' beliefs about their abilities, commonly referred to as self-efficacy. According to Bandura (1997), learners who believe in their capacity to succeed are more likely to persist in challenging tasks. Digital tools that provide immediate feedback and opportunities for success can strengthen self-efficacy, thereby promoting sustained effort in learning.

From a critical standpoint, it is important to ensure that persistence is not driven solely by external rewards but also by genuine interest in learning. The researcher argues that effective instructional design should balance extrinsic and intrinsic motivators, creating an environment where students are motivated to learn for both enjoyment and personal growth.

1.8 Technological Integration in Education

Usability and Accessibility of Digital Tools

Usability and accessibility are critical factors in the successful integration of technology in education, as they determine how effectively students and teachers can interact with digital tools.

Usability refers to the ease with which users can navigate and utilize a platform, while accessibility ensures that all learners can benefit from these tools regardless of their context. According to ISO 9241-11 (2018), usability is defined as the extent to which a system can be used effectively, efficiently, and satisfactorily by specified users.

In educational settings, user-friendly digital tools reduce cognitive load and allow students to focus on learning rather than technical difficulties. Research by Bower (2019) highlights that intuitive design enhances student engagement and facilitates the adoption of educational technologies. In EFL contexts, this is particularly important, as learners must already manage the cognitive demands of processing a new language.

Accessibility is equally important, especially in resource-limited environments where access to technology may be uneven. According to UNESCO (2023), inclusive digital education requires the consideration of infrastructure, connectivity, and user diversity. This underscores the need for selecting tools that are adaptable and accessible to all students.

From the researcher's perspective, the effectiveness of digital tools depends not only on their design but also on their alignment with the educational context. Therefore, this study emphasizes the importance of selecting platforms that are both user-friendly and accessible, ensuring that technological integration supports rather than hinders learning.

Teacher's Role in Technology Integration

The teacher plays a central role in the integration of technology in the classroom, acting as a facilitator, guide, and designer of learning experiences. Effective use of digital tools requires not only technical skills but also pedagogical knowledge that aligns technology with learning objectives. According to Mishra and Koehler (2006), the TPACK framework emphasizes the integration of technological, pedagogical, and content knowledge as essential for effective teaching.

Teachers' attitudes and beliefs about technology significantly influence its implementation in the classroom. Research by Scherer, Siddiq, and Tondeur (2019) indicates that teachers who perceive technology as useful and easy to use are more likely to integrate it into their teaching practices. This highlights the importance of professional development and training in enhancing teachers' digital competencies.

Moreover, teachers play a crucial role in scaffolding students' learning, ensuring that digital tools are used effectively to support educational goals. According to Kirschner and De Bruyckere (2017), guidance is essential in preventing cognitive overload and ensuring meaningful learning. This reinforces the idea that technology should complement, rather than replace, the teacher's role.

From a critical perspective, the researcher argues that successful technology integration requires a balance between innovation and pedagogy. Teachers must be able to critically evaluate digital tools and adapt them to their specific context, ensuring that they contribute to meaningful learning experiences in EFL classrooms.

1.9 Learning Environment and Classroom Climate

Low-Anxiety Learning Environment

A low-anxiety learning environment is essential for effective language acquisition, as it allows students to participate without fear of making mistakes. Language anxiety has been widely recognized as a barrier to learning, affecting students' confidence and performance. According to MacIntyre (2017), anxiety can significantly reduce learners' willingness to communicate, limiting their opportunities for practice and development.

Interactive and gamified learning environments can help reduce anxiety by shifting the focus from evaluation to participation. Digital tools create a more relaxed atmosphere where mistakes are seen as part of the learning process rather than failures. Research by Dewaele and Alfawzan (2018) indicates that positive emotional experiences in the classroom are associated with higher levels of motivation and engagement.

Furthermore, a supportive classroom climate fosters trust and encourages students to take risks in their learning. According to Wentzel (2010), positive teacher-student relationships play a crucial role in creating a safe and inclusive learning environment. This highlights the importance of both instructional strategies and interpersonal dynamics in reducing anxiety.

From the researcher's perspective, reducing anxiety should be a central objective in EFL instruction. However, it must be balanced with academic rigor to ensure that students are challenged appropriately. Therefore, this study emphasizes the creation of a supportive yet demanding learning environment that promotes both confidence and competence.

Collaborative Learning Environment

Collaborative learning environments promote interaction and cooperation among students, which are essential for language development. Through collaboration, learners have the opportunity to practice language skills, exchange ideas, and receive feedback from peers. According to Gillies (2016), cooperative learning enhances both academic achievement and social skills, making it a valuable approach in educational settings.

Digital platforms facilitate collaboration by enabling students to work together on tasks, share responses, and engage in group activities. Research by Hrastinski (2019) suggests that online and blended learning environments can enhance collaboration by providing flexible and interactive communication tools. In EFL contexts, this allows students to practice language in meaningful and authentic ways.

In addition, collaborative learning supports the development of communicative competence, as students are required to use language for real purposes. According to Swain (2005), interaction plays a crucial role in language learning by promoting output and negotiation of meaning. This reinforces the importance of incorporating collaborative activities into EFL instruction.

From a critical standpoint, effective collaboration requires careful planning and structure. Without clear objectives and guidance, group work may not lead to meaningful learning. Therefore, the researcher emphasizes the importance of designing collaborative activities that promote active participation and meaningful communication among students.

1.10 Intrinsic and Extrinsic Motivation in EFL Learning

Intrinsic Motivation

Intrinsic motivation refers to the internal desire to engage in an activity for its own sake, driven by interest, enjoyment, and personal satisfaction. In EFL learning, intrinsic motivation is essential because it sustains long-term engagement and promotes deeper learning. According to Ryan and Deci (2017), intrinsic motivation is associated with higher levels of persistence, creativity, and academic achievement, as learners are genuinely interested in the learning process rather than external rewards. This perspective highlights the importance of creating learning environments that

foster curiosity and enjoyment.

In digital and gamified learning environments, intrinsic motivation can be enhanced through engaging and meaningful activities that stimulate students' interest. Interactive platforms such as Bamboozle provide opportunities for playful learning, where students are motivated by the enjoyment of participation rather than solely by grades or evaluation. Research by Hanus and Fox (2015) suggests that gamification can increase intrinsic motivation when it is designed to support autonomy and competence. This reinforces the idea that motivation is closely linked to the quality of the learning experience.

Furthermore, intrinsic motivation is strongly connected to students' sense of competence and self-efficacy. When learners feel capable of completing tasks successfully, they are more likely to engage actively and persist in their efforts. According to Schunk and DiBenedetto (2020), self-efficacy beliefs play a crucial role in motivating students to take on challenges and maintain effort over time. Digital tools that provide immediate feedback and achievable challenges can support the development of these beliefs.

From a critical perspective, the researcher argues that intrinsic motivation should be a primary goal of instructional design in EFL contexts. While external rewards may initiate engagement, they are not sufficient to sustain long-term learning. Therefore, this study emphasizes the importance of designing learning experiences that are meaningful, enjoyable, and relevant to students' interests.

Extrinsic Motivation

Extrinsic motivation refers to engagement in learning activities driven by external factors such as rewards, grades, or recognition. In EFL contexts, extrinsic motivation often plays a significant role, particularly in formal educational settings where assessment is a central component. According to Benabou and Tirole (2003), external incentives can influence behavior by providing immediate rewards, which can be effective in initiating engagement.

Gamified learning environments frequently incorporate extrinsic motivators such as points, badges, and leaderboards, which can increase students' participation and effort. Research by Sailer et al. (2017) indicates that these elements can enhance motivation by providing clear goals and

feedback. In EFL classrooms, this can lead to increased participation in language activities and improved academic performance.

However, the reliance on extrinsic motivation may have limitations, particularly if it undermines intrinsic interest in learning. According to Kohn (1999), excessive use of rewards can reduce students' internal motivation, leading to dependency on external reinforcement. This highlights the importance of balancing extrinsic and intrinsic motivators in instructional design.

From the researcher's perspective, extrinsic motivation should be used strategically to support, rather than replace, intrinsic motivation. Digital tools should be designed to provide meaningful rewards that reinforce learning rather than distract from it. Therefore, this study adopts an approach that integrates both types of motivation to create a balanced and effective learning environment.

1.11 Cognitive Load and Learning Efficiency

Cognitive Load Management

Cognitive load refers to the amount of mental effort required to process information during learning. Effective instructional design aims to optimize cognitive load to enhance learning efficiency. According to Sweller (2011), cognitive load theory distinguishes between intrinsic, extraneous, and germane load, emphasizing the importance of minimizing unnecessary cognitive demands. In EFL learning, managing cognitive load is particularly important, as students must process new vocabulary, grammar, and meaning simultaneously.

Digital learning environments can both support and hinder cognitive processing, depending on their design. Well-structured multimedia content can facilitate understanding by presenting information in an organized and coherent manner. Research by Mayer (2021) highlights that multimedia learning is most effective when it reduces extraneous cognitive load and supports meaningful processing. This suggests that digital tools should be carefully designed to enhance rather than overwhelm learners.

Additionally, gamified environments can influence cognitive load by introducing elements of challenge and engagement. While these features can enhance motivation, they may also increase cognitive demands if not properly balanced. According to Paas and van Merriënboer (2020),

instructional design should ensure that cognitive resources are directed toward learning rather than unnecessary distractions.

From a critical perspective, the researcher emphasizes the importance of balancing interactivity and simplicity in digital learning environments. Excessive visual or interactive elements may distract learners and reduce learning efficiency. Therefore, this study prioritizes the design of activities that are both engaging and cognitively manageable.

Learning Efficiency and Retention

Learning efficiency refers to the ability to achieve meaningful learning outcomes with optimal use of time and cognitive resources. In EFL contexts, efficient learning strategies are essential due to limited instructional time and the complexity of language acquisition. According to Dunlosky et al. (2013), effective learning techniques such as retrieval practice and spaced repetition significantly improve retention and understanding.

Digital tools can enhance learning efficiency by providing opportunities for repeated practice and immediate feedback. Gamified platforms allow students to engage in multiple learning cycles, reinforcing knowledge through repetition and application. Research by Carpenter et al. (2012) suggests that retrieval-based learning strategies improve long-term retention, making them particularly valuable in language learning.

Moreover, multimedia learning environments can support efficient learning by presenting information in diverse formats that cater to different learning styles. According to Fiorella and Mayer (2016), active learning strategies that involve generating responses and interacting with content lead to deeper understanding. This highlights the potential of digital tools to enhance both efficiency and retention.

From the researcher's perspective, learning efficiency should be a key consideration in instructional design, particularly in contexts with limited resources. By integrating effective learning strategies with digital tools, it is possible to maximize learning outcomes within constrained timeframes. Therefore, this study emphasizes the importance of designing efficient and impactful learning experiences.

1.12 Innovation in Language Teaching

Digital Innovation in Education

Digital innovation has transformed educational practices by introducing new tools and methodologies that enhance teaching and learning. In EFL contexts, digital innovation provides opportunities to create more interactive and engaging learning environments. According to Redecker (2017), digital competence is a key component of modern education, enabling both teachers and students to adapt to technological advancements.

The integration of innovative tools such as gamified platforms and multimedia resources allows for more personalized and flexible learning experiences. Research by Holmes et al. (2019) highlights that digital innovation can support differentiated instruction, addressing the diverse needs of learners. This is particularly relevant in EFL classrooms, where students may have varying levels of proficiency and learning styles.

Furthermore, digital innovation promotes the development of 21st-century skills, including critical thinking, collaboration, and digital literacy. According to Voogt et al. (2015), these skills are essential for preparing students for future challenges in a globalized world. This underscores the importance of integrating technology into language education.

From a critical perspective, innovation should be guided by pedagogical principles rather than driven solely by technological trends. The researcher argues that effective innovation involves adapting technology to educational needs, ensuring that it enhances rather than replaces meaningful learning. Therefore, this study focuses on the purposeful integration of digital tools in EFL instruction.

Pedagogical Innovation and Student-Centered Learning

Pedagogical innovation involves the development and implementation of new teaching strategies that enhance learning outcomes. In EFL contexts, student-centered approaches have gained prominence as they prioritize active participation and meaningful engagement. According to Weimer (2013), student-centered teaching shifts the focus from the teacher to the learner, promoting autonomy and responsibility.

Digital tools support pedagogical innovation by enabling interactive and collaborative learning experiences. Research by Means et al. (2014) indicates that technology-enhanced learning

environments can improve student outcomes when they are aligned with student-centered approaches. This suggests that digital tools can facilitate more effective teaching practices.

In addition, student-centered learning emphasizes the importance of addressing learners' needs, interests, and preferences. According to Prince (2004), active learning strategies significantly improve understanding and retention compared to traditional lecture-based methods. This highlights the value of incorporating interactive activities into EFL instruction.

From the researcher's perspective, pedagogical innovation should be grounded in evidence-based practices that prioritize student engagement and learning outcomes. Technology should serve as a tool to support these practices rather than an end in itself. Therefore, this study emphasizes the integration of digital tools within a student-centered framework to enhance EFL learning.

1.13 Feedback and Reinforcement in EFL Learning

Immediate Feedback in Digital Learning

Immediate feedback is a crucial element in effective learning, particularly in language acquisition, where timely correction can significantly influence retention and understanding. In EFL contexts, learners benefit from instant responses that allow them to recognize and correct errors as they occur. According to Hattie and Timperley (2007), feedback is one of the most powerful influences on learning and achievement, especially when it provides clear guidance for improvement. This highlights the importance of integrating feedback mechanisms into instructional design.

Digital platforms offer unique opportunities to provide immediate feedback through interactive activities and automated responses. Gamified tools such as Bamboozle allow students to receive instant results, reinforcing correct answers and addressing mistakes in real time. Research by Van der Kleij, Feskens, and Eggen (2015) indicates that immediate feedback enhances learning outcomes by supporting self-regulation and reinforcing knowledge acquisition. This is particularly relevant in EFL learning, where frequent practice and correction are essential.

Furthermore, immediate feedback contributes to the development of metacognitive skills, enabling learners to reflect on their performance and adjust their strategies accordingly. According to Butler and Winne (1995), feedback plays a central role in self-regulated learning by informing

students about their progress and guiding future actions. This reinforces the idea that feedback is not merely corrective but also developmental.

From a critical perspective, the effectiveness of feedback depends on its quality and clarity. Feedback that is vague or overly simplistic may not contribute to meaningful learning. Therefore, the researcher emphasizes the importance of designing feedback that is specific, informative, and aligned with learning objectives to maximize its impact in EFL contexts.

1.14 Social Interaction in Language Learning

Peer Interaction and Language Development

Peer interaction is a fundamental aspect of language learning, as it provides opportunities for authentic communication and collaborative learning. In EFL contexts, interaction allows students to practice language skills, negotiate meaning, and receive feedback from their peers. According to Long (1996), interaction plays a critical role in language acquisition by facilitating comprehension and promoting language development through negotiation of meaning.

Digital platforms enhance peer interaction by enabling collaborative activities and real-time communication. Gamified environments encourage students to work together, share ideas, and engage in group tasks, which can improve both motivation and learning outcomes. Research by Chapelle (2003) highlights that computer-assisted language learning environments can support interaction and provide meaningful opportunities for language practice.

Additionally, peer interaction contributes to the development of social and communicative skills, which are essential for effective language use. According to Lantolf and Thorne (2006), social interaction is central to language learning, as it enables learners to construct knowledge collaboratively. This perspective emphasizes the importance of incorporating interactive activities into EFL instruction.

From the researcher's standpoint, peer interaction should be intentionally structured to ensure meaningful communication. Without proper guidance, interaction may not lead to effective learning. Therefore, this study emphasizes the design of collaborative tasks that promote active participation and language use.

Multisensory Input and Learning Effectiveness

Multisensory learning involves the use of multiple sensory modalities, such as visual, auditory, and kinesthetic inputs, to enhance learning. In EFL contexts, multisensory approaches can improve comprehension and retention by engaging different cognitive processes. According to Shams and Seitz (2008), multisensory integration enhances learning by providing richer and more meaningful experiences, which facilitate memory formation.

Digital tools and platforms provide opportunities to incorporate multisensory elements into instruction. For example, gamified and movement-based activities combine visual stimuli, sound, and physical movement, creating a dynamic learning environment. Research by Moreno and Mayer (2007) suggests that multimedia learning is more effective when it integrates multiple sensory channels, as it supports deeper cognitive processing.

Moreover, multisensory learning is particularly beneficial for young learners, who tend to respond positively to interactive and engaging activities. According to Goswami (2008), multisensory approaches support language development by reinforcing connections between different types of information. This highlights the importance of using diverse instructional strategies in EFL classrooms.

From a critical perspective, multisensory learning must be carefully designed to avoid cognitive overload. While engaging multiple senses can enhance learning, excessive stimuli may hinder comprehension. Therefore, the researcher emphasizes the importance of balancing sensory input to create effective and meaningful learning experiences.

Perceived Usefulness and Satisfaction

Student satisfaction and perception of learning are important indicators of the effectiveness of instructional strategies. Learners who perceive activities as useful and enjoyable are more likely to engage actively and achieve better outcomes. According to Davis (1989), perceived usefulness is a key factor influencing the acceptance and use of technology in educational contexts, as it reflects students' beliefs about the value of learning tools.

In EFL learning, digital platforms can enhance satisfaction by providing interactive and engaging experiences that differ from traditional methods. Research by Teo (2011) indicates that

students' attitudes toward technology significantly influence their motivation and learning outcomes. This suggests that positive perceptions of digital tools can contribute to increased engagement and achievement.

Additionally, satisfaction is closely linked to motivation and persistence, as students who enjoy learning are more likely to continue participating in activities. According to Sun et al. (2008), learner satisfaction is influenced by factors such as interaction, feedback, and perceived relevance of the content. This highlights the importance of designing activities that are both meaningful and engaging.

From the researcher's perspective, student satisfaction should be considered a key outcome of instructional design, as it reflects the overall effectiveness of the learning experience. However, satisfaction alone is not sufficient; it must be accompanied by meaningful learning. Therefore, this study emphasizes the integration of engaging and pedagogically sound strategies to achieve both satisfaction and academic success.

CHAPTER 2: METHODOLOGICAL DESIGN

2.1. Conceptualization and Operationalization of Variables

The study operationalized its variables based on a structured analytical framework that aligned with the research objectives. The independent variable, defined as the integration of gamified and movement-based digital platforms, was conceptualized through dimensions such as interactivity, usability, and engagement level. According to Kerlinger and Lee (2000), operationalization is essential for transforming abstract concepts into measurable elements, ensuring empirical validity. Each dimension was further divided into indicators that allowed for systematic observation and measurement.

The dependent variable, student motivation in EFL learning, was operationalized through three primary dimensions: behavioral, emotional, and cognitive engagement. These dimensions were measured using observable indicators such as participation frequency, emotional responses, and task persistence. Schreiber and Asner-Self (2011) emphasize that clearly defined indicators enhance the reliability of data collection instruments, particularly in educational research. Additionally, academic outcomes were included as a measurable extension of motivation.

Data collection instruments were aligned with each indicator to ensure consistency and validity. Surveys using Likert scales were employed to measure emotional and cognitive engagement, while observation rubrics captured behavioral participation. According to DeVellis (2017), Likert scales are effective for capturing attitudes and perceptions, making them suitable for measuring motivation. Pre- and post-tests were also used to assess vocabulary retention and academic performance.

The operationalization process ensured that all variables were measurable, comparable, and aligned with the research objectives. The integration of multiple instruments allowed for triangulation of data, enhancing the validity of the findings. From the researcher's perspective, this structured approach ensured that the variables were not only theoretically sound but also practically applicable within the educational context.

2.2. Research Approach

The study adopted a mixed-methods approach, combining quantitative and qualitative techniques to provide a comprehensive understanding of the research problem. Quantitative data were collected through structured instruments such as tests and surveys, while qualitative data were obtained through observations and interviews. According to Creswell and Plano Clark (2017), mixed-methods research allows for a more complete analysis by integrating numerical data with contextual insights.

The quantitative component focused on measuring changes in students' motivation and academic performance before and after the intervention. Statistical comparisons between pre-test and post-test results provided objective evidence of improvement. Field (2018) notes that quantitative methods are essential for identifying patterns and establishing relationships between variables, particularly in experimental studies.

The qualitative component provided deeper insights into students' experiences and perceptions of the intervention. Classroom observations captured real-time behaviors, while interviews allowed participants to express their opinions and feelings. According to Merriam and Tisdell (2016), qualitative data enrich research findings by providing context and meaning to numerical results.

The integration of both approaches ensured methodological rigor and data triangulation. This

allowed the researcher to validate findings from multiple perspectives, increasing the reliability of the conclusions. The mixed-methods approach was therefore considered the most appropriate for addressing the complexity of motivation in EFL learning.

2.3. Scope of the Research

The research was classified as descriptive and explanatory, as it aimed to analyze the characteristics of student motivation and explain the impact of digital tools on learning outcomes. Descriptive research allowed for the identification of patterns in student behavior and engagement, while explanatory research provided insights into causal relationships. According to Hernández-Sampieri et al. (2014), this combination is effective for understanding both the nature and causes of educational phenomena.

Additionally, the study was considered applied research, as it sought to provide practical solutions to a real educational problem. The integration of digital tools was designed to improve motivation and academic performance, making the research directly relevant to educational practice. McMillan (2016) highlights that applied research focuses on solving practical problems, which aligns with the objectives of this study.

The scope also included a comparative analysis of pre- and post-intervention results, allowing for the evaluation of the effectiveness of the implemented strategy. This approach provided measurable evidence of improvement, supporting the validity of the findings. The results demonstrated significant positive changes in both motivation and academic performance.

From the researcher's perspective, the chosen scope ensured a balance between theoretical analysis and practical application. By combining descriptive and explanatory elements, the study provided a comprehensive understanding of the impact of digital tools in EFL learning.

2.4. Type of Research

The study was conducted as field research, as data were collected directly from the educational setting where the intervention took place. This approach allowed for the observation of real classroom dynamics and provided authentic insights into student behavior. According to Cohen, Manion, and Morrison (2018), field research is essential for understanding complex educational processes in their natural context.

The research was also cross-sectional, as data were collected within a specific time frame

during the academic period. This design allowed for the analysis of changes resulting from the intervention without requiring long-term observation. Bryman (2016) notes that cross-sectional studies are effective for identifying relationships between variables at a particular point in time.

In addition, the study incorporated elements of quasi-experimental design, as it involved the comparison of pre- and post-test results without a control group. This approach allowed for the evaluation of the intervention's impact while maintaining practical feasibility. Shadish, Cook, and Campbell (2002) emphasize that quasi-experimental designs are widely used in educational research when random assignment is not possible.

From a critical perspective, the researcher acknowledged the limitations of the design but ensured methodological rigor through careful data collection and analysis. The combination of field research and quasi-experimental elements provided a robust framework for evaluating the effectiveness of the intervention.

2.5. Methods Used

The research employed a combination of theoretical, empirical, and statistical methods to ensure a comprehensive analysis. Theoretical methods included analysis-synthesis and inductive-deductive reasoning, which were used to interpret the relationships between variables. According to Kumar (2019), theoretical methods are essential for building a conceptual framework that guides the research process.

Empirical methods involved the collection of data through tests, surveys, observations, and interviews. These methods allowed for the measurement of both quantitative and qualitative aspects of motivation and learning. Punch (2014) highlights that empirical methods provide direct evidence that supports or refutes research hypotheses.

Statistical methods were used to analyze quantitative data, particularly in comparing pre- and post-test results. Descriptive statistics such as mean and percentage were employed to summarize data, while inferential analysis was used to identify significant improvements. According to Pallant (2020), statistical analysis is essential for validating research findings and ensuring reliability.

The integration of these methods ensured methodological rigor and allowed for a comprehensive understanding of the research problem. From the researcher's perspective, this combination provided a balanced approach that addressed both theoretical and practical aspects of the study.

2.6. Instruments and Results

Table 1.

Pre-test vs Post-test Results

Indicator	Pre-test (%)	Post-test (%)
Vocabulary Recognition	60%	88%
Vocabulary Application	55%	82%
Listening Comprehension	57%	80%
Task Completion Rate	62%	90%
Overall Academic Performance	58%	85%

The results presented in Table 1 demonstrated a consistent and significant improvement across all academic indicators after the implementation of the intervention. Vocabulary recognition increased from 60% to 88%, while vocabulary application improved from 55% to 82%, indicating that students not only memorized lexical items but also developed the ability to use them in context. Listening comprehension also showed a notable increase, rising from 57% to 80%, suggesting that students improved their ability to process spoken language. According to Vandergrift and Goh (2012), listening skills are enhanced through repeated exposure and interactive practice, which aligns with the activities implemented in this study.

Task completion rate exhibited one of the highest improvements, increasing from 62% to 90%, which reflected a substantial rise in student responsibility and engagement. This result indicated that students became more consistent in completing assigned activities, demonstrating increased commitment to the learning process. Additionally, overall academic performance improved from 58% to 85%, confirming the effectiveness of the intervention in enhancing learning outcomes. As stated by Black and Wiliam (2018), formative and interactive learning environments significantly contribute to improved academic achievement.

The improvement in these indicators was attributed to the integration of gamified and movement-based activities, which created a dynamic and engaging learning environment. Students

were exposed to repeated practice through interactive games, which reinforced learning and facilitated retention. Moreover, the inclusion of movement-based activities contributed to increased attention and cognitive activation, which supported learning processes. Research by Sousa (2021) indicates that active learning strategies enhance both engagement and retention, particularly in younger learners.

From a critical perspective, the results suggested that the intervention successfully addressed both cognitive and behavioral aspects of learning. The consistent improvement across all indicators demonstrated that the use of digital tools was not only effective but also sustainable within the educational context. The researcher concluded that the combination of gamification and movement-based learning provided a comprehensive approach to improving academic outcomes in EFL education.

Table 2.

Motivation and Engagement Results

Indicator	Before (%)	After (%)
Participation Frequency	50%	89%
Classroom Interaction	53%	87%
Interest in Learning	48%	92%
Enjoyment of Activities	46%	94%
Attention and Focus	55%	88%
Persistence in Tasks	54%	86%
Self-confidence in English	47%	90%

The results shown in Table 2 indicated a substantial improvement in all motivational and engagement indicators following the intervention. Participation frequency increased from 50% to 89%, while classroom interaction rose from 53% to 87%, demonstrating that students became significantly more active during lessons. Interest in learning showed one of the most notable increases, rising from 48% to 92%, which reflected a positive shift in students' attitudes toward English learning. According to Schunk and Usher (2019), motivation is closely linked to students'

perceptions of learning activities, particularly when they are engaging and meaningful.

Enjoyment of activities experienced the highest increase, reaching 94%, indicating that students found the learning process more enjoyable and engaging. This result suggested that the integration of gamified and movement-based activities successfully transformed the classroom environment into a more dynamic and motivating space. Attention and focus also improved significantly, increasing from 55% to 88%, which indicated that students were more concentrated during learning activities. Research by Linnenbrink-Garcia et al. (2016) highlights that positive emotional engagement enhances cognitive focus and learning outcomes.

Persistence in tasks improved from 54% to 86%, demonstrating that students were more willing to complete activities and overcome challenges. Additionally, self-confidence in English increased from 47% to 90%, indicating that students developed greater confidence in their language abilities. This improvement is particularly important, as confidence plays a key role in language learning. According to MacIntyre et al. (2019), increased confidence leads to greater willingness to communicate, which is essential for language development.

From a critical standpoint, the results confirmed that the intervention effectively enhanced multiple dimensions of motivation simultaneously. The combination of interactive and movement-based activities created a supportive and engaging learning environment that addressed both emotional and cognitive needs. The researcher concluded that the significant improvements observed in all indicators provided strong evidence of the effectiveness of the implemented strategy in increasing student motivation in EFL contexts.

Table 3.

Observational Data

Indicator	***Initial Level***	***Final Level***
Voluntary Participation	*Low*	*High*
Peer Collaboration	*Moderate*	*High*
Enthusiasm (Observed)	*Low*	*High*
On-task Behavior	*Moderate*	*High*

Classroom Discipline	*Moderate*	*High*

The observational data provided qualitative evidence that supported the quantitative findings of the study. Initially, voluntary participation was low, with students showing limited willingness to engage in classroom activities. However, after the intervention, participation increased significantly, with most students actively contributing to discussions and activities. Peer collaboration also improved from moderate to high levels, indicating that students were more willing to work together and support each other in learning tasks. According to Gillies and Boyle (2010), collaborative learning enhances both academic performance and social interaction.

Enthusiasm, as observed through students' expressions and behavior, showed a marked improvement, transitioning from low to high levels. Students demonstrated increased excitement and interest during lessons, particularly when engaging with digital tools. On-task behavior also improved significantly, with students spending more time focused on learning activities and less time distracted. This suggests that the intervention successfully captured students' attention and maintained their engagement throughout the lesson.

Classroom discipline improved as well, with fewer disruptions and more structured participation. This indicated that students were not only more engaged but also more responsible in their behavior. Research by Emmer and Sabornie (2015) suggests that engaging instructional strategies contribute to improved classroom management by reducing off-task behavior.

From a critical perspective, the observational data reinforced the validity of the quantitative results, providing a comprehensive view of the intervention's impact. The alignment between observed behaviors and measured outcomes confirmed that the improvements were consistent and meaningful. The researcher concluded that the intervention created a positive and productive learning environment that supported both academic and behavioral development.

2.7 Ethical Considerations

The present study was conducted in accordance with fundamental ethical principles that guide educational research, particularly those related to respect, responsibility, and integrity. Since the participants were minors, special attention was given to ensuring their protection and well-being throughout the research process. Informed consent was obtained from parents or legal guardians prior to data collection, and students' participation was voluntary at all times. According to the

American Psychological Association (2020), ethical research involving human participants requires transparency, respect for autonomy, and the protection of vulnerable populations, which were strictly observed in this study.

Confidentiality and anonymity were carefully maintained to protect participants' personal information. All data collected, including surveys, test results, and observations, were handled with strict confidentiality and used exclusively for academic purposes. Students' identities were replaced with codes to ensure anonymity in data analysis and reporting. As emphasized by the British Educational Research Association (2018), safeguarding participants' privacy is essential in educational research, particularly when working with minors in school settings.

Additionally, the research ensured that no harm—physical, psychological, or emotional—was caused to participants. The activities implemented, including gamified and movement-based tasks, were designed to create a positive and supportive learning environment. Care was taken to avoid any form of discrimination, pressure, or discomfort during participation. According to UNESCO (2021), ethical educational practices must promote inclusion, respect, and the well-being of all learners, principles that guided the implementation of this study.

The study also adhered to principles of academic honesty and integrity in the handling and reporting of data. All findings were presented truthfully, without manipulation or fabrication, ensuring that the results accurately reflected the outcomes of the intervention. Proper citation of sources was maintained throughout the research to acknowledge the contributions of previous authors. As stated by the Committee on Publication Ethics (2019), maintaining transparency and honesty in research reporting is essential for ensuring credibility and trustworthiness.

Finally, the researcher assumed full responsibility for the ethical conduct of the study, ensuring compliance with institutional and international research standards. The research was conducted with a commitment to contributing positively to the educational community, providing insights that can improve teaching practices and student learning experiences. From an ethical perspective, the study prioritized the dignity, rights, and development of participants, reinforcing the importance of conducting research that is both scientifically rigorous and socially responsible.

CHAPTER 3: PROPOSAL PRESENTATION AND VALIDATION

3.1. Presentation of the Proposal

The proposal was conceived as an innovative pedagogical intervention aimed at improving student motivation and academic performance in English as a Foreign Language (EFL) through the integration of gamified and movement-based digital tools. The design responded directly to the needs identified during the diagnostic phase, where low engagement and limited participation were evident among students. The proposal was framed within contemporary educational paradigms that emphasize active learning and student-centered approaches. According to Reigeluth and An (2021), modern instructional design must adapt to learners' needs by incorporating flexible and interactive methodologies that enhance engagement and learning outcomes.

The structure of the proposal was organized as a didactic program composed of interconnected components, including objectives, strategies, activities, and evaluation mechanisms. Each component was carefully aligned with the research variables to ensure coherence and effectiveness. The program integrated digital platforms such as Bamboozle and GoNoodle as core tools for facilitating learning activities. This integration allowed for the creation of a dynamic and interactive environment that encouraged participation and reduced anxiety. As highlighted by Merrill (2018), effective instructional programs must be grounded in problem-centered learning and active engagement.

The proposal was characterized by its originality, as it combined gamification and movement-based learning within a single structured framework. This combination addressed multiple dimensions of motivation simultaneously, including behavioral, emotional, and cognitive engagement. The inclusion of physical activity as part of the learning process represented an innovative approach that extended beyond traditional digital learning strategies. According to Plass, Homer, and Kinzer (2015), game-based learning environments enhance motivation by integrating cognitive, emotional, and social elements.

In addition, the proposal was designed to be adaptable to different educational contexts, particularly those with limited technological resources. The activities were structured in a way that allowed for flexibility, enabling teachers to modify them according to available resources and student needs. This adaptability ensured that the proposal could be implemented in diverse settings

without compromising its effectiveness. According to Kali, McKenney, and Sagy (2015), adaptable instructional designs are essential for addressing the variability of real classroom environments.

From the researcher's perspective, the proposal represented a comprehensive solution to the identified problem, integrating theoretical foundations with practical application. The structured design ensured that all elements were aligned with the research objectives, while the innovative use of digital tools provided a meaningful learning experience for students. The proposal was therefore considered both feasible and effective in addressing the challenges of EFL learning in the given context.

3.2. Theoretical and Pedagogical Foundation of the Proposal

The proposal was grounded in contemporary educational theories that emphasize active learning, student engagement, and the integration of technology in education. One of the primary theoretical foundations was constructivism, which posits that learners actively construct knowledge through interaction and experience. According to Fosnot (2013), constructivist approaches promote deeper understanding by encouraging learners to engage with content in meaningful ways. This principle guided the design of activities that required active participation and collaboration.

The proposal also drew on experiential learning theory, which emphasizes learning through action and reflection. The inclusion of movement-based activities allowed students to engage physically with the learning process, reinforcing cognitive development through embodied experiences. Kolb (2015) highlights that experiential learning enhances retention and understanding by connecting theory with practice. This approach was particularly relevant for young learners, who benefit from interactive and hands-on activities.

Another key theoretical foundation was the integration of digital pedagogy, which focuses on the effective use of technology to enhance learning. The proposal incorporated digital tools not as isolated elements but as integral components of the instructional design. According to Selwyn (2022), digital pedagogy requires a critical understanding of how technology influences teaching and learning processes. This perspective ensured that the use of digital tools was purposeful and aligned with educational objectives.

The proposal also considered socio-cultural theories of learning, which emphasize the role of interaction and collaboration in knowledge construction. The activities were designed to promote peer interaction and cooperative learning, allowing students to learn from each other. According to

Vygotskian perspectives discussed by Daniels (2016), social interaction plays a crucial role in cognitive development. This reinforced the importance of creating collaborative learning environments.

From a critical standpoint, the researcher integrated multiple theoretical perspectives to create a comprehensive and balanced approach. The proposal did not rely on a single theory but combined elements from different frameworks to address the complexity of motivation and learning. This theoretical integration strengthened the proposal's validity and ensured its relevance in contemporary educational contexts.

3.3. Structure and Components of the Proposal

The proposal was structured as a comprehensive didactic program composed of several interconnected components, each designed to contribute to the overall objective of enhancing motivation and learning outcomes. The first component involved the definition of general and specific objectives, which guided the design and implementation of the activities. These objectives were aligned with the research variables and focused on improving behavioral, emotional, and cognitive engagement. According to Tyler (2013), clearly defined objectives are essential for effective curriculum design and evaluation.

The second component consisted of the development of instructional strategies, which included gamified activities, movement-based exercises, and collaborative tasks. These strategies were designed to promote active participation and meaningful learning. The integration of digital tools allowed for the creation of interactive learning experiences that captured students' attention and maintained their interest. According to Laurillard (2013), effective teaching strategies must engage learners in active dialogue and practice.

The third component involved the design of learning activities, which were organized into structured sessions. Each session included a combination of digital games, physical activities, and language tasks that reinforced vocabulary and communication skills. The activities were sequenced to ensure gradual progression and continuous reinforcement of learning. This approach aligned with the principles of instructional scaffolding, which support learners as they develop new skills.

The fourth component focused on evaluation and assessment, incorporating both formative and summative methods. Digital tools were used to provide immediate feedback, while traditional assessments were used to measure overall progress. This combination allowed for a comprehensive

evaluation of student performance. According to Andrade (2019), formative assessment plays a crucial role in supporting learning by providing ongoing feedback.

From the researcher's perspective, the structured design of the proposal ensured coherence and effectiveness. Each component was carefully integrated into the overall framework, creating a cohesive and comprehensive program. The proposal was therefore considered a well-organized and systematic approach to addressing the research problem.

3.4. Implementation and Application of the Proposal

The implementation of the proposal was carried out through a series of structured sessions that integrated digital tools and interactive activities into the classroom. Each session was designed to address specific learning objectives while maintaining a high level of student engagement. The use of gamified platforms allowed students to participate actively in learning activities, while movement-based exercises provided opportunities for physical engagement. According to Hodges et al. (2020), effective implementation of digital learning strategies requires careful planning and alignment with instructional goals.

During the implementation phase, the teacher played a crucial role in facilitating activities and guiding students through the learning process. The teacher ensured that all students were actively involved and provided support when needed. This guidance was essential for maintaining focus and ensuring that activities contributed to learning objectives. According to Darling-Hammond et al. (2020), teacher facilitation is a key factor in the success of innovative instructional practices.

The application of the proposal also involved continuous monitoring and adjustment of activities based on student responses. This flexibility allowed the researcher to adapt the intervention to the specific needs of the students. The use of digital tools facilitated this process by providing immediate feedback and allowing for real-time adjustments. This adaptive approach enhanced the effectiveness of the intervention.

Students responded positively to the implementation, demonstrating increased participation, enthusiasm, and engagement. Observational data indicated that students were more motivated and willing to participate in activities. This confirmed the effectiveness of the proposal in creating a dynamic and engaging learning environment.

From a critical perspective, the successful implementation of the proposal highlighted the importance of combining innovative strategies with effective classroom management. The researcher

concluded that the integration of digital tools must be supported by structured planning and active teacher involvement to achieve optimal results.

3.5. Validation of the Proposal

The validation of the proposal was conducted through both empirical and theoretical approaches, ensuring a comprehensive evaluation of its effectiveness. Empirical validation was based on the analysis of pre-test and post-test results, as well as survey data and classroom observations. The results demonstrated significant improvements in both motivation and academic performance, confirming the effectiveness of the intervention. According to McEwan (2020), empirical validation is essential for determining the impact of educational interventions.

Theoretical validation was achieved by aligning the proposal with established educational theories and research findings. The integration of constructivist, experiential, and digital learning theories provided a strong conceptual foundation for the proposal. This alignment ensured that the intervention was not only effective but also theoretically sound. According to Biesta (2022), educational practices must be grounded in theory to ensure their relevance and effectiveness.

In addition, expert validation was considered through the review of the proposal by educational professionals, who provided feedback on its design and implementation. Their input confirmed the relevance and feasibility of the proposal within the educational context. This external validation strengthened the credibility of the research.

The validation process also included the analysis of student feedback, which indicated high levels of satisfaction and engagement. Students reported that the activities were enjoyable and helped them learn more effectively. This qualitative data supported the quantitative findings, providing a comprehensive evaluation of the proposal.

From the researcher's perspective, the validation process confirmed that the proposal was both effective and applicable in real educational settings. The combination of empirical, theoretical, and expert validation provided strong evidence of its success. Therefore, the proposal was considered a viable solution for improving motivation and learning outcomes in EFL education.

3.6. Foundation of the Proposal

The proposal was theoretically grounded in contemporary approaches to language teaching that emphasized active learning, student engagement, and the integration of digital tools. It was based on the premise that meaningful learning occurs when students actively participate in the

construction of knowledge through interaction and experience. According to Illeris (2018), learning involves cognitive, emotional, and social dimensions, all of which must be addressed to achieve effective educational outcomes. This perspective guided the design of the proposal, ensuring a holistic approach to EFL learning.

The incorporation of gamification and movement-based learning was supported by research in educational neuroscience, which highlights the connection between physical activity and cognitive development. Studies by Jensen (2017) indicated that movement enhances brain function by increasing attention and memory retention. This theoretical foundation justified the inclusion of physical activities as part of the instructional design, reinforcing the idea that learning is not limited to cognitive processes but also involves physical engagement.

Additionally, the proposal was aligned with principles of digital learning, which emphasize the use of technology to create interactive and personalized learning environments. According to Bates (2019), digital technologies have the potential to transform education by providing flexible and engaging learning opportunities. This perspective supported the integration of platforms such as Bamboozle and GoNoodle, which facilitated interactive and student-centered learning experiences.

The proposal also drew on motivational theories that highlight the importance of engagement and interest in learning. Research by Wentzel and Miele (2016) demonstrated that students are more likely to achieve academic success when they are emotionally and cognitively engaged. This reinforced the need to design activities that foster motivation and participation.

From a critical standpoint, the researcher integrated multiple theoretical perspectives to ensure a comprehensive foundation for the proposal. This multidimensional approach allowed for the development of a strategy that addressed the complexity of motivation and learning in EFL contexts, ensuring both theoretical coherence and practical applicability.

3.7. Characteristics of the Proposal

The proposal was characterized by its innovative and integrative nature, combining gamification and movement-based learning into a cohesive instructional framework. This approach allowed for the simultaneous development of multiple dimensions of student engagement, including behavioral, emotional, and cognitive aspects. According to Fullan and Langworthy (2014), innovative educational practices must integrate technology and pedagogy to create meaningful learning experiences.

Another defining characteristic of the proposal was its flexibility and adaptability to different educational contexts. The activities were designed to be easily modified according to available resources and student needs, ensuring that the proposal could be implemented in diverse settings. This adaptability was particularly important in resource-limited environments, where access to technology may vary. According to Bozkurt and Sharma (2020), flexible learning designs are essential for addressing the challenges of contemporary education.

The proposal also emphasized student-centered learning, prioritizing active participation and collaboration. Students were encouraged to take an active role in their learning, engaging in interactive tasks that required communication and problem-solving. This approach aligned with the principles of learner-centered education, which focus on the needs and interests of students. According to Cornelius-White (2007), student-centered approaches enhance motivation and academic performance.

In addition, the proposal was designed to be dynamic and engaging, incorporating a variety of activities that maintained student interest. The use of digital tools and physical movement created a stimulating learning environment that reduced monotony and increased participation. This dynamic nature contributed to the effectiveness of the intervention. From the researcher's perspective, these characteristics made the proposal both innovative and practical. The combination of flexibility, student-centeredness, and dynamic design ensured that the proposal could effectively address the challenges identified in the research.

3.8. Guiding Principles

The proposal was guided by a set of key principles that informed its design and implementation. One of the primary principles was the promotion of active learning, which emphasized student participation and engagement in the learning process. According to Bonwell and Eison (1991), active learning strategies significantly improve understanding and retention by involving students directly in their learning.

Another guiding principle was the integration of technology as a tool to enhance learning rather than as an end in itself. The proposal emphasized the purposeful use of digital tools to support instructional objectives. According to Mishra and Koehler (2006), effective technology integration requires the alignment of technological, pedagogical, and content knowledge.

The proposal also prioritized inclusivity and accessibility, ensuring that all students could

participate regardless of their abilities or resources. Activities were designed to accommodate diverse learning styles and needs, promoting equitable learning opportunities. According to Florian and Black-Hawkins (2011), inclusive education requires the adaptation of teaching strategies to meet the needs of all learners.

Another key principle was the creation of a positive and supportive learning environment that encouraged risk-taking and reduced anxiety. This was particularly important in EFL contexts, where students often experience fear of making mistakes. The proposal aimed to create a safe space for learning, where students felt comfortable participating. The researcher ensured that these guiding principles were consistently applied throughout the proposal. This coherence contributed to the effectiveness of the intervention and ensured that all components were aligned with the overall objectives.

3.9. Structure and Dynamics of the Proposal

The proposal was structured as a didactic program composed of interconnected components that worked together to achieve the research objectives. The structure included planning, implementation, and evaluation phases, each with specific activities and goals. According to Richards and Rodgers (2014), effective language teaching programs require a clear and coherent structure that guides the learning process.

The dynamic nature of the proposal was reflected in the interaction between its components, which allowed for continuous adaptation and improvement. Activities were designed to be flexible, enabling adjustments based on student responses and performance. This dynamic approach ensured that the proposal remained responsive to the needs of learners.

The integration of digital tools played a central role in the dynamics of the proposal, facilitating interaction and engagement. These tools allowed for real-time feedback and provided opportunities for repeated practice, which enhanced learning outcomes. According to Kukulska-Hulme (2020), mobile and digital learning environments support flexible and interactive learning experiences.

The proposal also incorporated collaborative and individual activities, promoting both social interaction and independent learning. This balance ensured that students developed a range of skills, including communication, critical thinking, and self-regulation. The structured yet dynamic nature of the proposal contributed to its effectiveness. The integration of multiple components created a

comprehensive and adaptable framework that supported meaningful learning.

3.10. Requirements and Conditions of the Proposal

The successful implementation of the proposal required specific conditions related to resources, teacher preparation, and classroom environment. One of the primary requirements was access to basic technological tools, such as computers or mobile devices, which were necessary for implementing digital activities. According to Ertmer and Ottenbreit-Leftwich (2013), access to technology is a key factor in successful integration.

Teacher training was another essential requirement, as educators needed to be familiar with the digital tools and instructional strategies used in the proposal. Professional development ensured that teachers could effectively facilitate activities and support student learning. According to Darling-Hammond et al. (2017), teacher competence is critical for the success of innovative educational practices.

The classroom environment also needed to support active and collaborative learning, with sufficient space for movement-based activities. This physical arrangement facilitated the integration of movement into the learning process, enhancing engagement and participation.

Additionally, the proposal required a supportive institutional context that encouraged innovation and flexibility in teaching practices. Administrative support played a crucial role in enabling the implementation of new strategies, the researcher recognized that these conditions were essential for achieving the desired outcomes. The proposal was therefore designed to be adaptable, allowing for modifications based on available resources and contextual constraints.

3.11. Application, Implementation, and Evaluation

The application of the proposal involved the systematic integration of digital tools and interactive activities into the classroom over a defined period. Each session was carefully planned to align with learning objectives and ensure active participation. According to Guskey (2000), effective implementation requires clear planning and alignment with educational goals.

The implementation process was monitored continuously to ensure that activities were effective and aligned with student needs. Adjustments were made based on observations and feedback, allowing for a flexible and responsive approach. This adaptability contributed to the success of the intervention.

Evaluation was conducted through a combination of formative and summative methods,

including tests, surveys, and observations. These methods provided comprehensive data on student performance and motivation. According to Brookhart (2013), effective evaluation involves multiple measures that capture different aspects of learning.

The results of the evaluation demonstrated significant improvements in both motivation and academic performance, confirming the effectiveness of the proposal. Students showed increased engagement, participation, and confidence in their language abilities, the systematic application and evaluation of the proposal ensured its validity and effectiveness. The results provided strong evidence of its potential to improve EFL learning outcomes.

3.12. Resources

The proposal required a combination of technological, human, and material resources to ensure successful implementation. Technological resources included digital platforms such as Bamboozle and GoNoodle, as well as devices for accessing these tools. According to Redecker and Punie (2017), digital competence is essential for effective use of educational technology.

Human resources included teachers and students, whose active participation was essential for the success of the proposal. Teachers played a key role in facilitating activities and guiding the learning process.

Material resources included classroom materials such as worksheets, visual aids, and space for movement-based activities. These resources supported the implementation of the proposal and enhanced the learning experience.

Time was also an important resource, as the proposal required careful planning and consistent implementation over a period of time. Effective time management ensured that all activities were completed successfully, the researcher ensured that the required resources were realistic and accessible within the educational context. This consideration contributed to the feasibility and sustainability of the proposal.

CONCLUSIONS

The findings of this research demonstrated that the integration of gamified and movement-based digital platforms significantly enhanced student motivation in EFL learning. The results showed consistent improvements across behavioral, emotional, and cognitive dimensions, indicating that students became more actively involved, emotionally connected, and cognitively engaged in the

learning process. This transformation was reflected in increased participation, greater enthusiasm during activities, and improved persistence in task completion. The implementation of interactive tools contributed to the creation of a dynamic and low-anxiety learning environment, which encouraged students to take risks and participate without fear. Therefore, it was concluded that the use of digital and interactive methodologies represented a highly effective alternative to traditional teaching practices.

The study also confirmed that the application of innovative instructional strategies had a direct and positive impact on academic performance, particularly in vocabulary retention and language application. The significant increase observed in pre-test and post-test results demonstrated that students were able not only to recall vocabulary but also to use it effectively in communicative contexts. This improvement was attributed to the repetitive, engaging, and meaningful nature of the activities implemented, which facilitated deeper learning. Additionally, the integration of movement-based activities contributed to improved attention and memory processes, reinforcing the connection between physical engagement and cognitive development. Consequently, the research validated the effectiveness of combining digital tools with active learning strategies to improve EFL outcomes.

Finally, the research concluded that the proposed pedagogical model was both feasible and adaptable within resource-limited educational contexts. The structured design of the intervention, which aligned theoretical foundations with practical application, ensured its effectiveness and sustainability. The proposal demonstrated that meaningful improvements in motivation and academic performance can be achieved even in environments with limited technological access, provided that instructional strategies are carefully designed and implemented. Moreover, the study highlighted the importance of teacher involvement and methodological coherence in achieving successful outcomes. Overall, the research contributed valuable insights into the role of innovation in language education, offering a practical and evidence-based solution to a persistent educational challenge.

RECOMENDATIONS

It was recommended that educators adopt gamified and movement-based digital strategies as part of their regular teaching practices in EFL classrooms. These approaches should be implemented in a structured and intentional manner, ensuring alignment with learning objectives and student

needs. Teachers should prioritize the use of interactive and dynamic activities that promote active participation, collaboration, and meaningful engagement. By incorporating these strategies, educators can create more motivating and inclusive learning environments that support both academic achievement and student well-being. Furthermore, it was suggested that teachers continuously evaluate and adapt their methodologies to maintain effectiveness and respond to the evolving needs of learners.

Educational institutions were encouraged to support the integration of digital tools by providing adequate resources, infrastructure, and professional development opportunities for teachers. Training programs should focus not only on technical skills but also on pedagogical strategies that maximize the potential of technology in education. Institutional support is essential for ensuring the successful implementation and sustainability of innovative practices. Additionally, schools should promote a culture of innovation that encourages experimentation and continuous improvement in teaching methods. This would contribute to the development of more effective and responsive educational systems.

Finally, it was recommended that future research expand on the findings of this study by exploring the long-term impact of gamified and movement-based learning on language acquisition and other academic areas. Further studies could also examine the effectiveness of these strategies in different educational contexts and age groups, providing a broader understanding of their applicability. Moreover, researchers should consider incorporating additional variables, such as socio-emotional development and digital literacy, to gain deeper insights into the impact of technology on learning. Such research would contribute to the advancement of knowledge in the field and support the development of more comprehensive and effective educational practices.

REFERENCES

Al-Azawei, A., Parslow, P., & Lundqvist, K. (2016). Barriers and opportunities of e-learning implementation in Iraq: A case of public universities. The International Review of Research in Open and Distributed Learning, 17(5), 126–146. https://doi.org/10.19173/irrodl.v17i5.2501

Andrade, H. (2019). A critical review of research on student self-assessment. Frontiers in Education,

4, 87. https://doi.org/10.3389/feduc.2019.00087

Ary, D., Jacobs, L. C., Sorensen, C., & Walker, D. (2018). Introduction to research in education (10th ed.). Cengage Learning.

Baddeley, A. (2000). The episodic buffer: A new component of working memory? Trends in Cognitive Sciences, 4(11), 417–423. https://doi.org/10.1016/S1364-6613(00)01538-2

Bates, A. W. (2019). Teaching in a digital age: Guidelines for designing teaching and learning. BCcampus.

Benabou, R., & Tirole, J. (2003). Intrinsic and extrinsic motivation. The Review of Economic Studies, 70(3), 489–520. https://doi.org/10.1111/1467-937X.00253

Benson, P. (2011). Teaching and researching autonomy (2nd ed.). Routledge.

Biggs, J., & Tang, C. (2011). Teaching for quality learning at university (4th ed.). Open University Press.

Black, P., & Wiliam, D. (2018). Classroom assessment and pedagogy. Assessment in Education, 25(6), 551–575. https://doi.org/10.1080/0969594X.2018.1441807

Bond, M., Bedenlier, S., Marín, V., & Händel, M. (2020). Emergency remote teaching in higher education. Educational Technology Research and Development, 68, 1–35.

Bonwell, C., & Eison, J. (1991). Active learning: Creating excitement in the classroom. ASHE-ERIC.

Bozkurt, A., & Sharma, R. (2020). Emergency remote teaching in a time of global crisis. Asian Journal of Distance Education, 15(1), 1–6.

Brookhart, S. M. (2013). How to create and use rubrics for formative assessment and grading. ASCD.

Brown, H. D., & Abeywickrama, P. (2019). Language assessment: Principles and classroom practices (3rd ed.). Pearson.

Bryman, A. (2016). Social research methods (5th ed.). Oxford University Press.

Butler, D. L., & Winne, P. H. (1995). Feedback and self-regulated learning. Review of Educational Research, 65(3), 245–281.

Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches. Applied Linguistics, 1(1), 1–47.

Carpenter, S. K., et al. (2012). Using spacing to enhance learning. Psychological Science, 23(3),

281–288.

Chen, C. M., & Wu, C. H. (2015). Effects of different video lecture types. Computers & Education, 88, 16–28.

Cohen, L., Manion, L., & Morrison, K. (2018). Research methods in education (8th ed.). Routledge.

Cornelius-White, J. (2007). Learner-centered teacher-student relationships. Review of Educational Research, 77(1), 113–143.

Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Sage.

Creswell, J. W., & Plano Clark, V. (2017). Designing and conducting mixed methods research (3rd ed.). Sage.

Darling-Hammond, L., et al. (2017). Effective teacher professional development. Learning Policy Institute.

Darling-Hammond, L., et al. (2020). Implications for educational practice. Educational Researcher, 49(1), 1–13.

DeVellis, R. F. (2017). Scale development: Theory and applications (4th ed.). Sage.

Deterding, S., et al. (2011). From game design elements to gamefulness. Proceedings of the 15th International Academic MindTrek Conference.

Duckworth, A. L., et al. (2007). Grit: Perseverance and passion. Journal of Personality and Social Psychology, 92(6), 1087–1101.

Dunlosky, J., et al. (2013). Improving students' learning with effective techniques. Psychological Science in the Public Interest, 14(1), 4–58.

Ertmer, P. A., & Ottenbreit-Leftwich, A. (2013). Removing obstacles to technology integration. Educational Technology Research and Development, 61(2), 261–280.

Etikan, I. (2016). Comparison of sampling techniques. Biometrics & Biostatistics International Journal, 5(1).

Field, A. (2018). Discovering statistics using IBM SPSS statistics (5th ed.). Sage.

Fiorella, L., & Mayer, R. (2016). Eight ways to promote generative learning. Routledge.

Florian, L., & Black-Hawkins, K. (2011). Exploring inclusive pedagogy. Cambridge Journal of Education, 41(4), 495–510.

Fullan, M. (2013). Stratosphere: Integrating technology, pedagogy, and change knowledge. Pearson.

Gillies, R. (2016). Cooperative learning. Routledge.

Greene, J. A. (2018). Self-regulation in education. Educational Psychologist, 53(4), 223–235.

Guskey, T. R. (2000). Evaluating professional development. Corwin Press.

Hanus, M. D., & Fox, J. (2015). Assessing gamification. Computers & Education, 80, 152–161.

Hattie, J., & Timperley, H. (2007). The power of feedback. Review of Educational Research, 77(1), 81–112.

Hodges, C., et al. (2020). The difference between emergency remote teaching and online learning. Educause Review.

Holmes, W., et al. (2019). Artificial intelligence in education. OECD.

Illeris, K. (2018). Contemporary theories of learning. Routledge.

Jensen, E. (2017). Brain-based learning. Corwin.

Kali, Y., McKenney, S., & Sagy, O. (2015). Design principles for learning. Educational Technology Research.

Kerlinger, F., & Lee, H. (2000). Foundations of behavioral research (4th ed.).

Kolb, D. (2015). Experiential learning. Pearson.

Kukulska-Hulme, A. (2020). Mobile-assisted language learning. ReCALL, 32(3).

Laurillard, D. (2013). Teaching as a design science. Routledge.

Linnenbrink-Garcia, L., et al. (2016). Emotions in education. Educational Psychologist.

MacIntyre, P. D., et al. (2019). Willingness to communicate. Modern Language Journal.

Merriam, S. B., & Tisdell, E. J. (2016). Qualitative research. Jossey-Bass.

Nation, I. S. P. (2022). Learning vocabulary in another language. Cambridge University Press.

OECD. (2020). Education at a glance. OECD Publishing.

Pallant, J. (2020). SPSS survival manual (7th ed.). McGraw-Hill.

Plass, J. L., Homer, B. D., & Kinzer, C. K. (2015). Foundations of game-based learning. Educational Psychologist.

Redecker, C. (2017). Digital competence framework. European Commission.

Richards, J. C., & Rodgers, T. (2014). Approaches and methods in language teaching. Cambridge.

Schunk, D. H., & Usher, E. L. (2019). Social cognitive theory. Educational Psychologist.

Selwyn, N. (2022). Education and technology. Bloomsbury.

Sousa, D. A. (2021). How the brain learns. Corwin.

UNESCO. (2022). Reimagining our futures together. UNESCO Publishing.

Vandergrift, L., & Goh, C. (2012). Teaching and learning second language listening. Routledge.

Webb, S. (2020). Vocabulary learning. Applied Linguistics Review.

Wentzel, K. R., & Miele, D. B. (2016). Handbook of motivation at school. Routledge.

ANEXOS

ANNEX 1: STUDENT MOTIVATION SURVEY (LIKERT SCALE)

Objective

The purpose of this instrument was to measure the level of students' motivation in English as a Foreign Language (EFL) before and after the implementation of gamified and movement-based learning strategies. The survey aimed to evaluate behavioral, emotional, and cognitive engagement through students' perceptions and attitudes toward learning activities.

Instructions

Students were asked to read each statement carefully and select the option that best represented their level of agreement. The scale ranged from 1 (Strongly Disagree) to 5 (Strongly Agree). The responses were collected anonymously to ensure honesty and reliability.

Scale

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

Items

No.	Statement	Dimension
1	I actively participate in English class activities.	Behavioral
2	I enjoy learning English through games.	Emotional
3	I feel motivated to complete English tasks.	Behavioral
4	I feel confident when I speak in English.	Emotional
5	I concentrate during English lessons.	Cognitive
6	I try to understand and remember new words.	Cognitive
7	I like using digital tools in English class.	Emotional

No.	Statement	Dimension
8	I complete tasks even when they are difficult.	Cognitive
9	I interact with my classmates in English activities.	Behavioral
10	I feel interested in learning English.	Emotional

ANNEX 2: CLASSROOM OBSERVATION RUBRIC

Objective

The objective of this instrument was to systematically observe and record students' behavioral, emotional, and cognitive engagement during English lessons. It aimed to provide qualitative data to complement quantitative findings from surveys and tests.

Instructions

The researcher observed classroom sessions and rated each indicator using a three-level scale: Low (1), Moderate (2), High (3). Observations were conducted before and after the intervention.

Observation Criteria

Indicator	Low (1)	Moderate (2)	High (3)
Participation	Rarely participates	Occasionally participates	Actively participates
Attention	Frequently distracted	Sometimes attentive	Fully focused
Interaction	No interaction	Limited interaction	Active collaboration
Enthusiasm	Shows no interest	Moderate interest	High enthusiasm
Task Completion	Rarely completes tasks	Completes some tasks	Completes all tasks

ANNEX 3: PRE-TEST AND POST-TEST (VOCABULARY ASSESSMENT)

Objective

The purpose of this instrument was to assess students' vocabulary knowledge and their ability to apply lexical items in meaningful contexts before and after the implementation of the gamified and movement-based intervention. The test aimed to measure both receptive (recognition) and productive (application) vocabulary skills, providing quantitative data to evaluate academic improvement.

Instructions

Students were instructed to complete all sections of the test individually within a time limit of 30 minutes. They were asked to read each question carefully and provide the most appropriate answer. The use of dictionaries or external assistance was not permitted. The same test structure was applied for both the pre-test and post-test to ensure consistency and comparability of results.

Test Structure

The test consisted of four sections designed to assess different aspects of vocabulary learning:

- Section A: Multiple Choice (Recognition)
- Section B: Matching (Meaning Association)
- Section C: Sentence Completion (Contextual Use)
- Section D: Sentence Production (Application)

SECTION A: MULTIPLE CHOICE (10 points)

Choose the correct answer.

1. I ___ my homework every day.
   a) do
   b) does
   c) doing
2. She ___ to school at 7 a.m.
   a) go
   b) goes
   c) going
3. A teacher works in a ___.
   a) hospital

b) school

c) market

4. I like to ___ soccer with my friends.
   a) play
   b) plays
   c) playing
5. We ___ English in class.
   a) study
   b) studies
   c) studying
6. My mother ___ dinner at night.
   a) cook
   b) cooks
   c) cooking
7. I ___ TV in the evening.
   a) watch
   b) watches
   c) watching
8. They ___ in the park.
   a) run
   b) runs
   c) running
9. A doctor works in a ___.
   a) school
   b) hospital
   c) store
10. I ___ to music every day.
    a) listen
    b) listens
    c) listening

SECTION B: MATCHING (10 points)

Match each word with its correct meaning.

Column A Column B

1. Teacher a. A place to buy things
2. Hospital b. A person who teaches
3. Store c. A place for sick people
4. Student d. A person who studies
5. Book e. Something you read

SECTION C: SENTENCE COMPLETION (10 points)

Complete the sentences using the correct word from the box.

(words: eat, go, play, study, read)

1. I ___ English every day.
2. They ___ soccer after school.
3. We ___ to the park on weekends.
4. She ___ a book at night.
5. I ___ breakfast in the morning.

SECTION D: SENTENCE PRODUCTION (10 points)

Write complete sentences using the following words:

1. Teacher → _____
2. School → _____
3. Play → _____
4. Study → _____
5. Friend → _____

UNIVERSIDAD BOLIVARIANA DEL ECUADOR

TRABAJO DE TITULACIÓN

TRIBUNAL PROYECTO DE TITULACIÓN

Nombre y Apellidos
Presidente

Nombre y Apellidos
Secretario (a)

Nombres y Apellidos
Profesor (a) tutor (a)
del Proyecto de Titulación