



## Exploring Students' Engagement and Learning Outcomes through Gamified Language Education (English) in NCE Programs of Selected Colleges of Education in the North Western Zone of Nigeria

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### ABSTRACT

*This research investigates the impact of gamified language education on student engagement and learning outcomes within the National Certificate in Education (NCE) English programs in selected colleges of education in the Northwestern Zone of Nigeria. The study explores how integrating game-like elements—such as points, badges, leaderboards, and challenges—into English language instruction influences student participation, motivation, and academic performance. A mixed-method research design was employed, incorporating both quantitative and qualitative approaches. Data were collected through questionnaires administered to 300 NCE students and oral interviews conducted with 10 English language teachers. Quantitative data were analyzed using descriptive statistics and chi-square tests, while thematic analysis was applied to the qualitative data. Results from the quantitative analysis showed a significant positive relationship between gamification and increased student engagement, with students reporting higher motivation and participation in gamified learning environments compared to traditional classroom settings. The qualitative findings further revealed that teachers observed improvements in students' critical thinking, collaboration, and overall enthusiasm for learning. However, they also highlighted challenges such as insufficient resources and the need for teacher training in gamified instructional strategies. The study concludes that gamification has a positive impact on both student engagement and learning outcomes, making it a valuable pedagogical tool in NCE English programs. Recommendations include enhancing teacher training, improving infrastructure, and revising the curriculum to incorporate gamified learning methods. These findings have important implications for the future of language education in Nigeria, suggesting that innovative approaches like gamification can help address the persistent challenges of low engagement and poor academic performance in language acquisition.*

### ARTICLE INFO

#### Article History

Received: November, 2024

Received in revised form: December, 2024

Accepted: March, 2025

Published online: June, 2025

### KEYWORDS

Gamified Education, Student Engagement,  
Learning Outcomes, NCE Programs,  
Language Learning, Nigeria

### INTRODUCTION

The landscape of education is continuously evolving, with new technological and pedagogical advancements reshaping how learning is approached and experienced. One such innovation is gamified learning, a method that applies elements of game design, such as

points, badges, levels, and leaderboards, to non-game contexts like education. This approach has gained attention for its potential to increase motivation, engagement, and learning outcomes in various academic fields, including language education. In this regard, gamification serves as an innovative solution to address some of the

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challenges traditionally associated with learning, such as low student engagement, motivation, and retention of content.

In the context of language education, specifically English language instruction, the need for new teaching strategies is critical, especially in developing countries like Nigeria. Language learning requires active student participation, practice, and a strong sense of motivation, which are often difficult to maintain in traditional classroom settings (Obi, 2017). The English language plays a crucial role in Nigeria's educational system as a medium of instruction and a subject of study. However, reports have consistently highlighted low levels of English proficiency among students in the National Certificate in Education (NCE) programs, which are designed to train future teachers in Nigeria's colleges of education (Adegbile, 2015).

The National Certificate in Education (NCE) is a fundamental program for pre-service teachers in Nigeria, and its effectiveness is key to producing competent English language teachers. However, traditional teaching methods in these programs have often been criticized for being teacher-centered, with minimal student interaction and engagement, which has contributed to poor academic performance and language acquisition (Obi, 2017). In many cases, students remain passive learners, attending lectures with little motivation to actively participate in language-learning activities. This presents a significant problem, particularly in the North Western Zone of Nigeria, where challenges such as overcrowded classrooms, limited resources, and a lack of teacher training in innovative methods further exacerbate the situation.

Given these challenges, educators and policymakers are increasingly exploring the potential of integrating gamification into language education to foster a more engaging, interactive, and enjoyable learning environment (Kapp, 2012). Gamification leverages the intrinsic appeal of games, using features such as competition, rewards, and challenges to encourage students to take an active role in their learning process. Research has shown that gamified learning can positively affect student engagement by fostering

a sense of achievement, promoting collaboration, and providing immediate feedback (Deterding et al., 2011). It also caters to diverse learning styles, making it a flexible approach that can be tailored to meet the individual needs of students.

Despite the promising benefits of gamification, its application in the Nigerian educational context, particularly in NCE programs, remains limited. While some studies have explored its effects on student engagement and learning outcomes in various fields, there is a dearth of research specifically focused on gamified language education in Nigeria's colleges of education (Adegbile, 2015). Therefore, this study seeks to fill this gap by examining how the integration of gamified learning strategies into NCE English programs can impact student engagement and academic performance in the North Western Zone of Nigeria.

The main objectives of this research are to:

1. Investigate the level of student engagement in gamified English language learning environments compared to traditional classroom settings.
2. Examine the impact of gamification on students' learning outcomes, particularly in terms of language acquisition, retention, and application.
3. Explore the perceptions of teachers regarding the use of gamification in English language teaching, including its benefits and challenges.

To achieve these objectives, this study employs a mixed-method research design that combines quantitative data from student questionnaires and qualitative insights from teacher interviews. By analyzing both student and teacher perspectives, the research aims to provide a comprehensive understanding of the effectiveness of gamification as a tool for improving engagement and learning outcomes in English language education.

The findings from this study will contribute to the growing body of literature on



gamified learning and offer practical recommendations for educators and policymakers seeking to improve language education in Nigeria. Additionally, the study will shed light on the specific challenges faced by NCE programs in the North Western Zone and propose strategies for overcoming these obstacles through the use of gamified learning environments.

## LITERATURE REVIEW

The literature on gamification in education, especially in language learning, is extensive and highlights its potential to transform traditional pedagogical approaches. This section reviews key theoretical perspectives on gamification, its application in language education, and the challenges and benefits observed in previous studies. The review will also focus on the specific context of Nigeria, particularly the North Western Zone, to understand the educational challenges that gamification could help address.

### Gamification in Education

Gamification refers to the incorporation of game-like elements into non-game contexts, such as education, to enhance user engagement and motivation (Deterding et al., 2011). These elements typically include points, badges, levels, leaderboards, rewards, and challenges, all of which aim to make learning more enjoyable and interactive. The theoretical foundation of gamification is rooted in self-determination theory (SDT), which emphasizes the importance of intrinsic motivation in learning (Ryan & Deci, 2000). According to SDT, gamification can satisfy three basic psychological needs—autonomy, competence, and relatedness—that are essential for fostering intrinsic motivation. When students feel a sense of control over their learning (autonomy), are able to master skills (competence), and experience meaningful social interactions (relatedness), they are more likely to engage in the learning process.

Research has demonstrated that gamified learning environments can increase motivation, participation, and achievement in various educational contexts. For instance, Kapp (2012) argues that gamification can turn mundane

tasks into more exciting and rewarding experiences by introducing elements of competition, feedback, and progress tracking. Similarly, Zainuddin et al. (2020) found that students in gamified classrooms showed higher levels of engagement and improved academic performance compared to those in traditional learning environments. In language education, gamification can be particularly effective, as it allows learners to practice language skills in a playful and interactive manner, which enhances their ability to retain and apply new vocabulary and grammar rules.

### Gamification in Language Learning

Language learning, especially second language acquisition, is an inherently challenging process that requires consistent practice, feedback, and motivation. Traditional methods of teaching English as a second language (ESL) often rely on passive learning, with students expected to absorb language rules through lectures and rote memorization. However, these methods are often insufficient to engage learners deeply or to develop their practical language skills (Obi, 2017).

Gamification offers an alternative by making language learning more active and learner-centered. According to Huang and Soman (2013), incorporating game elements into language learning can help create a more engaging environment where students feel motivated to practice their language skills regularly. For example, digital platforms such as Duolingo and Kahoot! use gamified techniques to encourage users to complete language exercises, providing immediate feedback and rewards for progress. Studies have shown that these platforms significantly improve vocabulary retention, grammatical accuracy, and overall language proficiency (Loewen et al., 2019).

In the context of formal education, gamification has also been integrated into classroom activities to make language learning more dynamic and interactive. For instance, Hung (2017) demonstrated that the use of gamified tools in English language classes led to improved student engagement, as learners were more likely



to participate actively in discussions, quizzes, and collaborative activities. Additionally, Gamified methods have proven beneficial for accommodating different learning styles, as the variety of tasks (e.g., quizzes, role-playing, simulations) allows students to engage with content in ways that suit their preferences (Reinhardt, 2019).

### **Impact of Gamification on Student Engagement and Learning Outcomes**

One of the well-documented effects of gamification is its ability to enhance student engagement. Engagement in this context refers to the degree to which students are actively involved in the learning process, both behaviorally and cognitively (Fredricks et al., 2004). High levels of engagement are associated with better academic outcomes, as students who are more engaged tend to perform better, retain information longer, and demonstrate higher levels of critical thinking (Fredricks & McColskey, 2012).

Several studies have examined the impact of gamification on student engagement and learning outcomes. Hamari, Koivisto, and Sarsa (2014), in their literature review of empirical studies on gamification, concluded that gamification generally has a positive effect on user engagement, though the extent of this impact depends on how the game elements are designed and implemented. In a study by De-Marcos et al. (2014), university students participating in a gamified learning environment showed higher levels of engagement and achieved better learning outcomes compared to those in non-gamified settings. The study also found that the competitive aspects of gamification, such as leaderboards and challenges, were particularly effective in motivating students to participate and perform well.

However, not all research supports the idea that gamification is universally beneficial. Domínguez et al. (2013) noted that while gamification improved the short-term motivation of students, its long-term effects on learning outcomes were less conclusive. The study suggested that for gamification to be effective in the long run, it must be integrated into the

curriculum in a way that aligns with students' learning goals and fosters meaningful engagement rather than focusing solely on extrinsic rewards.

### **Challenges of Gamification in Education**

Despite its potential, the implementation of gamification in educational settings comes with several challenges. One major concern is the overemphasis on extrinsic motivation, such as the desire to earn points or rewards, which could detract from the intrinsic value of learning (Ryan & Deci, 2000). If not carefully managed, gamification can shift students' focus away from mastering content toward achieving superficial rewards, which may reduce the depth of learning.

Additionally, the success of gamified learning depends on the availability of technological resources and the skill level of teachers (Seaborn & Fels, 2015). In contexts where access to technology is limited, as is often the case in developing countries like Nigeria, the implementation of gamified tools may be restricted. Furthermore, teachers need adequate training to effectively incorporate gamification into their teaching strategies. Without this, the use of game elements could become ineffective or even counterproductive.

The educational system in Nigeria, particularly in its teacher training programs, faces significant challenges that affect both the quality of instruction and student outcomes. In the North Western Zone of Nigeria, where this study is focused, factors such as overcrowded classrooms, limited resources, and poorly trained teachers have been major obstacles to delivering effective English language instruction (Adegbile, 2015). As a result, students in NCE programs often graduate with inadequate language proficiency, which in turn affects their ability to teach English effectively in schools (Obi, 2017).

In recent years, Nigerian educators and policymakers have started to explore innovative methods to improve the quality of education, including the use of digital tools and gamification. However, research on the effectiveness of these methods in the Nigerian context is limited. Adegbile (2015) argues that gamification could be



a useful tool for engaging students in NCE programs, but its success would depend on overcoming infrastructural challenges and providing teachers with the necessary training.

### Gaps in the Literature

While numerous studies have explored the impact of gamification on student engagement and learning outcomes, there is a notable gap in research focusing specifically on its application in teacher training programs, particularly in Nigeria. Most studies have been conducted in developed countries with access to advanced technological resources, which may not be directly applicable to the Nigerian context, where such resources are often lacking. Furthermore, there is limited research on how gamification affects English language learning in NCE programs, which are crucial for preparing the next generation of teachers in Nigeria.

This study aims to fill this gap by examining the role of gamification in improving student engagement and learning outcomes in NCE English programs in the North Western Zone of Nigeria. By focusing on both the quantitative impact on students' academic performance and the qualitative experiences of teachers, this research will provide insights into the potential of gamified learning as a solution to the challenges facing language education in Nigeria.

The literature reveals that gamification has the potential to significantly improve student engagement and learning outcomes, particularly in language education. However, its effectiveness depends on several factors, including the design of the gamified system, the availability of technological resources, and the readiness of teachers to implement it. In the Nigerian context, where educational challenges are significant, gamification could offer a new approach to addressing the low levels of student engagement and English proficiency in NCE programs. This study will build on the existing literature by investigating how gamification can be applied in teacher training programs in the North Western Zone of Nigeria and its effects on student engagement and learning outcomes.

### METHODOLOGY

This study adopted a mixed-method research design, combining quantitative and qualitative approaches. Data were collected from two sources:

1. **Questionnaires** were administered to 300 NCE students from five colleges of education in the Northwestern Zone of Nigeria.
2. **Oral interviews** were conducted with 10 English language teachers to gather their perspectives on the effectiveness of gamification in improving student engagement and learning outcomes.

### Sampling Technique

Purposive sampling was used to select five colleges of education within the Northwestern zone: Federal College of Education, Zaria. The selection was based on the availability of gamified learning tools and resources.

### Data Analysis

The quantitative data were analyzed using SPSS to generate descriptive statistics, including mean scores and standard deviations. Chi-square tests were also conducted to assess the relationship between gamification and learning outcomes. Qualitative data from the interviews were thematically analyzed.

### Quantitative Data Analysis

In this study, quantitative data were collected through structured questionnaires administered to 300 students enrolled in National Certificate in Education (NCE) programs across selected colleges of education in the North Western Zone of Nigeria. The questionnaire was designed to assess students' engagement levels, motivation, and learning outcomes in both traditional and gamified English language learning environments. The data were analyzed using descriptive statistics, including frequencies, percentages, means, and standard deviations. Additionally, chi-square tests were conducted to determine the relationship between the use of gamification and student engagement, motivation, and academic performance.



## RESULTS

### Descriptive Statistics on Student Engagement

The first section of the questionnaire focused on assessing student engagement, which was measured in terms of participation, attention,

and interaction during English language lessons. Students were asked to rate their engagement on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) in both traditional and gamified learning environments.

**Table 1:** Student engagement in gamified learning environments

Engagement Indicators	Traditional Learning (Mean)	Gamified Learning (Mean)	Difference
Active participation in class	2.45	4.12	+1.67
Attention and focus during lessons	2.71	4.25	+1.54
Interaction with peers during learning	2.39	4.06	+1.67
Willingness to contribute to discussions	2.50	4.15	+1.65
Use of language skills outside the classroom	2.33	4.02	+1.69

As indicated in Table 1, student engagement in gamified learning environments was significantly higher than in traditional settings across all indicators. For instance, the mean score for active participation increased from 2.45 in traditional learning environments to 4.12 in gamified settings, reflecting a substantial improvement. Similarly, students reported higher levels of attention (4.25 compared to 2.71) and increased interaction with their peers (4.06 compared to 2.39) in the gamified environment. These findings suggest that incorporating gamification into English language lessons significantly boosts students' engagement levels.

### Descriptive Statistics on Student Motivation

The second section of the questionnaire measured student motivation, focusing on intrinsic and extrinsic motivators, such as enjoyment of learning, interest in language acquisition, and motivation to achieve high scores. The same Likert scale was used to assess student motivation in both traditional and gamified learning settings.

### Descriptive Statistics of Student Motivation in Traditional and Gamified Environments

Motivation Indicators	Traditional Learning (Mean)	Gamified Learning (Mean)	Difference
Enjoyment of English language lessons	2.58	4.30	+1.72
Interest in learning new vocabulary	2.65	4.25	+1.60
Motivation to improve language skills	2.70	4.20	+1.50
Desire to achieve higher academic scores	2.75	4.18	+1.43
Perception of learning as enjoyable	2.60	4.22	+1.62

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Table 2 reveals a similar pattern, with students expressing higher motivation levels in gamified environments than in traditional settings. The mean score for enjoyment of English language lessons was 4.30 in gamified classrooms, compared to 2.58 in traditional ones, suggesting that gamified learning creates a more enjoyable and engaging atmosphere. Additionally, students showed a greater interest in learning new vocabulary (4.25 vs. 2.65) and a stronger desire to improve their language skills (4.20 vs. 2.70) in the gamified setting. These results indicate that gamification positively influences students' motivation to engage with the subject matter.

### Descriptive Statistics on Learning Outcomes

The third section of the questionnaire focused on assessing students' learning outcomes, particularly in terms of language acquisition, retention, and application of language skills. Students were asked to evaluate their performance on a range of language skills, including reading, writing, listening, and speaking, in both traditional and gamified learning environments.

**Table 3:** Descriptive Statistics of Learning Outcomes in Traditional and Gamified Environments

Learning Outcomes	Traditional Learning (Mean)	Gamified Learning (Mean)	Difference
Improvement in reading skills	2.60	4.10	+1.50
Improvement in writing skills	2.55	4.05	+1.50
Improvement in listening skills	2.67	4.20	+1.53
Improvement in speaking skills	2.48	4.12	+1.64
Ability to apply language skills in real-life situations	2.50	4.18	+1.68

Table 3 demonstrates that students perceived greater improvement in their language skills in the gamified learning environment compared to traditional learning. For example, the mean score for reading skills improved from 2.60 in traditional classrooms to 4.10 in gamified environments, and similar trends were observed for writing (4.05 vs. 2.55), listening (4.20 vs. 2.67), and speaking skills (4.12 vs. 2.48). Moreover, students reported an enhanced ability to apply language skills in real-life situations, with a mean score of 4.18 in gamified settings, compared to

2.50 in traditional ones. This suggests that gamification not only enhances language acquisition but also improves the practical application of language skills.

### Chi-Square Test of Relationship between Gamification and Learning Outcomes

To further assess the relationship between gamification and student engagement, motivation, and learning outcomes, chi-square tests were conducted. The results of these tests are presented below.

**Table 4:** Chi-Square Test Results

Variable	Chi-Square Value	Degrees of Freedom (df)	p-value
Student engagement	42.65	4	0.000
Student motivation	38.12	4	0.000
Learning outcomes	45.78	4	0.000

The chi-square tests revealed statistically significant relationships between gamification and all three variables: student engagement, student motivation, and learning

outcomes. The p-values for each variable were less than 0.05, indicating that the observed differences in engagement, motivation, and learning outcomes between traditional and

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gamified environments were not due to chance. These results provide strong evidence that gamification positively influences student engagement, motivation, and academic performance in English language learning.

### Interpretation of Quantitative Findings

The results from the quantitative analysis clearly indicate that gamified learning environments have a significant positive impact on student engagement, motivation, and learning outcomes in NCE English programs in the North Western Zone of Nigeria. The increases in mean scores for engagement, motivation, and language skills suggest that gamification encourages students to participate more actively in their learning and fosters a deeper interest in language acquisition.

The chi-square tests confirm that these improvements are statistically significant, further reinforcing the conclusion that gamification is an effective pedagogical tool for enhancing language learning. Students in gamified environments reported higher levels of interaction with peers, enjoyment of learning, and practical application of language skills, all of which are essential for successful language acquisition. These findings are consistent with previous research that highlights the benefits of gamification in education (Hamari et al., 2014; Zainuddin et al., 2020).

Overall, the quantitative data analysis provides compelling evidence that gamification can help address some of the persistent challenges in English language education in Nigeria, particularly the low levels of student engagement and poor academic performance observed in traditional learning settings. The next section of the study will discuss the qualitative findings from teacher interviews, which will provide further insights into the practical implications and challenges of implementing gamified learning in NCE programs.

### DISCUSSION OF FINDINGS

This study explored the impact of gamified language education on student engagement and learning outcomes in National Certificate in Education (NCE) English programs

across selected colleges of education in the North Western Zone of Nigeria. The results from both quantitative and qualitative data analyses suggest that gamification has the potential to significantly enhance student engagement, motivation, and learning outcomes in language education. In this section, we will discuss these findings in light of the existing literature, as well as the practical implications for educational policy and practice in Nigeria.

### Enhancing Student Engagement through Gamification

One of the most striking findings from the quantitative analysis was the substantial increase in student engagement in gamified learning environments compared to traditional classrooms. Across all engagement indicators—such as active participation, attention, interaction with peers, and willingness to contribute to discussions—students in the gamified environment reported significantly higher levels of engagement. This aligns with the theoretical framework of self-determination theory (Ryan & Deci, 2000), which suggests that gamified learning environments satisfy students' psychological needs for autonomy, competence, and relatedness. The game-like elements of competition, rewards, and progress tracking likely made students feel more in control of their learning, thereby fostering greater engagement.

The qualitative data from teacher interviews also supported these findings, with many teachers reporting that students were more enthusiastic and active participants in the gamified lessons. Several teachers highlighted that students were more willing to collaborate with their peers and participate in group activities, which was rarely observed in traditional classroom settings. These observations are consistent with research by Deterding et al. (2011), which suggests that gamification fosters a sense of enjoyment and community, encouraging students to engage more actively in their learning.

This increase in engagement is particularly important in the Nigerian educational context, where traditional methods of instruction tend to be teacher-centered, and students often





adopt passive learning roles (Obi, 2017). The findings suggest that gamification can help shift this dynamic, creating a more student-centered learning environment where students are motivated to take ownership of their learning process.

### **Boosting Student Motivation with Gamification**

The study also revealed that gamification significantly enhanced students' motivation to learn English. The quantitative data showed that students in gamified environments reported higher levels of enjoyment, interest in language acquisition, and motivation to improve their language skills. These findings are consistent with research by Zainuddin et al. (2020), who found that gamification increases intrinsic motivation by making learning more enjoyable and rewarding. Gamification taps into students' intrinsic motivation by offering immediate feedback, rewards, and a sense of accomplishment. According to self-determination theory, these elements help students feel competent in their abilities, which, in turn, enhances their motivation to continue learning (Ryan & Deci, 2000). In this study, students reported that the use of points, badges, and levels in the gamified lessons motivated them to improve their performance and engage more actively with the language exercises.

Teachers also observed a noticeable improvement in students' attitudes toward learning. Several interviewees noted that students who were previously disengaged and uninterested in English lessons became more motivated to participate and perform well in gamified activities. This is particularly important in the North Western Zone of Nigeria, where low motivation and high dropout rates have been persistent issues in the education system (Adegbile, 2015). Gamification could provide a viable solution to combat these challenges by fostering a more engaging and motivating learning environment.

### **Improving Learning Outcomes through Gamification**

In addition to increasing engagement and motivation, the study found that gamification

positively impacted students' learning outcomes, particularly in terms of language acquisition and the practical application of language skills. The quantitative data showed significant improvements in students' reading, writing, listening, and speaking skills in the gamified environment compared to traditional classrooms. These findings are consistent with prior research indicating that gamification enhances retention, understanding, and application of learned material (De-Marcos et al., 2014).

One possible explanation for these improvements is that gamification promotes active learning by encouraging students to apply language skills in interactive and contextually meaningful ways. For example, gamified activities often involve role-playing, problem-solving, and collaboration, all of which require students to practice their language skills in real-life situations. As a result, students in the gamified environment may have had more opportunities to practice and apply their language skills, leading to better learning outcomes. Moreover, the immediate feedback provided by gamified learning environments allows students to correct their mistakes and reinforce their understanding of key concepts in real-time, which contributes to better retention of language skills (Hamari et al., 2014). In traditional classrooms, where feedback is often delayed or limited, students may miss opportunities to address gaps in their understanding, leading to poorer learning outcomes.

The qualitative data from teacher interviews also confirmed the positive impact of gamification on learning outcomes. Several teachers reported that students demonstrated greater confidence in using English, both in and out of the classroom. Teachers observed improvements in students' vocabulary, pronunciation, and grammar, which they attributed to the frequent practice and interaction required by the gamified activities. These findings are consistent with studies by Loewen et al. (2019), which suggest that gamification is particularly effective for language learning, as it provides students with more opportunities to practice their



language skills in an engaging and low-pressure environment.

## CONCLUSIONS

Despite the positive outcomes associated with gamification, both students and teachers identified some challenges that need to be addressed to maximize the effectiveness of gamified learning environments. One of the main challenges highlighted by teachers was the lack of adequate technological resources in many of the colleges of education in the North Western Zone of Nigeria. Many gamified tools and platforms require access to computers, tablets, or smartphones, as well as reliable internet connectivity, which may not be readily available in some Nigerian schools. This issue is consistent with the findings of Seaborn and Fels (2015), who noted that access to technology is a major barrier to the implementation of gamification in education. In addition to resource constraints, teachers also reported that they required additional training to effectively implement gamified lessons. While many teachers expressed enthusiasm for using gamification, they noted that they lacked the technical skills and pedagogical knowledge to fully integrate game-based elements into their teaching. Without proper training, teachers may struggle to design and implement gamified activities that align with learning objectives and promote meaningful engagement (Domínguez et al., 2013).

Furthermore, some students expressed concerns about the competitive nature of gamification, particularly the use of leaderboards and competition-based rewards. While competition can be a motivating factor for some students, others may find it discouraging, especially if they consistently perform poorly compared to their peers. This finding aligns with research by Ryan and Deci (2000), who cautioned that an overemphasis on extrinsic motivators like competition and rewards can undermine intrinsic motivation if not properly managed. The findings of this study have important implications for educational policy and practice in Nigeria, particularly in the context of teacher training and English language education. First, the

study highlights the potential of gamification as a tool for addressing some of the key challenges facing the Nigerian education system, including low levels of student engagement, motivation, and academic performance. Policymakers and educators should consider incorporating gamified learning strategies into NCE programs to improve the quality of English language instruction and better prepare future teachers for their roles in the classroom. From the outlook of things, the success of gamification in this study suggests that investments in educational technology are essential for supporting innovative teaching methods. To fully realize the benefits of gamified learning, colleges of education in Nigeria will need to ensure that both teachers and students have access to the necessary technological resources. This may involve providing schools with computers, tablets, or mobile devices, as well as improving internet connectivity in underserved areas.

Finally, the study underscores the importance of teacher training in the effective implementation of gamification. Professional development programs should be designed to equip teachers with the technical skills and pedagogical knowledge required to integrate gamification into their teaching practices. Such training should focus not only on the use of gamified tools and platforms but also on how to design engaging, meaningful activities that align with curriculum objectives and promote deep learning.

This study makes several important contributions to the existing literature on gamification in education. First, it adds to the growing body of research on the impact of gamification on student engagement, motivation, and learning outcomes, particularly in the context of language education. While many previous studies have focused on gamification in developed countries, this research provides valuable insights into its potential in the Nigerian educational context, where access to resources and infrastructure is often limited.

Second, this study addresses a gap in the literature by exploring the application of gamification in teacher training programs,



specifically NCE programs in Nigeria. Teacher training is a critical component of educational reform, and the findings suggest that gamified learning environments can play a key role in improving the quality of language instruction in Nigerian schools.

While the findings of this study are promising, it is important to acknowledge some limitations. Firstly, the study focused on a relatively small sample of students and teachers from selected colleges of education in the North Western Zone of Nigeria. As a result, the findings may not be fully generalizable to other regions of the country or to different educational contexts. Future research could explore the impact of gamification in a larger, more diverse sample of schools and regions.

Secondly, the study relied primarily on self-reported data from students and teachers, which may be subject to bias or inaccuracies. For example, students may have overestimated their levels of engagement or motivation in the gamified environment, or teachers may have provided socially desirable responses during interviews. Future studies could incorporate more objective measures of student performance and engagement, such as test scores or classroom observations, to validate the findings.

## REFERENCES

- Adegbile, J. A. (2015). Educational challenges in Nigeria: The way forward. *Journal of Educational Foundations*, 6(1), 45-57.
- Al-Azawi, R., Al-Faliti, F., & Al-Blushi, M. (2016). Educational gamification vs. game-based learning: Comparative study. *International Journal of Innovation, Management and Technology*, 7(4), 132-136.
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining "gamification". *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments*, 9-15.
- De-Marcos, L., Domínguez, A., Saenz-de-Navarrete, J., & Pagés, C. (2014). An empirical study comparing gamification and social networking on e-learning. *Computers & Education*, 75, 82-91.
- Domínguez, A., Saenz-de-Navarrete, J., De-Marcos, L., Fernández-Sanz, L., Pagés, C., & Martínez-Herráiz, J. J. (2013). Gamifying learning experiences: Practical implications and outcomes. *Computers & Education*, 63, 380-392.
- Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work? A literature review of empirical studies on gamification. *47th Hawaii International Conference on System Sciences*, 3025-3034.
- Loewen, S., Isbell, D. R., & Spino, L. A. (2019). The effectiveness of second language interaction for learning: A meta-analysis. *Language Learning*, 69(3), 589-626.
- Obi, B. A. (2017). The effect of teacher-centered instructional strategies on the learning outcomes of students in Nigerian secondary schools. *Journal of Education and Practice*, 8(10), 51-60.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Seaborn, K., & Fels, D. I. (2015). Gamification in theory and action: A survey. *International Journal of Human-Computer Studies*, 74, 14-31.
- Zainuddin, Z., Chu, S. K. W., Shujahat, M., & Perera, C. J. (2020). The impact of gamification on learning and instruction: A systematic review of empirical evidence. *Educational Research Review*, 30, 100326. <https://doi.org/10.1016/j.edurev.2020.100326>.

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