



UTILIZATION OF DIGITAL GAMES FOR TEACHING ENGLISH LANGUAGE IN JUNIOR SECONDARY SCHOOLS IN ONDO WEST LOCAL GOVERNMENT IN ONDO STATE

Folahan, Olaniyi Olukayode

Department of Educational Technology,
Adeyemi Federal University of Education,
Ondo State, Nigeria.

And

Omotunde, Christopher Tayo (Ph. D)

Department of Educational Technology,
Adeyemi Federal University of Education,
Ondo State, Nigeria.

Abstract

The integration of digital games in language education has garnered increasing attention due to their potential to enhance student engagement and learning outcomes. This study examines utilization of digital games for teaching English Language in Junior Secondary Schools in Ondo West Local Government Area in Ondo state. The study evaluated teachers' awareness of digital games for teaching English in junior secondary schools, the extent of digital game usage, challenges hindering their integration, and teachers' attitudes toward their adoption in English language teaching. A descriptive survey research design was employed. The population comprised of 1827 teachers. The sample consisted of 100 English language teachers selected through simple random sampling technique. Data were collected using a structured questionnaire titled "Awareness and Utilization of Digital Games for Teaching English Language in Junior Secondary Schools" (AUDGTELJSS) with a reliability coefficient of 0.80. The data collected were analyzed using descriptive statistics and Mann-Whiney U test. The findings reveal that while teachers are highly aware of the benefits of digital games, their actual utilization remains low, primarily due to resource constraints, inadequate training, and infrastructural limitations. Teachers exhibit different attitude towards the adoption of digital games, and there is significant gender-based differences in attitude. The study recommends increased investment in digital infrastructure, targeted professional development programmes, and policy reforms to facilitate the effective integration of game-based learning in English language instruction.

Keywords: Digital games, English language learning, junior secondary schools, educational technology, game-based learning

Introduction

The rapid advancement of information and communication technologies (ICT) has significantly influenced pedagogical approaches, particularly in language education. Digital games, as interactive learning tools, offer immersive and engaging experiences that foster students' cognitive and linguistic skills (Liu *et al.*, 2024). In Nigeria, where English is the

official language and a core subject in the curriculum, integrating digital games into classroom instruction presents an opportunity to enhance language proficiency among students (Adeniran, 2018).

Digital games are interactive tools that engage users via platforms such as computers, consoles, and mobile devices,

offering experiences from simple puzzles to immersive environments (Boyle *et al.*, 2015). Educational games such as Classcraft gamify integrate content within the confine of the classroom while serious games serve specific purposes, such as training or simulation (Clark *et al.*, 2016).

Research indicates that digital games make learning more engaging and effective by providing interactive, problem-solving experiences that enhance critical thinking and retention (An & Cao, 2017). As for the teaching and learning of the English language, the incorporation of digital games provides immersive environments where students can practice reading, writing, speaking, and listening skills (Reinhardt & Thorne, 2016). Games like Minecraft, Duolingo, and Kahoot have been successful in teaching English by aligning gameplay with language objectives (Wang & Tahir, 2020)

The constructivist theory of learning underscores the active role of learners in constructing knowledge through engagement and social interaction (Piaget, 1952; Vygotsky, 1978). Digital games align with this framework by creating interactive environments that promote experiential learning, critical thinking, and problem-solving skills (Clark *et al.*, 2016). According to Kolb (2015), digital games often incorporate collaborative elements, enhancing social interaction, experiential learning, practical engagement which is central to Vygotsky's framework. Games also scaffold learning by gradually increasing difficulty, similar to Vygotsky's ZPD.

Moreover, digital games are highly motivating, capturing students' interest and promoting sustained engagement which is a key aspect of constructivist learning (Plass *et al.*, 2015). The integration of such tools in teaching English language offers learners opportunities to apply language in

authentic, interactive scenarios, making knowledge construction more relevant and effective (Boyle *et al.*, 2015). Thus, constructivist theory supports the use of digital games in fostering active, socially enriched, and contextually meaningful language learning experiences for junior secondary school students in Nigeria.

As technology is advancing, the definition of digital games has expanded beyond traditional electronic games to include emerging technologies that enhance digital audio and video experiences (Pinheiro *et al.*, 2022). Digital games utilize computer technology to deliver interactive and immersive experiences, supporting online multiplayer gaming, web browsing, and digital game distribution without the need for physical media (Pinheiro *et al.*, 2022). Also, Gamification has become an influential concept in education. Huotari & Hamari (2017) define it as the integration of game design elements into non-game settings to enhance motivation and psychological engagement. This definition highlights the role of game elements in shaping individuals' motivation and psychological experiences. According to Zhong & Wang (2016), these games incorporate multimedia features, making them engaging and goal-oriented. Digital instructional media generally affords learners high level of understanding of the subject matter good knowledge retention (Folahan & Omotunde, 2021)

In education, digital games like "Minecraft Education Edition" or "Duolingo" are designed to align with learning objectives. Games provide immediate feedback and encourage active participation, which enhances cognitive skills (Bavelier & Green, 2019) and supports personalized learning (Plass *et al.*, 2015). In language learning, digital games improve vocabulary and communication skills by immersing students in authentic, interactive environments (Peterson, 2016;

Loewen *et al.*, 2020). Furthermore, games promote cultural awareness by presenting language in context, aiding learners in understanding social and cultural nuances (Thorne *et al.*, 2018).

In Nigeria, teachers' awareness of digital games as educational tools is limited. Olusola & Alaba (2016) opined that secondary school teachers are often unfamiliar with these tools due to insufficient access to resources and inadequate professional development opportunities. In contrast, Adeoye & Akanbi (2019) study revealed that teachers who received training were more likely to adopt digital games in their lessons.

Furthermore, incorporating digital games into English language in Nigeria can enhance learners' language achievement, enjoyment, and motivation (Liu *et al.*, 2024). Similarly, Chen *et al.* (2024) reported that digital game-based learning environments improved self-regulated learning strategies and vocabulary development among primary school students. Popular games such as *Minecraft Education Edition*, *Duolingo*, and *Kahoot* have demonstrated effectiveness in fostering vocabulary retention and communication skills (Wang & Tahir, 2020). However, in Nigeria, barriers such as insufficient digital infrastructure, lack of teacher training, and curriculum constraints hinder their widespread use (Olusola & Alaba, 2016).

Moreover, teachers' perceptions of digital games as learning tools vary. While some recognize their potential to enhance engagement, others view them as distractions or struggle with their integration due to technical challenges (Kim & Ke, 2016; Becker, 2017). These conflicting views highlight the need for targeted interventions to facilitate the adoption of digital game-based learning.

Statement of Problem

The rapid advancement of ICT has positioned digital games as effective tools for enhancing language education by fostering engagement, critical thinking, and linguistic skills. In Nigeria, where English is a core subject, integrating digital games into junior secondary schools could significantly improve language proficiency. Despite the global shift toward digital game-based learning (DGBL), the adoption of these tools in Nigerian junior secondary schools remains limited. While some studies highlight the benefits of digital games in improving motivation and learning outcomes concerns persist regarding their implementation in resource-constrained environments. This study investigates the utilization of digital games for teaching English, evaluates the barriers to their effective adoption, and examines teachers' attitudes toward their integration into the curriculum, aiming to inform strategies for effective implementation in resource-constrained settings.

Objectives of the Study

The objective of this study is to examine the awareness and utilization of digital games for teaching English Language in Ondo West for Junior Secondary Schools. The specific objectives of the study are as follows:

- i. To assess the level of awareness of English Language Junior Secondary School teachers about the use digital games for teaching
- ii. To investigate the extent to which digital games are utilized by teachers in the teaching of English language in Junior Secondary Schools.
- iii. To identify the challenges, face by English Language teachers in Junior Secondary School in the use of digital games.



- iv. To assess the attitudes of Junior Secondary School English Language teachers towards the use of digital games.

Research Questions

The following research questions were raised and answered in the study:

1. What is the level of awareness among teachers regarding the use of digital games for teaching English language in Junior Secondary Schools?
2. To what extent are digital games utilized in the teaching of English language in Junior Secondary Schools?
3. What are the challenges hindering the effective integration of digital games for teaching English in Junior Secondary Schools?
4. What are the attitudes of Junior Secondary School English Language teachers towards the use of digital games?

Research Hypothesis

The following hypothesis was formulated to guide the study and tested at 0.05 level of significance.

Hypothesis:

There is no significant difference in the attitude of junior secondary school teachers towards the use of digital games based on gender

Methodology

The study employed a descriptive survey research design with a population comprising of 1827 teachers. A sample of 100 English language teachers was selected using simple random sampling technique. Data collection was carried out using a questionnaire titled "Awareness and Utilization of Digital Games for Teaching English Language in Junior Secondary Schools" (AUDGTELJSS), which had a reliability coefficient of 0.80. The data collected were analyzed using mean and standard deviation for the research questions and Mann-Whitney U test for the hypothesis at a 0.05 level of significance.

Results

Research Question 1: What is the level of awareness among teachers regarding the use of digital games for teaching English language in Junior Secondary School?

Table 1: Level of Awareness among Teachers in the use of Digital Games for Teaching English Language in Junior Secondary Schools

Items	SA	A	D	SD	Mean (\bar{x})	SD
I know about the benefits of using digital games for teaching English.	69	16	10	5	3.49	0.87
I am familiar with different types of digital games that can be used in English lessons.	25	54	21	0	3.04	0.68
I have attended workshops or training on using digital games for English teaching.	34	38	21	7	2.99	0.91
I know how to integrate digital games into the English language curriculum.	52	27	21	0	3.31	0.80
I regularly seek information about new digital games for educational purposes.	32	39	29	0	3.03	0.78
I know how to access digital games for classroom use.	41	35	14	10	3.07	0.97
Total					3.16	



Finding from table 1 reveals the level of awareness among teachers regarding the use of digital games for teaching English in Junior Secondary Schools. The table shows that respondents know about the benefits of using digital games for teaching English ($\bar{x} = 3.49$), are familiar with different types of digital games that can be used in English lessons ($\bar{x} = 3.04$), have attended workshops and training on using digital games for English teaching ($\bar{x} = 2.99$), know how to integrate digital games into the English language curriculum ($\bar{x} = 3.31$), regularly seek information about new digital games

for educational purposes ($\bar{x} = 3.03$), and know how to access digital games for classroom use ($\bar{x} = 3.07$). With a weighted average of 3.16 out of a maximum value of 4.00, which falls within the range indicating a high level of awareness, it can be concluded that teachers in Ondo State exhibit a high level of awareness regarding the use of digital games for teaching English in Junior Secondary Schools.

Research Question 2: To what extent are digital games utilized in the teaching of English language in Junior Secondary Schools?

Table 2: Extent to which Digital Games are Utilized in the Teaching of English Language in Junior Secondary Schools

Items	SA	A	D	SD	Mean (\bar{x})	SD
Digital games are frequently used in my English language classes.	15	12	62	11	2.31	0.86
I incorporate digital games into my lesson plans for teaching English.	15	14	57	14	2.30	0.89
My students engage in digital game-based activities to learn English.	13	12	62	13	2.25	0.85
I use digital games to assess my students' English language proficiency.	14	10	62	14	2.24	0.87
Digital games are part of my regular instructional materials for English lessons.	15	12	59	14	2.28	0.89
My students show enthusiasm when digital games are used in English lessons.	11	10	65	14	2.18	0.81
I adopt digital games to fit the learning objectives of my English classes.	13	9	62	16	2.19	0.86
Total						2.25

The findings presented in Table 2 reveals the extent to which digital games are utilized in the teaching of English language in Junior Secondary Schools. Although students' express enthusiasm when digital games are integrated into English lessons ($\bar{x} = 3.64$),

their overall usage by teachers remains limited. Specifically, teachers report that digital games are not frequently used in English language classes ($\bar{x} = 2.31$), and they often do not incorporate digital games into their lesson plans for English instruction



(\bar{x} = 2.25). Additionally, students do not regularly engage in digital game-based activities to enhance their English learning (\bar{x} = 2.24), and digital games are not utilized to assess students' English language proficiency (\bar{x} = 2.28). Moreover, digital games are not considered part of the regular instructional materials for English lessons (\bar{x} = 2.18), and teachers do not adapt digital games to align with the learning objectives of their English classes (\bar{x} = 2.19). With a

weighted average score of 2.25 out of a maximum possible score of 4.00, which indicates low utilization, it can be concluded that the integration of digital games in English teaching at Junior Secondary Schools is limited.

Research Question 3: What are the challenges hindering the effective integration of digital games for teaching English in Junior Secondary Schools?

Table 3: Challenges Hindering the Effective Integration of Digital Games for Teaching English in Junior Secondary Schools.

Items	SA	A	D	SD	Mean (\bar{x})	SD
Lack of access to digital devices and the internet in schools.	74	13	13	0	3.61	0.71
Insufficient training on how to use digital games for teaching English.	38	51	11	0	3.27	0.65
Limited availability of digital games that align with the English language curriculum.	20	46	23	11	2.75	0.90
High cost of acquiring quality digital games for educational use.	54	31	15	0	3.39	0.74
Technical issues, such as software malfunctions or hardware failures.	41	43	12	4	3.21	0.81
Lack of time to integrate digital games into the lesson plans.	62	28	5	5	3.47	0.81
Concerns about students becoming distracted by digital games.	31	50	18	1	3.11	0.72
Total					3.26	

Findings from table 3 present the challenges hindering the effective integration of digital games for teaching English in Junior Secondary Schools. The table reveals several obstacles, including limited access to digital devices and the internet in schools (\bar{x} = 3.61), insufficient training on how to use digital games for English instruction (\bar{x} = 3.27), and a limited availability of digital games that align with the English language curriculum (\bar{x} = 2.75). Additionally, the high cost of acquiring quality digital games for educational purposes is a concern (\bar{x} = 3.39), along with technical issues such as software malfunctions or hardware failures (\bar{x} = 3.21). Teachers also face challenges in

finding sufficient time to integrate digital games into their lesson plans (\bar{x} = 3.47) and are concerned about students becoming distracted by digital games (\bar{x} = 3.11). With a weighted average of 3.26 out of a maximum score of 4.00, which falls within the high range, it can be concluded that the challenges hindering the effective integration of digital games in teaching English at Junior Secondary Schools are significant.

Research Question 4: What are the attitudes of Junior Secondary School English Language teachers towards the use of digital games?

**Table 4:** Attitudes of Junior Secondary School English Language teachers towards the use of digital games.

Items	SA	A	D	SD	Mean (\bar{x})	SD
I believe digital games can enhance the learning experience in English classes	23	59	11	7	2.98	0.79
I open to integrating digital games into my English teaching practices	56	33	10	1	3.44	0.71
I feel confident in my ability to use digital games effectively in English lessons	46	43	9	2	3.33	0.73
I am willing to spend time learning how to use new digital games for teaching	63	29	4	4	3.51	0.76
I see digital games as a valuable tool for engaging students in English lessons	34	51	14	1	3.18	0.70
Total						3.29

The findings from Table 4 reveal the attitudes of Junior Secondary School English Language teachers towards the use of digital games. The results indicate that teachers generally hold positive views, with many believing that digital games can enhance the learning experience in English classes ($\bar{x} = 2.98$), and expressing openness to integrating digital games into their teaching practices ($\bar{x} = 3.44$). Teachers also report feeling confident in their ability to use digital games effectively in English lessons ($\bar{x} = 3.33$), and are willing to dedicate time to learning how to use new digital games for teaching ($\bar{x} = 3.51$). Additionally, they

perceive digital games as a valuable tool for engaging students in English lessons ($\bar{x} = 3.18$). With a weighted average of 3.29 out of a maximum score of 4.00, which falls within the high range, it can be inferred that the attitudes of Junior Secondary School English Language teachers towards the use of digital games are positive.

Test for Hypothesis

Research hypothesis: There is no significant difference in the attitude of Junior Secondary School teachers towards the use of digital games based on gender

Table 5 showing Mann-Whitney U on Attitude of Junior Secondary School teachers towards the use of Digital Games Based on Gender

Ranks								
	Gender	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Attitude	M	38	72.82	2767.00	330.000	2283.000	-6.815	.000
	F	62	36.82	2283.00				
	Total	100						



The results presented in Table 5 indicate that males generally have higher attitude scores compared to females. The mean rank for males ($M = 72.82$) is significantly higher than that of females ($F = 36.82$). Since $p\text{-value} < 0.05$ (typically 0.000, which is highly significant). This means there is a statistically significant difference in attitude scores between males and females. Therefore, it can be concluded that teachers' attitudes towards the use of digital games were influenced by gender. Hence, the null hypothesis was rejected.

Discussion

This study examines the utilization of digital games for teaching English language in junior secondary schools. The findings revealed a significant level of awareness among teachers regarding the potential benefits of using digital games in education. Many teachers are familiar with various types of digital games that could be integrated into English lessons and have a sound understanding of how these tools might align with the curriculum. This widespread awareness can be linked to the growing exposure to technology in education, supported by recent global reforms emphasizing digital tools. This observation is consistent with the findings of Kim & Ke (2016), who highlighted the increasing recognition of digital games as effective tools for promoting student engagement and enhancing language learning. The recognition of digital games' educational value, as seen in this study, reflects the broader trend of educators acknowledging the potential of these tools despite challenges in practical application. However, the actual utilization of digital games in teaching English remains limited. While teachers recognize the potential benefits, the integration of these tools into classroom instruction is still relatively low. This gap between awareness and utilization

aligns with Becker (2017), who noted that even though teachers acknowledge the value of digital games, various practical barriers hinder their frequent use. These obstacles include time constraints in lesson planning, limited access to resources, and the technical knowledge required to implement these tools effectively. Similarly, in this study, teachers' enthusiasm for digital games was evident, yet their actual use in teaching was minimal due to these challenges.

The study further highlights several key barriers to the effective use of digital games in English teaching. Limited access to digital devices, poor internet connectivity, insufficient training, and the high cost of educational games were identified as significant obstacles. These findings support Olusola and Alaba., (2016), who identified technological constraints and inadequate professional development as primary factors preventing teachers from fully embracing digital tools. Additionally, concerns about potential distractions, technical malfunctions, and the alignment of game content with academic goals contribute to teachers' hesitation in adopting digital games. This is consistent with the concerns raised by Clark *et al.*, (2016), who emphasized the need for better support systems to ensure that digital games can be effectively integrated without disrupting the learning process.

Teachers generally exhibited positive attitudes toward the use of digital games in the classroom. Many expressed a willingness to learn more about incorporating digital tools into their teaching practices and believed in the potential of these games to enhance student engagement and learning outcomes. This optimism mirrors findings from An and Cao (2017), who noted that when digital games are aligned with learning objectives, teachers are more inclined to view them as beneficial



tools for fostering motivation and participation in students.

The Mann-Whitney U test result revealed a significant difference in teachers' attitudes toward the use of digital games based on gender. Both male and female teachers expressed different views on the educational potential of digital games, suggesting that teachers' attitudes towards the use of digital games were influenced by gender. This finding is consistent with research by Liu *et al.*, (2024), which also concluded that gender plays little to no role in teachers' adoption of educational technologies.

Conclusion

The study concludes that although teachers possess high awareness of digital games' and recognize the potential of digital games in enhancing English language learning, their actual utilization in classroom instruction remains low because practical constraints hinder their full integration into classrooms instructional activities. The major challenges identified include limited access to digital devices, insufficient training, and high costs associated with acquiring quality educational games. More so, teachers exhibit different attitude towards the adoption of digital games, and there is significant gender-based difference in attitude.

Recommendations

Based on the findings of this study, it is recommended that:

1. Schools should be equipped with digital devices and internet connectivity to facilitate the adoption of game-based learning.
2. Regular workshops should be conducted to enhance teachers' competencies in integrating digital games into lesson planning.
3. Efforts should be made to develop or adapt digital games that align with national English language curricula.
4. Government agencies and private stakeholders should subsidize the acquisition of educational digital games to make them more accessible.
5. Schools should provide teachers with adequate time to explore and integrate digital games into their instructional strategies.

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