

## **Effect of Scramble Game on Senior Secondary School Students' Yorùbá Vocabulary Achievement in Kogi-West Senatorial District, Nigeria**

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### **ABSTRACT**

This study investigated the effectiveness of Scramble Game in enhancing Yorùbá vocabulary achievement among senior secondary school students in Kogi-west Senatorial District, Nigeria. Using a quasi-experimental pre-test post-test control group design, the study compared the vocabulary achievement of students taught using Scramble Game with those taught using conventional teaching method. A total of 100 students participated in the study, with 50 assigned to the experimental and control group respectively. The Yorùbá Vocabulary Achievement Test (YVAT) was used to assess students' proficiency before and after the intervention. The findings revealed that students in the experimental group significantly outperformed those in the Conventional Method group, demonstrating the potency of game-based learning in improving vocabulary retention. The Analysis of Covariance (ANCOVA) results confirmed that Scramble Game had a statistically significant effect on students' post-test scores ( $F(1, 73) = 49.511, p < 0.05$ ), reinforcing its efficacy as a vocabulary learning tool. Additionally, the study found no significant difference in vocabulary achievement between male and female students ( $F(1, 73) = 0.263, p > 0.05$ ), indicating that Scramble Game is equally beneficial for both genders. The study concluded that Scramble Game is a valuable instructional tool that can revitalise Yorùbá language education and improve students' vocabulary mastery. Based on these findings, the study recommends the integration of game-based learning into Yorùbá language instruction to enhance student engagement and achievement. Also, teachers should be trained on how to implement educational games effectively, while policymakers should consider curriculum revisions to incorporate interactive learning strategies. Future research should explore the long-term effects of game-based learning, its application in other indigenous languages, and its potential in digital learning environments.

**Keywords:** Scramble Game, Yorùbá Vocabulary, Language Learning, Achievement, Secondary Education

## INTRODUCTION

Language is a fundamental component of human communication that serves as a vehicle for cultural transmission and identity preservation. As one of the three major indigenous languages in Nigeria, Yorùbá plays a significant role in education, social interaction, and cultural heritage. However, despite its importance, there has been a gradual decline in Yorùbá language proficiency among secondary school students (Bamidele, 2025). This decline could be attributed to the dominance of English in formal education and lack of appropriate instructional methods. It has been observed that many students struggle with Yorùbá vocabulary acquisition, which is crucial for developing reading, writing, and comprehension skills. To address this challenge, there is a need for innovative teaching approaches that enhance vocabulary retention, engagement, and overall language achievement.

Educational games have emerged as an effective strategy for improving language learning outcomes. Game-based learning integrates interactive, competitive, and collaborative activities that make language instruction more engaging and memorable (Daulay & Adelita, 2023). One such game, Scramble, involves the rearrangement of letters or words to form meaningful expressions, promoting active learning and problem-solving skills. Studies have shown that educational games increase motivation, cognitive processing, and long-term retention of vocabulary (Gunel & Top, 2022). However, despite the proven capability of game-based learning, limited research has focused on its application in teaching Yorùbá vocabulary at the secondary school level in Nigeria. Given the declining interest in indigenous language learning, this study investigated the effectiveness of Scramble Game in enhancing Yorùbá vocabulary achievement among secondary school students. By comparing the achievement of students taught using Scramble Game with those taught using conventional method, the study provides empirical evidence on the potential of educational games (i.e. Scramble) as a viable instructional strategy for Yorùbá language teaching, especially vocabulary.

The findings of this study will be valuable to educators, curriculum planners, and policymakers in understanding the role of educational games such as Scramble in indigenous language instruction. By providing empirical evidence on the effectiveness of Scramble Game, the study will support efforts to integrate game-based learning into the Yorùbá curriculum. Additionally, the study's findings will contribute to the growing body of research on gender and language learning, offering insights into whether or not game-based instruction benefits male and female students equally. Ultimately, the study's findings would promote innovative teaching strategies that will improve students' proficiency in Yorùbá vocabulary and enhance language preservation efforts in Nigeria.

### Statement of the Problem

Many secondary school students struggle to achieve proficiency in Yorùbá vocabulary. Traditional teaching methods, which rely on rote memorisation and teacher-centred instruction, often fail to engage students effectively, leading to low retention rates and poor vocabulary achievement (Mohamed, 2021). Research in language education suggests that interactive and game-based learning approaches can enhance students' interest, engagement, and vocabulary retention (Zengin & Yilmaz, 2021). However, there is limited empirical research on the impact of Scramble Game

in teaching Yorùbá vocabulary, particularly in secondary schools in Kogi-west Senatorial District of Nigeria.

Furthermore, while previous studies have examined the effect of educational games on English and other foreign languages, few have explored their applicability to indigenous languages such as Yorùbá (Fasinro et al., 2024). Additionally, there is insufficient evidence on whether gender influences the effectiveness of game-based vocabulary instruction. This study therefore, fills part of these gaps by investigating the effect of Scramble Game on students' Yorùbá vocabulary achievement and assessing whether or not gender plays a role in their learning outcomes.

### **Objectives of the Study**

The following objectives were set to be achieved in this study:

- a. examine the general level of senior secondary school students' achievement in Yorùbá vocabulary;
- b. determine the effect of Scramble Game on students' achievement in Yorùbá vocabulary compared to conventional teaching methods; and
- c. assess the influence of gender on the effectiveness of Scramble Game in teaching Yorùbá vocabulary.

### **Research Questions**

The study was guided by the following research questions:

1. What is the general level of senior secondary school students' achievement in Yorùbá vocabulary?
2. What is the effect of Scramble Game on students' achievement in Yorùbá vocabulary compared to conventional teaching methods?
3. How does gender influence the effectiveness of Scramble Game in teaching Yorùbá vocabulary?

### **Research Hypotheses**

The following null hypotheses were formulated and tested in this study:

**H<sub>01</sub>:** There is no significant effect of Scramble Game on the achievement of senior secondary school students taught Yorùbá vocabulary.

**H<sub>02</sub>:** There is no significant difference in achievement between male and female students taught using Scramble Game and their counterparts taught using the conventional method.

## **LITERATURE REVIEW**

Language learning is an essential aspect of education, and vocabulary acquisition plays a crucial role in enhancing students' comprehension and communication skills. The ability to recognise, understand and effectively use words in various contexts is fundamental to achieving proficiency in any language (Huang & Huang, 2015). Despite the importance of vocabulary in language learning, many secondary school students struggle with Yorùbá vocabulary acquisition due to

ineffective instructional methods. Conventional teaching methods, which primarily involve rote memorisation and teacher-centred lectures, often fail to engage students, leading to low retention rates and a lack of motivation (Gunel & Top, 2022). This has prompted researchers to explore alternative strategies such as Scramble Game to improve vocabulary instruction. Several teaching methods and techniques have been adopted to provide learners with learning experiences that best suits their desire and aspiration in this ever-growing technological age. One of these techniques is educational games (Kamarulzaman Abdul Ghani & Wan Daud, 2018).

Educational games have gained recognition as a valuable instructional tool in language learning. These games integrate interactive, competitive and collaborative activities that promote engagement and active learning (Zengin & Yilmaz, 2021). Scramble, one of such games is a word arrangement activity where students rearrange jumbled letters to form correct words or sentences. This process encourages critical thinking, enhances problem-solving skills, and reinforces vocabulary retention. Studies have shown that students who engage in game-based learning demonstrate higher levels of motivation and improved learning outcomes compared to those exposed to traditional instructional methods (Daulay & Adelita, 2023).

The efficacy of Scramble Game in language instruction can be explained through the constructivist learning theory, which posits that students learn best when they actively participate in the teaching-learning process rather than passively receiving information (Huang & Huang, 2015). Educational games align with this theory by enabling students to interact with words in a meaningful way. Instead of memorising word lists, students engage in hands-on learning experiences that reinforce their understanding of vocabulary. Additionally, cognitive load theory suggests that excessive information processing can overwhelm students' working memory, making learning less effective (Kocaman & Kizilkayacumaoglu, 2014). Game-based learning helps manage cognitive load by presenting vocabulary incrementally through structured activities, allowing students to absorb and retain information more effectively.

Another important theoretical foundation for game-based learning is self-determination theory, which emphasises the role of intrinsic motivation in education. According to this theory, students learn more effectively when they experience autonomy, competence and relatedness in their learning activities (Zengin & Yilmaz, 2021). Scramble Game supports this theory by providing an engaging and interactive environment where students take control of their learning, build confidence in their vocabulary skills, and collaborate with peers. This sense of achievement and enjoyment enhances their motivation to learn.

Empirical studies have demonstrated the positive impact of educational games on vocabulary acquisition. For instance, Daulay and Adelita (2023) found that students who used word-based games, such as Scrabble in English language classrooms exhibited higher levels of engagement and vocabulary retention compared to those taught through conventional method. Similarly, Fasinro et al. (2024) reported that game-based instruction significantly improved students' achievement in Yorùbá vocabulary, highlighting the potency of interactive learning environments. In a related study, Gunel and Top (2022) observed that students who participated in digital word games in Turkish classrooms retained vocabulary more effectively than those who relied solely on traditional teaching methods.

These three earlier studies (i.e. Gunel et al, 2022; Daulay et al 2023 & Fasinro et al. 2024) are similar in some respects. The three employed game-based methods and analysed the data collected using analysis of covariance (ANCOVA). In addition, each of the three studies reported

the efficacy of game-based instruction on students' achievement. In a similar development, this present study also examined the effect of game-based method (scramble) on student achievement and employed ANCOVA in data analysis. However, while Gunel et al. (2022) focused on student achievement in English vocabulary and retention; Daulay et al. (2023) on English vocabulary acquisition; and Fasinro et al. (2024) on student achievement in Yoruba language. This present study's interest was on Yoruba vocabulary achievement.

While existing researches have established the benefits of game-based learning, there seems to be limited empirical evidence on its application in Yorùbá vocabulary instruction at the secondary school level in Nigeria. Most studies have focused on the impact of educational games on English and other foreign languages, while little attention is given to the indigenous languages such as Yorùbá (Mohamed, 2021). Furthermore, research on gender differences in game-based learning remains inconclusive. Some studies have reported that male students perform better in competitive learning environments, while some others indicated no significant difference in learning outcomes between male and female students (Huang & Huang, 2015). This present study contributes to this debate by examining whether or not gender influences the effectiveness of Scramble Game in teaching Yorùbá vocabulary.

Comparative studies between educational games and conventional teaching methods have further highlighted the superiority of game-based learning. Nnadozie and Otolehi (2021) found that computer game-based learning was more effective than rote-memorisation in developing English vocabulary skills. Similarly, Zengin and Yilmaz (2021) confirmed that students in gamified learning environments demonstrated higher motivation and better vocabulary retention than those in traditional classrooms. In a similar vein, Aderinto (2019) observed that students who learned Yorùbá vocabulary through gaming strategies showed greater enthusiasm and long-term retention compared to those taught using conventional lecture methods. Despite these findings, more studies are still needed to be conducted in order to determine whether educational games can consistently outperform traditional methods in Yorùbá language instruction.

Several gaps exist in the current literature. First, there is limited research on the use of Scramble Game for Yorùbá vocabulary instruction, as most studies focus on other word-based games such as scrabble and crossword puzzles (Daulay & Adelita, 2023). Second, while some studies have examined the impact of game-based learning on vocabulary retention, few have specifically analysed its effectiveness in Nigerian secondary schools, particularly in Kogi-west Senatorial District. Third, existing research has not sufficiently explored the role of gender in game-based vocabulary instruction, making it necessary to investigate whether or not male and female students benefit equally from Scramble Game.

This present study addressed a part of these gaps by investigating the impact of Scramble Game on students' Yorùbá vocabulary achievement and determining whether or not gender plays a statistical significant role in its effectiveness. By doing so, the study provided valuable insights that will inform language instruction practices and contribute to the broader discourse on the use of educational games in indigenous language learning.

## METHODOLOGY

This study employed a quasi-experimental pre-test post-test control group design to investigate the efficacy of Scramble Game in enhancing Yorùbá vocabulary achievement among senior secondary school students in Kogi-west Senatorial District, Nigeria. The choice of this design is based on its suitability for educational research where random assignment of participants may not be feasible. The study involved two groups: the experimental group, which was taught Yorùbá vocabulary using Scramble Game, and the control group, which was exposed to conventional teaching method. A pre-test was administered to both groups before the instructional intervention to establish baseline vocabulary knowledge, and a post-test was conducted after the intervention to assess learning outcomes.

The population for this study comprised public senior secondary school students in Kogi-west Senatorial District, Nigeria. The schools were selected based on the presence of a functional Yorùbá Language curriculum. A purposive sampling technique was used to select two schools, ensuring that both the experimental and control groups have comparable characteristics in terms of academic background, class size, and curriculum structure. A total of 100 students participated in the study, with 50 students in the experimental group and 50 in the control group. Gender representation is also considered to ensure a balanced sample. A pilot study was conducted to be sure that both sampled schools were established almost the same period, had a minimum of fifty students per class and were making use of the same national curriculum produced by the Nigerian Educational Research and Development Council (NERDC).

A Yorùbá Vocabulary Achievement Test (YVAT) was developed as one of the instruments for data collection. The YVAT consists of 30 multiple-choice items, each designed to measure students' understanding and application of Yorùbá vocabulary. The pre-test was administered to both groups at the beginning of the study to establish baseline scores, while the post-test was conducted after the instructional intervention to evaluate students' vocabulary improvement. The content validity of the instrument was established through expert review by two Yorùbá Language educators, two curriculum specialists and two experts in test construction to ensure that the test items aligned with the objectives of the Yorùbá Language curriculum. A pilot study was conducted to determine the reliability of the instrument using Cronbach's Alpha, which yields a reliability coefficient of 0.81, indicating a high level of internal consistency.

The study was carried out over a period of six weeks, following a structured procedure for data collection. In Week 1, the pre-test was administered to both the experimental and control groups to assess their initial Yorùbá vocabulary knowledge. The instructional phase spanned four weeks, during which students in the experimental group were exposed to Scramble Game, while those in the control group received conventional instruction based on rote memorisation and direct teaching methods. In the final week, a post-test was administered to both groups to measure vocabulary acquisition and retention.

Ethical considerations were strictly adhered to throughout the study. Informed consent was obtained from the school administrators, teachers and students ensuring that participation was voluntary. Given that the participants were teenagers, parental consent was also sought. The confidentiality of students' responses was guaranteed, and all data were used solely for research purposes. Efforts were also made to ensure that both the experimental and control groups received equal instructional hours to eliminate biases in the learning process.

The data analysis was conducted using the Statistical Package for Social Sciences (SPSS). Descriptive statistics, specifically mean and standard deviation were employed to analyse the general level of students' achievement in Yorùbá vocabulary before and after the intervention. The research hypotheses are tested using Analysis of Covariance (ANCOVA) to determine the effect of Scramble Game on students' vocabulary achievement while controlling for pre-test scores. Additionally, a pair-wise comparison analysis was conducted to examine the significance of differences between the Scramble Game group and the conventional teaching group. Finally, gender differences in Yorùbá vocabulary achievement were assessed using ANCOVA, allowing for the evaluation of interaction effects between teaching method and gender on students' learning outcomes.

## RESULTS

### Answering of the Research Question

Descriptive Statistics of mean was used to answer the research question raised for this study.

**Research Question One:** What is the general level of senior secondary school students' achievement in Yorùbá vocabulary before and after the treatment?

TABLE 1. Descriptive Statistics on the General Level of Senior Secondary School Students' Achievement in Yorùbá Vocabulary Before and After the Treatment

Groups	Test	Mean	S.D.	Min	Max	Remark
Experimental I (Scramble Game)	Pre-test	33.64	7.38	22.00	48.00	Low
	Post-test	59.69	10.37	42.00	78.00	High
Control Group (Conventional Method)	Pre-test	32.43	9.71	20.00	50.00	Low
	Post-test	45.67	6.12	34.00	56.00	Low

As revealed in Table 1, the general level of senior secondary school students' achievement in Yorùbá vocabulary (experimental and control groups) in the post-test scores was higher than their pre-test scores. This indicates that senior secondary school students' achievement in Yorùbá vocabulary in both groups performed better in the post-test exercise when compared with their pretest scores. However, from the post-test scores, the senior secondary school students taught with Scramble Game had a higher mean score (59.69), while that of those taught with conventional method was relatively low with a mean score of 45.67.

### Hypotheses Testing

The research hypotheses were tested using Analysis of Covariance (ANCOVA) at 0.05 level of significant.

**Hypothesis One:** *There is no significant effect of scramble game on the achievement of senior secondary school students taught Yorùbá vocabulary.*

TABLE 2. Analysis of Covariance Showing the Effect of Scramble Game on the Achievement of Senior Secondary School Students Taught Yorùbá Vocabulary

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3741.955 <sup>a</sup>	2	1870.977	25.159	.000
Intercept	12308.568	1	12308.568	165.513	.000
Pretest	11.686	1	11.686	.157	.693
Posttest	3681.938	1	3681.938	49.511	.000
Error	5428.729	73	74.366		
Total	221596.000	76			
Corrected Total	9170.684	75			

a. R Squared = .408 (Adjusted R Squared = .392)

\*Significant at  $p < 0.05$

The result in Table 2 reveals that the F-value is 49.511 and the p-value is 0.000 computed at 0.05 level of significance. Since the p-value (0.00) is less than the level of significance (0.05), the null Hypothesis One is rejected. This implies that Scramble Game had a significant effect on the achievement of senior secondary school students taught Yorùbá vocabulary ( $F_{(1, 73)} = 49.511$ ,  $p < 0.05$ ). A Pair-wise Comparison Analysis was run and this is presented in Table 3 on where the significant difference lies between (i.e. the effect of Scramble game on the achievement of senior secondary school students taught Yorùbá vocabulary and the use of conventional method).

TABLE 3. Pair-wise Comparisons Analysis Showing the Effect of Scramble Game on the Achievement of Senior Secondary School Students Taught Yorùbá Vocabulary

Dependent Variable: Posttest				
Group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Treatment	59.665 <sup>a</sup>	1.383	56.910	62.421
Control	45.704 <sup>a</sup>	1.420	42.875	48.533

a. Covariates appearing in the model are evaluated at the following values: Pretest = 33.0526.

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

As shown in Table 3, senior secondary school students taught Yorùbá Vocabulary (having the mean score of 59.664<sup>a</sup>) performed better than those taught with conventional method (having the mean score of 45.704<sup>a</sup>).

**Hypothesis Two:** There is no significant effect in the achievement of male and female senior secondary school students taught Yorùbá vocabulary using scramble game and their counterparts taught using the conventional method.

TABLE 4. Analysis of Covariance Showing Significant Difference in the Effect of Male and Female Senior Secondary School Students' Achievement Taught Yorùbá Vocabulary Using Scramble Game

Source	Type III Squares	Sum of df	Mean Square	F	Sig.
Corrected Model	5613.304 <sup>a</sup>	30	187.110	2.367	.004
Intercept	14855.057	1	14855.057	187.913	.000
Pretest (Scramble)	1315.067	1	101.159	1.280	.260
Group	2142.079	1	2142.079	27.097	.000
Gender	20.753	1	20.753	.263	.611
Error	3557.380	73	79.053		
Total	221596.000	76			
Corrected Total	9170.684	75			

a. R Squared = .612 (Adjusted R Squared = .353)

*\*Insignificant at  $p > 0.05$*

The result in Table 4 reveals that the calculated F-value is .263 and the p-value is .611 computed at 0.05 significant level. Since the p-value .611 is greater than the significant level (0.05), the null Hypothesis Two is retained. Thus, there is no significant effect in the achievement of male and female senior secondary school students taught Yorùbá vocabulary using scramble game and their counterparts taught using the conventional method ( $F_{(1,73)} = .263, p > 0.05$ ). This suggests that gender has no intervening role on the effect of Scramble Game on senior secondary school students' achievement.

## DISCUSSION

The findings of this study provide empirical evidence on the effectiveness of Scramble Game in enhancing Yorùbá vocabulary achievement among secondary school students. The discussion focuses on the interpretation of results, their alignment with or deviation from previous studies, and the implications for Yorùbá vocabulary instruction. The findings of the study indicate that Scramble Game enhances vocabulary learning more effectively than conventional methods. The results are consistent with the findings of Fasinro et al. (2024) who observed that students exposed to game-based instruction in Yorùbá Language classes demonstrated higher engagement and retention levels than those taught using traditional methods.

Similarly, Gunel and Top (2022) found that educational games significantly improved vocabulary acquisition in foreign language classrooms, supporting the argument that interactive learning strategies facilitate better retention and comprehension of new words. The finding also aligns with Daulay et al. (2023) who used scrabble in English Language classroom and reported that students demonstrated high level of engagement and vocabulary retention.

Further analysis addressing Hypothesis 1 confirms that Scramble Game had a significant effect on students' Yorùbá vocabulary achievement with the experimental group outperformed

their counterparts in the control group, even after controlling for initial differences in pre-test scores. This finding supports the cognitive load theory, which suggests that active and engaging learning strategies help reduce cognitive overload and improve knowledge retention (Kocaman & Kizilkayacumaoglu, 2014). The findings also align with the constructivist learning theory, which posits that students learn more effectively when they actively engage with content rather than passively receiving information (Huang & Huang, 2015).

The results addressing Hypothesis 2 show that gender does not significantly influence the effect of Scramble Game on Yorùbá vocabulary achievement. This finding suggests that Scramble Game is equally effective for both male and female students, making it a gender-inclusive instructional strategy. This result aligns with the findings of Mohamed (2021), who found that educational games benefit both male and female learners equally, as long as they are actively engaged in the learning process. However, this finding contrasts with the findings of Huang and Huang (2015) who reported that male students tend to excel in game-based learning environments due to their higher engagement in competitive tasks. The lack of a significant gender effect in this study implies that both male and female students respond positively to Scramble Game, making it a viable instructional approach for diverse classroom settings.

The findings of this study have significant pedagogical implications for Yorùbá Language instruction. First, the study provides strong empirical evidence that game-based learning should be integrated into Yorùbá Language instruction to enhance students' engagement and vocabulary achievement. Given the declining interest in indigenous languages, educational games such as Scramble could serve as an effective strategy to revitalise Yorùbá language learning in Nigerian schools. Second, the findings suggest that Scramble Game is effective for both male and female learners, reinforcing its potential for broad classroom applicability.

Additionally, the study highlights the need for a shift from passive, teacher-centred instruction to student-centred learning approaches. The success of Scramble Game in this study indicates that interactive and experiential learning strategies can significantly improve students' vocabulary learning outcomes. Educational policymakers should consider revising the Yorùbá Language curriculum to include structured game-based learning modules, ensuring that vocabulary instruction is engaging, effective, and aligned with modern pedagogical trends.

Although this study provides clear evidence of the potency of Scramble Game in enhancing Yorùbá vocabulary achievement, it also suggests areas for further research. Future studies could explore the long-term retention effects of game-based learning, as well as its applicability in other indigenous language subjects. Additionally, since this study was conducted in Kogi-West Senatorial District, similar research could be carried out in other regions to determine whether the findings are generalisable across different educational contexts.

In summary, the discussion confirms that Scramble Game significantly improves Yorùbá vocabulary achievement, provides a gender-inclusive learning experience, and aligns with previous research on the effectiveness of educational games in language acquisition. The study contributes to the growing body of knowledge on game-based learning and underscores its potential as a transformative tool for indigenous language education in Nigeria.

## CONCLUSION

This study examined the effectiveness of Scramble Game in enhancing Yorùbá vocabulary achievement among senior secondary school students in Kogi-west Senatorial District, Nigeria. Using a quasi-experimental pre-test post-test control group design, the study compared the vocabulary performance of students taught using Scramble Game with those taught using conventional methods. The findings provide strong evidence that game-based learning (Scramble in this case) significantly improves students' vocabulary acquisition, with the treatment group achieving higher post-test mean score than the control group.

The results further reveal that Scramble Game is an effective instructional strategy regardless of gender, as there was no significant difference in achievement between male and female students. This suggests that both male and female learners benefit equally from game-based vocabulary instruction, making it a gender-inclusive teaching approach. The ANCOVA results confirmed that teaching method had a statistically significant effect on students' post-test scores, reinforcing the cognitive and pedagogical advantages of interactive learning strategies.

### Recommendations

Based on these findings, recommendations are proposed for various stakeholders such as the teachers, policy-makers and future researchers.

#### *Recommendation for Teachers*

Yoruba Language teachers should:

1. incorporate game-based learning into Yorùbá vocabulary instruction to enhance students' engagement and improve learning outcomes;
2. **receive** training on how to effectively implement educational games in the classroom;
3. adopt student-centred teaching approaches that encourage active participation, problem-solving, and contextual word usage, rather than relying solely on rote memorisation; and
4. ensure balanced instructional strategies by combining traditional and game-based methods to cater to diverse learning styles and maximise student achievement.

#### *Recommendations for Policymakers*

Policymakers should:

1. revise the Yorùbá Language curriculum to include structured game-based learning activities, ensuring that instructional strategies align with modern educational trends;
2. provide teachers with professional development opportunities, focusing on interactive and technology-enhanced learning for indigenous language instruction; and
3. promote the use of locally relevant educational games to enhance language preservation efforts and sustain students' interest in indigenous languages.

***Recommendations for Further Research***

Further researches could be conducted to:

1. investigate the long-term effects of Scramble Game on Yorùbá vocabulary retention to determine whether students maintain their learning gains over time;
2. explore the effectiveness of game-based learning in other indigenous languages, such as Hausa and Igbo, to assess its applicability in Nigerian language education;
3. find out in different educational settings (including rural and urban schools) whether or not the effectiveness of Scramble Game varies across different student populations and learning environments; and
4. examine the potential of digital educational games in Yorùbá vocabulary learning, considering the increasing role of technology in education and the potential for mobile-based language learning applications.

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