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LOCATIONAL PARITY IN STUDENTS' SPELLING COMPETENCY AND ENGLISH VOCABULARY ACQUISITION

BY

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Abstract

This study investigated the influence of spelling competency on Upper Basic II students' achievement in English vocabulary using location as a moderating variable. The population of the study was 1,732 Upper Basic II students in Anyigba Education Zone of Kogi State in the 2024/2025 academic session. A total of 197 students (124 in urban area and 73 in rural area) were drawn from four schools using the disproportionate stratified sampling technique. In each of the four sampled schools, one intact class was used for the study. The ex post facto research design involving pre-test and post-test, was adopted for the study. One research question and one null-hypothesis guided the study. Two instruments were used for data collection. These are English Vocabulary Spelling Competency Test (EVSCT) and English Vocabulary Acquisition Achievement Test (EVAAPT). EVSCT is a fifty-item multiple choice spelling competency test used for pre-test. EVAAT is also a fifty-item multiple choice vocabulary test used for post-test. The instruments were validated by three experts from Prince Abubakar Audu University, Anyigba. The reliabilities of the instruments were ensured through trial testing using the Kudar-Richardson's formula 20 (K – R 20) with reliability estimates of 0.87 and 0.75 respectively. Pearson's Product Moment Correlation was used to analyze the research question while the hypotheses were tested using multiple regression analysis at 0.05 level of significance. The findings of the study revealed positive correlation between urban and rural students in spelling competency and achievement in vocabulary acquisition. This implies that location is not a significant predictor of students' achievement in spelling competency and vocabulary acquisition*. Based on this finding, it was recommended, among others, that Government should provide technology-enhanced learning tools such as spelling and vocabulary apps, games, and digital flashcards to reinforce learning in an engaging way.*

Keywords: Location, Spelling competency, Vocabulary acquisition and English

Introduction

Spelling competency and vocabulary acquisition are fundamental to language development, particularly for learners in middle schooling years such as Upper Basic II. At this stage of education, students transition from foundational literacy toward more complex academic language demands across subjects. Spelling accuracy helps learners internalize the structure of words, which in turn strengthens word recognition, fluency, and meaning-making—all of which are essential for vocabulary expansion and overall academic achievement (Wang et al., 2019; Kim et al., 2018). Spelling is central to literacy acquisition since it cements written language in memory, thus unburdening cognitive resources that are freed to focus on the message (Grünke & Skirde, 2022; Kahn-Horwitz, 2020). When young English learners begin their literacy journey, learning to spell adds an essential layer to word knowledge (Saban et al., 2024). Acquiring spelling competence, an integral component of word knowledge, is more complex than learning to read since it involves retrieving accurate word renditions from memory (Mather & Jaffe, 2021). Spelling is important for literacy acquisition since learning about the alphabetic system and the orthographic form of words contributes to word pronunciation and meaning in memory and assists with word retrieval (Ehri, 2014).

Vocabulary is an important indicator of general verbal ability, which is fundamental for learning (Kansızoğlu & Bekiroğlu, 2025). It is also the strongest predictor of reading comprehension, a vital component of academic success (Beck et al., 2022). A well-developed vocabulary is widely recognized as a key factor distinguishing learners who become proficient readers from those at risk of reading difficulties (Murnane et al., 2012). This relationship extends to other core language skills, such as writing, which requires recognizing words, understanding their meanings, forms, and syntactic functions, and using them effectively in context (Maden, 2021). Given its central role in language development, vocabulary instruction is essential for both academic achievement and social growth. In addition to improving literacy skills, vocabulary knowledge also affects social and emotional interactions, because the ability to express thoughts correctly creates a positive impression in daily communication (Bishop et al., 2019). Vocabulary acquisition strengthens cognitive skills such as thinking and reasoning. As cognitive skills such as comprehension, learning, and critical thinking advance, vocabulary emerges as a key predictor of academic achievement (Karadağ, 2019). This influence spans multiple academic disciplines. Yalçın and Özek (2016) highlighted the significant connection between vocabulary breadth across various subjects and academic achievement. A rich vocabulary in a specific academic field allows students to understand and express the concepts and principles unique to that area. Therefore, academic success is closely linked to the depth of students' academic language (Bishop et al., 2019). A broad

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vocabulary enables students to make connections between specialised terms and broader concepts, facilitating deeper understanding and better academic achievement. To acquire vocabulary, therefore, one must know the spelling of such a vocabulary, hence there is need to establish the relationship between spelling competency, vocabulary acquisition and school location.

School location in this study refers to the geographical environment of the school which can be rural or urban area. The World Bank (2017) refers to school location to be a school's site, type of building, usage, capacity, teachers, students, environment and other parameters for rationalization of both rural and urban school map. As a result of its importance in language teaching and learning, literatures on the effect of school location on students' academic achievement abound (Omachonu, 2018; Owoeye, 2019). Different scholars in the field of language have come out with different views on students' achievement with regard to school location. Lackney (2014), stresses that, students in rural schools achieved better than students in urban schools. The researcher explained further that this could be attributed to the fact that in the rural schools, classes were not as large as those in urban schools. Also, Axtel and Bowers (2022) found that students in rural areas perform significantly better than their urban counterparts in verbal aptitude, English language and total scores using the National Common Entrance as a base. However, Igbeyin (2022) states that students in urban schools obtained higher scores than those in rural schools. This achievement could be as a result of conducive learning environment, qualified teachers, laboratories and social amenities. These different views by different scholars have shown the existing differences in language achievement between schools in rural areas and those in urban areas. Due to the contradiction in the findings of research studies, the current study sets out to study the influence of vocabulary spelling competency on students' performance in vocabulary acquisition using location as one of the variables of interest.

For Upper Basic II students, who are often beginning to encounter more specialized academic texts and abstract vocabulary, the connection between spelling, vocabulary and location becomes increasingly significant. Spelling supports morphological and phonological decoding of new words, while vocabulary knowledge contributes to improved spelling through lexical familiarity and contextual understanding (Zhou et al., 2022). Despite this critical link, the degree to which spelling competency influences vocabulary acquisition may vary across different school environments. One important factor influencing this relationship is geographic location. In many educational systems, especially in developing contexts, location-based disparities persist in the quality of teaching, availability of resources, and exposure to print-rich environments (Bayar & Ucan, 2020; Siegel et al., 2023). Urban schools tend to offer better teacher training, improved infrastructure, and greater access to language-supportive materials such as libraries, computers, and literacy programmes. In contrast, rural schools may face challenges such as limited learning resources, teacher shortages, and fewer opportunities for enrichment (Zucker et al., 2021; Reeves & Lin, 2021). These inequalities are particularly critical for students in Upper Basic II, who are at a pivotal stage for consolidating language skills that impact achievement across the curriculum. Thus, an important question arises: Does the location of a school moderate the relationship between spelling competency and vocabulary achievement? This study investigates this relationship among Upper Basic II students, examining how the influence of spelling ability on vocabulary acquisition may differ between urban and rural educational settings. By focusing on this intersection of spelling, vocabulary, and school location, the study aims to generate evidence that informs targeted pedagogical interventions and resource allocation. In doing so, it will contribute to the development of more equitable English language teaching strategies for Upper Basic II learners navigating diverse learning environments.

Research Question

What is the relationship between the achievement mean score of Upper Basic II students in urban and rural areas in spelling competency and vocabulary acquisition?

Hypothesis

There is no significant relationship between the achievement mean score of Upper Basic II urban and rural students in spelling competency and vocabulary acquisition.

Methodology

This study adopted the ex post facto research design. The population of the study was 1,732 Upper Basic II students in Anyigba Education Zone of Kogi State in the 2024/2025 academic session. A total of 197 students (124 in urban area and 73 in rural area) were drawn from four schools using the disproportionate stratified sampling technique. In each of the four sampled schools, one intact class was used for the study. The ex post facto research design involving pre-test and post-test, was adopted for the study. One research question and one null-hypothesis guided the study. Two instruments were used for data collection. These are English Vocabulary Spelling Competency Test (EVSCT) and English Vocabulary Acquisition Achievement Test (EVAAPT). Both instruments have two sections, A and B. Section A is the subjects' demographic data such as name of school and location of school (urban or rural). Section B of EVSCT is a fifty-item multiple choice spelling competency test. This was used for pre-test. Section B of the EVAAT is

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also a fifty-item multiple choice vocabulary test which subjects were required to choose one correct option out of four. This was used for post-test. The instruments were validated by three experts from Prince Abubakar Audu University, Anyigba. The reliabilities of the instruments were ensured through trial testing using the Kudar-Richardson's formula 20 (K – R 20). The reliability co-efficient based on K – R 20 estimates were 0.87 and 0.75 respectively. Mean and standard deviation and Pearson's Product Moment Correlation were used to analyze the research question while the hypothesis was tested using multiple regression analysis at 0.05 level of significance.

Results

Research Question

What is the relationship between the achievement mean score of Upper Basic II students in urban and rural areas in spelling competency and vocabulary acquisition?

Table 1: Pearson's Product Moment Correlation Analysis of Students' Achievement in Spelling Competency and Vocabulary Acquisition in Urban and Rural Area

Groups		**Urban**		**Rural**		**N**
	N	$\bar{x}$	**SD**	$\bar{x}$	**SD**	
Spelling Competency	124	82.23	7.272	82.42	7.429	73
Vocab. Acquisition		95.30	5.114	96.07	2.849	
R		0.38		0.25		

r = Pearson's Product Moment Correlation

The result of the study as presented on Table 1 shows the correlation coefficient of the achievement mean score of students in urban and rural areas in spelling competency and vocabulary acquisition. Result showed that the correlation coefficient of students achievement mean score in spelling competency and vocabulary acquisition were 0.38 for urban and 0.25 for rural. This means there was a moderate and positive relationship between the achievement of students in urban and rural areas in spelling competency and vocabulary acquisition.

Hypothesis

There is no significant relationship between the achievement mean score of Upper Basic II urban and rural students in spelling competency and vocabulary acquisition.

Table 2: **Standardized Regression Summary of Students' Achievement in Urban and Rural Areas in Spelling Competency and Vocabulary Acquisition**

Model 1 Constant(VSC)	R^2	Beta (β)	$R^2\Delta$	P
Urban	0.144	0.145	0.305	0.000
Rural	0.063	0.141	0.250	0.000

α = 0.05, S = Significant, R^2= Coefficient of Determination, β = Beta Coefficient, Δ= change, P= probability value

The results on Table 2 shows the regression analysis of the relationship between the achievement means score of urban and rural students in spelling competency and vocabulary acquisition**.** Results showed a positive Beta (β) correlation of 0.145 for urban and 0.141 for rural and probability value of 0.000 for both urban and rural students. This exact probability value of 0.000 is less than 0.05 level of significance set as bench mark for testing the hypothesis and the result was found to be significant. The null hypothesis which stated that there is no significant relationship between the achievement mean score of urban and rural students in spelling competency and vocabulary acquisition was therefore rejected and the inference drawn was that, spelling competency significantly correlates with Upper Basic II urban and rural students' achievement in vocabulary acquisition. A positive beta coefficient of 0.145 and 0.141 shows that an increase in the predictor variable is associated with an increase in the dependent variable. This implies that, 1 unit change in spelling competency led to a change in urban and rural Upper Basic II students' achievement in vocabulary acquisition.

Discussion of Findings

The result of the study as presented on Table 1 shows that there is a positive correlation in the achievement mean score of students in urban and rural areas in spelling competency and vocabulary acquisition. The regression analysis on table 2 collaborated the result on table 1indicating that there is a significant positive relationship between spelling competency and vocabulary acquisition achievement between urban and rural students. This finding supports the works of Shafiq and Usaini (2024); Saban et al. (2024); Zhu et al. (2025) who all found that students' spelling ability and vocabulary knowledge usually improve if exposed to similar learning situation irrespective of location.

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The reasons for this finding could be attributed to the shared curriculum standards. In Kogi State both urban and rural schools follow the same national or state curriculum. This means students are exposed to similar spelling lists, vocabulary lessons, and testing benchmarks. There is also increased access to technology. Even in rural areas, access to the internet, mobile phones, and educational apps has improved. This helps rural students to catch up to their urban peers in language exposure and practice. Cultural and media influence such as TV shows, movies, YouTube, and social media have exposed both urban and rural students to similar language usage, slang, formal vocabulary, and correct spelling in daily life. Professional development for teachers has expanded, reaching nook and crannies including rural areas. There is also peer influence and standardized testing which cuts across both urban and rural areas. With common competitive examinations and scholarship opportunities, students everywhere are motivated to develop strong spelling and vocabulary skills to succeed. These factors could have been responsible for the positive correlation of students in both urban and rural areas in spelling competency and vocabulary acquisition in this study.

Conclusion

This study was carried out to investigate the influence of spelling competency on the achievement of Upper Basic II students in English vocabulary acquisition using location as a moderating variable. The findings of the study reveal a positive correlation between spelling competency and students' achievement in vocabulary acquisition. This relationship highlights the critical role that spelling skills play in enhancing vocabulary development. These results suggest that strengthening spelling instruction could be an effective strategy for improving vocabulary acquisition among diverse groups of students.

Recommendations

1. Since strong spelling skills can deepen understanding of word structures, which supports vocabulary acquisition, teachers should incorporate explicit spelling instruction into vocabulary teaching to reinforce word recognition, usage, and meaning.
2. Teachers should provide regular opportunities for reading varied texts and engaging in writing exercises that require the use of new vocabulary and correct spelling.
3. Government should provide technology-enhanced learning tools such as spelling and vocabulary apps, games, and digital flashcards to reinforce learning in an engaging way since technology can provide instant feedback, repeated practice, and differentiated instruction, enhancing both spelling and vocabulary acquisition skills.

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