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LEVERAGING DIGITAL TOOLS TO ENHANCE VOCABULARY INSTRUCTION IN SOUTH-SOUTH NIGERIAN ENGLISH AS A SECOND LANGUAGE (ESL) SECONDARY SCHOOLS

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ABSTRACT

This study investigates the extent to which digital technology is strategically incorporated in English language classes in South-South States in Nigeria to enhance vocabulary learning. English as a second language (ESL) teachers often encounter challenges such as low student engagement, lack of motivation, and insufficient resources in vocabulary instruction. To address these issues, teachers need to stimulate their students' interest by using technology to encourage and foster a positive attitude and motivation towards vocabulary learning. This study is hinged on Modern educational technology theory. A quantitative research approach was adopted, with data analyzed using statistical tables and simple percentages. Data were drawn from government, missionary, and private secondary schools, and involved 40 English language teachers who completed a questionnaire and a structured interview. The findings revealed that digital technologies such as computers and internet connectivity are available in schools but are rarely deployed for teaching vocabulary in English language classes. Additionally, most English language laboratories are not functional, and many language teachers are not familiar with internet software programs designed for vocabulary teaching. The common technological method teachers resort to is the use of projectors to display downloaded pictures and videos from the internet to engage their students in the classroom. Even with this method, the lack of steady internet connectivity poses a significant challenge. The study concludes that for students to develop a keen interest in vocabulary learning in this age of technological advancement, teachers need to become familiar with software programs and online educational sites that complement their efforts in vocabulary instruction. The study recommends continuous workshops and seminars to train teachers on the latest educational software that can support their classroom efforts with regard to vocabulary development.

Keywords: Digital technology, instructional materials, vocabulary development, software program, English as second language.

INTRODUCTION

The traditional means of second language learning and teaching have always been through textbooks and role plays, focusing predominantly on acquiring the four language skills: reading, writing, speaking, and listening. Textbooks are designed to enable learners to develop these skills. Reading comprehension passages allow learners to get acquainted with unfamiliar words and their contextual usage. Instructors encourage learners to identify new words, their morphological composition, word origin, check their meaning in a dictionary, expose them to different contextual usages, and form sentences with them (Pearson et al. 2007). Despite traditional methods such as textbook exercises and role plays, as well as explicit vocabulary instruction, many students find it difficult to learn and retain new words, and this hampers their comprehension and overall language proficiency. Furthermore, educators face difficulties in keeping students motivated and identifying effective instructional strategies to boost vocabulary growth. With the upsurge in digital technologies, there is a pressing need to explore and incorporate multimedia tools and online-resources into pedagogical approaches to enhance vocabulary acquisition and overcome the limitations of traditional teaching methods. However, Beck et al. (2008) note that direct and explicit teaching of vocabulary in class is not enough to improve students' acquisition of new words. In addition to classroom exercises, learners should also read extensively to become acquainted with more lexical items in the target language.

With present technological advancements, this generation is exposed to numerous kinds of digital technology that transform text beyond its traditional form. To enhance the acquisition of the four language skills, new literacy makes use of multimedia such as videos, sound, text, and other digital tools to generate, communicate, and negotiate meaning (Mardonovna, Normuratovna, Abdullo o'g'li, 2022). According to Kharadea (2022), learning language skills becomes arduous and time-consuming without multimedia technologies and internet-based tools. Educators need to design pedagogy to align with the demands of this fast-paced world. Technology can help facilitate learning goals for individuals with wide differences in their abilities (Rajaram, 2023); Swargiary, 2024).

Vocabulary development is a key ingredient in developing essential language skills that students need to advance their academic and career pursuits. One's understanding of a concept or idea in a text hinges on one's cognitive knowledge of the words representing them in the text (Baumann & Kame'enui, 2004). Increasing one's vocabulary bank help improve students' reading and writing skills. Students with a rich and broad vocabulary have better chances of mastering the four language skills, while those with poor vocabulary struggle with understanding and comprehension (Afzal 2019). This limitation can inhibit their entire career advancement if not addressed. To develop advanced literacy levels needed for success in school and beyond, improving students' vocabulary acquisition is essential (Graves & Watts-Taffe, 2008).

Given the necessity of vocabulary development, both learners and language instructors need to utilize every available means to help students build their vocabulary. One of the problems teachers face is the inability to motivate students' interest in acquiring new words (Ardiyanti, Kamsinah, Nurasik & Said 2021). Vocabulary is an area where teachers seek guidance on instructional approaches, strategies, and materials (Berne & Blachowicz 2008). Due to the challenging situation in teaching vocabulary development, teachers need to stimulate their students' interest by using different methods and techniques to encourage a positive attitude towards learning vocabulary (Gardner 1985). A fundamental research-based approach to foster a keen interest in acquiring and expanding vocabulary in a target language can be achieved through strategies such as encouraging children to read more extensively and deeply. This can be realized by offering a diverse selection of reading materials that align with their interests and by designating specific times for reading at both school and home. Engaging in discussions about their reading with adults and peers further enhances learners' vocabulary acquisition. Creating a learning community that enjoys wordplay builds on individual interests as well as curricular needs. Promoting confidence in word learning could be effected through incorporating technology- based learning in the teaching and learning of new words.

Spiteri & Rundgren (2020) affirm that one of the proven factors that help teachers develop a positive attitude towards learning is the use of technology. According to them, the use of technology helps students to be actively involved in classes due to the interest it generates. In the 20th century, the popular technological applications used in classrooms were radio, television, film, VHS, VCR, and cassettes.

Towards the end of the century, other applications such as CD players, projectors, DVDs, and computers emerged (Siddiquah & Salim 2017). Computers paved the way for multimedia tools, also known as CALT (Computer Assisted Language Teaching) (Devi, 2020). The educational process has been positively impacted by computer and other ICT innovations. They provide opportunities for more productive and innovative instruction, allowing learners to interact with audiovisual materials to enhance their creative and intellectual abilities. With the variety of symbolic modes such as text, graphics, multicolor images, motion, and audiovisuals, learners tend to partner with computers as tutors. It offers them opportunities for independent investigation, individualized learning, personalized activities, and teamwork (Zhang & Yu, 2023).

However, studies from Nigeria indicate that most secondary schools are yet to fully integrate ICT tools due to inadequate resources and infrastructure. (Adeosun 2010). Essential infrastructure such as computers, internet facilities, and constant electricity supply is needed for full implementation of advanced ICT-assisted instructions. In Nigeria and most developing countries, few computers are often available for instructional purposes. Most schools in Nigeria have established computer laboratories only for developing computer skills, not for teaching other subjects. However, in developed countries, computers are available in the educational system for individual students during classroom instructions (United Nations Educational Scientific and Cultural Organization, 2014). A recent survey by the U.S. Department of Education indicated that 97 percent of teachers had one or more computers in their classroom every day in 2009 (Rathore & Sonawat 2015). Technological devices such as LCD, digital light processing projectors, interactive whiteboards, and digital cameras are available in classrooms, equipping teachers with powerful tools to support teaching and learning.

LITERATURE REVIEW

Integrating digital tools for teaching vocabulary involves using different types of technology to foster students' learning experiences. It actively engages students in classroom learning, making English language lessons vivid, interesting, and motivating (Pun 2013). Dalton and Grisham (2011) propose strategies

teachers can use to foster vocabulary learning through technological tools organized into three instructional areas: teaching and learning words, strategy using digital language tools, and increasing students' reading volume to support incidental vocabulary learning. The following are some digital tools for enhancing vocabulary acquisition:

Computer-Assisted Language Learning (Call)

CALL involves using computer-based resources such as the internet to present, reinforce, and assess teaching and learning materials. This involves the use of different software applications and programs for language teaching and learning in the classroom. For instance, online programs such as Wordle, and Wordsift an online based applications that can be used to enhance vocabulary instructions in classrooms. Wordsift is designed to help teachers manage the demands of vocabulary and academic language in their text materials. It helps students preview text and quickly scan for relevant and challenging vocabulary, as highlighted by Sergey (2020) and further supported by Adesope, Lavin, Thompson, and Ungerleider (2010).

Aside, Wordle and Wordsift, there are several other online games that are freely available and can enhance vocabulary acquisition. These games include crossword puzzles, word scrambles, picture-word matches, anagrams, word jumbles, Boggle, and many other entertaining ways to learn (Sergey, 2020). In selecting suitable games for vocabulary teaching and learning, educators should consider parameters such as the number of learners, proficiency level, cultural context, timing, and classroom settings (Kayseroğlu & Samur, 2018). Muhanna (2018) highlights that games are challenging and amusing, providing learners with opportunities to improve their communication skills while learning and practicing new words. When used appropriately and frequently, digital games are effective self-study tools that help learners develop automaticity in the target language (Feng, 2009). Vardanjani (2014) emphasizes that learning vocabulary through games can foster students' cognitive skills, emotional engagement, and interactive abilities. However, teachers should adhere to specific guidelines based on learners' needs to integrate the games into their curriculum. Teachers can enhance learning by bookmarking games, preparing test items, and

designing activities focused on prefixes and suffixes, thereby enabling students to engage in memorable independent practice and collaborative group work (Dalton & Grisham, 2011).

Language Laboratory And PowerPoint Projection

In addition to online programs, PowerPoint projection and language laboratories are basic technologies that can support language teaching including vocabulary acquisition. Teachers can use projectors to display multimedia representations of words, such as audiovisual materials and videos, in PowerPoint slides with hyperlinks to facilitate learning the four English language skills. Prayoga, Padmadewi, and Pratiwi (2022) emphasize the necessity of using PowerPoint as an effective tool for bringing students closer to digital learning media, maintaining the characteristics of Generation Z. Language laboratories provide students with opportunities to listen to native English speakers, exposing them to the real context of English vocabulary usage. Feng (2009) asserts that mastering the rules of a target language does not mean learners can use the language correctly and fluently. The more vocabulary and rules are practiced, the more automatic they become.

Social Media Platforms

Social media platforms (SMP) is another vital online tools that can enable users to enhancing their vocabulary acquisition and overall language skills. SMP enable users engage in online activities, create profiles, connect with others, exchange information, create content, engage in live streaming, link to other resources, and send and receive instant messages in various forms such as text, audio, photos, and videos (Dewing 2010). Using these forms, learners are exposed to diverse uses of English, enhancing their vocabulary acquisition and overall language skills. Facebook, Twitter, Instagram, Snapchat, and WhatsApp are leading platforms that enable students to express vocabulary knowledge, improve reading skills, and enhance word learning with reference tools. Kabilan and Zahar (2016) studied the effectiveness of Facebook as a Social Media platform for enhancing vocabulary learning and discovered that students' vocabulary acquisition improved while interacting and socializing with fellow students and other Facebook users, particularly native speakers of the target language. They argued that Facebook is an effective learning tool, capable of motivating students and increasing engagement, interaction,

collaboration, and confidence. Connolly (2011) observes that SMP have educational value as instruments for knowledge sharing and communication. Research has shown that social media platforms are veritable environments for developing English language skills, providing a casual cross-linguistic learning context where the conversational qualities of the English language are explored (Puspa 2018).

In addition to multimedia and social platforms, hypertext glosses provide another effective digital method for vocabulary learning. Hypertext Glosses presented in the text margins and footnotes can also help furnish learners with meanings and usage of lexical items contextually. According to Hassan, Ali, and Sipur (2017), hypertext gloss deals with the clarification, rendition, annotation, or explanation of a lexical item in a text to make it comprehensible for the reader. It deals with attaching a link to the word so that upon clicking on that link, one can obtain more information regarding the same word. It could be text, images, or videos. Vocabulary glosses presented in hypertext environments have been found valuable in vocabulary learning as it is designed to attract readers' attention to target words and this is mostly found in computerized text.

Digital Text And Online Educational Platforms

Reading and listening to digital text with text-to-speech and audiobooks can also help increase students' reading volume. These methods help to acquaint them with the contextual expression of new words. The multimodal and interactive features of digital text or e-books provide English language learners with opportunities for independent and interactive reading, enabling them to create meaning from the text through multimedia elements such as comments, movies, links, sound effects, and auto-reading of the text (Skolverket 2021). The multimedia features of digital text motivate students' interest in extensive reading and improve their reading skills, which in turn help build their vocabulary (Jiawook 2022). Hypertext glosses presented in text margins and footnotes can help learners understand the meanings and usage of lexical items within context. According to Hassan, et al. (2017), hypertext gloss deals with the clarification, rendition, annotation, or explanation of a lexical item in a text to make it comprehensible for the reader.

Empirical Review

The idea of learning through technology in an ESL classroom has been explored extensively by scholars who examined its effectiveness in improving mastery of the language skills. One study conducted to determine whether Wiki technology would improve students' writing skills in a college English as a foreign language writing class showed its benefits. In the study, through the use of a Wiki page, students were engaged in writing and posting passages. They also read and responded to their classmates' posts. Students who participated in the exercise reported an enhanced learning experience due to immediate feedback from their instructor. Students in the study also reported that they improved their vocabulary, spelling, and sentence structure by reading the work of their classmates (Lin & Yang, 2011).

More so, a study conducted by Basal, Yilmaz, Tanriverdi, and Sari (2016) examined the effectiveness of using Duolingo in an ESL classroom. The findings revealed that students who used Duolingo demonstrated a 35% improvement in vocabulary retention compared to those who relied solely on traditional methods.

In a study by Lin and Lin (2019), ESL learners used an AR-based application to explore vocabulary related to animals and their habitats. The participants demonstrated a significant improvement in both receptive and productive vocabulary skills, with post-test scores showing a 42% increase. The study also found that AR's multisensory approach catered to diverse learning styles, particularly benefiting visual and kinesthetic learners. The above review is an indication that the use of technology is vital in facilitating vocabulary retention, sentence structure, and engagement through interactive, multisensory, and collaborative approaches.

Challenges Facing The Use Of Technology In Teaching Of Vocabulary Development

While using technology to support classroom teaching is highly beneficial, both teachers and students sometimes face significant challenges. One major challenge is the lack of sufficient technological competence among teachers. Many teachers lack professional training on how to use advanced technology and therefore find it difficult to maximize its potential. Nobre (2021) conducted a quantitative study to examine the challenges teachers faced in virtual education during the COVID-19 pandemic. The results

indicate that a significant challenge in using technology is the lack of teacher training. Other challenges include weak internet connectivity, interruptions in electricity supply, lack of experience, fear of online classes, plagiarism in online assessments, and the lack of non-verbal communication.

Lack of accessibility and affordability of necessary technological tools poses another challenge. Basic equipment for technological integration includes educational computer programs. Unlimited access to computers and internet facilities for both teachers and students is essential for integrating technology into education. Many schools have limited computers for students to use, while some teachers have computers with limited internet connectivity (Warschauer, Zheng, Niiya, Cotton, & Farkas, 2014). Inadequate professional development for teachers is also a major barrier to technology implementation in classrooms. Ertmer et al. (2012) identify insufficient professional development and training as the primary barrier to effectively integrating technology in classrooms.

Confidence in digital technology skills and knowledge is another major barrier to teachers' integration of technology into teaching and learning. Many teachers were not brought up in an environment of information technology, unlike present-day students raised in an environment saturated with mobile phones and computers. To avoid being intimidated by digital natives, some teachers lacking expertise in digital technology often resort to traditional methods, such as using textbooks, to maintain classroom control (Hughes, 2005; Rakes & Casey, 2002).

Theoretical Framework

This study is hinged on modern educational technology theory, which refers to the practice of enhancing teaching and learning with information technology (Lei 2017). It involves institutions and their staff effectively mobilizing modern technology to facilitate the teaching and learning process. Institutions are expected to provide necessary support networks, systems, and procedures to support learning (Yang, Miller & Wu 2022). Advancements in information technology have affected every sphere of society, including education. Modern educational technology emphasizes using digital tools to design, develop, manage, and evaluate learning resources and processes. It views teaching and learning from the perspective of

stimulating student interest in learning, focusing on cultivating enthusiasm and creativity, and shifting from teacher-centeredness to student-centeredness (Lei, *ibid*).

Teachers can incorporate modern technology such as computers, the Internet, and multimedia technologies into their vocabulary teaching techniques to enhance student motivation. Information and Communication Technology (ICT) is vital for social life, business, and the economy to meet the demands of the modern information society and progress in education (Aduwa & Iyamu 2005). The use of ICT in education improves its quality and quantity (Balasubramanian et al. 2017). It engenders innovative, creative, and cognitive thinking, higher productivity, efficiency, and educational outcomes (Adeosun 2010). Jung (2015) notes that ICT greatly influences teaching and learning at higher education levels by facilitating both processes.

Different digital tools can be used by teachers to foster students' interest in learning new words. With the increase in inexpensive mobile devices, incorporating digital technology in the classroom, particularly in teaching new words, should be widely embraced (Sergey 2020). Taghizadeh and Hasani-Yourdshahi (2020) argue that young learners and teachers need to integrate new technologies because children of today live in a highly innovative digital world. They assert that computer-assisted language learning (CALL) can spark student interest in learning English as a second language and enhance their communicative and computer skills. By leveraging on some of the aforementioned multimedia and digital tools, vocabulary instruction becomes more interesting and an easy task for both the teachers and learners.

METHODOLOGY

Research Design.

This study is a descriptive survey investigation of the extent of deployment of digital technological tools by ESL teachers in vocabulary instruction in the South-South Region of Nigerian classrooms, using a quantitative research design. The quantitative research method is used to obtain measurable results on the extent of digital technological integration in vocabulary teaching and learning in ESL classrooms. Self-designed closed-ended questionnaires and structured interviews were the instruments used to collect data

for this study. The self-designed closed-ended questionnaires consist of six (6) questions designed to elicit information from teachers regarding the extent of the use of digital technology in teaching vocabulary development in their classrooms. In contrast, the structured interview consisting of five (5) questions was designed to find out the challenges facing such practices in the Nigerian context, represented by their various institutions. The responses for the structured interview were recorded on a POP 4 TECNO Android phone, which was later transcribed by the researcher for analysis. Leedy (1993) states that quantitative research data are collected through closed-ended questionnaires and structured interviews to ensure high result validity and high-quality research. This justifies using closed-ended questionnaires and structured interviews as research instruments for data collection in this study, which aims for unbiased and objective insights regarding the extent and level of digital technology integration in teaching vocabulary in the South-South Regions of Nigeria.

Convenient sampling was used to select 40 participants for the study: 10 teachers each from one government-owned school, one missionary school, and two private-owned schools in Ibusa, Asaba, and Agbo, Delta State, in the South-South Region of Nigeria. This mix of participants from private and public-owned schools was designed to ensure broader coverage and enhance the validity and reliability of research outcome. The data was analyzed using statistical tables and simple percentages.

DATA ANALYSES

This analysis is divided into two sections. The first part consists of the closed-ended questionnaire, with the questions and responses tabulated and analyzed statistically. The second part addresses the structured interviews, where the responses from the interviewees are also tabulated and quantified using simple percentages.

Part 1: Questionnaire; Questions and Responses

Questions in this part are closed-ended, with options available for respondents to tick their preferred choices.

Table 1:
Distribution of Respondents by Class of Teaching

CLASS OF TEACHING	FREQUENCY	PERCENTAGE %
JSS 1-3	22	55
SSS 1-3	18	45
TOTAL	40	100

Source: Field Survey, 2024

The table above captures the different levels of classes in secondary schools that teachers are assigned to. The analysis reveals that 22 (55%) of the respondents teach JSS 1-3, while the remaining 18 (45%) teach SSS classes.

Table 2:
Distribution of Respondents by Gender

CLASS OF TEACHING	FREQUENCY	PERCENTAGE %
Male	15	37.5
Female	25	62.5
TOTAL	40	100

Source: Field Survey, 2024

The table above captures the gender distribution of the respondents. The analysis reveals that 15 (37.5%) of the respondents are male, while the remaining 25(62.5%) are female.

Table 3
Times of Weekly Engagement of Students in Vocabulary Development

How many times in a week do you engage students in vocabulary development?	Frequency	Percentage %
Once in a week	40	40
Twice in a week		
TOTAL	40	100

Source: Field Survey, 2024

The table above captures the number of times teachers engage students in vocabulary development in the classroom. The table shows that teachers engage students in vocabulary development once a week.

Table 4: Giving of Online Assignment to Students

How often do you give your students online assignments?	FREQUENCY	PERCENTAGE %
Rarely	10	25
Very often	0	0
Not at all	30	75
Always	0	0
TOTAL	40	100

Source: Field Survey, 2024

The table above captures how often teachers give online assignments to students. The results show that 10 (25%) of teachers rarely give online assignments, while 30 (75%) do not give online assignments at all.

Table 5
The Stability of Internet Connectivity

How steady is the internet connectivity in your school?	FREQUENCY	PERCENTAGE %
Not steady	29	73
Very steady	0	0
Often steady	11	27.5
TOTAL	40	100

Source: Field Survey, 2024

The table above shows responses on the stability of internet connectivity in schools. The results indicate that 11 (27.5%) affirm that their school internet connectivity is often steady, while 29 (73%) believe there is consistent fluctuation in the internet connection.

Table 6
Availability of Language Laboratory

Does your school have language laboratory?	FREQUENCY	PERCENTAGE %
YES	0	0
NO	40-	100
TOTAL	40	100

Source: Field Survey, 2024

The table above captures the availability of language laboratories in secondary schools. The results reveal that all respondents claimed there is no language laboratory in their schools.

Part 2

This part consists of structured interview questions that allowed interviewees to provide answers to challenges they face with using digital technology in teaching and learning English vocabulary.

Table 7
Types of Technological Tools use for Teaching of Vocabulary

What type of technological tools do you use to support teaching of vocabulary in your class?	FREQUENCY	PERCENTAGE %
Laptop and projector	33	83
Online dictionary and thesaurus	7	17.5
Language laboratory	0	0
Online software applications	0	0
Total	40	100

Source: Field Survey, 2024

The table above captures the types of technological tools used by teachers to enhance or support teaching and learning vocabulary in and outside the classroom. It was discovered that most teachers (33, or 83%) use laptops and projectors. None of the respondents indicated using specialized educational platforms or language laboratories, except for 7 (17.5%) who use online dictionaries and thesauruses.

Table 8
The Use of Smart Phones by Students in Classroom

Do you allow students to use smart phones in classrooms to search for word meaning? Give reasons for you answer.	FREQUENCY	PERCENTAGE %
No. This is because students are not allowed access to smart phones in school premises by the school authority.	40	100
Yes	0	0
TOTAL	40	100

Source: Field Survey, 2024

The table above reveals responses on whether or not students are allowed to use smartphones in class to search for the meanings of unfamiliar words. The results show that all interviewees agreed that students are not allowed to use smartphones in class because the school authority prohibits them.

Table 9

Online Program or Platform Teachers are Familiar with for Vocabulary Development Teaching

Aside online dictionary and thesaurus, which other online program or platform for vocabulary development are you familiar with? Mention any one or two.	FREQUENCY	PERCENTAGE %
I am familiar with Ulesson and Google Meet but do not use them during classroom interactions, and hardly give students assignments with them.	15	37.5
I am familiar with Google Meet, but used it last during COVID-19 pandemic to engage students in remote lessons.	25	62.5
TOTAL	40	100

Source: Field Survey, 2024

The table above captures the type of online programs and software applications that teachers use to support teaching and learning vocabulary with their students. The results reveal that most teachers are not familiar with online software and platforms for teaching vocabulary development. Those who mentioned Ulesson and Google Meet indicated that they stopped using them after the COVID-19 pandemic.

Table 10

Accessibility to Computer and Internet Facility while Class is in Progress by Students

Do students in your class have access to computer and internet facilities while class is in progress? Give reasons for your answer.	FREQUENCY	PERCENTAGE %
No, there are no such provisions in the classrooms. Computers are only kept in the computer laboratory and only made accessible to students during computer classes.	40	100
Yes.	0	0
TOTAL	40	100

Source: Field Survey, 2024

The table above captures responses from interviewees on whether students have access to computers while classes are on. 100% of the interviewees indicated "No" because computers are not made available in classrooms but rather in computer laboratories.

Table 11

Challenges in the use of Digital Technology in Teaching Vocabulary

What are your challenges in the use of digital technology in teaching vocabulary? Mention any one or two.	FREQUENCY	PERCENTAGE %
Poor internet connectivity and erratic/ electricity supply.	24	60
Unfamiliarity with appropriate educational software for vocabulary development and lack of experience on how to use the available ones.	16	40
TOTAL	40	100

Source: Field Survey, 2024

The table above reveals the challenges facing teachers in using digital technology in teaching vocabulary development. The challenges mentioned by the interviewees include ignorance of the existence of software for vocabulary development, lack of experience in using the available ones, poor internet connectivity, and poor electricity supply.

DISCUSSION

This research explores the extent of integration of digital technology in teaching vocabulary in secondary schools within the South-South Region/States of Nigeria. The findings highlight significant gaps and challenges in the adoption of technology, providing a critical view of the current state of digital integration in vocabulary instruction.

The result of the analysis reveals that the most commonly used technologies by teachers in classrooms are computers and projectors. However, even these tools are only utilized by a few teachers. This is an indication of a limited penetration of digital resources in vocabulary teaching. The underutilization of these tools suggests a lack of access, training, or motivation among teachers to integrate technology effectively into their teaching practices. Furthermore, the results show that many teachers are unaware of specific software applications, programs, and online platforms designed to enhance vocabulary instruction. This deficiency in awareness and expertise hinders the ability of teachers to enrich the learning experience and make vocabulary lessons more engaging and effective.

Another critical finding is the absence of language laboratories in secondary schools across the region. This indicates a lack of infrastructural investment and prioritization of language education in the region's educational policy. This infrastructural gap ultimately limits opportunities for students to practice and improve their vocabulary using modern tools and techniques. Additionally, the instability of internet connectivity and electricity supply presents a formidable challenge. Reliable internet access is a cornerstone for utilizing digital tools effectively, as it facilitates access to a plethora of online resources, platforms, and interactive tools. Similarly, inconsistent electricity supply disrupts the use of any digital tools, making it difficult for teachers to rely on technology during lessons.

Another barrier identified is the unavailability of computers for individual student use in classrooms. This restricts students to passive forms of learning, often reliant on teacher-led instruction and traditional hardcopy textbooks. Teachers' lack of expertise in handling digital technology is another pressing issue. Many teachers shy away from assigning online tasks due to their limited proficiency in using technology. Consequently, vocabulary instruction remains rooted in traditional methods that rely on hardcopy textbooks and rote learning techniques.

In summary, this study reveals that teaching vocabulary development in the South-South Region of Nigeria largely remains traditional, with minimal integration of digital technology. Key challenges include limited access to technology, lack of teacher expertise, absence of language laboratories, and infrastructural deficiencies such as unstable electricity and internet connectivity. These findings highlight the urgent need for targeted interventions, including investments in infrastructure, professional development for teachers, and policies aimed at promoting the integration of digital tools in education. Addressing these challenges is crucial to aligning vocabulary instruction with global trends in educational technology and ensuring students are adequately prepared for the demands of the modern world.

CONCLUSION

This study has discovered the current state of digital technology integration in vocabulary development within English as a Second Language (ESL) classroom in the South-South Region of Nigeria. Despite the availability of digital tools such as computers and Internet connectivity, their utilization for vocabulary

teaching remains minimal. The findings revealed several barriers to effective digital integration, including a lack of functional language laboratories, inadequate familiarity with educational software among teachers, and inconsistent internet connectivity. Teachers primarily rely on traditional methods like using textbooks and occasionally using projectors to display multimedia content. This limited use of technology fails to fully engage students and harness the potential benefits of digital tools for vocabulary acquisition. To address these challenges, there is a need for continuous professional development programs that equip teachers with the necessary skills to integrate digital technologies effectively.

Furthermore, the study emphasized the importance of providing reliable infrastructure, including stable internet connectivity and access to functional language laboratories. By addressing these issues, educators can create a more engaging and effective learning environment that promotes vocabulary acquisition and improves overall language proficiency. This study maintains, therefore, that embracing digital technology in ESL classrooms can significantly enhance vocabulary learning, motivating students and preparing them for academic and career success in a technologically advanced world. Continuous efforts towards the training of personnel and infrastructural improvements are essential to realizing the full potential of digitalized vocabulary development in ESL education.

RECOMMENDATIONS

In view of the challenges identified in integrating digital technologies in classrooms for teaching vocabulary, this study recommends further studies to provide insights on strategic digital training educators should be acquainted with, leveraging specific internet-based software programs and mobile applications available on their smartphones to actively engage students.

This study also recommends that regular workshops and seminars should be conducted to acquaint and train teachers on the use of both basic and advanced digital educational software tools for vocabulary development that can complement their effort and competences in classroom setting. A continuous support

system should be put in place where teachers can seek help and share best practices on the use of digital technologies in teaching of vocabulary development.

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