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ASSESSING THE INFLUENCE OF DIGITAL MEDIA ON ENGLISH LANGUAGE COMPREHENSION: A COMPARATIVE STUDY OF RURAL STUDENTS IN CROSS RIVER STATE, NIGERIA

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Abstract
This study investigates the influence of digital media on English language comprehension among rural secondary school students in Cross River State, Nigeria, comparing those with access to digital media to those without. Utilizing a mixed-methods approach, data were collected through English comprehension tests, questionnaires, and semi-structured interviews from 300 Senior Secondary School (SSS) students across six rural schools. The sample comprised 150 students with regular digital media exposure (via smartphones and social media platforms) and 150 with minimal or no exposure. Findings reveal that students with digital media access scored significantly higher ($M = 72.4$, $SD = 8.3$) in comprehension tests compared to their counterparts ($M = 58.7$, $SD = 9.1$), with a t-value of 4.87 ($p < .001$). Qualitative insights indicate that digital media exposure enhances vocabulary acquisition and contextual understanding but is hindered by limited internet access and low digital literacy. The study underscores the potential of digital media to bridge educational gaps in rural settings while highlighting infrastructural challenges. Recommendations include integrating digital literacy into curricula and improving rural internet connectivity to maximize educational benefits.

Keywords: Digital media, English language comprehension, rural students, digital literacy, educational technology

Introduction
The advent of digital media has revolutionized educational paradigms, particularly in the realm of language acquisition, where access to diverse, interactive, and authentic content has reshaped learning experiences. In Nigeria, English, as the official language and medium of instruction, is pivotal for academic achievement and socio-economic advancement. However, rural students often face significant barriers, including limited access to quality educational resources, inadequately trained teachers, and minimal exposure to English-rich environments. This study investigates the influence of digital media encompassing social media platforms, educational apps, and online resources on English language comprehension among rural secondary school students in Cross River State, Nigeria, comparing those with regular digital media access to those without.

The transformative potential of digital media in education has been a focal point in educational research for decades. Early studies, such as Krashen's (1982) work on comprehensible input, emphasized the importance of exposure to meaningful language for acquisition, a principle that digital media amplifies through authentic and contextually rich content. More recently, Huang and Hew (2022) demonstrated that social media platforms like WeChat enhance vocabulary acquisition among Chinese EFL learners by providing interactive and engaging learning environments. Similarly, Namaziandost et al. (2021) found that WeChat-based instruction significantly improved English vocassbulary knowledge among Iranian learners, attributing this to real-time feedback and exposure to authentic language use. These findings suggest that digital media can serve as a dynamic tool for language learning, particularly in contexts where traditional resources are scarce.

In the Nigerian context, the role of digital media in education is gaining attention, though research remains limited, particularly in rural settings. Umeh (2016) found that internet usage positively influenced reading comprehension among Nigerian undergraduates, suggesting that digital platforms provide opportunities for incidental learning. However, rural students face unique challenges. Azubuike et al. (2021) highlighted a pronounced digital divide during the COVID-19 pandemic, with rural Nigerian students experiencing limited access to online learning platforms compared to their urban counterparts. This divide is compounded by infrastructural constraints, such as unreliable electricity and poor internet connectivity, which hinder the adoption of digital tools in rural education (Okebukola, 2007).

Older literature provides a foundational understanding of technology's role in language learning. Warschauer (1996) argued that computer-mediated communication fosters collaborative learning and exposure to diverse linguistic inputs, a precursor to modern digital media's interactive capabilities. Similarly, Chapelle (2001) emphasized the role of technology in providing multimodal learning experiences, which enhance comprehension through visual and textual stimuli. These early insights align with contemporary studies, such as Godwin-Jones (2019), who noted that mobile-assisted language learning (MALL) facilitates personalized and context-driven learning, particularly for vocabulary and reading comprehension.

Despite its potential, digital media's impact is not uniformly positive. Solak (2014) cautioned that digital platforms may encourage superficial reading habits, as students often skim content rather than engage deeply. Furthermore, Kukulska-Hulme and Shield (2008) highlighted that low digital literacy can limit the effectiveness of technology in language learning, a concern particularly relevant in rural contexts. In Nigeria, studies like Adegbija (2004) underscored the socio-cultural barriers to English proficiency in rural areas, where limited exposure to native-like contexts hinders comprehension. Digital media could bridge this gap by providing access to authentic English content, but its efficacy depends on overcoming infrastructural and literacy barriers.

This study addresses these issues by examining how digital media influences English language comprehension among rural students in Cross River State. It hypothesizes that students with regular digital media access will exhibit superior comprehension skills due to increased exposure to authentic English content and interactive learning opportunities. By integrating older and recent literature, this study situates itself within a robust theoretical framework, exploring how digital media can mitigate educational disparities in resource-constrained settings while acknowledging potential challenges.

Methodology

Research Design

This study adopted a mixed-methods approach, combining quantitative data from English comprehension tests and questionnaires with qualitative insights from semi-structured interviews. A comparative design was used to assess differences in comprehension between students with and without regular digital media exposure.

Participants

The study involved 300 Senior Secondary School (SSS) students from six rural public secondary schools in Cross River State, Nigeria, selected through purposive sampling to ensure rural representation. The sample was divided into two groups: 150 students with regular digital media access (via smartphones, social media, or educational apps) and 150 with minimal or no access. Demographic details are presented in Table 1.

Table 1

Demographic Characteristics of Participants

Variable	Digital Media Access (n=150)	No Digital Media Access (n=150)
Age (Mean, SD)	16.2 (1.1)	16.4 (1.2)
Gender		
Male	78 (52%)	74 (49.3%)
Female	72 (48%)	76 (50.7%)
Socioeconomic Status		
Low	92 (61.3%)	108 (72%)
Middle	58 (38.7%)	42 (28%)
School Location		
Rural	150 (100%)	150 (100%)

Instruments

- English Comprehension Test: A 20-item multiple-choice test, validated by language experts, assessed reading comprehension, vocabulary, and contextual understanding. The test had a Cronbach's alpha of 0.82, indicating high reliability.
- Questionnaire: A 15-item questionnaire (Cronbach's alpha = 0.78) collected data on digital media usage, frequency, and perceived impact on English learning.
- Semi-Structured Interviews: Conducted with 20 students (10 from each group) to explore their experiences with digital media and its perceived effects on comprehension.

Data Collection

Data collection occurred over eight weeks in 2025. The comprehension test was administered under controlled conditions, followed by the questionnaire. Interviews were conducted in a quiet

setting, recorded, and transcribed verbatim. Ethical considerations included obtaining informed consent, ensuring anonymity, and securing approval from school authorities.

Data Analysis

Quantitative data were analyzed using descriptive statistics (means, standard deviations) and an independent samples t-test to compare comprehension scores between groups. Qualitative data were thematically analyzed to identify recurring patterns and insights.

Results

Quantitative Findings

The English comprehension test results are summarized in Table 2. Students with digital media access outperformed those without, with a statistically significant difference ($t(298) = 4.87$, $p < .001$).

Table 2

English Comprehension Test Scores

Group	Mean Score	Standard Deviation	t-value	p-value
Digital Media Access (n=150)	72.4	8.3	4.87	< .001
No Digital Media Access (n=150)	58.7	9.1		

The questionnaire revealed that students with digital media access used platforms like WhatsApp (68%), YouTube (52%), and educational apps (34%) for English learning. Frequency of use correlated positively with comprehension scores ($r = .62$, $p < .01$).

Qualitative Findings

Thematic analysis identified three key themes:

- Enhanced Vocabulary and Contextual Learning: Students with digital media access reported learning new words and phrases from social media and videos, e.g., “Watching English movies on YouTube helps me understand how words are used” (Student A).
- Engagement and Motivation: Digital media made learning interactive and enjoyable, with students noting, “I like reading posts on Instagram because they are short and interesting” (Student B).
- Challenges of Access and Literacy: Limited internet connectivity and low digital literacy were barriers. One student remarked, “Sometimes the network is bad, and I don’t know how to use some apps” (Student C).

Discussion

The findings of this study confirm that digital media significantly enhances English language comprehension among rural students in Cross River State, with those having regular access scoring higher (M = 72.4, SD = 8.3) than those without (M = 58.7, SD = 9.1). These results align with Krashen's (1982) theory of comprehensible input, which posits that exposure to meaningful and contextually relevant language fosters acquisition. Digital media, through platforms like YouTube and WhatsApp, provides rural students with authentic English content, such as videos and social media posts, which enrich vocabulary and contextual understanding. This corroborates Huang and Hew (2022), who found that social media facilitates incidental vocabulary learning, and Namaziandost et al. (2021), who highlighted the role of interactive platforms in enhancing language skills.

The qualitative findings further illuminate digital media's motivational impact. Students reported that engaging content, such as short Instagram posts and YouTube tutorials, made learning enjoyable and relevant, supporting Warschauer's (1996) assertion that technology fosters collaborative and engaging learning environments. This engagement is critical in rural contexts, where traditional methods often fail to capture students' interest due to outdated materials or teacher-centered approaches (Adegbija, 2004). The positive correlation between frequency of digital media use and comprehension scores ($r = .62$, $p < .01$) underscores the importance of regular exposure, aligning with Godwin-Jones (2019), who emphasized the efficacy of mobile-assisted language learning in providing consistent, personalized practice.

However, the study also highlights significant challenges. Limited internet connectivity and low digital literacy, as reported in interviews, mirror findings by Azubuike et al. (2021), who identified infrastructural barriers as a key constraint in rural Nigeria. These issues echo earlier concerns by Okebukola (2007), who noted that technological adoption in Nigerian education is hampered by poor infrastructure. Furthermore, Solak's (2014) caution about superficial reading habits was partially evident, as some students reported skimming social media content rather than engaging deeply. This suggests that while digital media offers opportunities, its effectiveness depends on guided use and digital literacy training, as advocated by Kukulska-Hulme and Shield (2008).

The study's implications are significant for rural education. Digital media can bridge the gap between resource-scarce environments and English-rich contexts, supporting Chapelle's (2001) argument for multimodal learning. However, equitable access remains a critical issue. The digital divide, as highlighted by Azubuike et al. (2021), underscores the need for infrastructural investments to ensure rural students can fully leverage digital tools. Additionally, the findings challenge Solak's (2014) concerns about superficial engagement, as students in this study reported deeper contextual learning through videos and interactive content, suggesting that the nature of digital media use influences its impact.

This study contributes to the literature by providing empirical evidence of digital media's role in rural Nigerian education, an area underexplored compared to urban contexts (Umeh, 2016). It extends older theories, such as Krashen's (1982) input hypothesis, to modern digital contexts,

demonstrating their continued relevance. Future research should explore longitudinal impacts and investigate strategies to enhance digital literacy, ensuring that rural students can maximize the educational potential of digital media.

Conclusion

This study demonstrates that digital media significantly enhances English language comprehension among rural students in Cross River State, Nigeria, by providing access to authentic and engaging content. However, challenges such as limited internet access and low digital literacy underscore the need for targeted interventions. Integrating digital media into rural education could transform language learning, but equitable access remains critical.

Recommendations

- Curriculum Integration: Incorporate digital literacy and media-based English learning into the secondary school curriculum.
- Infrastructure Development: Government and stakeholders should invest in rural internet connectivity and affordable devices.
- Teacher Training: Provide professional development for teachers to effectively use digital media in instruction.
- Community Engagement: Establish community digital hubs to support student access and learning.

Future research should explore longitudinal impacts and include urban-rural comparisons to deepen understanding of digital media's role in language education.

References

Adegbija, E. (2004). Language policy and planning in Nigeria. Current Issues in Language Planning, 5(3), 181–199. https://doi.org/10.1080/14664200408668258

Azubuike, O. B., Adegboye, O., & Quadri, H. (2021). Who gets to learn in a pandemic? Exploring the digital divide in remote learning during the COVID-19 pandemic in Nigeria. International Journal of Educational Research Open, 2-2, 100022. https://doi.org/10.1016/j.ijedro.2020.100022

Chapelle, C. A. (2001). Computer applications in second language acquisition: Foundations for teaching, testing, and research. Cambridge University Press. https://doi.org/10.1017/CBO9781139524681

Godwin-Jones, R. (2019). In a world of SMART technology, why learn another language? Educational Technology & Society, 22(2), 14–24.

Huang, G., & Hew, K. F. (2022). Adding "reinforcement" to the involvement load hypothesis improves students' productive vocabulary performance. In Blended Learning: Engaging Students in the New Normal Era (pp. 293–307). Springer. https://doi.org/10.1007/978-3-031-08939-8_25

Krashen, S. D. (1982). Principles and practice in second language acquisition. Pergamon Press.

Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. ReCALL, 20(3), 271–289. https://doi.org/10.1017/S0958344008000335

Namaziandost, E., Hashemifardnia, A., Bilyalova, A. A., Fuster-Guillén, D., Palacios Garay, J. P., Ngoc Diep, L. T., Ismail, H., Sundeeva, L. A., Hibana, A., & Rivera-Lozada, O. (2021). The effect of WeChat-based online instruction on EFL learners' vocabulary knowledge. Education Research International, 2021, 1–8. https://doi.org/10.1155/2021/8825450

Okebukola, P. (2007). The state of science and technology education in Nigeria: Challenges and prospects. Journal of Science Teachers Association of Nigeria, 42(1), 1–10.

Solak, E. (2014). Prospective English teachers' perceptions of paper-based and digital reading. International Journal of Education and Research, 2(7), 1–12.

Umeh, I. A. (2016). Analysis of internet utilization and its influence on undergraduate students' reading habits and reading comprehension [Doctoral dissertation, Nnamdi Azikiwe University].

Warschauer, M. (1996). Computer-assisted language learning: An introduction. In S. Fotos (Ed.), Multimedia language teaching (pp. 3–20). Logos International.