

Challenges and Opportunities of Virtual Classrooms for French Language Education in Nigeria: Implications for Teachers and Learners

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Abstract

The purpose of this chapter was to investigate the challenges and opportunities presented by virtual classrooms for French language education in Nigeria, with particular emphasis on the implications for both teachers and learners. The contention of the chapter is the global shift towards virtual learning, accelerated by the COVID-19 pandemic, which has significantly transformed educational delivery across disciplines, including foreign language instruction. Drawing on sociocultural theory and connectivism as theoretical frameworks, the study examines infrastructural, pedagogical, and attitudinal constraints that hinder effective online instruction, such as limited digital literacy, unreliable internet access, and inadequate teacher training. Conversely, it identifies emerging prospects including access to authentic Francophone resources, flexible learning environments, and the enhancement of learner autonomy and digital competencies. Through a critical review of recent literature and contextual analysis, the study advocates policy-driven interventions to bridge the digital divide and enhance teacher preparedness. It concludes that, with targeted investment in digital infrastructure and inclusive training, virtual classrooms can serve as a viable and transformative tool for advancing French language education in Nigeria.

Keywords: Virtual learning; pandemic; foreign language; foreign language anxiety.

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Introduction

The shift from traditional classroom instruction to virtual learning has become an integral part of global education, particularly in response to the disruptions caused by the COVID-19 pandemic. While language acquisition is a cognitively demanding process, learning a foreign language in a classroom setting often induces foreign language anxiety (FLA), a phenomenon that affects students' confidence and performance (Horwitz, Horwitz & Cope, 1986). Studies have shown that anxiety can stem from various factors, including fear of making mistakes, peer evaluation, and teacher expectations (MacIntyre & Gardner, 1994; Dewaele & MacIntyre, 2014). In the Nigerian context, French language education has long faced several structural and pedagogical challenges, including inconsistent language policies, outdated curricula, a shortage of qualified teachers, and limited instructional resources (Balogun, 2020; Efevbokhan et al., 2020; Onumajuru, 2004). Additionally, the dominance of English and indigenous languages, coupled with a general lack of motivation among learners, has contributed to the marginalization of French in Nigeria's linguistic landscape (Adebayo, 2016).

The COVID-19 pandemic exacerbated these pre-existing challenges, disrupting conventional teaching methods and necessitating a rapid transition to virtual classrooms. The enforcement of social distancing protocols and school closures compelled educators and institutions to adopt online learning platforms, video conferencing tools, and digital resources to sustain instructional activities (Dhawan, 2020). However, the implementation of virtual classrooms for French language education in Nigeria has been met with technological, infrastructural, and pedagogical difficulties, including limited internet access, inadequate teacher training in digital pedagogy, and varying levels of student engagement (Agina-Obu, R., & Okwu, E. (2023); Balogun et al. 2018).

Despite these challenges, virtual learning presents significant opportunities for enhanced accessibility, flexible learning models, and exposure to authentic linguistic and cultural materials (Hampel & Stickler, 2005; Alshammari, 2019). With the appropriate technological infrastructure and policy support, virtual classrooms can complement traditional teaching approaches and improve foreign language acquisition. This study, therefore, examines the challenges and opportunities of virtual classrooms for French language education in Nigeria, with a focus on its implications for teachers and learners. The findings will contribute to ongoing discussions on the role of digital education in foreign language instruction and inform policy recommendations for more effective implementation.

Statement of the Problem

Despite the popularity of online learning, there are still concerns about the effectiveness, accessibility, and sustainability of virtual classrooms in Nigeria, especially as the global shift towards virtual learning, accelerated by the COVID-19 pandemic, has significantly transformed educational delivery across disciplines, including foreign language instruction. In the French language education context, existing infrastructure, technological limitations, socio-economic factors, and inconsistent government policies as posited by Efevbokhan et

al. (2020) and Onumajuru (2004), may pose significant challenges to the successful implementation of virtual classrooms, potentially exacerbating existing educational disparities. Meanwhile, virtual classrooms also offer opportunities for increased access to education, flexibility, and personalized learning. With a view to identifying strategies for optimizing their potential and addressing the associated challenges, this study aims to investigate the challenges and opportunities presented by virtual classrooms for French language education in Nigeria, with particular emphasis on the implications for both teachers and learners.

Theoretical Framework

The foundation of this study is built on several theoretical perspectives that provide insight into the challenges and opportunities of virtual classrooms for French language education in Nigeria. These theories include Foreign Language Anxiety (FLA) Theory, Sociocultural Theory (SCT) and the Zone of Proximal Development (ZPD), Connectivism, and Cognitive Load Theory (CLT). Each of these perspectives offers a unique lens for analyzing the transition from traditional face-to-face instruction to digital learning environments.

One of the most relevant frameworks for this study is Foreign Language Anxiety (FLA) Theory, as proposed by Horwitz, Horwitz, and Cope (1986). This theory highlights the psychological barriers that learners face when acquiring a foreign language in a classroom setting. Anxiety, stemming from communication apprehension, fear of negative evaluation, and test anxiety, can significantly affect students' willingness to participate in class and their overall language proficiency (MacIntyre & Gardner, 1994). In a virtual learning environment, these anxieties may either be mitigated or exacerbated. While some students may feel more comfortable participating in online discussions where they are not physically observed, others may experience heightened anxiety due to technical challenges, reduced face-to-face interaction, and unfamiliarity with digital platforms (Dewaele & MacIntyre, 2014). This study, therefore, seeks to examine how virtual classrooms impact foreign language anxiety among Nigerian learners of French and how teachers can adopt strategies to foster a low-anxiety learning environment in digital settings.

Additionally, this research is informed by Vygotsky's (1978) Sociocultural Theory (SCT), which underscores the importance of social interaction in the learning process. According to SCT, learning occurs within a Zone of Proximal Development (ZPD), where students acquire knowledge through guidance from more experienced peers or instructors (Lantolf & Thorne, 2006). The effectiveness of virtual classrooms in promoting interaction and scaffolding learning is a key concern in this study. While digital platforms offer opportunities for collaborative learning through discussion forums, group projects, and video conferencing, there are challenges related to technological accessibility, teacher preparedness, and student engagement (Agina-Obu & Okwu, (2023). The study will explore whether virtual classrooms provide sufficient interaction and scaffolding opportunities for French language learners in Nigeria and how teachers can optimize these features to enhance learning outcomes.

Furthermore, Connectivism, a theory developed by Siemens (2005), offers a relevant framework for understanding how learning occurs in digitally mediated environments. Unlike traditional language acquisition theories, connectivism argues that knowledge is distributed across networks and that learners construct meaning through digital interactions, multimedia resources, and online collaboration. Virtual classrooms can serve as effective platforms for exposing learners to authentic French language materials, including online articles, podcasts,

videos, and interactive exercises (Hampel & Stickler, 2005). However, digital inequality, particularly in developing countries like Nigeria, remains a significant barrier. Limited internet access, inadequate digital literacy among teachers and students, and the high cost of data may prevent learners from fully benefiting from virtual French language education (Balogun et al. 2018). This study will examine the extent to which connectivist principles can be applied within the Nigerian educational context and explore solutions for bridging the digital divide.

Finally, Cognitive Load Theory (CLT), as developed by Sweller (1988), provides insight into the instructional design challenges associated with virtual learning. CLT suggests that learners' cognitive capacity is limited, and effective instructional design must balance intrinsic, extraneous, and germane cognitive loads (Kirschner, Sweller, & Clark, 2006). Poorly designed virtual learning environments can overwhelm students with complex navigation, excessive multimedia, and disorganized content, thereby hindering language acquisition. Conversely, well-structured online courses with clear learning objectives, interactive elements, and guided practice can enhance engagement and comprehension. Given that many teachers in Nigeria lack specialized training in digital pedagogy, this study will assess how cognitive load influences virtual French language education and propose strategies for developing effective online instructional materials.

The integration of FLA Theory, Sociocultural Theory, Connectivism, and Cognitive Load Theory provides a robust foundation for analyzing the challenges and opportunities of virtual classrooms for French language education in Nigeria. These theories will guide the investigation into how digital learning environments impact learner anxiety, social interaction, digital resource accessibility, and instructional design. This study aims to contribute to the development of more effective virtual learning strategies that will enhance French language education in Nigeria while addressing the infrastructural and pedagogical challenges that currently hinder its success.

Challenges and opportunities of virtual classrooms for French language Education in Nigeria

The adoption of virtual classrooms for French language education in Nigeria presents both significant challenges and promising opportunities. While digital learning platforms have the potential to improve language instruction by offering flexibility, accessibility, and exposure to authentic materials, several barriers related to infrastructure, pedagogy, and learner engagement hinder their effectiveness. This section explores these challenges and opportunities in detail.

1. Challenges of Virtual Classrooms

a. Digital Infrastructure and Internet Connectivity

One of the most significant barriers to virtual learning in Nigeria is limited digital infrastructure and unreliable internet connectivity. Many regions lack stable electricity and high-speed internet, making online learning difficult (Agina-Obu & Okwu, (2023)). Even in urban areas, internet access is costly, and many students do not have personal laptops or smartphones to access virtual classes consistently (Balogun et al. 2018). This digital divide creates disparities in learning, particularly for students from lower-income backgrounds.

b. Technological Literacy and Teacher Preparedness

The effectiveness of virtual classrooms depends on teachers' ability to use digital tools and online pedagogical strategies effectively. However, many French language instructors in Nigeria lack formal training in digital pedagogy (Snezhana, 2021). Traditional teaching methods that rely on chalk-and-talk approaches do not always translate well to online platforms, and many educators struggle with designing interactive digital lessons or using platforms like Google Classroom, Moodle, or Zoom. As a result, virtual classes may become passive and less engaging, reducing their effectiveness in language acquisition.

c. Student Engagement and Motivation

Maintaining learner motivation in a virtual classroom is more challenging than in a physical setting, especially for a subject like French, which requires interactive and immersive learning (Dewaele & MacIntyre, 2014). Many students experience feelings of isolation in virtual settings due to the lack of real-time interactions with peers and teachers (Hampel & Stickler, 2005). In addition, distractions at home, such as household responsibilities, lack of a quiet learning space, and multitasking, further reduce concentration levels.

d. Assessment and Feedback Mechanisms

Assessing students' progress in a virtual environment poses another significant challenge. Oral proficiency, pronunciation, and spontaneous conversation skills—critical components of French language learning—are difficult to evaluate through standard online testing methods (Adebayo, 2016). While automated quizzes can assess grammar and vocabulary, speaking and writing assessments require personalized feedback from instructors, which can be time-consuming and difficult to implement effectively in large online classes.

e. Lack of Exposure to Authentic Language Use

One of the key advantages of learning French in a physical classroom is the opportunity for face-to-face interaction, role-playing, and real-time pronunciation correction. In a virtual classroom, students may miss out on the natural conversational practice needed for fluency (Hampel & Stickler, 2005). Although pre-recorded audio and video resources can help, they do not fully replace the interactive and spontaneous nature of real-life communication.

2. Opportunities for Virtual Classrooms

a. Increased Access to Language Learning Resources

Despite infrastructure challenges, virtual classrooms provide greater access to authentic French language materials that are not always available in Nigerian schools. Online resources such as French podcasts, e-books, movies, news articles, and language learning apps allow students to engage with real-world language use, enhancing their comprehension and cultural understanding (Siemens, 2005).

b. Flexibility in Learning

Virtual learning allows students to learn at their own pace, which is particularly beneficial for language acquisition. Online platforms provide opportunities for asynchronous learning, where students can revisit recorded lectures, access reading materials, and complete exercises at their convenience (Hodges et al., 2020). This flexibility is advantageous for learners who may have other commitments, such as work or family responsibilities.

c. Collaborative and Interactive Learning Opportunities

Although virtual classrooms limit physical interaction, they encourage collaborative digital learning through tools such as discussion forums, group projects, and video conferencing (Lantolf & Thorne, 2006). Platforms like Google Meet, Microsoft Teams, and WhatsApp groups enable students to communicate with peers, participate in online debates, and practice French with native speakers from around the world. These tools can enhance speaking and listening skills, provided they are effectively integrated into the curriculum.

d. Cost-Effective Education

For many students, virtual learning reduces transportation and accommodation costs associated with attending physical schools. Additionally, digital resources such as e-books, YouTube tutorials, and online exercises minimize the need for expensive printed textbooks. Schools and institutions can also benefit financially by offering blended learning programs, reducing the demand for physical infrastructure.

e. Opportunities for Teacher Training and Professional Development

Virtual classrooms open new possibilities for teacher training and professional development. Online certification courses, webinars, and language teaching workshops allow French language educators to upgrade their skills and learn innovative teaching methodologies without leaving their workplaces (Agina-Obu & Okwu, (2023)). This can improve the overall quality of French language instruction in Nigeria.

f. Emergency Preparedness and Educational Continuity

The COVID-19 pandemic demonstrated the importance of virtual learning in ensuring educational continuity during crises (Snezhana, 2021). By investing in virtual classrooms, Nigeria can develop resilient education systems that remain functional in situations where physical attendance is impossible, such as pandemics, conflicts, or natural disasters.

Implications for Teachers and Learners in Virtual French Language Education in Nigeria

The transition from traditional classroom-based French language education to virtual learning environments presents significant implications for both teachers and learners. These implications range from pedagogical adjustments, technological adaptation, learner engagement strategies, and professional development for teachers to motivation, autonomy, and digital literacy for students. This section explores these implications in detail.

1. Implications for Teachers

a. Pedagogical Adaptation and Digital Competency

The shift to virtual classrooms requires teachers to modify their instructional strategies to align with online learning environments. Traditional lecture-based teaching methods may not be effective in virtual spaces where students require interactive, engaging, and multimedia-supported learning experiences (Hodges et al., 2020). Teachers must integrate digital tools such as language learning apps, virtual whiteboards, discussion forums, and real-time video conferencing to create an immersive learning environment. Additionally, they need training in digital pedagogy to design lessons that maximize student engagement and language acquisition.

b. Assessment and Feedback Mechanisms

One of the key challenges in virtual French language education is ensuring effective assessment and feedback. Unlike physical classrooms, where teachers can assess pronunciation, fluency, and comprehension through direct interactions, virtual settings may limit spontaneous feedback. Teachers must adopt innovative assessment techniques such as audio/video assignments, interactive quizzes, peer reviews, and AI-powered language proficiency tests (Olutola, & Olatoye, 2015). Providing timely, constructive feedback through personalized comments, voice notes, and digital corrections is crucial for maintaining students' motivation and learning progress.

c. Increased Workload and Teacher Burnout Risks

Virtual teaching often increases teachers' workload, as they must create digital materials, moderate online discussions, and respond to students' queries outside regular class hours. Many educators in Nigeria are unfamiliar with learning management systems (LMS) such as Google Classroom, Moodle, and Blackboard, which further adds to their challenges (Balogun et al. 2018). Without proper training and institutional support, teacher burnout could become a major issue, potentially reducing the quality of instruction.

d. Need for Continuous Professional Development

To keep up with evolving digital teaching trends, French language teachers must engage in continuous professional development (CPD). Webinars, online courses, and international collaborations with native French-speaking educators can help teachers refine their virtual classroom management, digital lesson design, and online student engagement skills (Agina-Obu & Okwu, (2023)). Government bodies and educational institutions must invest in capacity-building programs to ensure that teachers are well-equipped for virtual instruction.

e. Changes in Classroom Management Strategies

In physical classrooms, teachers maintain discipline through face-to-face interactions, eye contact, and direct engagement. However, in virtual classrooms, maintaining student attention and participation requires alternative classroom management techniques. Teachers must use interactive activities, breakout rooms for group discussions, gamification strategies, and regular check-ins to ensure that students remain engaged (Hampel & Stickler, 2005). Clear guidelines on online etiquette, participation expectations, and digital communication norms must also be established.

2. Implications for Learners

a. Increased Need for Self-Discipline and Autonomy

One of the most significant implications of virtual classrooms for learners is the shift towards self-directed learning. Unlike traditional classrooms, where teachers provide direct supervision, virtual learning environments require students to manage their own schedules, complete assignments on time, and stay motivated (Siemens, 2005). French language learners must develop self-discipline, time management skills, and intrinsic motivation to succeed in online learning settings.

b. Development of Digital Literacy Skills

Since virtual classrooms rely on digital platforms, multimedia content, and interactive tools, students must develop basic technological skills to navigate online learning resources effectively. This includes familiarity with video conferencing platforms, online dictionaries, grammar checkers, and digital collaboration tools (Snezhana, 2021). Students who lack computer literacy may struggle to keep up with online learning demands, leading to learning inequalities. Therefore, digital literacy training should be integrated into the curriculum to bridge the knowledge gap among students.

c. Reduced Social Interaction and Risk of Isolation

One major drawback of virtual learning is the lack of face-to-face interaction, which is crucial for language acquisition. Traditional classroom settings allow students to practice oral skills, role-play conversations, and engage in peer discussions. In virtual settings, students may feel isolated, less engaged, and disconnected from their peers and teachers (Dewaele & MacIntyre, 2014). This lack of social interaction can affect their motivation, confidence, and speaking fluency. Educators must therefore create opportunities for virtual collaboration, language exchange programs, and peer feedback activities to enhance communication skills.

d. Impact on Speaking and Listening Skills

Learning French as a foreign language requires constant exposure to spoken interactions and real-life communication scenarios. In virtual classrooms, technical issues such as poor internet connection, audio lag, and background noise can disrupt listening and speaking exercises (Hampel & Stickler, 2005). Students who rely heavily on text-based discussions and pre-recorded lessons may struggle with oral proficiency and pronunciation, which are essential for mastering the language. To counter this, virtual learning should incorporate live speaking sessions, oral assessments, and conversation partners to ensure students develop strong communicative competence.

e. Accessibility and Equity Concerns

Virtual learning offers greater flexibility, but not all students have equal access to digital devices, stable internet, and quiet learning environments. Socioeconomic disparities in Nigeria mean that students from rural areas or low-income backgrounds may struggle to participate fully in online learning (Balogun et al. 2018). This digital divide exacerbates educational inequality and puts disadvantaged learners at risk of falling behind. To promote inclusivity, policymakers and institutions must explore affordable internet solutions, digital learning grants, and offline learning resources such as pre-recorded lessons on USB drives or mobile applications that work without an internet connection.

f. Exposure to Authentic Language Use and Global Learning

Despite its challenges, virtual learning presents unparalleled opportunities for students to connect with native French speakers and authentic language materials from around the world. Unlike traditional classrooms that rely on textbooks and teacher-centered instruction, virtual platforms provide access to live French TV, radio stations, podcasts, online newspapers, and international language exchange programs (Siemens, 2005). This exposure helps learners develop cultural competence, improve listening comprehension, and adapt to different French accents and dialects.

Conclusion

The integration of virtual classrooms into French language education in Nigeria presents a dynamic interplay of challenges and opportunities that significantly impact both teachers and learners. While virtual learning enhances flexibility, accessibility to global resources, and digital literacy, it also raises concerns about digital equity, learner engagement, technological barriers, and assessment effectiveness. The digital divide, limited infrastructure, and lack of digital literacy training pose major obstacles to effective online French language instruction, particularly in rural and underprivileged areas.

However, the opportunities offered by virtual learning cannot be overlooked. Digital platforms provide access to authentic Francophone resources, interactive multimedia content, and global language exchange programs, fostering autonomous learning and cultural immersion. Additionally, online learning encourages students to develop self-discipline, time management, and digital communication skills, which are crucial in today's interconnected world.

Recommendations

To maximize the benefits of virtual classrooms, there is a need for policy interventions that address technological infrastructure, affordable internet access, and digital teacher training programs. French language educators must be equipped with digital pedagogy skills, while students must be given the necessary technological support and resources to thrive in virtual learning environments. By bridging the digital divide, investing in professional development, and adopting innovative online assessment methods, virtual classrooms can become a sustainable and effective model for French language education in Nigeria.

Future research should focus on evaluating the long-term impact of virtual learning on students' linguistic proficiency, exploring best practices for online assessment of oral skills, and investigating the role of artificial intelligence and adaptive learning systems in enhancing French language acquisition. Through a collaborative approach involving educators, policymakers, and technology providers, virtual classrooms can transform the landscape of French language education in Nigeria, making it more inclusive, effective, and globally competitive.

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References

- Agina-Obu, R., & Okwu, E. (2023). Impact of Digital Literacy on University Students' Use of Digital Resources in Nigeria. *Asian Journal of Information Science and Technology*, 13(2), 60–65. <https://doi.org/10.51983/ajist-2023.13.2.3587>
- Alshammari, S. H. (2019). The role of virtual reality in enhancing students' learning. *International Journal of Educational Technology and Learning*, 7(1), 1-6
- Balogun, M., Tejumola, A. A., Yisa, B. K., & Balogun, O. I. (2018). *Adapting Modern Methods of Lecturing In Nigerian Universities: A Critique*. PEOPLE: International Journal of Social Sciences,4(2), 360-377. Available from: https://www.researchgate.net/publication/326559212_ADAPTING_MODERN_METHODS_OF_LECTURING_IN_NIGERIAN_UNIVERSITIES_A_CRITIQUE [accessed Apr 03 2025].
- Dewaele, J.-M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second Language Learning and Teaching*, 4(2), 237–274. <https://doi.org/10.14746/ssllt.2014.4.2.5>
- Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, 49(1), 5-22. <https://doi.org/10.1177/0047239520934018>
- Efevbokhan, G.O. et al (2020) : « La langue Française: les relations entre l'orthographe et les sons » in *Pedagogy and Social Discourse*, A Festschrift in honour of Professor Tunde Ajiboye, Volume 2: 120 - 127, a joint publication of the Department of French, University of Ilorin, Nigeria and University of Cape coast, Cape coast, Ghana.
- Hampel, R., & Stickler, U. (2005). *New Skills for New Classrooms: Training Tutors to Teach Languages Online*. Computer Assisted Language Learning, **18(4)**, 311-326.
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). *The Difference Between Emergency Remote Teaching and Online Learning*. Educause Review, **27(1)**, 5-12.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign Language Classroom Anxiety. *The Modern Language Journal*, 70(2), 125–132. <https://doi.org/10.2307/327317>
- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). *Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-Based, Experiential, and Inquiry-Based Teaching*. Educational Psychologist, **41(2)**, 75-86.
- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why Minimal Guidance during Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-Based, Experiential, and Inquiry-Based Teaching. Educational Psychologist, 41, 75-86. https://doi.org/10.1207/s15326985ep4102_1
- Lantolf, J. P., & Thorne, S. L. (2006). *Sociocultural Theory and the Genesis of Second Language Development*. Oxford: Oxford University Press.
- Balogun, V. (2020) : « Analyse des Erreurs chez les Apprenants de FLE en Immersion Linguistique au Village Français du Nigeria » in *Pedagogy and Social Discourse*, A Festschrift in honour of Professor Tunde Ajiboye, Volume 2: 66 - 73, a joint publication of the Department of French, University of Ilorin, Nigeria and University of Cape coast, Cape coast, Ghana.
- MacIntyre, P. D., & Gardner, R. C. (1994). The Subtle Effects of Language Anxiety on Cognitive Processing in the Second Language. *Language Learning*, 44, 283-305. <http://dx.doi.org/10.1111/j.1467-1770.1994.tb01103.x>

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- Olatoye, O. O and Olutoa, A. T, (2015). ‘Challenges of E-Learning Technologies in Nigerian University Education’ in: Journal of Educational and Social Research MCSER Publishing, Rome-Italy, Vol. 5 No.1 pp. 301-306
- Olukayode Solomon Aboderin. (2015). Challenges and Prospects of E-learning at National Open University of Nigeria. Journal of Education and Learning. Vol. 9(3)pp. 207-216. (PDF) *The Challenges and Prospects of E-learning in National Open University of Nigeria*. Available from:
https://www.researchgate.net/publication/282520782_The_Challenges_and_Prospects_of_E-learning_in_National_Open_University_of_Nigeria [accessed Apr 03 2025].
- Olutola, A. T., & Olatoye, O. O. (2015) Challenges of E-Learning Technologies in Nigerian University Education. *Journal of Educational and Social Research*, 5(1), 301. <https://www.richtmann.org/journal/index.php/jesr/article/view/5623>
- Onumajuru, E. M. 2004. Le français 2e langue officielle au Nigéria : farce ou réalité ? *RANEUF*, Vol. 1 No. 1 pp 79-91
- Siemens, G. (2005). *Connectivism: A Learning Theory for the Digital Age*. International Journal of Instructional Technology and Distance Learning, **2(1)**, 3-10.
- Snezhana, D. (2021). Challenges in Education during the Second Year of Pandemic. *Proceedings of the 16th International Conference on Virtual Learning ICVL*, Available at
SSRN: <https://ssrn.com/abstract=4155418> or <http://dx.doi.org/10.2139/ssrn.4155418>
- Sweller, J. (1988), Cognitive Load During Problem Solving: Effects on Learning. *Cognitive Science*, 12: 257-285. https://doi.org/10.1207/s15516709cog1202_4
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological Processes*. Cambridge, MA: Harvard University Press.