

Digital Footprints and Responsible Communication: Implications for English Language Teaching and Learning in Nigeria

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Abstract

This study examined digital footprints and responsible communication and their implications for English language teaching and learning in Nigeria. The increasing integration of digital technologies into education has transformed communication practices among learners and teachers, making digital participation an essential component of contemporary language learning. As students engage with online platforms, social media, and educational technologies, they continuously generate digital footprints that reflect their communication behaviour, identity construction, and academic engagement. The study adopted a conceptual and theoretical approach, drawing insights from Sociocultural Theory, Connectivism Theory, and Digital Citizenship Theory to explain the relationship among digital participation, communication practices, and language learning. The study established that English language learning is no longer limited to classroom interaction but extends to digital environments where communication is persistent, traceable, and publicly visible. Findings reveal that responsible communication is a critical competency for effective participation in digital learning environments. It involves ethical use of language, respect for others, critical evaluation of information, and awareness of the consequences of online communication. The study further shows that integrating digital literacy and communication ethics into English language teaching enhances learners' ability to communicate effectively and manage their digital identities responsibly. The study concludes that digital footprints and responsible communication are central to modern English language education and should be integrated into instructional practices in Nigeria. It recommends curriculum integration of digital citizenship concepts, teacher training on digital pedagogy, and strengthened digital literacy education to prepare learners for responsible participation in digital spaces.

Keywords: digital footprints, responsible communication, English language teaching, digital literacy, digital citizenship, Nigeria.

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I. Introduction

The emergence and rapid advancement of digital technologies have transformed communication practices, social interaction, information dissemination, and educational processes across the globe. The twenty-first century has witnessed an unprecedented integration of digital tools into everyday life, making communication increasingly mediated through online platforms, mobile technologies, social networking sites, learning management systems, and internet-enabled educational resources. This transformation has reshaped not only how individuals communicate but also how they learn, construct knowledge, and establish identities within digital environments (Castells, 2010; Selwyn, 2016). Consequently, education systems worldwide are increasingly confronted with the responsibility of preparing learners to participate responsibly and effectively within digitally mediated societies.

One of the major realities associated with participation in digital environments is the creation of digital footprints. Digital footprints refer to the traces of information individuals leave behind through their online activities, interactions, and engagements across digital platforms. These traces may include messages, comments, search histories, uploaded content, browsing behaviour, academic submissions, social media activities, and interactions with educational technologies (Madden et al., 2013). Digital footprints can either be active, where users intentionally share information online, or passive, where data are collected automatically through browsing activities and digital interactions without direct awareness of users (Jisc, 2020). These footprints collectively shape digital identity and influence how individuals are perceived within academic, social, and professional communities. The significance of digital footprints has become increasingly relevant within educational contexts because contemporary learners are deeply immersed in digital ecosystems. Students no longer engage with learning exclusively through face-to-face classroom interactions; rather, learning increasingly occurs through

digital communication channels, online collaboration platforms, educational applications, and social networking spaces. Such digital engagement creates enduring records that may positively or negatively influence students' educational experiences and future opportunities (Ribble, 2015). Consequently, educational institutions are paying greater attention to digital citizenship, ethical technology use, and responsible communication practices.

Responsible communication refers to the intentional, ethical, respectful, and socially appropriate use of communication channels to exchange information and interact with others. In digital contexts, responsible communication extends beyond language proficiency to include awareness of privacy, ethical behaviour, accuracy of information, respect for diversity, online etiquette, critical evaluation of content, and accountability for one's digital actions (Common Sense Education, 2020). Responsible communication encourages users to consider the long-term implications of their online expressions and interactions, thereby promoting positive digital participation. The increasing prominence of responsible communication is linked to growing concerns regarding misinformation, cyberbullying, privacy violations, digital misconduct, online harassment, and unethical online practices among students and educators. Digital communication environments have created opportunities for collaboration and knowledge exchange while simultaneously exposing users to risks associated with irresponsible digital engagement (Livingstone & Haddon, 2012). These realities underscore the importance of integrating responsible communication competencies into educational systems, particularly within language education where communication constitutes a central learning objective.

English language teaching and learning occupy a strategic position in responding to these emerging educational realities. English serves as the principal language of instruction in Nigeria and remains central to educational advancement, professional communication, academic success, and participation in global knowledge economies (Federal Republic of Nigeria, 2014). As digital technologies increasingly shape language practices, English language classrooms are becoming important sites for cultivating digital literacy, communication ethics, and responsible online engagement. English language teaching traditionally focused on developing listening, speaking, reading, and writing competencies. However, contemporary perspectives increasingly recognize the need to extend language education beyond conventional literacy skills toward multiliteracies that incorporate digital communication practices (New London Group, 1996). Learners are now expected to communicate effectively across multiple digital platforms while demonstrating ethical awareness, critical thinking, and responsible participation in online environments. Thus, language learning increasingly involves developing students' ability to interpret, produce, evaluate, and manage digital communication.

Within the Nigerian educational context, the growing penetration of internet services, mobile technologies, and social media has significantly altered communication and learning practices among students. The expansion of digital access has created opportunities for language learning through online reading materials, virtual discussions, educational videos, collaborative writing platforms, and social interaction in English. However, these opportunities have also generated concerns regarding students' digital behaviour, online language use, privacy management, and communication ethics (Adeleke & Emeahara, 2016). The Nigerian educational landscape presents a unique environment for examining digital footprints and responsible communication because of the increasing integration of technology into teaching and learning despite persistent infrastructural and policy challenges. Educational reforms and institutional initiatives have encouraged digital transformation in schools and higher education institutions. Consequently, students increasingly leave extensive digital records through online assignments, virtual classroom participation, educational applications, and social media interactions connected to academic activities.

Digital footprints generated through educational engagement have implications for students' language development and identity construction. Language use in digital spaces often differs from traditional classroom communication, introducing informal linguistic patterns, abbreviated expressions, multimodal communication, and evolving discourse practices (Crystal, 2011). While these practices may encourage creativity and authentic communication, they may also influence formal language competence and academic writing standards. Furthermore, responsible communication within English language learning environments requires students to develop awareness of audience, purpose, tone, credibility, and ethical language choices. Students who engage irresponsibly online may encounter consequences such as damaged reputations, compromised academic integrity, reduced employability, and weakened communication competence. Therefore, English language education has a significant role in helping learners navigate digital environments thoughtfully and responsibly.

Educational stakeholders increasingly recognize that preparing learners for contemporary society requires integrating digital citizenship education into school curricula. Digital citizenship encompasses responsible technology use, ethical participation, digital safety, and constructive communication behaviours (Ribble, 2015). Since English language instruction directly addresses communication processes, teachers are positioned to facilitate students' understanding of responsible digital engagement. Despite increasing attention to educational technology integration in Nigeria, limited emphasis appears to have been placed on examining how students' digital footprints influence communication practices and English language learning outcomes. Existing educational discussions often emphasize access to technology and digital infrastructure while paying less atten-

tion to behavioural and ethical dimensions of digital participation. This creates a knowledge gap regarding how English language education can contribute to responsible digital communication among learners.

Moreover, the growing use of artificial intelligence tools, online educational platforms, and social media in academic activities has intensified concerns about originality, authorship, academic integrity, and communication ethics. Students now engage with digital texts in ways that require critical evaluation, responsible sharing, and thoughtful content production. Consequently, language education must evolve to address these realities. The need to investigate digital footprints and responsible communication becomes even more significant considering Nigeria's aspiration toward educational modernization and global competitiveness. Learners require competencies that extend beyond grammatical accuracy to include responsible participation in networked communication environments. English language teaching therefore becomes a strategic avenue for developing digitally competent citizens capable of communicating effectively and ethically. Against this background, this study seeks to examine digital footprints and responsible communication and explore their implications for English language teaching and learning in Nigeria. The study is premised on the understanding that contemporary language education must respond to technological realities by equipping learners with communication skills that support academic achievement, responsible citizenship, and lifelong participation in digital societies.

Concept of Digital Footprints

The concept of digital footprints has emerged as one of the defining characteristics of communication and social participation in contemporary digital society. As digital technologies become increasingly integrated into educational, professional, and personal activities, individuals continuously generate records of their actions through interactions with internet-enabled systems. These records accumulate over time and create identifiable patterns that reflect behaviour, preferences, communication styles, social relationships, and intellectual engagement. Within educational contexts, digital footprints have become particularly important because students and teachers increasingly rely on digital platforms for teaching, learning, assessment, collaboration, and information exchange.

Digital footprints generally refer to the collection of data traces left behind whenever individuals interact with digital technologies and online environments. These traces may include website visits, search histories, social media posts, uploaded files, online comments, electronic communications, educational submissions, login records, and engagement with digital applications (Madden et al., 2013). Although many users view digital activities as temporary interactions, digital footprints often remain accessible and retrievable over extended periods, thereby contributing to a persistent digital identity. The notion of digital footprints is grounded in the understanding that digital participation produces observable and recordable behaviours. Unlike traditional face-to-face communication, digital communication frequently leaves permanent or semi-permanent evidence of interaction. Every click, upload, response, message, or digital transaction potentially contributes to an individual's online presence and identity construction (Lupton, 2015). Consequently, digital footprints represent both opportunities and challenges for contemporary education. Scholars commonly distinguish between active and passive digital footprints. Active digital footprints consist of information intentionally created and shared by users. These include social media posts, online discussions, blog entries, uploaded videos, emails, classroom discussions on learning platforms, and contributions to collaborative digital projects. Active footprints reflect deliberate choices made by individuals regarding self-presentation and communication (Jisc, 2020).

Within educational settings, both active and passive digital footprints influence teaching and learning experiences. Students create active footprints when participating in online discussions, submitting assignments electronically, engaging in virtual classrooms, or interacting through educational applications. Simultaneously, learning management systems collect passive data regarding attendance, duration of participation, access frequency, engagement levels, and learning patterns. These accumulated digital traces increasingly inform educational decision-making and assessment processes. Digital footprints are closely associated with the concept of digital identity. Digital identity refers to the representation of an individual through online information, behaviours, communication patterns, and technological interactions (Buckingham, 2008). Unlike traditional identity, digital identity develops continuously across multiple platforms and contexts. Students often maintain academic, social, and professional identities simultaneously, creating complex digital profiles that influence how they are perceived by peers, educators, and future employers.

The relationship between digital footprints and identity formation is particularly relevant to language education because communication practices shape how individuals present themselves and interact with others. Language choices, writing styles, participation patterns, and communicative behaviours all contribute to digital identity construction. Students learning English increasingly express themselves through digital platforms where linguistic competence intersects with digital presence. The expansion of social media platforms has further intensified awareness of digital footprints. Young people frequently engage with communication technologies as spaces for expression, learning, networking, and identity exploration. However, digital communication often occurs without sufficient reflection on permanence and consequences. Educational researchers have therefore

emphasized the need for students to understand that online content can affect academic opportunities, employment prospects, and social relationships (boyd, 2014).

Digital footprints possess several defining characteristics that distinguish them from traditional forms of communication records. First, digital footprints demonstrate persistence because digital content often remains accessible even after deletion attempts. Second, digital footprints exhibit scalability because information shared online can reach large audiences rapidly. Third, they display searchability, enabling information retrieval across platforms and time periods. Fourth, digital footprints show replicability because digital content can easily be copied and redistributed (boyd, 2014). These characteristics introduce important educational considerations. Students may not fully appreciate how language used in digital spaces contributes to long-term representations of their identity and communication competence. Informal communication habits developed online may influence academic writing, classroom discourse, and professional communication. Therefore, educational institutions increasingly recognize the importance of helping learners understand how digital participation shapes future outcomes.

Digital footprints also intersect with issues of privacy and data ethics. Contemporary educational technologies gather extensive information regarding learners' academic engagement and behavioural patterns. While such data may support personalized learning and educational improvement, concerns remain regarding ownership, consent, surveillance, and ethical use of student information (Williamson, 2017). Educational systems must therefore balance innovation with responsible data governance. The increasing use of educational technologies in Nigeria further reinforces the relevance of digital footprints. Digital classrooms, online assessment platforms, mobile learning applications, virtual libraries, and social media-supported learning have expanded opportunities for educational participation. However, these developments also mean that students increasingly generate extensive digital records that influence educational experiences and communication practices.

The growth of internet penetration and mobile device usage among Nigerian students has transformed language learning environments. Students now interact with English language content through websites, messaging applications, educational videos, digital reading platforms, and collaborative online activities. Such interactions contribute to the development of digital footprints that reflect language use, learning engagement, and communication behaviour. From a pedagogical perspective, understanding digital footprints provides opportunities for reflective learning. Students can be encouraged to evaluate their online communication patterns, assess the quality of their digital interactions, and consider how digital participation affects academic identity. Reflection on digital footprints supports metacognitive awareness and promotes more intentional communication practices. The educational value of digital footprints extends to assessment and learning analytics. Data generated through digital engagement may provide insights into participation, progress, collaboration, and communication competence. Learning analytics enables educators to identify patterns that support instructional improvement and student support systems (Siemens & Long, 2011). However, ethical considerations remain essential to prevent misuse and over-surveillance.

In English language teaching and learning, digital footprints offer both instructional possibilities and challenges. They create opportunities for authentic language use, collaborative writing, digital storytelling, peer interaction, and intercultural communication. At the same time, they require learners to become aware of audience expectations, ethical communication, language appropriateness, and responsible content creation. Consequently, understanding digital footprints should no longer be viewed as a purely technological concern but as an essential component of contemporary language education. English language instruction in Nigeria can contribute significantly to helping learners develop awareness of their digital presence and cultivate communication practices that support academic success and responsible citizenship.

Theoretical Perspectives

Theoretical framework provides the conceptual and explanatory foundation that guides scholarly investigation by explaining relationships among variables and offering perspectives through which research problems may be understood and interpreted. In educational research, theories help explain how learning occurs, how behaviour develops, and how educational outcomes are influenced by social, psychological, and environmental factors. The present study examines digital footprints and responsible communication and explores their implications for English language teaching and learning in Nigeria. Since the study focuses on communication behaviour, participation within digital environments, language development, and educational interaction, relevant theoretical perspectives are required to explain how learners engage with communication technologies and how educational experiences shape participation and learning outcomes. The theoretical framework for this study is anchored on two complementary theories: Sociocultural Theory and Connectivism Theory. These theories collectively provide explanations for how learners develop communication competence, participate in digital environments, construct identities, and engage responsibly within educational contexts. This section begins with Sociocultural Theory.

Sociocultural Theory

Sociocultural Theory is one of the most influential educational theories explaining how learning and human development occur through interaction within social and cultural environments. The theory was developed primarily by Lev Vygotsky and emphasizes that learning is not an isolated individual activity but a socially mediated process shaped by communication, interaction, and participation in meaningful contexts (Vygotsky, 1978).

Sociocultural Theory emerged as a response to perspectives that viewed learning primarily as an internal cognitive process independent of social experience. Vygotsky argued that intellectual development occurs through interaction with others and that language serves as a major tool for mediating thinking, learning, and participation.

The theory has become highly influential in education because it positions communication, social participation, and contextual interaction at the centre of learning processes.

Core Assumptions of Sociocultural Theory

The central assumption of Sociocultural Theory is that learning occurs through socially mediated interaction. According to Vygotsky (1978), individuals acquire knowledge through participation in social activities and gradually internalize experiences into personal understanding.

Language as a Tool for Learning

- One of the most important contributions of Sociocultural Theory is the recognition of language as a central mediating tool in learning and development.
- Vygotsky viewed language not simply as a communication system but as a psychological and cultural tool that supports thinking, reflection, problem-solving, and participation.
- Language enables learners to organize experiences, negotiate meanings, express ideas, and construct knowledge (Lantolf, 2000).

Within English language teaching and learning, this perspective emphasizes that language acquisition develops through meaningful communication rather than isolated memorization of linguistic forms. Students strengthen language competence through participation in communicative activities that encourage interaction and collaboration. The emphasis on language mediation strongly aligns with the present study because communication behaviours within digital environments influence both learning experiences and digital footprints.

Connectivism Theory

The emergence of digital technologies and networked communication environments has significantly transformed educational practices and challenged traditional assumptions about how learning occurs. Conventional learning theories such as behaviourism, cognitivism, and constructivism were developed largely before the widespread integration of internet technologies, social networks, and digital information systems. Although these theories continue to offer valuable educational insights, contemporary educational environments increasingly require theoretical perspectives that account for learning within interconnected digital spaces. One theory that emerged in response to these developments is Connectivism Theory. Connectivism Theory was developed primarily by George Siemens and later expanded through related contributions by Stephen Downes. The theory proposes that learning in contemporary society occurs through the creation, maintenance, and navigation of networks connecting individuals, information sources, digital systems, and communities (Siemens, 2005). Unlike traditional theories that emphasize internal cognitive processing alone, Connectivism emphasizes distributed knowledge and participation within dynamic digital environments.

The theory emerged from recognition that digital technologies have altered how information is created, accessed, communicated, and applied. Learners increasingly operate within environments characterized by rapid information growth, continuous connectivity, and multiple communication channels. Consequently, educational success depends not only on acquiring information but also on developing the ability to locate, evaluate, connect, and apply knowledge effectively. Connectivism therefore provides an important theoretical lens for understanding digital footprints, responsible communication, and English language teaching and learning in contemporary educational contexts.

Core Assumptions of Connectivism Theory

The fundamental assumption of Connectivism is that knowledge exists across networks and that learning involves establishing and maintaining connections among diverse information sources. According to Siemens (2005), learning does not occur exclusively within individuals but extends across digital systems, technological tools, communication environments, and social networks.

- From this perspective, learners continuously engage with information distributed across multiple platforms and construct understanding through interaction and connection.
- Educational participation therefore involves navigating networks, evaluating information quality, and making informed communication decisions.

- This assumption strongly aligns with contemporary language learning because English language education increasingly occurs through digital participation and communication.

Examples include online discussion platforms, language applications, educational websites, collaborative writing tools, artificial intelligence systems, and multimedia communication spaces. These environments create opportunities for engagement while simultaneously generating digital footprints. Overall, Connectivism provides a contemporary educational perspective for understanding how learners communicate, construct knowledge, and participate within digital environments that shape both educational experiences and digital identities.

Responsible Communication in Digital Spaces

Communication occupies a central position in human existence because it enables individuals to exchange ideas, negotiate meaning, build relationships, construct identities, and participate in social activities. The emergence of digital technologies has significantly transformed communication processes by extending interaction beyond physical boundaries and creating new forms of engagement across multiple online environments. Contemporary communication increasingly occurs through social media platforms, messaging applications, online forums, educational technologies, collaborative networks, virtual classrooms, and digital publishing spaces. While these developments have expanded opportunities for interaction and knowledge exchange, they have also generated concerns regarding communication ethics, accountability, privacy, and responsible participation in digital environments.

Responsible communication in digital spaces refers to the ethical, respectful, informed, and accountable use of communication technologies to interact with others and share information. It involves conscious awareness of how communication choices affect individuals, communities, and broader society. Responsible communication requires users to consider issues of truthfulness, privacy, accuracy, cultural sensitivity, digital etiquette, intellectual honesty, and the consequences of online behaviour (Ribble, 2015). In educational contexts, responsible communication extends beyond technological competence and emphasizes the development of ethical and socially appropriate communicative practices. The increasing relevance of responsible communication emerges from the unique characteristics of digital environments. Unlike traditional face-to-face interaction, digital communication frequently enables rapid dissemination of information, asynchronous participation, broad audience reach, and permanent documentation of exchanges. These characteristics create opportunities for learning and collaboration but also introduce risks associated with misinformation, cyberbullying, hate speech, plagiarism, privacy breaches, and irresponsible language use (Livingstone & Third, 2017). Consequently, users require communication competencies that support constructive and ethical digital participation.

Responsible communication is closely connected to the concept of digital citizenship. Digital citizenship refers to the norms, behaviours, values, and competencies required for effective and responsible participation in digital society (Ribble, 2015). Digital citizens are expected to communicate respectfully, protect personal and collective privacy, evaluate information critically, demonstrate ethical online conduct, and contribute positively to digital communities. Educational institutions increasingly recognize digital citizenship as a fundamental educational outcome for learners in technologically mediated societies. One important dimension of responsible communication is digital etiquette, commonly referred to as netiquette. Digital etiquette encompasses the behavioural standards that guide communication in online environments. These standards include respectful language use, consideration of audience diversity, avoidance of offensive content, acknowledgment of differing opinions, and adherence to communication norms within specific digital communities (Shea, 2024). Educational settings that encourage responsible communication often incorporate explicit instruction on appropriate digital behaviour and interaction protocols.

Language plays a significant role in shaping responsible communication because communication choices influence interpretation, relationships, and identity formation. In digital contexts, language functions not only as a medium of information exchange but also as a tool for constructing meaning and social positioning. The absence of facial expressions, gestures, and physical context in many online interactions increases the importance of careful language selection and contextual awareness (Crystal, 2011). Consequently, language education becomes increasingly relevant in promoting responsible communication practices. The rise of user-generated content has intensified discussions surrounding communication responsibility. Digital technologies enable individuals to become producers rather than merely consumers of information. Students and educators can now create blogs, videos, podcasts, social media posts, discussion responses, and collaborative documents that reach broad audiences. While such opportunities promote participation and creativity, they also require users to evaluate the credibility, ethical implications, and potential impact of shared content (Jenkins et al., 2009).

Another essential component of responsible communication involves information literacy and critical evaluation of digital content. The abundance of information available online creates challenges regarding credibility, authenticity, and reliability. Users must develop the ability to distinguish verified information from misinformation and manipulated content. Information literacy supports responsible communication by enabling indi-

viduals to evaluate sources critically, interpret messages appropriately, and make informed communication decisions (UNESCO, 2018). The increasing prevalence of misinformation and disinformation has elevated the importance of communication responsibility within educational environments. Misinformation refers to false or inaccurate information shared without deliberate intention to deceive, whereas disinformation involves intentional dissemination of false content to manipulate audiences (Wardle & Derakhshan, 2017). Students operating in digital environments frequently encounter both forms of misleading information, making critical communication skills increasingly necessary.

Responsible communication also requires awareness of digital privacy and data protection. Digital interactions generate personal data that may become accessible to institutions, organizations, and other users. Students often share information without fully understanding how data may be stored, analysed, or redistributed. Responsible communication therefore includes informed decision-making regarding disclosure, consent, security settings, and digital boundaries (Livingstone & Haddon, 2012). Academic integrity represents another important dimension of responsible communication within educational settings. The accessibility of digital resources has created opportunities for plagiarism, unauthorized content reproduction, academic dishonesty, and misuse of artificial intelligence technologies. Responsible communication encourages originality, proper citation practices, acknowledgment of intellectual ownership, and ethical participation in academic discourse (Pecorari, 2013). In language education, responsible communication contributes to the development of communicative competence. Communicative competence extends beyond grammatical knowledge to include sociolinguistic awareness, discourse competence, strategic communication, and contextual appropriateness (Canale & Swain, 1980). Digital communication environments require learners to apply these competencies across diverse platforms and audiences while maintaining ethical standards.

Within Nigerian educational contexts, responsible communication has become increasingly significant due to expanding access to mobile technologies and internet connectivity. Students engage extensively with social media platforms, online discussion spaces, educational applications, and digital communication tools. Although these technologies support learning opportunities, concerns persist regarding online misconduct, cyber harassment, misinformation, digital distraction, and inappropriate language practices among learners (Adeleke & Emeahara, 2016). The integration of technology into English language teaching creates opportunities for fostering responsible communication habits among students. Classroom activities such as collaborative writing, discussion forums, peer review, digital storytelling, and project-based learning can encourage learners to reflect on communication choices and ethical considerations. Teachers play an important role in modelling respectful digital interaction and guiding students toward responsible participation.

Teacher preparedness is equally important in promoting responsible communication. Educators require competencies that enable them to integrate communication ethics into instruction while supporting learners' digital engagement. Teachers who understand responsible communication can facilitate discussions on privacy, digital identity, language appropriateness, and ethical content creation. From a pedagogical perspective, responsible communication aligns with contemporary learner-centred approaches that emphasize active participation, reflection, collaboration, and ethical reasoning. Students who develop responsible communication competencies become more capable of engaging critically with digital content, expressing ideas constructively, and contributing meaningfully to educational communities. As educational practices continue to evolve in response to technological developments, responsible communication should be viewed as an essential component of language learning rather than an additional skill. English language teaching in Nigeria therefore possesses significant potential to support students in developing communication behaviours that promote academic success, ethical participation, and constructive citizenship in increasingly digital societies.

English Language Teaching and Learning in Nigeria

English language teaching and learning occupy a central position within the Nigerian educational system because English serves not only as a school subject but also as the principal language of instruction across formal education. Since Nigeria is a multilingual nation with hundreds of indigenous languages and numerous ethnic groups, English has historically functioned as a unifying medium for administration, education, commerce, interethnic communication, and international engagement. The strategic position of English within Nigeria's educational structure has consequently shaped curriculum development, teaching methodologies, assessment practices, and national educational policies.

The historical development of English language education in Nigeria can be traced to colonial educational policies that introduced English as the language of governance and formal schooling. Although the post-independence educational agenda emphasized recognition of indigenous languages, English retained its dominance due to its perceived role in national integration, academic advancement, and global participation (Bamgbose, 2010). Over time, English evolved beyond its colonial origins to become deeply embedded in Nigeria's social, educational, political, and economic realities. Contemporary educational policy in Nigeria continues to emphasize the importance of English language proficiency. According to the National Policy on Education,

English remains the medium of instruction beyond the early years of schooling and functions as a compulsory subject throughout formal education (Federal Republic of Nigeria, 2014). Consequently, students' academic performance across disciplines is often strongly connected to their competence in English language use.

English language teaching in Nigeria traditionally focused on developing the four fundamental language skills—listening, speaking, reading, and writing—alongside grammar, vocabulary acquisition, and literary appreciation. Instructional practices frequently emphasized teacher-centred approaches, memorization, grammar drills, comprehension exercises, and examination preparation (Ajibola, 2010). While these practices contributed to foundational language development, contemporary educational realities increasingly demand broader communicative and digital competencies. Global educational transformations have significantly influenced language teaching philosophies and classroom practices. Contemporary English language education increasingly embraces communicative, learner-centred, and technology-supported approaches that promote authentic language use and meaningful interaction (Richards & Rodgers, 2014). Rather than viewing language merely as a body of rules to be mastered, current perspectives emphasize language as a social practice used to construct meaning and participate effectively in diverse contexts.

This shift has important implications for English language teaching and learning in Nigeria. The increasing availability of digital technologies has transformed how students access language resources, communicate, and engage with learning activities. Learners now interact with English through online articles, social media platforms, educational applications, discussion forums, digital libraries, virtual classrooms, podcasts, and video-based instruction. These developments have expanded opportunities for language exposure beyond traditional classroom environments. Technology integration has become increasingly visible across educational institutions in Nigeria, particularly following global educational disruptions and the growing emphasis on blended and online learning models. Schools and tertiary institutions increasingly utilize digital platforms for assignments, instructional delivery, assessment, communication, and academic collaboration. Consequently, English language learning increasingly occurs through digitally mediated environments where communication and literacy practices extend beyond printed texts.

Within this evolving educational landscape, digital literacy has become closely connected to English language teaching. Digital literacy refers to the ability to access, evaluate, create, communicate, and manage information using digital technologies (Ng, 2012). Since communication remains the foundation of language education, English classrooms increasingly provide opportunities for learners to engage with digital texts and develop critical communication skills. Language learning theories further support the integration of digital communication into English language instruction. Sociocultural perspectives emphasize that language acquisition occurs through social interaction and participation within meaningful contexts (Vygotsky, 1978). Digital environments have created new interactional spaces where learners collaborate, negotiate meaning, and engage in authentic language use. English language teaching therefore increasingly incorporates collaborative technologies and interactive learning experiences. Communicative language teaching emphasizes meaningful communication rather than isolated language practice (Richards, 2006). Digital tools support this approach by enabling real-time interaction, peer collaboration, content creation, and contextual language use. Students can participate in online discussions, engage in collaborative writing, access authentic materials, and communicate with diverse audiences using English.

Despite these opportunities, English language teaching and learning in Nigeria continue to face numerous challenges. One major challenge concerns disparities in access to technological infrastructure. Many schools experience inadequate internet connectivity, insufficient digital resources, unstable electricity supply, and limited access to educational technologies (Aduwa-Ogiegbaen & Iyamu, 2005). Such limitations affect equitable implementation of technology-enhanced language instruction. Teacher readiness represents another significant concern. Effective integration of digital communication practices into English language teaching requires teachers to possess both pedagogical and technological competencies. However, variations in professional development opportunities and digital preparedness may limit teachers' ability to maximize technology for language instruction (Eze & Chinedu-Eze, 2018).

The growing use of social media among students has also introduced new dimensions to English language learning. Social media platforms often function as informal learning spaces where students practice language skills through interaction and content creation. Studies have suggested that these environments can support vocabulary development, communication confidence, and learner autonomy while simultaneously raising concerns regarding distraction, misinformation, and language accuracy (Greenhow & Lewin, 2016). English language learning increasingly involves identity construction and participation in digital communities. Students use language not only to demonstrate competence but also to express opinions, establish relationships, and create digital identities. Consequently, English language education must address issues of digital presence, communication ethics, audience awareness, and responsible participation. The emergence of artificial intelligence technologies has further transformed language education by providing tools for writing assistance, language correction, translation, content generation, and personalized learning support. While these technologies offer

opportunities for enhancing instruction and learner engagement, they also raise concerns regarding dependency, originality, academic integrity, and ethical communication practices.

Within Nigeria's educational context, these developments suggest that English language teaching can no longer remain confined to traditional literacy practices. Effective language education increasingly requires integration of digital literacy, responsible communication, critical thinking, and ethical technology use into classroom experiences. English language teachers therefore play a strategic role in preparing students for participation in contemporary communication environments. Through purposeful instructional practices, educators can help learners become competent communicators who understand how language choices influence digital identity, social relationships, academic performance, and future opportunities. Against this background, understanding English language teaching and learning in Nigeria provides an important foundation for examining how digital footprints and responsible communication influence educational outcomes. Since language education remains fundamentally concerned with communication, contemporary English instruction must respond to emerging digital realities and prepare learners for responsible participation in increasingly connected societies.

Digital Literacy and Language Education

The rapid advancement of information and communication technologies has transformed educational systems across the world and redefined expectations regarding the knowledge and competencies learners require for effective participation in contemporary society. Educational success in the twenty-first century increasingly depends not only on mastery of traditional literacy skills but also on learners' ability to navigate digital environments critically, ethically, and productively. Consequently, digital literacy has emerged as a fundamental educational construct that extends conventional notions of reading and writing into broader competencies associated with accessing, interpreting, creating, evaluating, and communicating information through digital technologies. Digital literacy is generally understood as the ability to use digital tools and technologies effectively while demonstrating critical understanding, ethical awareness, communication competence, and problem-solving skills. Unlike early interpretations that emphasized technical proficiency alone, contemporary perspectives recognize digital literacy as a multidimensional concept involving cognitive, social, cultural, and communicative dimensions (Ng, 2012). Digital literacy therefore encompasses not only the ability to operate digital devices but also the capacity to engage responsibly and meaningfully within digital environments. The growing significance of digital literacy reflects broader societal transitions toward knowledge economies, global interconnectedness, and technology-mediated communication. Individuals increasingly participate in education, employment, civic engagement, and social interaction through digital platforms. Educational institutions are therefore expected to equip learners with competencies that support effective participation within these evolving contexts (Gilster, 2007). Since language remains central to communication and knowledge construction, language education occupies a strategic position in promoting digital literacy.

Language and literacy have historically been interconnected concepts because language functions as the primary medium through which individuals interpret experiences, construct meaning, and communicate ideas. Traditional literacy was largely associated with the ability to read and write printed texts. However, technological developments have expanded literacy practices to include engagement with multimedia content, digital texts, interactive platforms, visual communication, and networked participation (Lankshear & Knobel, 2011). As a result, language education increasingly incorporates multiple forms of literacy that reflect contemporary communication realities. English language education is particularly relevant to digital literacy development because English serves as a dominant language within global digital communication. Large volumes of online content, educational resources, academic materials, software interfaces, and communication platforms are produced in English. Consequently, English language competence increasingly influences students' ability to access digital information and participate effectively in global knowledge networks (Crystal, 2013).

Digital literacy and language education share several common objectives. Both emphasize communication competence, meaning-making, critical engagement with texts, audience awareness, and the development of expressive abilities. In contemporary educational settings, language learners are expected not only to comprehend and produce texts but also to evaluate digital information critically, participate in online discussions, collaborate through digital tools, and create multimodal content. Contemporary approaches to language education increasingly recognize digital texts as legitimate instructional resources. Digital texts include websites, blogs, online articles, discussion forums, social media posts, podcasts, videos, infographics, electronic books, and multimedia presentations. These resources expose learners to authentic language use and diverse communicative contexts while supporting interactive learning experiences (Kress, 2010). The integration of digital literacy into language education aligns closely with sociocultural theories of learning. Sociocultural perspectives emphasize that learning occurs through interaction, participation, and engagement within meaningful social environments (Vygotsky, 1978). Digital technologies extend opportunities for interaction by enabling learners to collaborate, communicate, and negotiate meaning beyond physical classroom boundaries.

Language learning in digitally mediated environments often encourages learner autonomy and active participation. Students can independently access educational resources, engage in peer learning, receive immediate feedback, and participate in authentic communication situations. Such opportunities support the development of communicative confidence and self-directed learning habits (Little, 2017). Critical literacy also represents an important component of digital literacy in language education. Critical literacy involves the ability to question assumptions, analyse perspectives, evaluate representations, and understand how language influences power relationships and social realities (Luke, 2022). Digital environments contain large amounts of information that require critical examination; therefore, language education increasingly emphasizes analytical and evaluative skills. Another significant dimension of digital literacy concerns multimodal communication. Contemporary communication frequently combines written language with images, videos, hyperlinks, graphics, symbols, audio elements, and interactive features. Learners must therefore develop multimodal literacy skills that enable them to interpret and create meaning across diverse communication formats (Jewitt, 2008).

Within English language teaching, multimodal practices may include digital storytelling, collaborative writing, online discussions, multimedia presentations, blogging, podcasting, and project-based learning activities. These practices support language development while encouraging creativity and communication effectiveness. Digital literacy also contributes to the development of information literacy competencies. Information literacy involves identifying information needs, locating sources, evaluating credibility, synthesizing content, and using information ethically (UNESCO, 2018). Since language mediates information access and interpretation, English language classrooms provide valuable opportunities for developing these competencies. The Nigerian educational context presents both opportunities and challenges for integrating digital literacy into language education. Increased access to mobile technologies and internet services has expanded opportunities for digital learning across educational institutions. Students increasingly engage with educational content through mobile applications, virtual learning environments, social media platforms, and online communication channels.

Teacher competence remains critical in facilitating digital literacy within language education. Teachers require technological knowledge, pedagogical expertise, and awareness of digital communication practices to design meaningful learning experiences. Effective teachers guide learners in evaluating digital information, communicating responsibly, and reflecting critically on digital participation (Mishra & Koehler, 2016). The increasing use of social media among learners further illustrates the intersection between digital literacy and language education. Social media platforms create opportunities for authentic language interaction, collaborative learning, and exposure to diverse language forms. Nevertheless, concerns regarding misinformation, informal language transfer, privacy risks, and communication ethics highlight the need for structured educational guidance. Digital literacy additionally intersects with issues of digital footprints and responsible communication. Learners who develop digital literacy become more aware of how communication choices contribute to online identity formation and long-term digital presence. Such awareness supports intentional communication behaviours and responsible participation within educational and social contexts. Recent developments in artificial intelligence and automated language technologies have further expanded the scope of digital literacy. Students increasingly interact with AI-supported tools for writing assistance, translation, content generation, and personalized learning. While these technologies provide educational benefits, they also require critical judgment, ethical awareness, and responsible use. As educational systems continue adapting to technological changes, language education must evolve to prepare learners for effective participation in digitally connected societies. Integrating digital literacy into English language teaching therefore offers opportunities to strengthen communication practices and promote responsible digital citizenship among Nigerian learners.

Opportunities and Challenges of Digital Footprints in English Language Teaching and Learning

The increasing integration of digital technologies into educational environments has significantly transformed the processes of teaching and learning across disciplines, including English language education. As learners and educators engage with digital platforms for instruction, assessment, collaboration, and communication, they continuously generate digital footprints that reflect educational participation and communication behaviours. These digital traces have become an important feature of contemporary education because they create both opportunities for improving learning outcomes and challenges relating to ethics, privacy, identity, and responsible engagement. Within English language teaching and learning, digital footprints have particular significance because language education is fundamentally concerned with communication, interaction, expression, and meaning construction. Digital footprints have created opportunities for extending English language learning beyond traditional classroom boundaries. Previously, language learning was largely confined to teacher-led instruction, textbooks, and physical classroom interactions. However, digital environments now provide learners with access to authentic language materials, interactive communication spaces, and collaborative learning opportunities that support continuous language development (Richards, 2016). Students increasingly participate in digital reading, online discussions, multimedia communication, and virtual language communities, thereby creating records of their learning experiences and communicative growth.

One major opportunity associated with digital footprints in English language education is enhanced learner engagement. Digital platforms encourage active participation through interactive tasks, online discussions, collaborative projects, peer review activities, and multimedia communication. These forms of engagement allow learners to become active contributors rather than passive recipients of information. Records generated through such interactions provide evidence of learning progression and communication practices over time (Selwyn, 2016). Digital footprints also support personalized learning experiences. Contemporary educational technologies increasingly utilize learner-generated data to identify participation patterns, monitor progress, and adapt instructional approaches according to individual needs. Learning analytics enables educators to examine digital interactions and develop strategies that support differentiated instruction and individualized language development (Siemens & Long, 2011). Through analysis of students' digital engagement, teachers may identify strengths, challenges, and opportunities for targeted intervention.

Digital footprints additionally facilitate reflective learning practices. Since learners leave observable records of participation, assignments, discussions, and communication activities, they can review their interactions and reflect on progress over time. Reflection encourages metacognitive awareness and supports learners in identifying patterns in language use, communication habits, and learning strategies (Little, 2017). Reflection on digital engagement also helps students become more conscious of their communication choices and online behaviour. Collaborative learning represents another major opportunity created by digital participation. Digital environments enable students to work collectively through shared documents, discussion boards, virtual meetings, and online communities. Collaborative communication supports negotiation of meaning, peer interaction, and social construction of knowledge, which are important principles within language learning theory (Vygotsky, 1978). Digital footprints generated through collaboration provide insights into learner participation and interaction patterns.

The emergence of digital footprints has also expanded opportunities for formative assessment and continuous evaluation. Teachers can monitor student engagement through participation records, writing histories, feedback exchanges, and online interaction logs. Such data support more comprehensive evaluation of language learning processes rather than relying exclusively on traditional examinations (Black & Wiliam, 2019). In the Nigerian context, digital footprints offer opportunities for improving access to language resources and reducing limitations associated with physical learning environments. Mobile technologies and internet-based platforms provide learners with opportunities to access reading materials, instructional videos, online dictionaries, writing tools, and collaborative learning spaces. These developments may strengthen learner autonomy and promote independent language practice.

Despite these opportunities, digital footprints also present significant challenges for English language teaching and learning. One of the most prominent concerns relates to privacy and data protection. Educational technologies frequently collect extensive information regarding student participation, communication behaviour, and learning activities. Questions regarding ownership, storage, consent, and ethical use of learner data continue to generate debate within educational research (Williamson, 2017). Another major challenge concerns the permanence and visibility of digital records. Unlike many traditional classroom interactions, digital activities often remain stored and retrievable over time. Students may not fully understand that comments, assignments, social media interactions, and online expressions can contribute to long-term digital identities. Inappropriate language use or irresponsible communication may therefore have lasting educational and professional consequences (boyd, 2014).

The influence of informal digital communication on formal language development also presents concerns for English language educators. Online communication frequently includes abbreviations, non-standard spelling, emojis, code-switching, and simplified expressions. Although such forms may enhance speed and creativity, excessive dependence on informal digital language may affect students' academic writing competence and adherence to formal language conventions (Crystal, 2011). Digital distraction constitutes another important challenge. Educational technologies often coexist with entertainment applications, social media platforms, and non-academic digital content that may reduce concentration and interfere with meaningful learning engagement. Students may experience fragmented attention and reduced academic productivity if digital participation is not guided effectively (Carr, 2010). Cyberbullying and irresponsible online behaviour further complicate educational use of digital environments. Learners who communicate through online platforms may encounter harassment, exclusion, offensive language, and unethical interactions that negatively affect participation and psychological wellbeing (Livingstone & Third, 2017). English language classrooms that incorporate digital communication must therefore establish supportive and respectful communication practices.

Academic integrity has emerged as another significant challenge associated with digital footprints. Easy access to online information and digital writing tools increases opportunities for plagiarism, unauthorized content reproduction, and misuse of artificial intelligence technologies. Students may become dependent on automated writing support without developing independent language competence (Pecorari, 2013). Teacher preparedness also affects the successful management of digital footprints in language education. Teachers require

competencies that enable them to guide students in responsible communication, digital identity awareness, and ethical technology use. Limited professional development opportunities may reduce educators' ability to integrate digital literacy effectively into instructional practice (Mishra & Koehler, 2016).

The opportunities and challenges associated with digital footprints indicate that technology integration alone does not guarantee improved educational outcomes. Effective utilization requires thoughtful pedagogical design, ethical awareness, communication responsibility, and supportive educational policies. For English language teaching and learning in Nigeria, digital footprints should be approached as educational resources that require critical engagement rather than passive acceptance. Teachers and learners must develop awareness of how digital participation shapes communication competence, language practices, identity formation, and future opportunities. Ultimately, maximizing the educational value of digital footprints requires integrating digital literacy, responsible communication, ethical reflection, and language development into instructional practices. Such integration can contribute to preparing learners who communicate effectively, participate responsibly, and navigate digital environments with confidence and critical awareness.

Pedagogical Implications for English Language Teachers

The transformation of communication practices through digital technologies has created new demands for educational systems and redefined the roles of teachers in contemporary classrooms. English language teachers in particular occupy a strategic position because language education extends beyond teaching grammatical competence and increasingly includes preparing learners to communicate effectively, ethically, and responsibly within digitally mediated environments. As students continuously generate digital footprints through online interaction, collaborative learning, and technology-supported communication, English language teachers are required to adapt pedagogical approaches to address emerging realities associated with digital literacy, responsible communication, and digital citizenship. Pedagogy traditionally refers to the principles, methods, and practices through which teaching and learning occur. Contemporary educational discourse increasingly emphasizes pedagogical approaches that promote learner engagement, critical thinking, collaboration, and contextual learning rather than teacher-centred transmission of information (Freire, 1970). Within English language education, pedagogy now extends beyond language structure and incorporates communicative competence, multimodal literacy, intercultural awareness, and digital participation.

The emergence of digital communication environments has altered expectations regarding what constitutes effective language teaching. Previously, English language instruction focused primarily on listening, speaking, reading, and writing within classroom settings. Contemporary educational realities require learners to communicate across digital platforms using diverse textual and multimodal forms. Consequently, teachers must design learning experiences that prepare students to engage responsibly and effectively within these evolving communication spaces (Richards & Rodgers, 2014). One major pedagogical implication concerns the integration of digital literacy into English language instruction. Since communication increasingly occurs through digital media, language teachers must help learners develop competencies that extend beyond linguistic accuracy to include information evaluation, digital participation, ethical communication, and technological awareness (Ng, 2012). Integrating digital literacy allows students to become more competent users of language within digital contexts. English language teachers therefore need to move from viewing technology merely as an instructional tool toward understanding it as an environment that shapes communication practices. Technology-supported pedagogy should encourage students to interpret digital texts critically, communicate responsibly, and reflect on how digital participation influences language use and identity formation (Selwyn, 2016).

The increasing importance of digital communication further suggests the need for expanding the concept of literacy within language education. Contemporary literacy includes engagement with multimodal texts that combine written language, images, videos, hyperlinks, symbols, and interactive elements (Kress, 2010). English language teachers therefore need to expose students to diverse forms of communication and develop instructional strategies that support multimodal literacy. Instructional practices such as digital storytelling, collaborative writing, podcast creation, blogging, discussion forums, and multimedia presentations provide opportunities for integrating language development with digital communication competence. These approaches encourage authentic language use while enabling students to develop awareness of audience, purpose, and communication effectiveness (Robin, 2008). The role of the teacher also shifts from information provider to facilitator of learning. Contemporary pedagogical models emphasize guiding learners in exploring resources, solving problems, constructing meaning, and participating actively in learning processes (Vygotsky, 1978). In digitally mediated environments, teachers support students in navigating information, evaluating sources, and engaging in reflective communication practices.

Assessment practices represent another important pedagogical implication. Traditional assessment approaches often emphasize final products rather than learning processes. However, digital learning environments provide opportunities to assess participation, communication patterns, writing development, collaboration, and reflective practices through learner-generated digital records (Black & Wiliam, 2009). English language teach-

ers can incorporate formative assessment strategies that utilize digital portfolios, online discussions, peer assessment, self-reflection journals, and collaborative tasks. Such approaches provide broader perspectives on language development and encourage continuous improvement. Teacher competence becomes increasingly important in implementing effective digital pedagogy. Teachers require a combination of content knowledge, pedagogical knowledge, and technological competence to integrate digital tools meaningfully into language instruction. The Technological Pedagogical Content Knowledge (TPACK) framework emphasizes the interaction between these knowledge domains and highlights the importance of balanced integration for effective teaching (Mishra & Koehler, 2016).

Within the Nigerian educational context, pedagogical transformation requires consideration of contextual realities such as infrastructure limitations, varying digital access, and differences in teacher preparedness. Effective implementation of digital pedagogy should therefore remain flexible and responsive to local educational conditions. English language teachers must additionally recognize cultural diversity and intercultural communication dimensions within digital environments. Since digital communication frequently involves interaction across linguistic and cultural boundaries, teachers should encourage inclusive communication practices and respect for diverse perspectives (Byram, 2017). The increasing use of artificial intelligence technologies in language learning also introduces important pedagogical considerations. Teachers need to guide learners toward ethical and productive use of AI-supported tools while maintaining originality, creativity, and communication competence. Rather than replacing language learning processes, technology should support meaningful engagement and reflective communication. Classroom practices should create opportunities for students to analyse their own digital footprints and understand how communication behaviour contributes to identity formation and future opportunities. Reflective activities may include examining online language use, evaluating digital participation, and discussing implications of communication decisions.

Ultimately, the pedagogical implications of digital footprints highlight the need for English language teachers in Nigeria to adopt approaches that emphasize communication competence, critical literacy, ethical participation, digital awareness, and lifelong learning. Such transformation positions language education as a meaningful response to contemporary educational and societal changes.

II. Conclusion

This study examined digital footprints and responsible communication and their implications for English language teaching and learning in Nigeria. It established that learners and teachers continuously generate digital footprints through online communication, classroom technologies, and social media engagement, which increasingly influence identity, academic participation, and learning outcomes. The study concludes that responsible communication is a critical competency in contemporary English language education, as it determines the quality, ethical nature, and long-term impact of learners' digital engagement. English language teaching provides a strong platform for developing these competencies because it focuses on communication, expression, interpretation, and interaction. Overall, the study concludes that integrating digital literacy, communication ethics, and awareness of digital footprints into English language instruction is essential for preparing learners to participate effectively and responsibly in today's digitally connected educational environment.

III. Recommendations

1. Government policies should integrate digital footprint awareness into English language curriculum to help learners understand the long-term effects of online communication.
2. Teachers should teach responsible communication explicitly through speaking, writing, and digital interaction activities in English language classrooms.
3. Ministry of education should make provision for teachers training on digital pedagogy, online communication ethics, and responsible use of educational technologies.
4. Relevant education authorities promote digital citizenship education across schools to encourage respectful, safe, and accountable online behaviour.
5. Teachers should encourage reflective learning practices, helping students evaluate their digital communication choices and their consequences.
6. There should be a community support for effective use of educational technologies that enhance communication while reinforcing ethical participation.
7. Government should ensure there is improved ICT infrastructure in schools to support meaningful and responsible digital language learning experiences.

References

- [1]. Adeleke, D. S., & Emeahara, E. N. (2016). Relationship between information literacy and use of electronic information resources by postgraduate students. *Library Philosophy and Practice*.
- [2]. Aduwa-Ogiegbaen, S. E., & Iyamu, E. O. S. (2005). Using information and communication technology in secondary schools in Nigeria. *Educational Technology & Society*, 8(1), 104–112.
- [3]. Ajibola, M. A. (2010). Confronting the challenges of teaching English language as a second language in Nigeria. *Journal of Language Teaching and Research*, 1(2), 95–98.
- [4]. Bamgbose, A. (2010). *Language and exclusion: The consequences of language policies in Africa*. LIT Verlag.
- [5]. Black, P., & Wiliam, D. (2019). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, 21(1), 5–31.
- [6]. boyd, d. (2014). *It's complicated: The social lives of networked teens*. Yale University Press.
- [7]. Buckingham, D. (2008). *Introducing identity*. In D. Buckingham (Ed.), *Youth, identity, and digital media*. MIT Press.
- [8]. Byram, M. (2017). Teaching and assessing intercultural communicative competence. *Multilingual Matters*.
- [9]. Canale, M., & Swain, M. (1998). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1(1), 1–47.
- [10]. Castells, M. (2010). *The rise of the network society* (2nd ed.). Wiley-Blackwell.
- [11]. Common Sense Education. (2020). *Digital citizenship curriculum*.
- [12]. Crystal, D. (2011). *Internet linguistics: A student guide*. Routledge.
- [13]. Eze, S. C., & Chinedu-Eze, V. C. (2018). Determinants of ICT adoption in education. *Education and Information Technologies*, 23(5), 2147–2166.
- [14]. Federal Republic of Nigeria. (2014). *National policy on education* (6th ed.). NERDC Press.
- [15]. Freire, P. (1970). *Pedagogy of the oppressed*. Continuum.
- [16]. Greenhow, C., & Lewin, C. (2016). Social media and education. *Learning, Media and Technology*, 41(1), 6–30.
- [17]. Jenkins, H., Purushotma, R., Weigel, M., Clinton, K., & Robison, A. (2019). *Confronting the challenges of participatory culture*. MIT Press.
- [18]. Jisc. (2020). *Building digital capability: Digital identity and wellbeing*.
- [19]. Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(5), 365–379.
- [20]. Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. Routledge.
- [21]. Little, D. (2007). Language learner autonomy: Some fundamental considerations revisited. *Innovation in Language Learning and Teaching*, 1(1), 14–29.
- [22]. Livingstone, S., & Haddon, L. (2012). *Children, risk and safety online*. Policy Press.
- [23]. Livingstone, S., & Third, A. (2017). Children and young people's rights in the digital age. *New Media & Society*, 19(5), 657–670.
- [24]. Lupton, D. (2015). *Digital sociology*. Routledge.
- [25]. Madden, M., Fox, S., Smith, A., & Vitak, J. (2013). *Digital footprints: Online identity management and search in the age of transparency*.
- [26]. New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1), 60–92.
- [27]. Ng, W. (2012). Can we teach digital natives digital literacy? *Computers & Education*, 59(3), 1065–1078.
- [28]. Pecorari, D. (2013). *Teaching to avoid plagiarism*. Open University Press.
- [29]. Ribble, M. (2015). *Digital citizenship in schools* (3rd ed.). International Society for Technology in Education.
- [30]. Richards, J. C. (2016). *Communicative language teaching today*. Cambridge University Press.
- [31]. Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press.
- [32]. Selwyn, N. (2016). *Education and technology: Key issues and debates* (2nd ed.). Bloomsbury.
- [33]. Shea, V. (2024). *Netiquette*. Albion Books.
- [34]. Siemens, G., & Long, P. (2011). Penetrating the fog: Analytics in learning and education. *EDUCAUSE Review*, 46(5), 30–40.
- [35]. UNESCO. (2018). *Media and information literate citizens: Think critically, click wisely*.
- [36]. Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- [37]. Wardle, C., & Derakhshan, H. (2017). *Information disorder: Toward an interdisciplinary framework*. Council of Europe.
- [38]. Williamson, B. (2017). *Big data in education: The digital future of learning, policy and practice*. Sage.