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DIGITAL LITERACY AND DIGITAL TECHNOLOGY USAGE IN ADMINISTRATION OF PUBLIC AND PRIVATE PRIMARY SCHOOLS IN IFAKO-IJAIYE L.G.A., LAGOS STATE

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Abstract

This study investigates the digital literacy levels and technology usage among leaders of public and private primary schools in Ifako-Ijaiye, Lagos. Digital literacy involves the ability of individuals to find, understand, evaluate and communicate information by use of digital media platforms and digital technology usage is the process of applying digital technology to create value from ordinary day-to-day activities or operations. Using comparative the design, 36 school leaders were randomly selected from a total population of 107 school leaders in Ifako Ijaiye L.G.A., Lagos. The instruments "MDLL" and "MDTU" checklists were administered to each of the leaders to test the hypothesis using T-test. From the analysis, public school leaders generally exhibit basic digital skills, such as using email and browsing the internet, but struggle with more advanced tasks like data analysis and digital security. In contrast, leaders in private schools demonstrate higher digital literacy, greater autonomy in technology adoption, and more frequent use of advanced digital tools for educational and administrative tasks. Based on the findings, it is recommended among others that government should train leaders in the public school in digital literacy and provide digital technology tools in the area of schools' administration.

Keywords: *Digitalization, Digital Literacy, Technology, Digital Technology, and Digital Technology Usage.*

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INTRODUCTION

Digitalization has emerged as a transformative force across various aspects of life, revolutionizing industries and societal practices. Its origins trace back to the advent of digital technology, which began in the mid-20th century with the development of electronic computers and digital communication systems (Smith, 2020). The evolution of digitalization can be traced from the early adoption of computers and digital networks to the pervasive integration of smart devices, cloud computing, and artificial intelligence today. Initially, digitalization focused on automating manual processes and digitizing data for improved storage and retrieval (Brown & White, 2017). However, with advancements in computing power and connectivity, digitalization has evolved to encompass broader transformations in business models, consumer behaviour, and societal interactions. As digital technologies continue to advance rapidly, the evolution of digitalization is marked by the convergence of various disruptive trends, such as big data analytics, the Internet of Things (IoT), and machine learning (Davis, Jones, & Wilson, 2021). This convergence is driving profound changes across industries, reshaping how organizations operate, compete, and create value in the digital age. Consequently, the evolution of digitalization is characterized by an ongoing journey of innovation, adaptation, and transformation in response to the opportunities and challenges presented by emerging technologies.

Over time, digitalization has evolved to encompass the integration of digital tools, platforms, and processes into diverse sectors, leading to profound changes in commerce, agriculture, medicine, communication, and education (Garcia, 2020).

Narrowing down to education, digitalization has revolutionized teaching and learning practices, offering new opportunities for personalized learning, collaboration, and skill development. Educational technology tools such as learning management systems, interactive whiteboards, and educational apps have transformed classrooms into digital learning environments, Wang & Hannafin (2005). Digitalization has also expanded access to education through online courses, virtual classrooms, and open educational resources, breaking down barriers to learning and promoting lifelong learning opportunities for learners of all ages (Clark, 2016).

Indeed, the utilization of digitalization in various fields is closely intertwined with digital literacy levels, which reflect individuals' abilities to effectively navigate and utilize digital technology. In developed countries like the USA, digital literacy begins at an early age, with children often exposed to technology from as young as four years old. For instance, the government provides Chromebooks to students in many school districts, enabling them to access digital resources and engage in interactive learning experiences (US Department of Education, 2019).

However, the situation contrasts starkly in many developing countries, where access to technology, especially among young children, is limited. Historically, in developing economies, the integration of digital technology in education has been slow, with challenges such as inadequate infrastructure, limited resources, and a lack of government initiatives hindering progress. Despite these challenges, there have been recent efforts to bridge the digital divide and promote digital literacy in Nigeria.

One notable initiative is the introduction of 'Opon Imo' (Tablet of Knowledge) in secondary schools in Osun State, Nigeria. Opon Imo is a digital device loaded with educational content, including textbooks, past questions, and instructional materials, aimed at enhancing learning outcomes and promoting digital literacy among students (Aluko, 2019). This initiative represents one of the earliest government interventions in digital technology usage in Nigerian schools, signaling a shift towards embracing digitalization in education. However, while initiatives like Opon Imo demonstrate progress in promoting digital literacy, challenges persist, particularly regarding equitable access to technology and quality digital education resources. Addressing these challenges requires sustained efforts from government, educators, and other stakeholders to ensure that all stakeholders have access to digital tools and the skills needed to thrive in the digital age.

According to Jones (2020), the usage of technology by global and local leaders is influenced by their level of digital literacy. Leaders who possess higher levels of digital literacy are more likely to leverage technology effectively for decision-making, communication, collaboration, and innovation as they can harness digital tools and platforms to gather and analyze data, connect with diverse stakeholders, and drive organizational or societal transformations. In addition, Smith (2019) added that leaders who embrace digital technology have the potential to enhance education systems, promote digital inclusion, and foster innovation in teaching and learning practices. They can leverage technology to provide access to quality education, bridge the digital divide, and prepare students for the digital age.

Digital literacy is paramount for effectively integrating digital technology into education. Without adequate training and access to digital resources, administrators and teachers may find it challenging to adapt their teaching practices, limiting students' exposure to digital learning opportunities and potentially hindering their educational outcomes.

In Nigeria, are school leaders' digital literate, do they use digital technology to carry out administrative functions to transform education and empower learners in the digital age?

Purpose of the Study

The main objective of this study is to find out the digital literacy level and technology usage by leaders of public and private primary schools in Ifako-Ijaiye, Lagos.

Specifically, to;

- To find out the digital literacy level and technology usage by leaders of public primary schools in Ifako-Ijaiye, Lagos.
- To find out the digital literacy level and technology usage by leaders of private primary schools in Ifako-Ijaiye, Lagos.
- To find out the difference between digital literacy level and technology usage by leaders of public and private primary schools in Ifako-Ijaiye, Lagos

REVIEW OF RELATED LITERATURE

Concept of Digitalization and Digital Literacy

Digitalization refers to the process of integrating digital technology for usage in various aspects of society, according to Smith (2020). He further explains that it involves the transformation of analog information and processes into digital formats enabling easier storage, manipulation, and dissemination of data. Jones (2020), defined digitalization as the transformation of analog data,

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processes, or services into digital formats, enabling them to be stored, manipulated, and transmitted electronically and the process involves converting physical information into digital form, which enhances accessibility, efficiency, and scalability across various domains. In a broader sense, digitalization encompasses the adoption and utilization of digital technologies to streamline operations, enhance communication, and innovate services across industries (Jones & Brown, 2019). It involves the integration of digital tools and platforms to optimize workflows, improve customer experiences, and drive organizational growth.

In commerce, digitalization has reshaped traditional business models, enabling organizations to streamline operations, reach wider markets, and enhance customer experiences. E-commerce platforms have emerged as key drivers of digital commerce, facilitated online transactions, and enabled businesses to engage with customers globally (Smith, 2019). Additionally, digitalization has spurred innovations in supply chain management, digital marketing, and data analytics, empowering businesses to optimize processes and make data-driven decisions (Brown, 2018).

In agriculture, digitalization has ushered in the era of precision farming, leveraging technologies such as sensors, drones, and data analytics to optimize crop production, monitor soil health, and conserve resources (Johnson, 2017). Farmers can now access real-time data on weather patterns, soil moisture levels, and crop conditions, enabling them to make informed decisions and maximize yields while minimizing environmental impact.

In medicine, digitalization has revolutionized healthcare delivery, leading to advancements in telemedicine, electronic health records, and digital diagnostics (Garcia, 2020). Telemedicine platforms enable remote consultations and monitoring, improving access to healthcare services, particularly in underserved areas. Electronic health records enhance care coordination and patient safety by enabling seamless information sharing among healthcare providers.

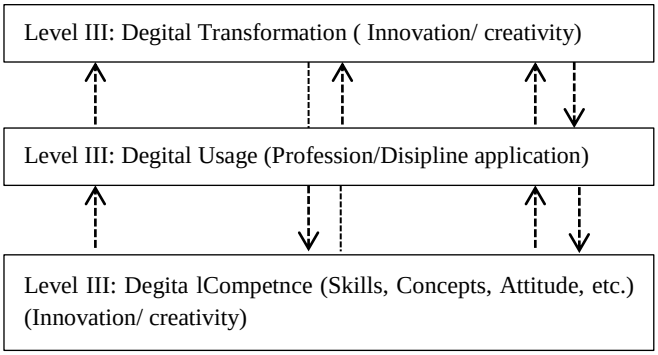
In communication, digitalization has democratized access to information and transformed how individuals connect and communicate. Social media platforms, messaging apps, and digital communication tools have become integral parts of daily life, facilitating instant communication and collaboration across geographical boundaries (Taylor, 2018). Digitalization has also played a pivotal role in the rise of online journalism, citizen journalism, and digital storytelling, reshaping the media landscape.

According to Gilster (2017), digital literacy was a term coined in the United States and can be traced back to a publication by Glister, titled ‘Digital Literacy’. Gilster’s landmark work was on the definition of skills required to critically navigate information in an increasingly digital world.

Digital literacy, as stated by Green (2017), is the ability to utilize digital technology effectively and critically. It involves the skills, knowledge, and attitudes required to navigate, evaluate, create, and communicate information using digital tools. Additionally, Brown (2019) explained that digital literacy goes beyond basic computer literacy and encompasses competencies such as information literacy, media literacy, and critical thinking in a digital context. Several studies have explored different levels of digital literacy and their relationship with technology usage. For example, Smith, Brown & Nguyen (2020) investigated the various levels of digital literacy among students and found that those with higher levels of digital literacy were more likely to engage in complex technological tasks and utilize a wider range of digital tools and platforms effectively. Similarly, Johnson (2018) examined the digital literacy skills of teachers and observed that educators with advanced digital literacy were better equipped to integrate technology into their teaching practices and adapt to new digital tools and resources. Additionally, Garcia (2021) explored digital literacy levels among older adults and highlighted the importance of digital skills in enabling them to access and utilize technology for communication, information seeking, and social participation. These studies demonstrate that digital literacy plays a crucial role in shaping individuals' ability to effectively utilize technology across different contexts and settings.

Martin & Grudziecki (2006) proposed three levels of Digital Literacy. The lowest level is Digital competence, the second is Digital Usage, and the third is Digital Transformation. Each level covers specific personal engagement, from technical skills to innovation and creativity, as presented in Figure 1.

Figure 1: Three (3) levels of Digital Literacy Development.



Source: Martin and Grudziecki (2006).

These levels were further explained by Cetindamar & Abedin (2021), who said that at the first level, termed Digital Competence, knowledge, ideas, methods and behaviours needed to navigate the digital world is understood. They are fundamentals like understanding basic hardware and software, such as using a mouse, keyboard, and basic operating system functions. Also, internet navigation, which is the ability to use web browsers, search engines, and basic online communication tools like email is learned. At the second level, termed Digital Usage, the contextualization of the technologies with skills are demonstrated leading to hardware and software proficiency that results in competence in using productivity software like word processors, spreadsheets, and presentation tools. E.g. creating and editing basic Word document, creating and editing basic Excel spreadsheet, creating a simple presentation with PowerPoint among others with knowledge of online safety and digital transformation. At the third level termed Digital Transformation is where innovation and creativity is carried out using digital skills and tools. It calls for originality and creativity in the digital process as problems are solved and content are created using computer hard wares and soft wares based on high level of analyzing digital information.

The determination of digital literacy levels therefore portends the need to have some skills and competencies. There will be no way to measure digital literacy level of an individual without referring to some skills and competencies as noted by (Bawden, 2018).

Digital literacy skills or pillars of digital literacy can be classified into three abilities according to Belshaw, (2019). First is finding and consuming digital content; second is creating digital content and third is sharing and communicating it effectively. Finding and

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consuming content is the ability to complete digital tasks like using an e-reader in a classroom, viewing your online examination results and banking statements, or reading an online news article.

Creating digital contents includes everything from making and editing videos to writing articles to creating and editing PDFs as stated by (Martin, 2017). He further explained that share and communicate information has to do with knowing how to propagate it as communication can take many forms — from composing a tweet or sending an email to sharing documents online with a team and more.

Koltay (2011) suggests that digital literacy involves not only acquiring technical skills but also developing the capacity to navigate complex digital landscapes, discerning credible information, and engaging responsibly in digital communication and collaboration. Thus, digital literacy extends beyond technical proficiency to encompass broader cognitive and socio-emotional competencies essential for effective participation in digital society.

Digital Technology and Digital Technology Usage in Education

Technology is defined by Jones (2016), as the practical application of scientific knowledge and engineering principles to create tools, devices, and systems that serve practical purposes. It encompasses a diverse array of artifacts, techniques, and processes used by humans to solve problems, accomplish tasks, and achieve goals (Smith, 2018). Technology involves the systematic use of resources, materials, and energy to produce desired outcomes or effects (Johnson, 2015). Over time, technology has evolved as a result of human innovation and ingenuity, leading to continuous advancements in various domains such as agriculture, industry, and communication (Brown, 2008). The evolution of technology as explained by Jones (2016), can be traced back to ancient civilizations, where early humans developed simple tools and techniques to meet their basic needs for survival. Over time, technological advancements have occurred in various domains, leading to significant transformations in human society and culture. The invention of the wheel, for example, revolutionized transportation and facilitated the movement of goods and people over long distances. Similarly, the development of agriculture marked a pivotal moment in human history, enabling the transition from nomadic lifestyles to settled communities and the rise of civilizations.

Campbell-Kelly & Aspray, (2004), stated that the Industrial Revolution of the 18th and 19th centuries ushered in a new era of mechanization and mass production, fuelled by innovations such as the steam engine and the cotton gin. This period saw the emergence of factories, urbanization, and unprecedented economic growth, laying the foundation for modern industrial society, Jones (2016). In the 20th century, advancements in electricity, telecommunications, and computing technology accelerated the pace of technological innovation, leading to the digital revolution. The advent of computers, the internet, and digital electronics transformed virtually every aspect of human life, from communication and commerce to education and healthcare. Today, the fourth industrial revolution, characterized by the convergence of digital, physical, and biological technologies is evolving. This era of digitalization and automation is reshaping industries, economies, and societies, paving the way for new opportunities and challenges in the 21st century. The fourth industrial revolution represents the culmination of these technological advancements, heralding the integration of digital technologies into every aspect of society. Coined by Klaus Schwab (2016), the founder and executive chairman of the World Economic Forum, the fourth industrial revolution is characterized by the convergence of digital, physical, and biological technologies (Schwab, 2016). Breakthroughs in artificial intelligence, big data analytics, and the Internet of Things (IoT) are driving transformative changes in industries such as manufacturing, healthcare, and education, reshaping economies and societies around the world.

In educational settings, the integration of digital technology into adminitrative, teaching and learning practices has become increasingly prevalent, offering a myriad of benefits for both educators and students.

Incorporating digital technology into school operations has become increasingly common, impacting various aspects of administrative and educational processes. Paper-based processes and manual administration tasks can hold school staff back. Being busy and being productive doesn't mean the same thing. Some school leaders imbibe various digital tools such as WIFI connectivity, school records management (attendance, student portals, examination assessments, result compilation etc), online payments etc., to enhance school educational environment (Hames & Nwovuhoma, 2023). School leaders also provide online classroom calendar, which displays class schedules, assignment schedules, field excursions, speaker events, examinations schedules, or semester breaks, and this helps students plan accordingly (Abid, Mohd, Mohd, & Rajiv, 2021). The digitization of school libraries by school leaders are also documented (Suleimon, 2013).

The implementation of student registration portals allows schools to streamline enrolment processes, manage student records efficiently, and enhance communication with parents and guardians. Digital registration systems provide school leaders with real-time access to enrolment data, facilitating informed decision-making and resource allocation (Ron & Sara 2005). The implementation of student registration portals in schools represents a significant advancement in administrative efficiency and communication. These portals serve as centralized platforms where parents or guardians can register their children for enrollment, providing essential information such as personal details, contact information, and previous academic records. By digitizing the enrollment process, schools can streamline administrative workflows, eliminate paperwork, and reduce manual data entry errors. Additionally, student registration portals often include features such as online forms and electronic signatures, enabling parents to complete registration tasks conveniently from any internet-enabled device. Moreover, student registration portals facilitate efficient management of student records throughout their academic journey. Digital registration systems allow school administrators to maintain comprehensive databases of student information, including demographic data, attendance records, health records, and academic transcripts. This centralized repository of student data provides school leaders with real-time access to vital information, enabling them to monitor student progress, track attendance, and address any emerging issues promptly. Hames & Nwovuhoma, (2023), noted that digital registration systems support seamless integration with other school management systems, such as grading software and learning management systems, enhancing data accuracy and interoperability across various administrative functions. In addition to streamlining enrollment processes and managing student records, student registration portals play a crucial role in enhancing communication

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between schools, parents, and guardians. These portals often feature communication tools such as messaging systems, announcements, and event calendars, allowing school administrators to disseminate important information and updates to parents in a timely manner. By fostering transparent and accessible communication channels, student registration portals strengthen the partnership between schools and families, promoting parental involvement in their child's education. It also enables parents to track the status of their child's enrollment, receive notifications about upcoming deadlines or events, and communicate with school staff or teachers as needed, fostering a collaborative and supportive educational environment.

Digital payment systems enable schools to collect tuition fees, activity fees, and other payments securely and conveniently. Online payment platforms offer flexibility for parents and students to make payments electronically, reducing administrative overhead and improving financial transparency (Sharma & Mahalakshmi, 2018). The integration of digital payment systems in schools has revolutionized the fee payment process, offering numerous benefits for both educational institutions and students/parents. Digital payment platforms enable schools to collect various types of fees, including tuition fees, activity fees, exam fees, and other payments, through secure and convenient online channels. By providing multiple payment options such as credit/debit cards, bank transfers, and mobile wallets, these platforms offer flexibility and accessibility, allowing parents and students to choose the most convenient payment method based on their preferences and financial circumstances. One of the primary advantages of digital payment systems in schools is the reduction of administrative overhead associated with traditional fee collection methods. By automating the fee payment process, schools can eliminate manual tasks such as cash handling, cheque processing, and reconciliation, saving time and resources for administrative staff. Sharma & Mahalakshmi, (2018), added that digital payment platforms often integrate seamlessly with school management systems, enabling real-time tracking and reporting of fee transactions. This enhances administrative efficiency, improves financial record-keeping accuracy, and minimizes the risk of errors or discrepancies in fee collection and accounting processes. Furthermore, digital payment systems promote financial transparency and accountability within educational institutions. Online payment platforms provide detailed transaction records, receipts, and payment confirmations to both payers and receivers, ensuring transparency in fee transactions. Parents and students can easily access their payment history, view pending fees, and track payment status through secure online portals or mobile applications. This transparency fosters trust and confidence in the school's financial management practices, enhancing the overall reputation and credibility of the institution. Moreover, digital payment systems enable schools to comply with regulatory requirements and auditing standards by maintaining accurate and auditable financial records, contributing to institutional integrity and governance.

Liao, Y., Wang, H., & Chen, R. (2016), stated that digital technologies such as biometric scanners, RFID tags, and surveillance cameras enhance security measures within school premises. School leaders can leverage these technologies to monitor access control, track attendance, and ensure the safety of students and staff. The implementation of digital security technologies in schools plays a crucial role in enhancing safety measures and ensuring a secure learning environment for students and staff. Biometric scanners, such as fingerprint or facial recognition systems, provide a highly secure method of access control by verifying the identity of individuals entering school premises. These scanners help prevent unauthorized access and enhance the overall security posture of the school. RFID (Radio Frequency Identification) tags are another digital technology commonly used for security control in schools. These tags can be embedded in student ID cards, staff badges, or school assets to track their movement and location within the premises. By leveraging RFID technology, school leaders can monitor attendance, track the movement of students and staff, and locate school property in real-time. This enhances accountability and security by providing valuable insights into who is present on campus and the whereabouts of school resources. Liao et al., (2016), noted that surveillance cameras are an essential component of digital security systems in schools, enabling continuous monitoring of key areas such as entrances, hallways, classrooms, and outdoor spaces. Burgess & Burgess, (2018), worked on digital attendance systems that enable teachers to sign in and out electronically, providing accurate records of staff attendance and working hours. By automating attendance tracking, school leaders can optimize staffing levels, identify trends in teacher absenteeism, and address staffing issues proactively. Implementing digital attendance systems for teachers to sign in and out electronically offers several advantages for school operations and administrative management. These systems provide accurate and reliable records of staff attendance and working hours, eliminating the need for manual tracking and reducing the likelihood of errors or discrepancies in attendance data. By automating the attendance process, school leaders can streamline administrative tasks associated with monitoring teacher attendance, freeing up time and resources for other critical responsibilities. Digital attendance systems also enable school leaders to gain insights into teacher attendance patterns and trends over time. By analyzing attendance data collected through these systems, administrators can identify patterns of absenteeism or tardiness among staff members and take proactive measures to address underlying issues. For example, if certain teachers consistently arrive late or miss classes, administrators can intervene with targeted support, counseling, or professional development opportunities to improve attendance and performance. In summary, implementing digital attendance systems for teachers to sign in and out electronically offers numerous benefits for school leaders, staff, and students alike. By automating attendance tracking, school leaders can improve accuracy, gain insights into attendance patterns, and optimize staffing levels to support student learning and achievement. Digital attendance systems contribute to streamlined administrative processes, enhanced accountability, and efficient resource allocation, ultimately fostering a positive and productive learning environment within the school community.

Digital platforms for result compilation and timetable management streamline administrative tasks and improve data accuracy according to Burgess & Burgess, (2018),. School leaders can use digital tools to generate student report cards, analyse academic performance trends, and create optimized timetables based on class schedules and resource availability according to Zheng, Zhang, & Xu (2016). Implementing digital platforms for result compilation and timetable management offers significant advantages for school administrators and educators. These digital tools streamline administrative tasks related to academic record-keeping and scheduling, improving efficiency and accuracy in school operations. By digitizing the process of compiling student results,

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school leaders can automate the generation of report cards, transcripts, and academic records, reducing the time and resources required for manual data entry and processing. Digital platforms for result compilation also facilitate data analysis and reporting, enabling school leaders to gain insights into academic performance trends and student achievement outcomes. Administrators can use these tools to track student progress, identify areas for improvement, and make data-driven decisions to support student learning and success. By centralizing academic data on digital platforms, schools can ensure consistency and accuracy in reporting, enhancing accountability and transparency in academic assessment and evaluation processes. Furthermore, digital timetable management systems enable school leaders to create and manage class schedules efficiently, taking into account factors such as teacher availability, classroom resources, and student preferences. These platforms automate the process of timetable generation, allowing administrators to optimize resource allocation and maximize instructional time. By creating balanced and well-structured timetables, schools can ensure that students have access to a diverse range of courses and learning opportunities, promoting academic engagement and achievement. Burgess & Burgess, (2018), summarized that, digital platforms for result compilation and timetable management play a crucial role in streamlining administrative tasks, improving data accuracy, and enhancing decision-making in schools. By digitizing academic record-keeping processes and scheduling procedures, school leaders can increase efficiency, reduce administrative burdens, and focus more time and resources on supporting student learning and success. Digital tools for result compilation and timetable management contribute to the overall effectiveness and accountability of school operations, fostering a positive and productive learning environment for students and educators.

Theoretical Framework

This study is anchored on the Theory of Technological Pedagogical Content Knowledge (TPACK), formulated by Punya Mishra and Mathew Koehler in 2006. The TPACK theory states that effective teaching with technology requires an understanding and integration of three primary forms of knowledge: Content Knowledge (CK), Pedagogical Knowledge (PK), and Technological Knowledge (TK). The theory emphasizes that these forms of knowledge are not isolated but interact and intersect in complex ways.

According to Mishra and Koehler (2006), CK is the "knowledge about actual subject matter that is to be learned or taught". Teachers must know about the content they are going to teach and how the nature of knowledge is different for various content areas and PK refers to the methods and processes of teaching and includes knowledge in classroom management, assessment, lesson plan development, and student learning. While TK refers to the knowledge about various technologies, ranging from low-tech technologies such as pencil and paper to digital technologies such as desktop computer, internet connection, laptop, monitor for projection/television, printer, projector, scanner, speaker, tablet, etc.

Though a recent theory, Technology Pedagogy and Content Knowledge theory of education, focuses on the application of learning in teacher education integrated with technology. TPACK is an ideal portrait that every teacher must possess in this era of education. It explains the set of knowledge that teachers need to teach their students, to teach effectively, and to use technology (McGraw-Hill, 2019).

The TPACK framework suggests that content, pedagogy, technology, and teaching/learning contexts have roles to play individually and together. Teaching successfully with technology requires continually creating, maintaining, and re-establishing a dynamic equilibrium among all components. TPACK framework integrates these three primary forms of knowledge essential for effective teaching: technological knowledge (TK), pedagogical knowledge (PK), and content knowledge (CK). According to Mishra and Koehler, effective technology integration in teaching requires teachers to possess a deep understanding of how these knowledge domains intersect and interact to support meaningful learning experiences.

Figure 2: TPACK Framework. Source: Tpack.org

Recent literature on the Theory of Technological Pedagogical Content Knowledge (TPACK) highlights its continued relevance and applicability in the context of digital technology usage and digital literacy in education. Researchers have explored various aspects of TPACK, including its role in teacher professional development, curriculum design, and instructional practices. Here are some key findings from recent studies:

Koehler & Mishra, (2009), examined the effectiveness of TPACK-based professional development programs in enhancing teachers' digital literacy and technology integration skills and found out that targeted interventions focusing on the development of TPACK can improve teachers' confidence and competence in using digital technologies for teaching and learning.

Angeli & Valanides, (2009) explored how the TPACK framework can inform curriculum design and instructional strategies that promote digital literacy skills among students by integrating technology, pedagogy, and content knowledge and found out that educators can design learning experiences that engage students in authentic tasks and promote critical thinking, creativity, and collaboration. Graham, Burgoyne, Cantrell, Smith & St. Clair, (2009) investigated the relationship between teachers' TPACK levels and their instructional practices in digital-rich environments with the result suggesting that teachers with high TPACK scores are more likely to adopt student-centered, inquiry-based approaches that leverage digital technologies to support diverse learning needs and preferences. Overall, recent research on the

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Theory of Technological Pedagogical Content Knowledge (TPACK) underscores its significance in guiding effective technology integration efforts in education. By recognizing the complex interplay between technological, pedagogical, and content knowledge, educators can design learning experiences that empower students to develop essential digital literacy skills and thrive in the digital age.

Recent literature on TPACK underscores its relevance and applicability in the context of digital technology usage and digital literacy in education. Researchers have explored various aspects of TPACK, including its role in teacher professional development, curriculum design, and instructional practices. Koehler and Mishra (2009) examined TPACK-based professional development programs and found that targeted interventions focusing on TPACK significantly improve teachers' confidence and competence in using digital technologies for teaching and learning. This highlights the importance of integrating TPACK principles into professional development programs to elevate digital literacy among educators.

Angeli and Valanides (2009) investigated how the TPACK framework can inform curriculum design and instructional strategies to promote digital literacy skills among students. Their research demonstrated that educators could create learning experiences that engage students in authentic tasks, fostering critical thinking, creativity, and collaboration. Additionally, Graham et al., (2009), explored the relationship between teachers' TPACK levels and their instructional practices in digital-rich environments. Their results suggested that teachers with high TPACK scores are more likely to adopt student-centered, inquiry-based approaches that leverage digital technologies to support diverse learning needs and preferences. These findings emphasize the role of TPACK in shaping instructional practices that enhance student engagement and cater to various learning styles.

Anchoring this study on the TPACK theory is justified for several compelling reasons. Firstly, TPACK provides a comprehensive framework that integrates the essential knowledge domains required for effective technology use in education. By recognizing the interplay between Content Knowledge (CK), Pedagogical Knowledge (PK), and Technological Knowledge (TK), TPACK offers a holistic approach to understanding how these elements combine to support meaningful learning experiences. This theoretical foundation is crucial for exploring how digital literacy and technology integration can be effectively achieved in educational settings.

Secondly, the TPACK framework's focus on professional development aligns directly with the study's objective of enhancing digital literacy among educational leaders. The literature highlights the effectiveness of TPACK-based professional development in boosting educators' competence and confidence with technology, addressing the digital literacy gaps identified in the study's context. Additionally, TPACK's applicability to curriculum design and instructional practices ensures that the study's findings will be relevant and actionable, offering insights into how educational leaders can implement technology-enhanced learning experiences. In summary, TPACK provides a robust theoretical foundation that supports the exploration of effective strategies for integrating digital literacy and technology in education, aiming to improve both professional development programs and educational outcomes.

METHODOLOGY

The research design adopted for this study is the Comparative Research Design. Comparative design, according to Cohen, Manion, and Morrison (2018), is a research design in which two or more groups, conditions, or phenomena are studied and compared. According to data provided by the Education Secretary at the Local Government Education Secretariat for Ifako Ijaiye, there are 25 public primary schools and 82 private primary schools in Ifako Ijaiye Local Government Area of Lagos State so the population of study are 107 head teachers of these schools. A simple random sampling technique was employed to select 36 headteachers made up of 8 headteachers from the public and 28 headteachers form private primary schools in Ifako-Ijaiye L.G.A respectively.

A questionnaire titled "Measures of Digital Literacy Level (MDLL) and Measures of Digital Technology Usage (MDTU) Questionnaires," was self-developed with the aid of 'Start Question App' to gather relevant information from the respondents. It is made up of f three sections A, B and C. Section A focused on measuring digital literacy levels, while Section B assessed the level of digital technology usage among leaders of both public and private primary schools.

The following research questions were answered;

- What is the digital literacy level and technology usage by leaders of public primary schools in Ifako-Ijaiye, Lagos?
- What is digital literacy level and technology usage by leaders of private primary schools in Ifako-Ijaiye, Lagos?
- What is the difference between digital literacy level and technology usage by leaders of public and private primary schools in Ifako-Ijaiye, Lagos?

The Hypothesis of the study was tested.

- HO 1: There is no significance difference between digital literacy level and technology usage by leaders of public and private primary schools.

RESULTS

Table 1: Digital literacy level and technology usage by leaders of public primary schools in Ifako-Ijaiye, Lagos.

S/N	Digital Literacy Skill	VG (N/%)	G (N/%)	Av. (N/%)	P (N/%)	VP (N/%)
1	Can you turn on and shut down a computer correctly?	23 (63.9%)	8 (22.2%)	3 (8.3%)	1 (2.8%)	1 (2.8%)
2	Do you know how to install a software program?	6 (16.7%)	9 (25.0%)	7 (19.4%)	10 (27.8%)	4 (11.1%)
3	Can you create and edit a basic Word document?	11 (30.6%)	13 (36.1%)	3 (8.3%)	6 (16.7%)	3 (8.3%)
4	Can you create and edit a basic Excel spreadsheet?	9 (25.0%)	11 (30.6%)	6 (16.7%)	8 (22.2%)	2 (5.6%)

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5	Can you create a simple presentation using PowerPoint?	5 (13.9%)	8 (22.2%)	6 (16.7%)	13 (36.1%)	4 (11.1%)
6	Can you write files on a CD, DVD, or USB drive?	7 (19.4%)	5 (13.9%)	10 (27.8%)	9 (25.0%)	5 (13.9%)
7	Can you download and use educational apps on digital devices?	12 (33.3%)	14 (38.9%)	4 (11.1%)	4 (11.1%)	2 (5.6%)
8	Can you search for information online using web search engines?	14 (38.9%)	12 (33.3%)	3 (8.3%)	2 (5.6%)	5 (13.9%)
9	Can you make use of emails to send out information?	12 (33.3%)	15 (41.7%)	2 (5.6%)	3 (8.3%)	4 (11.1%)
10	Can you set up a Google Team or Zoom meeting?	5 (13.9%)	11 (30.6%)	3 (8.3%)	9 (25.0%)	8 (22.2%)
11	Can you input and use a statistical tool on Excel to analyze data?	7 (19.4%)	5 (13.9%)	9 (25.0%)	11 (30.6%)	4 (11.1%)
12	Can you present a given data in graphic forms?	4 (11.1%)	8 (22.2%)	7 (19.4%)	14 (38.9%)	3 (8.3%)
13	Can you identify warning indications of social engineering attacks such as phishing?	4 (11.1%)	6 (16.7%)	8 (22.2%)	16 (44.4%)	2 (5.6%)
14	Can you identify security vulnerabilities that put you at risk when using a computer?	8 (22.2%)	6 (16.7%)	4 (11.1%)	11 (30.6%)	7 (19.4%)
15	Can you diagnose performance issues making apps ineffective?	4 (11.1%)	5 (13.9%)	6 (16.7%)	16 (44.4%)	5 (13.9%)
16	Can you figure out why integrations between different software on your computer fail?	5 (13.9%)	4 (11.1%)	8 (22.2%)	12 (33.3%)	7 (19.4%)
17	Can you evaluate digital information sources for credibility and relevance to your work?	3 (8.3%)	9 (25.0%)	6 (16.7%)	14 (38.9%)	4 (11.1%)

Source: Field Survey, August, 2024

The skill of turning on and shutting down a computer is rated very highly, with 23 respondents (63.9%) rating themselves as very good. Only a small number struggle with this basic task (1 poor and 1 very poor rating), showing that most leaders have foundational computer literacy. Installing software poses challenges for many, with 10 respondents rating their skills as poor and only 6 considering themselves very good. This suggests that many leaders lack confidence in installing software. The ability to create and edit a basic Word document is generally rated well, with 11 respondents very good and 13 good. However, 9 respondents rate their skills as poor or very poor, indicating some variation in proficiency. Proficiency in creating and editing Excel spreadsheets is mixed. While 20 respondents rate themselves as either very good or good, 10 rate their skills as poor or very poor. This points to a gap in spreadsheet knowledge among some leaders. Creating presentations using PowerPoint shows a significant skill gap, with 13 respondents rating themselves as poor and only 5 as very good. This suggests that more training is needed in this area. The ability to write files to a CD, DVD, or USB drive shows a wide range of skills. While 7 respondents rate themselves as very good, 14 rate their skills as poor or very poor, highlighting inconsistency in basic file management skills. Skills in downloading and using educational apps are rated positively, with 26 respondents rating themselves as very good or good. Similarly, most respondents are confident in searching for information online, with 26 rating their skills as very good or good. The ability to use email is generally strong, with 27 respondents rating themselves as very good or good. This indicates that email communication is a well-understood tool among primary school leaders. Setting up Google Meet or Zoom meetings is challenging for many, with 17 respondents rating their skills as poor or very poor. This suggests that more support is needed for using these essential digital communication tools. Inputting and using statistical tools in Excel reveal varying levels of proficiency. While some respondents (7 very good, 5 good) are confident, 15 rate their skills as poor or very poor, indicating the need for additional training. Presenting data in graphic forms is another area of weakness, with 17 respondents rating themselves as poor or very poor. Visual data presentation is a key skill that many leaders need to develop. Identifying phishing attacks and other social engineering threats is an area of concern, as 18 respondents rate their skills as poor or very poor. Similarly, many struggle to identify security vulnerabilities, with 18 rating themselves poorly. Diagnosing performance issues in apps and figuring out why software integrations fail are areas of significant challenge, with many respondents rating themselves poorly. This suggests a lack of deeper technical skills among primary school leaders. Evaluating the credibility and relevance of digital information is a skill where 18 respondents rate themselves as poor or very poor. This is a critical digital literacy skill that requires attention.

The analysis reveals that primary school leaders possess basic digital literacy skills such as turning on a computer, using email, and searching for information online. However, there are notable gaps in more advanced skills like software installation, using video conferencing tools, data analysis, cybersecurity awareness, and troubleshooting technical issues. These areas could benefit from

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targeted training and support to improve digital literacy among school leaders.

Table 2: Digital literacy level and technology usage by leaders of private primary schools in Ifako-Ijaiye, Lagos.

S/N	Digital Technology Usage	Very Often (N/%)	Often (N/%)	Not Often (N/%)	Not at all(N/%)
1	I make use of digitalized enrolment processes with student portals for management of student information, academic progress, exam assessment, result compilation, etc.	8 (22.2%)	13 (36.1%)	10 (27.8%)	5 (13.9%)
2	I use technology to communicate with staff, parents, and stakeholders through the portal and other means	5 (13.9%)	9 (25.0%)	15 (41.7%)	7 (19.4%)
3	I have set up technology for online payments of school fees and other school-related payments	4 (11.1%)	8 (22.2%)	18 (50.0%)	6 (16.7%)
4	I am comfortable using software for management of class schedules, assignments, examination timetables, etc.	7 (19.4%)	6 (16.7%)	14 (38.9%)	9 (25.0%)
5	I incorporate digital tools and resources into security measures such as clock-in and clock-out for staff, surveillance cameras across the school, etc.	3 (8.3%)	9 (25.0%)	12 (33.3%)	12 (33.3%)
6	I create strong passwords and activate two-factor authentication (2FA) wherever possible to increase security of information such as text messages, fingerprints, etc.	5 (13.9%)	8 (22.2%)	17 (47.2%)	6 (16.7%)
7	I can hunt down bugs slowing things down or crashing programs and restore my computer	3 (8.3%)	7 (19.4%)	17 (47.2%)	9 (25.0%)
8	I perform data analysis and present graphic reports on school records such as students' performance, test results, attendance, etc.	6 (16.7%)	4 (11.1%)	18 (50.0%)	8 (22.2%)
9	I create academic digital content in the form of videos, blogs, social media posts, etc.	5 (13.9%)	9 (25.0%)	11 (30.6%)	11 (30.6%)
10	I apply credible digital information relevant to my work	8 (22.2%)	10 (27.8%)	14 (38.9%)	4 (11.1%)

Source: Field Survey, August, 2024

58.3% of respondents (Very often = 22.2%, Often = 36.1%) indicated they use digitalized enrolment processes and student portals for managing student information, academic progress, and exam assessments. This suggests that a majority of school leaders have integrated digital tools for student management. However, 27.8% Not Often, while 13.9% Not at all., indicating a notable portion of leaders still rely on traditional methods.

Only 38.9% (Very Often = 13.9%, Often = 25.0%) of school leaders use technology for communication, indicating room for improvement in digital communication practices.

A significant 41.7% Not Often, and 19.4% Not at all, reflecting resistance or limited adoption of digital communication tools in many schools.

Adoption of technology for online payments is relatively low, with only 33.3% (Very Often = 11.1%, Often = 22.2%) agreeing to using such systems. On the other hand, a majority of 66.7% either not often or not at all, pointing to challenges in implementing online payment systems in schools, possibly due to financial constraints, lack of technical expertise, or resistance to change.

36.1% of school leaders (Very Often = 19.4%, Often = 16.7%) are comfortable using software for managing class schedules, assignments, and examination timetables. However, 63.9% expressed discomfort, indicating a significant gap in digital competency among leaders for basic school management tasks.

The responses were evenly spread, with 33.3% (Very Often = 8.3%, Often = 25.0%) agreeing to using digital tools for security measures like clock-in systems and surveillance cameras. Conversely, 66.6% (Not Often = 33.3%, Not at All = 33.3%), showing that many schools are yet to integrate digital security systems effectively.

Only 36.1% (Very Often = 13.9%, Often = 22.2%) practice good digital security habits such as using strong passwords and activating two-factor authentication. A concerning 63.9% Not Often or Noat at All, highlighting a significant risk in information security practices among school leaders.

Digital troubleshooting skills are low among the leaders, with only 27.7% (Very Often = 8.3%, Often = 19.4%) confident in their ability to fix bugs or restore programs. A large majority of 72.2% (Not Often = 47.2%, Not at All = 25.0%) expressed difficulty with this skill, indicating a reliance on external support or an inability to handle technical issues independently.

27.8% (Very Often = 16.7%, Often = 11.1%) perform data analysis and present graphic reports on school records. However, 72.2% of leaders struggle with data analysis, suggesting that advanced digital skills are still lacking among a majority of school leaders.

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Only 38.9% (Very Often = 13.9%, Often = 25.0%) engage in creating digital content like videos, blogs, and social media posts. The majority of leaders (61.1%) either Not Often or Not at All, indicating limited integration of digital content creation in their educational strategies.

50.0% (Very Often = 22.2%, Often = 27.8%) of leaders are confident in their ability to apply credible digital information relevant to their work. Nevertheless, half of the respondents (50.0%) struggle in this area, pointing to a need for better digital literacy training that focuses on evaluating and applying digital resources effectively.

The findings reveal a mixed level of digital technology adoption and competency among primary school leaders. While there is moderate usage of digital tools for enrolment, communication, and content creation, significant gaps exist in areas such as online payments, digital security practices, software management, and troubleshooting.

The null hypothesis 'There is no significance difference between digital literacy level and technology usage by leaders of public and private primary schools', was tested at a 0.05 level of significance using a t-test.

Table 3: Independent Samples Test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
There is no significance difference between digital literacy level and technology usage by leaders of public and private primary schools	Equal variances assumed	35.834	.010	1.9907	34	.030	-1.52941	.18171	-1.88992	-1.16891
	Equal variances not assumed			-8.417	66.408	.000	-1.52941	.18171	-1.89216	-1.16666

The assumption of the Levene's test for Equality of Variances states that the assumption that the variances of different group should be equal. That is, we do not want the two groups to be statistically significantly different, which means the Levene's test must be less than 0.05(<.05). From the above table the Levene's test is .010 which is less than .05 (.010<.05). The Levene's test is statistically significantly different and with this we reject the NULL hypothesis and accept the alternative hypothesis (There is significance difference between digital literacy level and technology usage by leaders of public and private primary schools).

Also, the t- value of 1.9907 does exceed the Critical value: ±1.9840 and the significant value for t-value (.030) is < (.05). The means of these two groups are statistically significantly different.

The mean digital literacy level and technology usage among leaders of public schools (M = 1.61, SD = 0.49) was found to be significantly different from that of leaders in private schools (M = 3.14, SD = 1.20). The t-test results, t(100) = 1.99, p = .010, indicate a statistically significant difference, leading to the rejection of the null hypothesis.

Summary of Findings

Based on the analysis of data, the following findings emerged:

- Leaders of public primary schools generally demonstrate basic digital literacy skills, such as turning on a computer, using email, and browsing the internet. However, they exhibit limited proficiency in more advanced tasks like software installation, data analysis, digital security practices, and troubleshooting technical issues.
- Leaders of private primary schools demonstrated a higher level of digital literacy and broader technology usage. They integrate digital tools into their daily operations, including managing student information, communicating with stakeholders, and implementing security measures.
- The study uncovered a statistically significant difference in digital literacy levels and technology usage between leaders of public and private primary schools.

DISCUSSION OF THE FINDINGS

The first finding that leaders of public primary schools generally demonstrate basic digital literacy skills, such as turning on a computer, using email, and browsing the internet. is consistent with the work of Akomolafe, Oladipo, & Ojo. (2019), who found that public primary school leaders in Nigeria often struggle with advanced digital literacy due to inadequate training and limited access to resources. However, there are contrasting perspectives within the literature. Oloruntoba and Ayeni (2021) suggest that public school leaders in certain areas have made significant progress in enhancing their digital literacy through targeted professional development programs. Their study, conducted in Lagos State, found that with strong governmental support and investment in ICT training, some public-school leaders have improved their ability to integrate technology into school management. This finding highlights the uneven distribution of digital literacy improvements across different regions and schools, which could explain the variation in results between studies.

In the current study, the limited use of technology among public primary school leaders was primarily confined to basic administrative tasks, such as record-keeping and communication,

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rather than more advanced applications like data analysis or e-learning platforms. This aligns with the findings of Adeyemi, Ede, & Adesola (2020) who observed that despite the availability of ICT infrastructure in some public schools, the lack of confidence and competence among school leaders results in the underutilization of these resources. The study's results underscore the need for continuous professional development and support to bridge the digital literacy gap among public school leaders.

The second finding that leaders of private primary schools demonstrated a higher level of digital literacy and broader technology usage is in line with the research of Eze and Oladapo (2018), who found that private school leaders in Lagos are more likely to engage in continuous ICT training, leading to higher proficiency in digital literacy and innovative uses of technology in school management. However, the study also considers alternative perspectives. Adegoke (2022) highlights that not all private schools have high digital literacy levels among their leaders, particularly those with limited budgets. Some private schools still struggle with outdated technology and insufficient training, which hinders the effective use of digital tools. This finding emphasizes the variability in digital literacy among private school leaders, which can be significantly influenced by the financial resources and institutional support available to each school.

In the current study, the usage of technology among private primary school leaders extended beyond basic administrative functions to include more sophisticated applications, such as digital learning platforms, online communication with parents, and data-driven decision-making. This trend is consistent with the findings of Onuoha and Nwankwo (2021), who reported that private schools in urban areas like Lagos are increasingly adopting digital tools for comprehensive school management. The competitive nature of the private education sector, where schools seek to distinguish themselves through innovative practices, likely drives this higher adoption rate of technology.

The third finding reveal a significant disparity, with private school leaders generally exhibiting higher digital literacy and more extensive use of technology compared to their public-school counterparts. This result is consistent with the study by Ajiboye and Olaniyan (2020), which attributed the gap in digital literacy between public and private school leaders to differences in access to resources, professional development opportunities, and institutional support.

However, it is important to acknowledge that this gap is not static and may be narrowing in certain contexts. Akinwale, Ayoola, & Obafemi (2021). noted that targeted interventions, such as ICT training programs for educators funded by the Lagos State government, have started to level the playing field by equipping public school leaders with the necessary skills to enhance their digital literacy. While these efforts are promising, they are still in the early stages and have not yet achieved widespread impact across all public schools.

The current study also found that while private school leaders tend to use technology more frequently and for a wider range of tasks, public school leaders are gradually adopting more advanced digital tools as they receive more training and access to better resources. This observation aligns with the research of Bakare, Adejumo, & Yusuf (2019), who noted a slow but steady increase in the adoption of technology among public school leaders, driven by ongoing professional development initiatives and increasing awareness of the benefits of digital literacy.

Overall, the findings from this study underscore the importance of continuous investment in digital literacy training and resource provision for both public and private school leaders. Addressing the existing disparities in digital literacy and technology usage is crucial for ensuring that all schools, regardless of their status, can effectively leverage technology to improve educational outcomes. By situating these findings within the broader context of existing research, this study highlights both the progress that has been made and the challenges that remain in enhancing digital literacy among primary school leaders in Ifako-Ijaiye, Lagos.

Implications of the Study

The findings of this study have several practical implications for the field of educational administration, particularly in the context of primary education in Ifako-Ijaiye, Lagos. The observed disparities in digital literacy and technology usage between public and private primary school leaders highlight critical areas that require attention to ensure equitable and effective education management across different school types.

The study underscores the urgent need for targeted professional development programs aimed at improving digital literacy among school leaders, particularly in public primary schools. The limited proficiency in advanced digital skills among public school leaders suggests that ongoing training initiatives are essential. Educational policymakers and administrators should prioritize continuous, hands-on digital training that equips school leaders with the necessary competencies to integrate technology into their daily administrative and educational tasks. By doing so, they can enhance the overall effectiveness of school management and foster a culture of digital fluency within the educational system.

The significant difference in digital literacy levels between public and private school leaders can be partially attributed to disparities in access to digital resources and infrastructure. This finding implies that resource allocation strategies need to be revisited, with a focus on ensuring that public schools have adequate access to up-to-date technology and digital tools. Governments and educational stakeholders should invest in improving ICT infrastructure in public schools, which will not only bridge the digital divide but also enable school leaders to make better use of technology in managing school operations, enhancing educational outcomes, and preparing students for a digital future.

The results of this study provide evidence that can inform educational policy formulation and implementation. Policymakers should consider the digital literacy levels of school leaders when designing and implementing educational policies, particularly those related to technology integration in schools. Policies that mandate digital literacy as a core competency for school leadership, coupled with adequate support systems, could drive significant improvements in the adoption and effective use of technology across schools. Additionally, policies should address the specific needs of public schools to ensure that all students, regardless of their socio-economic background, have access to high-quality, digitally enriched education.

Given the higher digital literacy levels observed among private school leaders, there is an opportunity for increased collaboration between public and private schools. Private schools, which often have more advanced technology and better training programs, can

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serve as models or partners for public schools. Collaborative initiatives such as joint training sessions, resource sharing, and mentorship programs could help public school leaders enhance their digital literacy and adopt best practices in technology usage. Such partnerships would contribute to a more balanced and equitable educational environment, where all school leaders have the tools and knowledge needed to succeed.

The findings suggest that enhancing digital literacy among school leaders is crucial for modern educational leadership. As educational environments become increasingly digital, leaders must possess the skills to navigate and leverage technology effectively. This study highlights the need for educational leadership programs to incorporate digital literacy training as a fundamental component. By equipping future leaders with these skills, educational institutions can ensure that their leaders are prepared to manage schools in a digital age, ultimately leading to more efficient and innovative school management.

The study's findings also emphasize the broader issue of the digital divide within the education sector. The disparity in digital literacy between public and private school leaders reflects a larger socio-economic divide that affects educational outcomes. Addressing this digital divide requires a multi-faceted approach, including policy reforms, targeted investments, and community engagement. Efforts to reduce the digital divide will not only improve the effectiveness of school leadership but also contribute to greater educational equity and social inclusion.

Finally, the implications of this study extend beyond the immediate context of Ifako-Ijaiye, Lagos, offering valuable insights for educational administrators, policymakers, and stakeholders across different regions. By addressing the identified gaps in digital literacy and technology usage, the education system can better prepare school leaders to meet the challenges of the 21st century, ultimately leading to improved educational outcomes for all students.

CONCLUSION AND RECOMMENDATION

In conclusion, this study met its objective to find out the digital literacy level and digital technology usage by leaders of public and private primary schools in Ifako-Ijaiye and also to find out the difference between digital literacy levels and digital usage by leaders of public and private primary schools in Ifako-Ijaiye.

Based on the findings, the following recommendations are made:

- There is a need for regular and comprehensive digital literacy training programs for public primary school leaders in Ifako-Ijaiye, Lagos. These training programs should focus on developing advanced digital skills, such as data analysis, digital security practices, and troubleshooting technical issues, to enhance their ability to manage schools effectively in a digital age.
- Public primary schools in Ifako-Ijaiye should receive increased funding and support to improve their digital infrastructure. This includes providing modern computers, reliable internet access, and essential software tools that enable school leaders to perform their tasks efficiently and integrate technology into their educational management practices.
- Collaborative partnerships between public and private primary schools should be encouraged to facilitate the sharing of best practices, digital resources, and expertise. Such partnerships can help bridge the digital divide by allowing public school leaders to learn from the experiences and strategies employed by their private school counterparts.
- Both public and private primary school leaders should be encouraged to integrate digital content creation into their educational strategies. This includes creating and using digital content such as videos, blogs, and social media posts to enhance teaching and learning experiences. Training in digital content creation should be included in professional development programs for school leaders.

By addressing these recommendations, the digital literacy gap between public and private primary school leaders in Ifako-Ijaiye, Lagos, can be narrowed, leading to more equitable educational outcomes and better preparation for a technology-driven future.

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